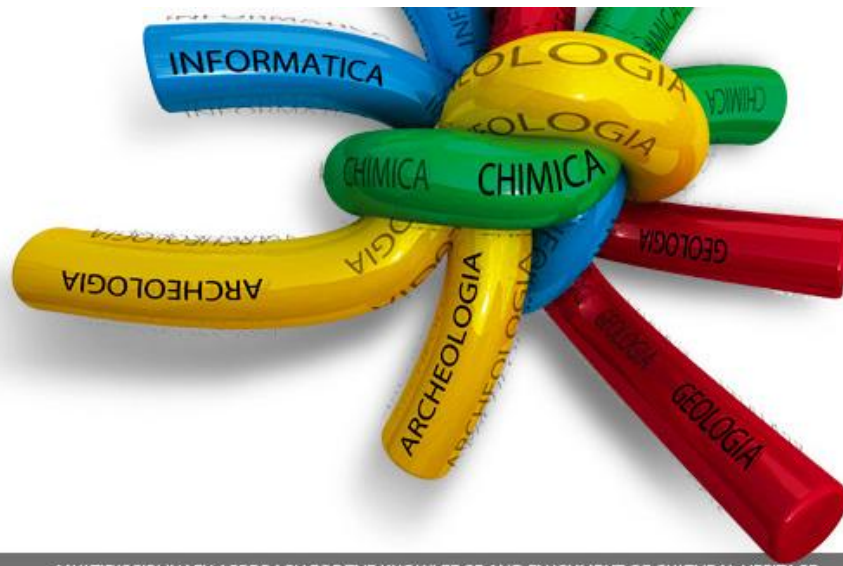


NICOLA MASINI



MULTIDISCIPLINARY APPROACH FOR THE KNOWLEDGE AND ENJOYMENT OF CULTURAL HERITAGE

CURRICULUM

A) GENERAL DATA, TITLES, SCIENTIFIC AND RESEARCH MANAGEMENT CAREER,

□ A.1 GENERAL DATA

Name: NICOLA

Surname : MASINI

Date of birth:

Place of birth:

Address:

E_mail nicola.masini@cnr.it; nicola.masini@unibas.it

Tel:

Foreign languages: ENGLISH and SPANISH



A.2 CITATION DATA BASES

ORCID Number: <http://orcid.org/0000-0002-8804-5718>

Web of Science ResearcherID: H-3889-2012

Scopus: 8931289200

Scholar: <https://scholar.google.it/citations?user=XE1CdZUAAA AJ&hl=it>

Semantic scholar: <https://www.semanticscholar.org/author/N.-Masini/2572730>

<https://sciprofiles.com/profile/13002>

□ A.3 ACTUAL POSITION

- **Research Director** of CNR-ISPC (Istituto di Scienze del Patrimonio Culturale / Institute of Heritage Science) since 2020
- **Director** of CNR International Mission for Archaeogeophysics and Heritage Conservation in Peru and Bolivia (ITACA) since 2018
- **Co-founder and Co-Editor in Chief** of *Heritage* (<http://www.mdpi.com/journal/heritage/editors>) since 2018
- Expert for the CNR of the disciplinary field SH8 - Studies of Cultures and Arts (by appointment of the NRC President following the elective procedure) since April 1, 2025
- Member of the Academic Board of the National PhD School in Heritage Science since 2024-25
- Member of the Academic Board of the PhD School in Cities and landscapes: architecture, archaeology, cultural heritage, history and resources at the University of Basilicata (Matera) since academic year 2015-16
- Professor of Ancient building systems and restoration in the Postgraduate School of Archaeology of Matera, University of Basilicata since academic year 2020-21
- Professor of *Fundamentals of Restoration*, School of Architecture of Matera, University of Basilicata since academic year
- Scientific Responsible of the Project “Basilicata Heritage SmartLab” . PO ERDF Basilicata (2014-20) since 2021
- Scientific responsible of Research Infrastructure IRPAC: “Technological and Research Infrastructure for the study of the human past, Conservation and Management of Cultural Heritage” - PO ERDF 2014-20 since 2022

- Deputy Director of Creative Cultural Industry Cluster "Basilicata Creativa" since 2018

□ **A.4 SCIENTIFIC CAREER : BRIEF CHRONOLOGY**

- **1990:** Degree in Civil Engineering.
- **1993–1994:** Research Grant Holder at CNR-IISF.
- **1995–2000:** Contract Researcher at CNR-IISF.
- **2001–2003:** Researcher at CNR-IBAM (*Istituto per i Beni Archeologici e Monumentali*).
- **2002–2012:** Professor of Architectural Restoration, Faculty of Engineering, University of Basilicata – Potenza Campus.
- **Since 2003:** Senior Researcher at CNR-IBAM (later integrated into CNR-ISPC).
- **2005–2015:** Scientific Manager, CNR Research Program “*Integrated Diagnostic Methodologies for the Preservation of Architectural and Archaeological Heritage in the Mediterranean Basin*” (CNR-IBAM, Lecce and Potenza units)
- **Since 2008 :** Director of CNR International Mission for Archaeogeophysics and Heritage Conservation in Peru and Bolivia (ITACA)
- **2002-2012:** Professor of Science for Conservation and Restoration of Architectural Heritage in the Faculty of Engineering of the University of Basilicata - Seat of Potenza
- **November 2011 – September 2019:** Deputy Director of CNR-IBAM **and** Head of the CNR-IBAM Potenza Unit
- **Since 2012:** Professor of Architectural Restoration **at the** School of Architecture, University of Basilicata – Matera Campus
- • **2014:** Visiting Professor at the Universitat Politècnica de València (Spain)
- • **2015:** Visiting Professor at the Henan Academy of Sciences, Zhengzhou (China)
- • **Since 2015:** Member of the International Doctorate College – Cities and Landscapes: Architecture, Archaeology, Cultural Heritage, History and Resources, School of Architecture, University of Basilicata – Matera
- • **2016:** Visiting Professor at the Universitat de les Illes Balears, Palma de Mallorca (Spain)
- • **2016–2017:** Visiting Professor at the Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, Beijing (China)
- • **2016:** Member of the Regional Observatory of Cultural Heritage of Basilicata
- • **2018:** Deputy Director of the Creative and Cultural Industry Cluster “Basilicata Creativa”
- **October 2019 – May 2025:** Deputy Director of CNR-ISPC and Head of the CNR-ISPC Potenza Unit
- **Since 2020, March 1:** Research Director at CNR-ISPC
- **Since April 1, 2025 –** Appointed by the President of the CNR following the elective procedure, he serves as Expert for the CNR in the disciplinary field SH8 – Cultures and Arts Studies.

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• **A.5 Research Activity : Briefly**

- Director of International Mission ITACA-Peru

- **2004–2025:** Scientific Coordinator and Project Manager of **26 national and international research projects and field investigation campaigns**, including: n.3 **Horizon 2020 (H2020)** projects, n. **2 Interreg** projects, n.2 **ERDF** (European Regional Development Fund) project
- He has authored or co-authored **468 publications**, including:
 - 144 articles in international journals
 - 21 books (authored or edited)
 - 1 patent
 - 71 chapters in international volumes
 - 17 special issues of international journals (as editor or co-editor)
 - 75 papers in international conference proceedings
 - 2 encyclopedic entries
- He has served as **General Chair** of international conferences, including the *EARSeL Symposium* (2013) and *YOCOCU* (2018). He has organized and chaired several international workshops, such as the *EARSeL Workshop on Remote Sensing for Cultural Heritage* (Rome 2008; Matera 2013), and workshops within the *ICCSA Conference* (Santander 2011; Salvador de Bahia 2012; Ho Chi Minh City 2013).
- He has also been **convener of numerous scientific sessions** at major conferences, including *EGU* (2009–2016), *SPIE* (2007–2009), and *MetroArcheo* (2020–2023). Additionally, he has served as a **member of the scientific committees** for several international conferences and workshops, including *GPR 2010*, *EARSeL* (2008, 2013), *ICCSA* (2011–2017), *RSCy* (2014–2020), *YOCOCU* (2016, 2018), and *ReUSO* (2019, 2022).
- He has **delivered 41 keynote and invited lectures** at international conferences and academic institutions across the globe (see section I.1.2), including in Brasil (Salvador de Bahia), China (Chendu, Huangshan, Beijing, Zheng Zhou), Cipro (Limassol, Nicosia), Colombia (Cartagena de Indias), Czech Republic (Prague), Egypt (El Cairo; Luxor), France (Paris, Tolosa), Germany (Colonia), India (Nuova Delhi), Italy (Firenze; Genova; Lecce; Matera; Rende; Rome), Peru (Cusco; Lima; Nasca), Poland (Università di Varsavia), UK (UCL -Londra), Portugal (Guimaraes), Spain (Madrid, Siviglia, Valencia), Turkey (Ankara), USA (Huntsville, US Space and Rocket Center), Vietnam (Ho Chi Minh)
- He has served as **Editor-in-Chief** of *Heritage* since 2018
- He is **Associate Editor** of *Geoscientific Instrumentation, Methods and Data System (GI)*
- He is **component of the Advisory Board** of
 - **Journal of Archaeological Method and Theory**
 - **International Journal of Architectural Heritage**
 - *Sci*
- He is **member** of the **Editorial Board** of the following journals:
 - *Remote Sensing*
 - *Journal of Geophysics and Engineering*
 - *Sustainability*
- He is/has been Guest Editor of special issues of international journals : *Journal of Cultural Heritage* (2009, vol. 10S), *Journal of Geophysics and Engineering* (2010, vol. 7; 2011, vol. 8; 2012, vol. 9), *Near Surface Geophysics* (2010, vol.8(5)), *Advances in Geosciences* (2010, vol. 24), *Journal of Archaeological Science* (2011, vol. 38), *International Journal of*

Geophysics (2011), *Archaeological Prospection* (2013, vol. 20), *International Journal of Applied Earth Observation and Geoinformation* (2014, vol. 26), *Remote Sensing* (2015), *Heritage* (2018-19), *Heritage* (2019), *Sustainability* (2019)

- 2006-07: Scientific responsible of ByHeriNet (*Byzantine Heritage Network: Rehabilitation, highlighting and management in the Eastern Mediterranean Basin*) Project [Interreg III B – Archimed]
- 2007: Co-chairman of the EARSeL (European Association Remote Sensing Laboratories) Special Interest Group (SIG)- on "Remote Sensing for Archaeology, Natural and Cultural Heritage".
- 2007-08: Scientific responsible for CNR-IBAM of Project PALAIS (*Patrimoine Architectural Locale t Aménagement Innovante et Stratégique*) [Interreg III C – Zone Sud]
- Since 2011 He has been **Science Officer** of “Cultural and Archaeological Heritage” within the division Geoinstrumentation and Geoscience of EGU
- Since 2010 Membership: EGU (European Geosciences Union), EARSEL
- **2013–2015**: Scientific Coordinator of the **Italy–China Great Relevance Project** “*Smart management of cultural heritage sites in Italy and China: Earth Observation and pilot projects*” within the framework of Executive Programme for Scientific and Technological Cooperation between Italy and China (Chinese partner - Chinese Academy of Sciences – Center for Earth Observation and Digital Earth)
- 2015-16 - Scientific responsible of Bilateral project CNR/IBAM - Università di Cartagena (Colombia) “Tecnologie e strumenti di diagnostica e conservazione degli insediamenti fortificati di Cartagena de Indias (COL) e Acaia (ITA)“ funded by CNR-ACAC Agreement
- 2016-2018: Scientific responsible of Project ATHENA. "Remote Sensing Science Center for Cultural Heritage" (H2020-TWINN-2015), Grant agreement ID: 691936
- 2017-2020: Scientific responsible of Project GeoMOP " Modern Geospatial Practices for Ancient Movement Praxis" (H2020-MSCA-IF-2016), Grant agreement ID: 747493
- 2020-on going: Scientific responsible of Project HERITAGE WITHIN " (Programme CROSS-SECT - Cross Sectoral Strand) - Grant agreement ID: 614719
- Associate at Research Group "Archaeology of Science and Andean Technologies" of the National University of San Marcos in Lima (Peru)

□ **A.6 TEACHING ACTIVITY : BRIEFLY**

□ **PROFESSOR OF PHD SCHOOL**

- **2014-15 - University of Catania** - Member of the Academic Board of the PhD School "Studi sul Patrimonio Culturale" of Dipartimento di Scienze Umanistiche (XXX Cicle)
- **2015-on going- University of Basilicata**, Member of the Academic Board of the PhD School in *Cities and landscapes: architecture, archaeology, cultural heritage, history and resources* (XXXI to XXXVIII Cycles)
- **2022-2024** - Member of the Academic Board of the National PhD School in *Design for Made in Italy: Identity, Innovation and Sustainability* (XXXVIII-XXXIC Cycles)
- **2024-on going** - Member of the Academic Board of the National PhD School in *Heritage Science* (XXXX Cycle)

• **University Teaching courses (1998-2016): n. 31**

- Faculty of Engineering of Potenza

- *Laboratory of Technical Architecture*: n.2 [1998-99 / 1999-2000]
- *Architectural Restoration* : n. 11 [2002-03 / 2003-04 / 2004-05 / 2005-06 / 2006-07 / 2007-08 / 2008-09 / 2009-10 / 2010-11 / 2012 – 13 / 2013 – 14]
- *Restoration of Architecture*: n. 2 [2002-03 / 2003-04]
- *Laboratory of Architectural Restoration* : n. 7 [2002-03 / 2004-05 / 2005-06 / 2006-07 / 2007-08 / 2008-09, 2009-10]
- *Science of Conservation and Restoration of Architectural Heritage* : n.3 [2011-12, 2012 – 13, 2013-14]
- Faculty of Engineering of Matera
 - *Restoration*: n. n.2 [2002-03 / 2003-04]
- Course of Architecture in Matera
 - *Fundamentals of Restoration*: n. 11 [2013-14, 2015-16; 2016-17; 2017-18, 2018-19, 2019-2020, 2020-21, 2021-22, 2022-23, 2023-24, 2024-25]
- **Master Post-Degree courses : n. 5**
- University of Basilicata, School of Specialization in Archaeological Heritage in Matera
 - *Ancient Building Systems and Restoration*: n. 4 [2021-22, 2022-23, 2023-24, 2024-25]
-
- **Visiting professor: n.4**

Universita Politecnica de Valencia (2014), Henan Academy of Sciences a Zheng Zhou (Cina) (2015; 2017), Chinese Academy of Sciences – RADI Beijing(2016; 2017), Universitat de les Illes Balears – Palma di Maiorca (2016)

- **A7 H-INDEX AND CITATIONS**
- SCOPUS: H-index=35, Citations=3869 (Scopus Author ID [8931289200](#).)

- Google Scholar: H-index=45, i-10 index= 132, citations=6492
- ISI-WEB of Science: H-index=32, citations=2969 (H-3889-2012)
- ResearchGate: Research Interest Score= 3665, citations= 5516, h-index=41, h-index= 27 (excluding self-citations)
- Semantic Scholar: H-index=36, citations=4349

A8 AWARDS

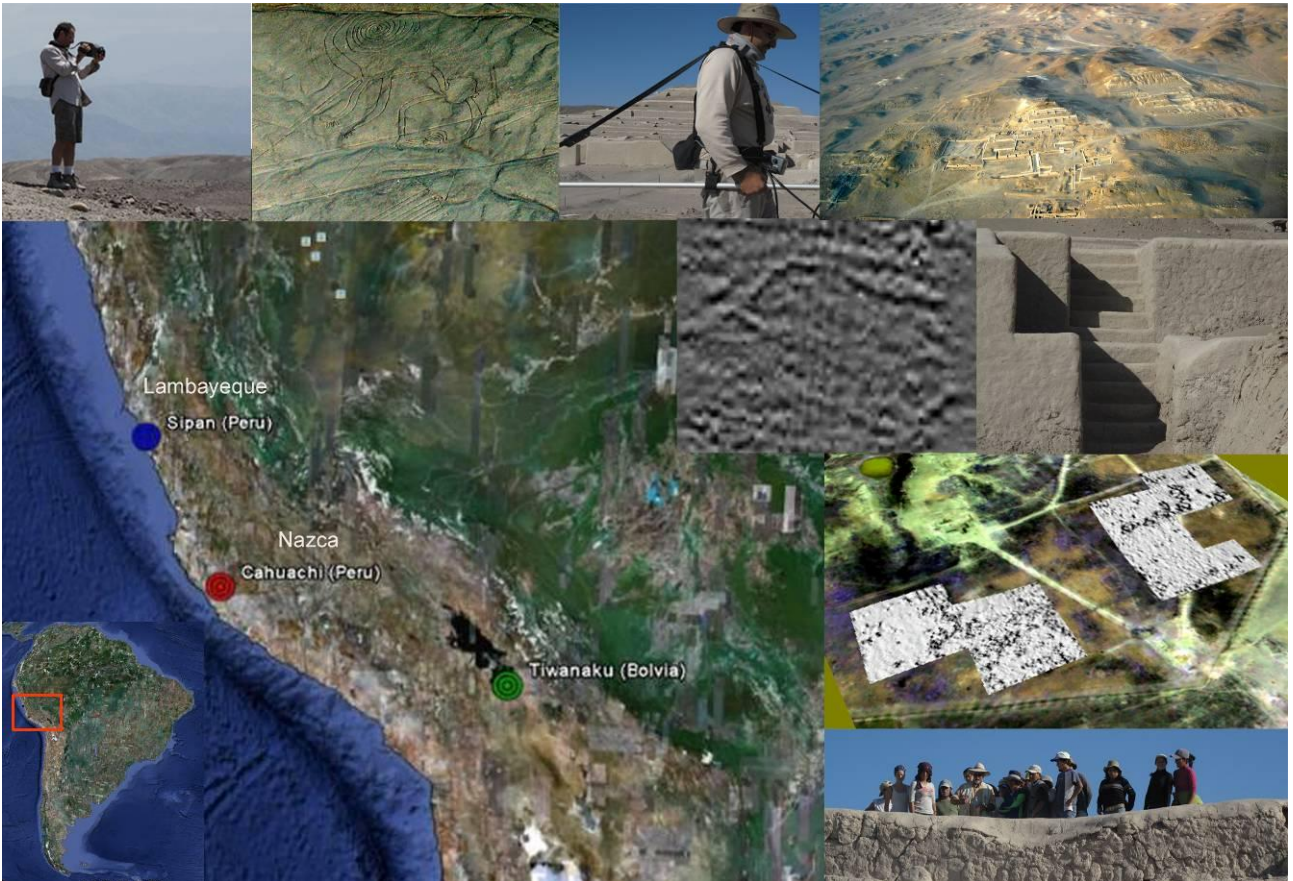
2010: Certificate of public merit of the first class - Gold Medal of the National Civil Protection

2011-2015. Best paper award in international conferences among which RSCY (2015), paper of special interest in EGU (2011), EGU (2012)

2016: Winner of CAS (Chinese Academy of Science) President's International Fellowship Initiative (PIFI).

2017: American Library Association's Choice Magazine Award as "Outstanding Academic Title" for 2017 for the volume "Ancient Nasca World. New Insights from Science and Archeology " (Springer 2017)

B) SCIENTIFIC RESEARCH ACTIVITY



B) SCIENTIFIC RESEARCH ACTIVITY

□ B.1 RESEARCH STATEMENT

My primary scientific interest throughout my career has been the **development and application of innovative methodologies and technologies for the conservation of cultural heritage and archaeological research.**

I have pursued this overarching goal through the following main research lines:

1. **Archaeogeophysics, remote sensing, and spatial analysis** for the study, preservation, and enhancement of archaeological heritage and ancient landscapes.
2. **Methodologies for the documentation, analysis, and conservation** of built heritage and historical monuments.
3. **Integrated approaches to understanding human settlement dynamics and environmental change** in Andean civilizations, particularly within the framework of the **ITACA Mission.**

Research Line 1: Archaeogeophysics, Remote Sensing, and Spatial Analysis for the Knowledge and Enhancement of Archaeological Heritage and Ancient Landscapes

This line of research is aimed at:

- i) the **identification and spatial characterization of proxy indicators and patterns** associated with buried archaeological sites through the integrated use of aerial and satellite imagery;
- ii) the **creation of predictive models and maps** to support archaeological exploration and preservation;
- iii) the **study of human presence dynamics in relation to environmental settings and changes.**

The activity is articulated into the following thematic areas:

1.a) Development of **models and analytical procedures** based on Earth Observation sciences—such as remote sensing and archaeogeophysics—and **predictive modeling** to support **preventive archaeology.**

1.b) Development of **automated extraction methods** from multispectral satellite imagery to detect features indicative of **clandestine excavations and archaeological disturbances**, with applications carried out and ongoing in **Syria and Peru.**

1.c) **Spectral analysis** and **multitemporal observation** of archaeological proxy indicators, with particular focus on the identification and interpretation of **crop marks.**

1.d) Development and application of **non-invasive prospecting techniques** for the identification and characterization of **archaeological contexts buried in alluvial areas**—with a case study in **Henan, China.**

1.e) Application of **LiDAR surveys, GIS-based analyses,** and other remote sensing datasets to investigate **post-classical landscapes** in Southern Italy during the **late Middle Ages**, with particular reference to the **abandonment of rural settlements.**

Currently I am involved in several research projects aimed at promoting the development of diagnostic, archeogeophysical and remote sensing methodologies through:

- The creation of a center of excellence for remote sensing applied to cultural heritage in Cyprus as part of the project "ATHENA Remote Sensing Science Center for Cultural Heritage" (H2020-TWINN-2015)
- the ITACA mission involved since 2007 in several scientific projects in South America for preventive archaeology (Peru and Bolivia), landscape protection (Peru and Argentina) and conservation of architectural heritage (Colombia)
- cooperation activities with various research institutions in China (Chinese Academy of Sciences (CAS)-RADI, HIST, Henan Academy of Science) in the context of bilateral projects financed by MAECI, the CAS, a visiting professor activity, aimed at developing earth observation based approaches for the management of cultural heritage in China and archeological prospection with particular reference to regions and areas crossed by Silk Road.

Research Line 2: Methodologies for the Knowledge and Conservation of Built Historical Heritage and Monuments

This research line focuses on the development and application of **integrated diagnostic, analytical, and restoration techniques** for the study and preservation of historical buildings and monuments. The main topics include:

2.a) Integration and fusion of diagnostic investigation methodologies based on non-invasive in situ testing and geophysical techniques (including Infrared Thermography – IRT, Ground Penetrating Radar – GPR, sonic, ultrasonic, and seismic tests) for the **diagnosis of the state of conservation** and support in **restoration planning**.

2.b) Study of traditional and historical construction techniques to inform strategies for the **restoration and structural rehabilitation** of monuments.

2.c) Analysis of historical building methods and the development of **seismic damage scenarios**, aimed at improving the resilience and safeguarding of architectural heritage in earthquake-prone areas.

In the past, as Research granter and Researcher of CNR-IISF (1993-2000) I studied medieval building techniques of fortified architecture in Southern Italy and I worked in the field of aerial and architectural photogrammetry.

Research Line 3: Integrated Approaches to the Study of Human Dynamics and Environmental Change in Andean Civilizations (ITACA Mission)

This research line focuses on the **interdisciplinary investigation of the relationship between ancient Andean societies and their environmental contexts**, with particular attention to adaptation strategies, resource management, and cultural expressions. Key topics include:

3.a) The Nasca Civilization: Environment and Sacred Landscape

Interdisciplinary research aimed at understanding the **adaptive strategies of the Nasca civilization** in response to environmental and climatic conditions, with a focus on **water resource management**

and the **cultural and religious dimensions** reflected in the geoglyphs of the **Pampas of Atarco** and **Cahuachi**. The project, conducted in cooperation with the *Proyecto Nasca* led by archaeologist **Giuseppe Orefici**, integrates expertise in **Earth observation technologies** to support archaeological analysis.

3.b) The Sanctuary of Pachacamac between Ichma and Inca Periods

Study of **settlement patterns** and **hydraulic systems** at the Sanctuary of Pachacamac, with a focus on **canalization structures** and the **Urpiwachaq lagoon**. Based on **archaeogeophysics** and **geoarchaeology**, the research is carried out in collaboration with the *Museo de Sitio de Pachacamac* (directed by **Denise Pozzi-Escot**) and includes the creation of an **archaeological predictive model** for the Ichma and Inca periods, with specific attention to the **Taurichumpi Palace sector**.

In **2017**, the **ITACA Mission of the CNR** was invited by the **University of Warsaw** to participate in a multi-year research project in the **Río Urubamba Valley**. As part of this collaboration, the ITACA Mission carried out **archaeogeophysical investigations** at the **Sanctuary of Machu Picchu** and the nearby sites of **Chachabamba** and **Inkarakay**

□ B.2 INTERNATIONAL SCIENTIFIC MISSION

□ B.2.1 ITACA MISSION IN SOUTHERN AMERICA

Since 2007 he has been **Director** of **CNR International Mission for Archaeogeophysics and Heritage Conservation** in Southern America (ITACA), financed by Italian Ministry of Foreign Affairs and CNR

□ **Director:** Nicola Masini.

□ **Staff:** The following researchers and archaeologists participated in the activities: N. Abate, G. Ciccone, L. Capozzoli, M. Danese, M. Delle Rose, G. Di Giacomo, C. Fattore, F. Gizzi, A. Higuera, R. Lasaponara, M. Lazzari, G. Leucci, A. Minervino, G. Nolè, A. Pecci, F. Perciante, R. Persico, M. Punzo, E. Rizzo, G. Romano, P. Romano, A. Sanchez, C. Sabia, M. Scavone, M. Sileo, D. Vera, V. Vitale.

□ **Activity:** Archaeogeophysics, archaeological investigations, Geomorphology, Science for Conservation of Earthen Architecture, Satellite remote Sensing, Field survey, Exposition

□ **Scientific partners:** CNR-IBAM, CNR-ISPC; CNR-IMAA, University of Bologna, University of Warsaw, University of Berkeley, Universidad Nacional de San Antonio Abad del Cusco, Universidad Católica de Santa María en Arequipa, Universidad de San Marcos (Lima), Universidad Nacional de Ingeniería (Lima)

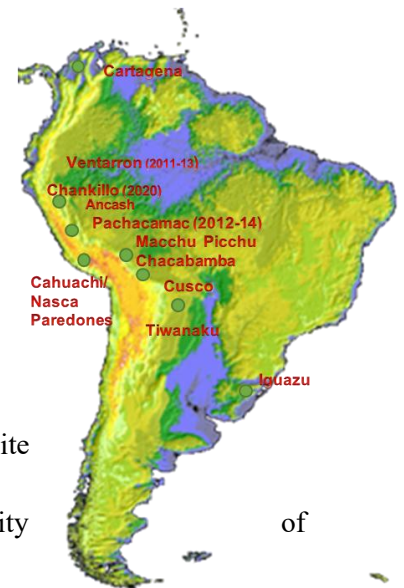
□ **Collaboration and agreement:** Centro de Estudios Arqueológicos Precolombinos in Nasca; Museo Tumbas Reales de Sipan, Museo de Sitio de Pachacamac, Archaeological Park of Machu Picchu, Unidad Ejecutora Chankillo

□ **Financed by:** Italian Ministry of Foreign Affairs, CNR, CNR-IBAM, CNR-IMAA, CNR-ISPC, University of Warsaw, Concytec (Peru), Universidad Nacional de San Antonio Abad del Cusco

□ **Investigated sites.** Peru: Ceremonial Centre of Cahuachi, Geoglyphs of Pampa de Atarco, Puquios of Rio Taruga and Rio Las Trancas, Rio Taruga geoglyphs and settlement, Paredones, Pachacamac, Ventarron, Arenal, Collud, Zarpan, Ucupe, Chankillo, Cusco, Machu Picchu, Sacsaihuaman; Bolivia: Tiwanaku; Bolivia: Cartagena

□ **Investigation campaigns.**

- I. April 2007: aerial prospection of Rio Nasca;
- II. April 2008: Cahuachi, georadar prospections in *Templo del Escalonado*;
- III. November 2008: Cahuachi, geomagnetic prospections in *Piramide Naranja*, infrared surveys, Ground truth of archaeological features detected from satellite imagery in Rio Nasca,
- IV. May 2009: Tiwanaku, Geomagnetic prospections, GPS surveys, Ground truth of archaeological features detected from satellite imagery
- V. August 2009. Cahuachi: Geomagnetic prospections in templo Escalonado and in Rio Nasca, measurement of seismic noise, Ground truth of archaeological features detected from satellite imagery
- VI. August 2010. Cahuachi, Geoelectric prospections, measurement of seismic noise in Piramide Naranja, GPS survey in the area of geoglyphs at South of Cahuachi.
- VII. December 2010. Arenal and Ucupe (Lambayeque). Archaeogeophysical investigations
- VIII. April 2011. Titicaca Lake, field survey for the study of waru-waru and the fortress of Pukarrani.
- IX. August-September: archaeogeophysical investigations in Huanter (Ancash) and Cahuachi (Nazca); field survey for the study of ancient aqueducts in the drainage basin of Nazca river
- X. November-December: archaeogeophysical investigations in Arenal, Collud and Zarpan (Lambayeque region)



- XI. December 2012: archaeogeophysical investigations in Cahuachi, Pachacamac
- XII. November-December 2013: archaeogeophysical investigations and field survey in Pachacamac, Cahuachi and Rio Taruga, near Nazca.
- XIII. June 2014. Tiwanaku (Bolivia) Archaeogeophysical investigations and surveys Akapana, Kantatallita and Templete.
- XIV. December 2014. Pachacamac (Peru): Field survey, archaeogeophysical investigations, aerial prospection by UAV, mapping archaeological features from satellite SAR data
- XV. September 2015. Nasca : Rio Taruga, Paredones, Pampa de Atarco and Cahuachi. Field survey and mapping by aerial surveys based on UAV of geoglyphs in Rio Taruga and Pampa de Atarco; Archaeogeophysical investigations in South Temple of Cahuachi, Inca settlement of Paredones and a settlement dating to later Intermediate Period in Taruga by means of the integration of geomagnetic prospections and aerial surveys based on UAV.
- XVI. June 2016. Cartagena de Indias (Colombia) :aerial survey, mapping and diagnostics investigations in the City Walls of Cartagena
- XVII. December 2016. Pachacamac: geomagnetic investigations and trial excavation in the inka palace of Taurichumpi; Cahuachi: geomagnetic investigations in Monticolo 1,
- XVIII. May 2017. Archaeogeophysical investigations (GPR and gradiometry) in Chachabamba, Machu Picchu, Inkaraqay
- XIX. November 2018. Archaeogeophysical investigations in Cusco: Plaza de Armas and historical centre
- XX. June 2019. Archaeogeophysical investigations (ERT and UAV-based multispectral imagery) in Machu Picchu
- XXI. February 2020. Archaeogeophysical investigations and syrveys in Chankillo
- XXII. May 2022 Archaeogeophysical investigations and syrveys in Nasca, Chicaa and Chankillo
- XXIII. July-August 2023 Surveys, archaeogeophysical and diagnostics investigations in Kuelap and Muyu Muyu
- XXIV. June 2024 Surveys, archaeogeophysical and diagnostics investigations in Sacsayhuamán. UAV based multisensor surveys and investigations of geoglyphs in Casma Valley. LiDAR survey of the Sanctuary of Pachacamac
- XXV. July 2025 Surveys, archaeogeophysical and diagnostics investigations in Sacsayhuamán, Temple of Moon and Qenqo site / UAV based multisensor surveys and investigations of geoglyphs in Casma Valley and the monumental complex of Chankillo-

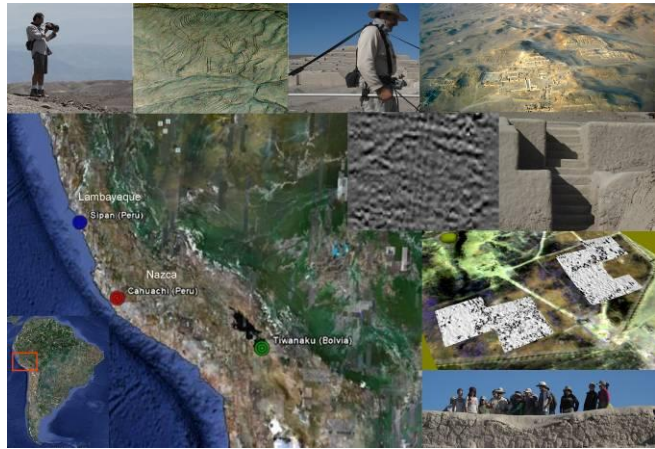
□ **Highlights and discoveries.**

- **2008–2009:** Discovery of a buried pyramid near the Río Nasca, using satellite remote sensing and geomagnetic investigations.
- **2009:** At Cahuachi, discovery of an altar, a ritual offering in the *Piramide Naranja*, and the tomb of the Priestess Girl.
- **2011:** At **Arenal** (Lambayeque), discovery of a Moche temple dating to the 3rd–4th century A.D.
- **2011–2012:** At Cahuachi, geophysical support for the discovery and excavation of the *Piramide Sur*.
- **2013:** Creation of a satellite map of ancient aqueducts in the Río Nasca drainage basin.
- **2016:** Compilation of the Archaeological Atlas of **Cahuachi** and the geoglyphs of the Pampa de Atarco.
- **2017:** Production of the Atlas of the City Walls of **Cartagena de Indias** (Colombia)
- **2017-19:** Characterization of **Machu Picchu** construction phases through subsurface exploration of Plaza Principal

□ **B.2.2 SCIENTIFIC MISSION IN CHINA**

In the context of the Bilateral Project between Italian CNR and Chinese Academy of Sciences (CAS) some scientific missions for archaeological purposes have been conducted from 2013 to 2015 in the Henan and Anhui provinces.

- **Responsibles:** Nicola Masini (CNR/IBAM), Fulong Chen (CAS/RADI and HIST)
- **Staff:** n. 5 researchers (N. Masini, R. Lasaponara, F. Gabellone, E. Rizzo, G. Romano, M. Sileo; n. 2 Research Granter (L. Capozzoli, A. Pecci)
- **Activity:** Archaeogeophysics, Satellite remote Sensing, Field survey, Photogrammetry, Science for Conservation
- **Scientific partners:** CNR-IBAM, CNR-IMAA, CAS-RADI
- **Collaboration and agreement:** HIST, Henan Academy of Sciences
- **Financed by:** Great Relevance Project of Italian Ministry of Foreign Affairs, CNR-IBAM, CNR-IMAA, Hundred Talents Program of the Chinese Academy of Sciences (CAS) [Y5YR0300QM], Youth Director Fund Category-A of Institute of Remote Sensing and Digital Earth, CAS
- **Investigated sites.** Han-Wei city in Luoyang, Longmen, Kaifeng, Zheng Zhou
- **Investigation campaigns.**



October 2013: field survey in Luoyang, surveys in Longmen.

October 2014: archaeogeophysical investigations and aerial surveys (drone) in Han-Wei city in Luoyang and Dinding gate of Sui Tang dynasties (Luoyang), terrestrial surveys and infrared thermography in Hong Cun

November 2015: archaeogeophysical investigations and field survey in Kaifeng, Han-Wei city in Luoyang, Zheng Zhou.

- **Research and studies.**
 - 2014-15: Satellite based detection of archaeological features in the HanWei city in Luoyang (Henan)
 - 2015: SAR based investigations in Niya (Xinjiang region)
 - 2014-15: Archaeogeophysical investigations in Kaifeng (Henan)

□ **B.2.3 OTHER SCIENTIFIC MISSION**

□ **B.2.3.1 COLOMBIA**

July 2016: As Scientific responsible of the Bilateral Project CNR-ACAC Colombia, he coordinated the close ranging remotem sensing campaigns and diagnostic investigations for the conservation and documentazion of the City Walls (Ciudad Amurallada) of Cartagena de Indias

□ **B.2.3.2 CYPRUS**

2017 March / 2018 September: As scientific responsible of Project Athena (H2020) he coordinated the scientific investigation of Tombs of Kings in Paphos

□ **B.3 RESEARCH MANAGEMENT EXPERIENCE**

B.3.1. CNR Research Commitment

2005-in progress Manager of a **CNR Research Commitment**: “Integrated diagnostic Methodologies for preservation of the architectural and archaeological heritage in the Mediterranean basin” (IBAM, seats in Lecce and Potenza)

- **Manager:** Nicola Masini. **Staff (2010):** n. 9 researchers n. 1 technologist, n.2 technicians, n.3 administratives; n. 6 Research Grant
- **Activity:** diagnostic for architectural and structural restoration, material characterization, archaeometry, archaeogeophysics, non invasive for diagnostics, study of provenance of materials, Virtual reality
- **Methodologies:** XRD, infrared thermography, georadar, sonic and ultrasonic tests, Laboratory of chemical and physical analyses.
- **Funds:** between 2007 and 2010 the ratio (ratio of amplification) between ordinary and external funds for research is around 1:12÷1:15

B.3.2. Laboratory of GIS and Remote Sensing

□ **2007-2010. Responsible** of Laboratory of GIS and Remote Sensing for Archaeology and Cultural Heritage Management.

- **Activities:** LiDAR for Archaeology and Palaeoenvironmental Analysis, Spatial Analysis for archaeological predictive modelling, Image processing of multispectral satellite data for site discovery, mapping of cultural sites, monitoring of archaeological sites.
- **Staff:** n. 2 researchers, n. 1 researcher-technologist, n. technician, n. 2 Research Granters

B.3.3. IBAM-CNR Seat of Potenza

□ **November 2011-September 2019. Responsible** of IBAM, UOS of Potenza.

- **Current Staff of IBAM seat of Potenza:** n. 10 researchers, n. 1 researcher-technologist, n.3 technicians, n.2 administratives

B.3.4. ISPC-CNR Seat of Potenza

□ **October 2019-on going. Responsible** of ISPC, Seat of Potenza.

- **Current Staff of ISPC seat of Potenza:** n. 11 researchers, n.3 technicians, n.3 administratives, n.4 Research Grant

□ **B.4 INTERNATIONAL RESEARCH PROJECTS*: MANAGEMENT EXPERIENCE**

* For sake of brevity, I only refer to projects, which I am in charge of.

B.4.1. INTERREG IIB - Project Manager of ByHeriNet (2006-07)

Transnational cooperation project in the framework of Archimed Interreg IIB, entitled: “Byzantine Heritage Network: Rehabilitation, highlighting and management in the Eastern Mediterranean Basin”

The Project has created a network addressed to valorization and integrated management of the byzantine cultural heritage in the Mediterranean East basin.

The outcomes have been: the development of itineraries, pilot-projects, studies, best practices and international protocols complying with the highlighting and management of the byzantine cultural heritage, through tools and systems of the Information Society, by means of the cooperation and the exchange of know-how. The countries involved in the project have been: Italy, Greece and Cyprus.



Project manager: Nicola Masini. **Staff:** n.5 researchers, n. 7 research granter. **Budget:** € 125.000,00. **Financing Programme:** Archimed Interreg IIB

B.4.2. Interreg III C SUD - project PALAIS (2007-08)

Responsible of the agreement with Region of Basilicata within the European transnational cooperation project, **PALAIS** : *Patrimoine Architectural Locale t Aménagement Innovante et Stratégique*

IBAM-CNR activity was focused on the set up and validation of a methodology aimed at the creation of a guide line framework for the study of feasibility and business plan for the reuse, valorization and management of architectural heritage. The countries involved in the project have been: Italy, Greece and Slovakkia.



Responsible: Nicola Masini. **Staff:** n.3 persons. **Budget:** € 60.000,00. **Financing Programme:** Interreg III C SUD

B.4.3. Bilateral Programme CNR Italy-CSIC Spain (2007-08)

Scientific responsible for IBAM-CNR of the project “Exchange of methodologies and knowledge for the preservation and promotion of Geomonumental routes: historical bridges built by the granite of Madrid and the calcarenite of Salento” with CSIC-IGE of Madrid.

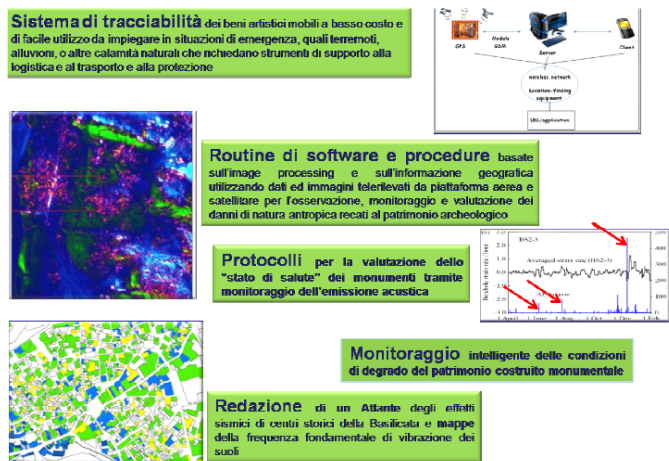
Responsibles: Nicola Masini (IBAM-CNR) and Monica Alvarez de Buergo (CSIC-IGE, Madrid). **Staff:** n.5 researchers; n.2 research granter; n.1 administrative. **Budget:** € 10.000,00. **Financing Programme:** Bilateral Programme CNR Italy and CSIC Spain

B.4.4 European Regional Development Fund (ERDF) - Project PRO-CULT (2012-15)

Title *Advanced methodological approaches and technologies for Protection and Security of Cultural Heritage*

Lead partner: *CNR-IBAM*; **other partners:** CSIC -IGE of Madrid (Spain); Adam Mickiewicz University of Poznan (Poland)

Responsible: Nicola Masini. **Financing:** Operative Programme ERDF Basilicata (2007-2013). **Budget** € 430.000,00



B.4.5 - 2012 - ESA-Cat1: Archaeological and environmental studies in the Nasca region using C- and L-band SAR imagery [2012-2014]

P.I.: Francesca Cigna. Co-investigators: Rosa Lasaponara, **Nicola Masini**, Deodato Tapete,

B.4.6 - 2013 – DLR (German Aerospace Center). Co-investigator of the project of Utilisation of TerraSAR-X / TanDEM-X Data and Products for Scientific Use

B.4.7 – 2013-15

Title: “Smart management of cultural heritage sites in Italy and China: Earth Observation and pilot projects (2013-2015).

Partners: *CNR-IBAM; CNR-IMAA*; Chinese Academy of Sciences – Center for Earth Observation and Digital Earth)

Responsible: Nicola Masini.



Financing/Programme: Executive Programme for Scientific and Technological Cooperation between Italy and China of Italian Ministry of Foreign Affairs

Budget € 40.000,00

Investigation campaigns and meeting

October 2013

Investigation campaign in the ancient city of Luoyang (11-13/10/2013) invited by HIST (International Centre on Space Technologies for Natural and Cultural Heritage) in Beijing of CAS (Chinese Academy of Sciences)

Bilateral meeting with HIST-CAS in Zheng Zhou, 10.10.2013

B.4.8 - 2014

ESA project, entitled : " Apply PALSAR data for the study of ancient Silk Road and archaeological sites in Xinjiang region (China)"

Principal investigator: Nicola Masini

B.4.9. Bilateral Programme CNR Italy-ACAC Colombia (2015-16)

Scientific responsible for IBAM-CNR of the project “*Technologies and tools for diagnosis and conservation of the fortified settlements of Cartagena de Indias (COL) and Acaia (ITA)*” with University of Cartagena.

Responsibles: Nicola Masini (IBAM-CNR) and Jorge Luis Alvarez Carrascal (University of Cartagena). **Staff:** n.5 researchers; n.2 research granter; n.1 administrative. **Budget:** € 12.000,00.

Financing Programme: Bilateral Programme CNR Italy and ACAC Colombia

B.4.10 [2016-18] Responsible for CNR-IBAM of the **Project ATHENA Remote Sensing Science Center for Cultural Heritage** (2016-18) **Staff:** n.3 researchers; n.2 administrative.

Financing Programme: Horizon 2020, Twinning 2015 (2015-2018)

B.4.11 - [2018-2020 January] Primary Coordinator of the **Project GeoMOP** (2018 on going) entitled: "*Modern Geospatial Practices for Ancient Movement Praxis* **Staff:** n.2 researchers; n.2 administrative. **Budget:** € 88.125,00. **Financing Programme:** H2020-MSCA-IF-2016.

B.4.12 - [2020-2022] Responsible for CNR-ISPC of the **Project HERITAGE WITHIN -** Programme Cross Sectoral Strand Action INNOVLAB - Bridging culture and audiovisual content through digital (dal 1.01.2020) - Grant agreement ID: 614719

B.4.13 - [2020-ongoing] Scientific PI for CNR-ISPC of the **Project Space-to-Tree: Earth Observation based monitoring of Natural and historical Park** – (Call *ARTES IAP-5G for L’ART Demonstration Projects* - European Space Agency) (Budget € 100.000,00)

B.4.16 - [2022-ongoing] Co-Principal Investigator and Coordinator of Coordinator of “Abbandono vErsus riGenerazioNe - BEGIN- ERDF 2014-20 – Basilicata Region

□ **B.5 NATIONAL RESEARCH PROJECTS*: MANAGEMENT EXPERIENCE**

- *For sake of brevity, I only refer to projects which I am in charge of.*

B.5.1 Project of Cataloguing of Cultural heritage in Basilicata (2015)

Customer: Basilicata Region.

Responsibles: Nicola Masini and Fabrizio T. Gizzi

B.5.2 High Training Project (2012-13): “Identification of best practices and ICT competencies for the management and valorization of Archaeological and Cultural Heritage”

Financing: Basilicata Region, Programme FSE Basilicata 2007-2013.

Responsible: Nicola Masini.

Budget € 20.220.

Staff: Stefano Del Lungo, Francesco Gabellone, Giovanni Leucci, Raffaele Persico, Canio Sabia

B.5.3 – Scientific consultant of the Project of CNR-IMAA financed by Basilicata Regione (Programma Basilicata Innovazione) of the bilateral project CNR-IMAA and CNR-IBAM for the validation of ultrasonic tests and tomographies and infrared termography on concrete infrastructures
Budget € 2.500,00

Responsible: Nicola Masini. **Financing:** CNR-IMAA

B.5.4 Project CNR-MIUR for the strengthening of technological infrastructures and laboratories (2009-11).

Responsible: Nicola Masini. **Financing:** MIUR (Ministry of Education, University and Research).

Budget € 517.058,00

B.5.5 Project of strengthening of professional competence of young researchers of GEL Project¹ (June 2009-June 11).

Project financing Scientific Research and training

Responsible: Nicola Masini. **Staff** : n. 5 Researchers as scientific tutors (F.T. Gizzi, M. Lazzari, N. Masini, D. Roubis, F. Sogliani); n.1 administrative (A. Briuolo). **Financing:** Basilicata Region.

Budget € 250.000

B.5.6 Project GEL (2007-08).

Responsible of IBAM of the GEL project for scientific Research and training financed by Basilicata Region

Responsible: Nicola Masini. **Staff** : n. 5 Researchers as scientific tutors (A. Calia, F. Gabellone, N. Masini, D. Roubis, F. Sogliani); n.1 administrative (A. Briuolo) **Financing:** Basilicata Region. **Budget** € 225.000

B.5.7 Agreement between Province of Lecce and IBAM-CNR for a research aimed at the preservation and valorization Byzantine Architectural Heritage (2007-08)

Responsible of IBAM of the GEL project for scientific Research and training financed by Basilicata Region

Responsible: Nicola Masini. **Staff** : n. 4 Researchers (A. Calia, F. Gabellone, M.T. Giannotta, G. Quarta); n.1 research granter (M. Sileo). **Financing:** province of Lecce. **Budget** € 85.000



B.5.8 Triennial plan of IBAM (2001-03)

Scientific activities on : Building techniques and architectural types of medieval castles in the South of Italy; Castles and quarries; Identification of building materials and spotting of quarries

Responsible: Nicola Masini; **Financing:** CNR

B.5.9 - [2020-ongoing] Coordinator of Technological and Research Infrastructure - IRPAC ("Technological and Research Infrastructure for the study of the human past, Conservation

¹ GEL is the acronymous of "Giovani eccellenze Lucane", that is "Young out standing of Basilicata"

and Management of Cultural Heritage") - (Budget € 3.014.000,00)- ERDF 2014-30 – Basilicata Region

B.5.10 - [2021-ongoing] Principal Investigator and **Coordinator of Basilicata Heritage SmartLab** (Budget € 3.338.000,00).- ERDF 2014-20 – Basilicata Region

□ **B.6 NATIONAL PROJECT FOR TECHNOLOGICAL DEVELOPMENT AND TRANSFER.**

- *For sake of brevity, I only refer to projects which I am in charge of.*

B.6.1 Georadar Stepped frequency reconfigurable

Description: Georadar stepped frequency offers many advantages respect to the classic pulsed georadar, because it allows us to set the parameters of the system in function of the frequency.

Responsible: Raffaele Persico, Nicola Masini, Francesco Soldovieri. **Staff** : n.2 researchers.

Financing: AITECH Project financed by Apulia Region and CNR Research Commitment: “Integrated diagnostic Methodologies for preservation of the architectural and archaeological heritage in the Mediterranean basin”. **Budget** € 150.00,00

B.6.2 Tracking System of Movable Cultural Objects (July 2010-june 2011)

Description: System of traceability of movable cultural artefacts useful both to manage the emergency (from carriage of artefacts to logistics) and to safeguard movable artistic heritage. It is based on the integration of sensors with mobile network and geographic information, managed by means of Location Based Services; thus making the technology low cost, modular, user friendly and easily integrable with other localization sensors

Such technology is in progress. It is conceived to assure two different levels of functionality: i) the first, static, is based on the use of RFID (Radio Frequency IDentification) to control openings or passages; ii) the second one is dynamic. It is composed of active localization sensors, capable to connect to a network as well as to use GPS signals and GSM infrastructures. They allow us to send the change of position of artistic objects with a given temporal frequency.

Responsible: Nicola Masini. **Staff** : n.1 researcher (Stefano. Del Lungo) and n.1 research granter (M. Biscione and M. Danese). **Financing:** Programme Basilicata Innovazione / Area Science Park of Trieste. **Budget** € 66.788,00 (including co-financing of IBAM-CNR of € 30.788)

B.6.3 SATOR Project

Description :Study and development of innovative models for the analysis and processing of satellite data for achieving high performance in terms of spatial and temporal resolution)

Scientific Responsible: Nicola Masini.

Financing: Ingenia srl

□ **B.7 MANAGEMENT ROLE IN NATIONAL BODIES AND INSTITUTIONS:**

Since 2018: Deputy Director of Creative Cultural Industry Cluster "Basilicata Creativa

□ **B.8 MAIN SCIENTIFIC RESULTS, HONORS AND AWARDS**

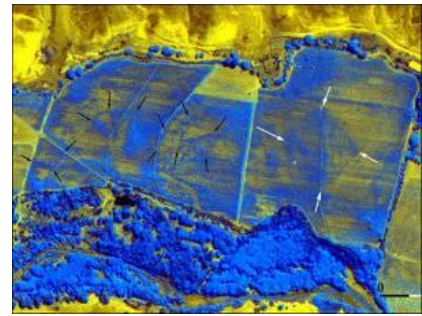
2007: Rotary Award “Outstanding Researchers”, assigned by Rotary Foundation - Italy

2008-09: Discovery of a buried archaeological settlement near Nazca river in Peru (2008-09)

2009: Distinction award by Italian Ministry of Education, University and Research for BYHERINET Project

2008-09: CNR Highlights 2008-09

2009-10: CNR Highlights 2009-10



Satellite image of the buried settlement in Peru

2010 - November 9

As a **responsible of task force of CNR-IBAM** operating in L'Aquila, after the 6 April 2009 earthquake, received **Certificate of public merit of the first class - Gold Medal of the National Civil Protection** which awarded to the CNR research groups of ITC U.O.S. L'Aquila, IRPI Perugia and IBAM (N. Masini, S. Del Lungo, E. Geraldi, FT Gizzi) operating in L'Aquila in the two-year period 2009-10, with the following motivation: "For the concrete and effective support for the resumption of administrative, cultural and social life of the victims of the disaster »(Undersecretary of State to the Presidency of the Council of Ministers - SSPCM protocol No. 865 / CD / 2010, of 4.11.2010).

2011

Wien, 3.8 April 2011. EGU Assembly

Paper of special interest "Multitemporal analysis and archaeogeophysical methods to monitor and face the archaeological looting: the experience in Nasca (Southern, Peru)" presented in the session "Satellite time series analysis", Wien 4 apr. 2011.

Paper of special interest "Archaeogeophysics in Peru and in Bolivia: the contribution of Italian CNR with ITACA mission (2007-10)." showed in the session "From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage", Wien 5 apr. 2011.

1st paper most cited of Journal of Geophysics and Engineering in the years 2010-11 (Masini N., Persico R., Rizzo E. 2010, Some Examples of GPR Prospecting for Monitoring of the Monumental Heritage, *Journal Geophysics Engineering* 7, pp. 190-199)

2012 - Wien, 22-27 April 2012. EGU Assembly

Paper of Special interest "Thermographic inspection of bond defects in Fiber Reinforced Polymer applied to masonry structures" (N. Masini, M. A. Aiello, L. Capozzoli, and E. Vasanelli) showed in the session "From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage"

Paper of Special interest "Electrical Resistivity Tomographies on the detection of adobe buried archaeological structures in Piramide Sur in Cahuachi (Peru)" (L. Capozzoli, N. Masini, E. Rizzo, R. Lasaponara, and G. Orefici) showed in the session "From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage"

Member of Italian Consultant Panel Stakeholders for Joint Programming Initiative on "Cultural Heritage and global change: a new Challenge for Europe"

2013

Best paper award at the Conference RSCy 2013 (First International Conference on Remote Sensing and Geoinformation of Environment, 8-10 April 2013 Paphos, Cyprus) with a paper entitled: "Gis and Archaeology: A Spatial Predictive Model For Neolithic Sites Of The Tavoliere (Apulia)" (Authors: Maria Danese, Nicola Masini, Marilisa Biscione e Rosa Lasaponara)

2016

2016 Winner of CAS (Chinese Academy of Science) President's International Fellowship Initiative (PIFI).

2017

4-5 October. Capri, ex Osservatorio Svedese. He has been part of the Italian Delegation which attended "High Level Research" Italy – Uk Bilateral Meeting, with particular reference to "Innovative Technologies for Cultural Heritage"

2019

Most cited paper of Journal of Cultural Heritage from 2013 up to 2019

□ **B.9 NATIONAL INVESTIGATION CAMPAIGNS OF DIAGNOSTICS FOR CONSERVATION, ARCHAEOGEOPHYSICS AND STUDIES.**

- *For sake of brevity, I only refer to investigations campaigns which I am in charge of.*

2022-24

Surveys and diagnostic investigations aimed at assessing vulnerability and seismic risk for the restoration of the Co-Cathedral of Troia

Purchaser: Regional Secretariat of the Ministry of Culture for Puglia -Troia

Scientific responsables: Nicola Masini;

Staff: M. Sileo (Technical coordinator), N. Abate, E. Cantisani, L. Capozzoli, D. Gioia, F.T. Gizzi, A. Minervino, L. Morero, M.R. Potenza, M. Scavone; **Budget** = € 4.800.



2015



Diagnostics investigation for the Restoration of Regio VIII in the archaeological area in the archaeological area of Pompeii

Purchaser: Private

Scientific Responsible: Nicola Masini.

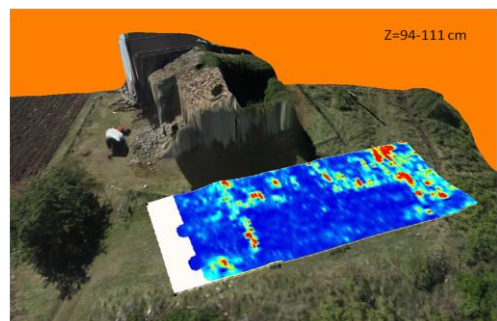
Technical coordinator: Maria Sileo. **Staff:**

Gianni Leucci, Giovanni Quarta, Antonio D'Antonio, Lara De Giorgi, Davide Melica, Antonio Pecci, Manuela Scavone. **Budget** = € 14.000

2013-14

Archaeogeophysical investigations in san Pietro - Calvello

Purchaser: Municipality of Calvello



Scientific responsible: Nicola Masini. **Staff:** Gianni Leucci, Enzo Rizzo, Cosimo Marzo, Luigi Capozzoli, Lara de Giorgi, Gregory De Martino, Loredana Matera, Antonio Pecci, Manuela Scavone, Maria Sileo; **Budget** =

2010-11

Cataloguing, diagnostics, conservation and valorization of the Cultural heritage in the territory of Cancellara.

Purchaser: Municipality of Cancellara

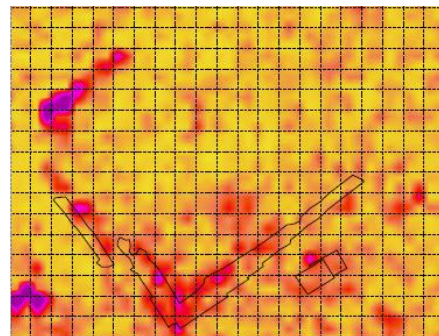
Scientific responsible: Stefano De Lungo & Nicola Masini. **Staff:** n.3 Researchers; **Budget** = € 15.000.

2010

Archaeogeophysical investigations in Vagnari, Gravina (Bari).

Purchaser: Archaeological Mission of Saint Mary's University, Halifax, Canada

Scientific responsible: Nicola Masini. **Staff:** Gianni Leucci, Raffaele Persico, Dimitris Roubis; **Budget** = € 2.000



Geophysical investigations in the Cathedral of Tricarico (Potenza).

Purchaser: Dioceses of Tricarico

Scientific responsible: Nicola Masini. **Staff:** n. 2 Researchers (G. Leucci, R. Persico); **Budget** = € 4.500

Diagnostic investigation for the restoration of the Cathedral of Tricarico (Potenza).

Purchaser: Regional Superintendance of Cultural Heritage of Basilicata

Scientific responsible: Nicola Masini. **Staff:** n. 5 Researchers (E. Gheraldi, F. Gizzi, G. Leucci, G. Quarta, R. Persico); **Partner:** University of Rome "La Sapienza". **Budget** = € 9.500



2007-08

Diagnostic investigations for the restoration of the medieval "Palombaro" in the historical centre of Matera (UNESCO)

Purchaser: Archaeological Superintendance of Architectural Heritage of Basilicata

Scientific responsible: Nicola Masini. **Staff:** n.1 Researcher (A. Calia), n.2 Research Granter (L. Fragasso, M. Sileo) **Budget** = € 7.000.

Diagnostic investigations for the restoration of the Cathedral of Matera

Purchaser: Archaeological Superintendance of Architectural Heritage of Basilicata

Scientific responsible: Nicola Masini; **Staff:** n.1 Researcher (R. Persico); **Budget** = € 4.800.

2007

Diagnostic investigations for the restoration of the Castle of Cancellara

Purchaser: Municipality of Cancellara

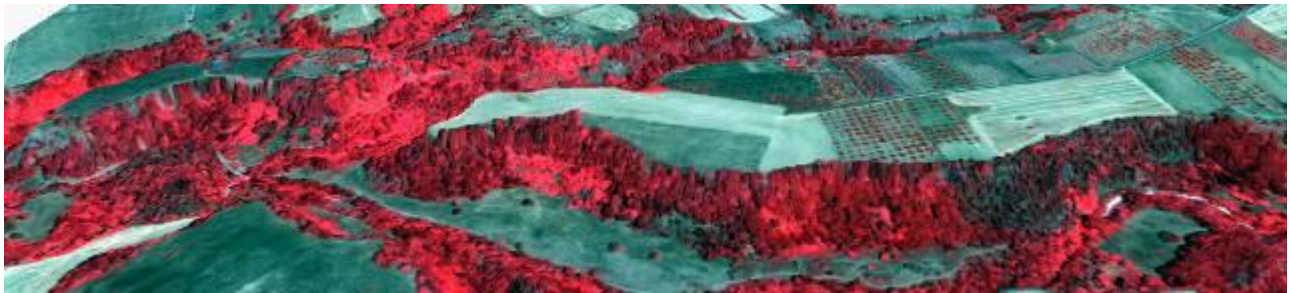
Scientific responsible: Nicola Masini. **Staff:** n.1 Researcher (A. Calia), n.3 Research Granters (A. Cinnella, D. Sanseverino, M. Sileo); **Partner:** DAPIT, University of Basilicata; **Budget** = € 9.000.



Archaeogeophysical investigations in the archaeological site of San Giovenale (agreement with Institute of Swedish Classic Studies of Rome)

Purchaser: Swedish Classic Studies of Rome

Scientific responsible for IBAM: Nicola Masini. Other partners: CNR-IMAA



2006

Study aimed at the reconstruction of historical seismic damage scenario of Melfi

Purchaser: Municipality of Melfi

Scientific co-responsibles: Fabrizio Gizzi & Nicola Masini. **Partner:** CNR-IMAA;

Budget = € 5.000.

Diagnostic investigations for the restoration of the of the Annunziata church in Salandra

Purchaser: Municipality of Salandra

Scientific responsible: Nicola Masini..

2004

Diagnostic investigations for the restoration of the Cathedral of Troia (FG)

Purchaser: Dioceses of Lucera-Troia

Scientific responsables: Domenico Liberatore and Nicola Masini;

Partners: DISGG, University of Potenza; CNR-IMAA; University of Lecce; **Staff:** A. Calia, D. Liberatore, N. Masini, L. Nuzzo, E. Rizzo;

Budget = € 4.800.



C) EDITORIAL ACTIVITY

D) CONFERENCES

E) PROJECT REVIEWER

C) EDITORIAL ACTIVITY

C.1 EDITOR IN CHIEF OF INTERNATIONAL JOURNALS

He is Editor in Chief and **co-founder** of **HERITAGE**
(<https://www.mdpi.com/journal/heritage/editors>)

C.2a ASSOCIATE EDITOR OF INTERNATIONAL JOURNALS

He is **Associate Editor** of Geoscientific *Instrumentation, Methods and Data System*

C.2b MEMBER OF ADVISORY BOARD OF THE FOLLOWING INTERNATIONAL JOURNALS

- **Journal of Archaeological Method and Theory** (since 2019)
- **International Journal of Architectural Heritage** (since 2019)
- **Sci** (since 2018)

C.23 Member of Editorial Board of the following international journals

- **Remote Sensing** (since 2010)
- **Journal of Geophysics and Engineering** (since 2010)
- **Sustainability** (since December 2019)

C.3 GUEST EDITOR OF INTERNATIONAL JOURNALS

- He is/has been **Guest Editor** of the following special issues of international journals :
 - *Journal of Cultural Heritage*, vol. 10S (2009), entitled: "ICT and Remote sensing for Cultural Resource Management and Documentation" (guest editors Lasaponara R., Masini N.)
 - *Journal of Geophysics and Engineering*, vol. 7 (2010), entitled: "Near surface geophysics for the study and the management of historical resources"(guest editors Lev Eppelbaum, Nicola Masini, Francesco Soldovieri)
 - *Near Surface Geophysics* vol. 8/5 (2010), entitled: "GPR in Archaeology "(guest editors Nicola Masini, Francesco Soldovieri)
 - *Photo Interpretation European Journal of Applied Remote Sensing* , vol. 46 (2010), entitled "Aerial and Spatial Archaeology : From the Historical Photographs to Lidar" (guest editors Lasaponara R., Hernandez M., Masini N., Deroin J.-P.)
 - *Advances in Geosciences*, vol. 24 (2010), entitled: "Near surface geophysics for the study and the management of historical resource" (guest editors Nicola Masini, Lev Eppelbaum, Francesco Soldovieri).
 - *Journal of Archaeological Science*, vol. 38 (2011), entitled : " Satellite remote sensing in archaeology: past, present and future perspectives" (guest editors Rosa Lasaponara, Nicola Masini)
 - *Journal of Geophysics and Engineering*, vol. 8 (2011), entitled: "Integrated non-invasive sensing techniques and geophysical methods for the study and conservation of architectural, archaeological and artistic heritage" (guest editors Nicola Masini, Francesco Soldovieri)
 - *International Journal of Geophysics* (2011), entitled: " Noninvasive Sensing Techniques and Geophysical Methods for Cultural Heritage and Civil Infrastructures Monitoring" (guest editors Francesco Soldovieri, Jean Dumoulin, Nicola Masini, and Erica Utsi)

- *Journal of Geophysics and Engineering*, vol. 9 (2012), entitled: “Cultural heritage and civil engineering” (editors Masini N., Soldovieri F., Alvarez De Buergo M., Dumoulin J.)
- *International Journal of Geophysics* (2012), entitled: “ Noninvasive Sensing Techniques and Geophysical Methods for Cultural Heritage and Civil Infrastructures Monitoring” (guest editors Francesco Soldovieri, Jean Dumoulin, Nicola Masini, and Erica Utsi)
- *International Journal of Geophysics* (2012), entitled: “ Noninvasive Sensing Techniques 2012” (guest editors Francesco Soldovieri, Jean Dumoulin, Nicola Masini, Raffaele Solimene, and Erica Utsi)
- *Archaeological Prospection*, 20 (2013), entitled: “ Satellite Radar in Archaeology and Cultural Landscape” (Guest editors: Rosa Lasaponara & Nicola Masini)
- *International Journal of Applied Earth Observation and Geoinformation*, 26 (2014), entitled: “Advance in geocomputation” (Guest editors: Lasaponara R., Murgante B., Masini N., Yong Ge, Asche H.)
- *Remote Sensing* (2014-15), entitled: "New Perspectives of Remote Sensing for Archaeology" (Guest editors: Lasaponara R., Masini N.), ISSN 2072-4292
- *Heritage* (2018), entitled: " *Features Papers*" (Guest editors: Masini N., Soldovieri F.)
- *Heritage* (2018-19), entitled: " *Sharing and Discussion of Experiences and Approaches to Interpretation, Conservation and Management of Archaeological and Architectural Heritage*" (Guest editors: Masini N., Prestileo F., Schiavon N.)
- *Sustainability* (2019), entitled: " *New Perspectives of Remote Sensing for Archaeology*" (Guest editors: Lasaponara R., Masini N.)

C.4 REVIEWER OF JOURNAL, PROCEEDINGS AND PROJECTS

C4.1 Reviewer for the following journals

- African Archaeological Review*
- American Journal of Engineering and Applied Sciences*
- Applied Energy*
- Archaeometry*
- Archaeological Prospection*
- Archaeological Research in Asia*
- Archaeology*
- Archeologia e Calcolatori*
- Big Earth Data*
- Construction & Building Materials*
- Digital Applications in Archaeology and Cultural Heritage*
- European Journal of Remote Sensing*
- Geoheritage*
- Geological Society of London*
- IEEE Journal of selected topics in applied earth observations and remote sensing (j-stars)*
- International Journal of Architectural Heritage*
- International Journal of Digital Earth*
- International Journal of Geophysics*
- International Journal of Remote Sensing*
- Journal on Computing and Cultural Heritage*

- Journal of Applied Geophysics*
- Journal of Archaeological Science*
- Journal of Archaeological Method and Theory*
- Journal of Architectural Conservation*
- Journal of Cultural Heritage*
- Journal of Geophysics and Engineering*
- Latin American Antiquity*
- Measurement*
- Natural Hazards and Earth System Sciences*
- Near Surface Geophysics*
- Remote Sensing*
- Remote Sensing of Environment*
- Sensors*
- The Egyptian Journal of remote Sensing and Space sciences*

C4.2 Reviewer for the following Proceedings of International Conferences

- Geoprocessing (2010)*
- ICCSA (2010, 2011, 2012)*
- EARSeL symposium and workshops (2008-12)*
- CAA – Computer Applications and Qualitative methods in Archaeology (2012, 2013)*
- Digital Heritage International Congress 2015, Granada (Spain), 28 September - 2 October 2015.*
- Geomedisland*
- YOCOCU 2016*

D) INTERNATIONAL CONFERENCES AND WORKSHOPS

D.1 CHAIR OR CO-CHAIR OF INTERNATIONAL CONFERENCES AND WORKSHOPS

2008

Co-chair of the EARSeL Workshop “**Advances in Remote Sensing for Archaeology and Cultural Heritage Management**” Rome, 30 September-4 October 2008

2011

• Santander (Spain), 20-23 June 2011. Co-chair of the Workshop : “Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis”, within Conference ICCSA (International Conferences on Computational Science and Its Applications) 2011

2012

• Salvador de Bahia (Brazil), 18-21 June 2012. Co-chair of the Workshop : “Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis”, within Conference ICCSA (International Conferences on Computational Science and Its Applications) 2012

2013

- Matera (Italia), 3-6 June 2013. Co-chairman of the 33rd EARSeL Symposium 2013 “Towards Horizon 2020: Earth Observation and Social Perspectives”
- Matera (Italia), 6-7 June 2013. Co-chairman of the 4th EARSEL Workshop on Cultural and Natural Heritage in conjunction with the 33rd EARSeL Symposium 2013
- Ho Chi Minh City (Vietnam), 24-27 June. Co-chairman of the Workshop : “Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis” within ICCSA Conference 2013
- Potenza (Italia), 4 October. Chairman of the 1st International Workshop of the Project PRO_CULT : "Cultural heritage between knowledge and monitoring. Multiscale approaches and smart technologies"

2014

- Guimarães (Portogallo), 30 June-3 July. Co-chairman of the IV Workshop : “Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis” nell’ambito della Conferenza ICCSA 2013

2015

- Banf, AB, Canada, 22-25 June. Co-chairman of the V Workshop : “Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis” nell’ambito della Conferenza ICCSA 2015

2016

- Beijing, 4-7 July 2016. Co-chairman of the VI Workshop : “Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis” within Conference ICCSA ICCSA 2016

2017

Trieste 6-8 June 2017. Chair of the Workshop : “Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis”, within Conference ICCSA (International Conferences on Computational Science and Its Applications) 2017

2018

- Matera, 23-25 May - **General Chair** of the International Conference YOCOCU 2018 "Dialogues in Cultural Heritage"

2023

- Rome, 19-21 Oct – Publication Chair of the 2023 IMEKO International Conference on Metrology for Archaeology and Cultural Heritage - MetroArchaeo2023

2025

- Matera, 23-24 May – General Chair of the Fourth European Assembly of Archaeology of the Americas entitled “Technologies in the Americas: From Ancestral Knowledge to AI”

D.2 CONVENER OF SCIENTIFIC SESSIONS WITHIN INTERNATIONAL CONFERENCES AND SYMPOSIUM 2007

- Florence, 17-20 September 2007. Spie Europe Remote Sensing Symposium. Convener of session on “*Remote sensing for archaeology, cultural and natural heritage*”, within the Conference “*Remote Sensing for Environmental Monitoring, GIS Applications, and Geology*”.

2008

- Cardiff, 15-19 September 2008. Spie Europe Remote Sensing Symposium. Convener of session on “*Remote sensing for archaeology, cultural and natural heritage*”, within the Conference “*Remote Sensing for Environmental Monitoring, GIS Applications, and Geology*”.

2009

- Wien, 19-24 April. EGU General Assembly. Co-convenor of the session on “*Near surface geophysics for the study and the management of historical resources: past, present and future*”
- Berlin, 31 August – 3 September 2009. Spie Europe Remote Sensing Symposium. Convener of session on “*Remote sensing for archaeology, cultural and natural heritage*”, within the Conference “*Remote Sensing for Environmental Monitoring, GIS Applications, and Geology*”.

2010

- Wien, 2-7 May. EGU General Assembly. Convener of the session GI9: “*Integrated non-invasive sensing techniques and geophysical methods for the study and conservation of architectural, archaeological and artistic heritage*”

2011

- Vienna, 3-8 April. EGU General Assembly Convener of the session GI9 *From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*

2012

- Vienna, 22-27 April. EGU General Assembly Convener of the session GI3.4 “*From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*”

2013

- Vienna, 7-12 April. EGU General Assembly Convener of the session GI3.4 “*From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*”

2014

- Vienna, 27 April-2 May. EGU General Assembly Convener of the session GI3.4 “*From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*”

2015

- Vienna, 12-17 April. EGU General Assembly Convener of the session GI3.4 “*From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*”

2016

- Vienna, 17-22 April. EGU General Assembly Convener of the session GI3.4 *From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*

2017

- Vienna, 23-28 April. EGU General Assembly Convener of the session GI3.4 *From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*

2023

- Amsterdam, 3-6 April. CAA (Computer Applications and Quantitative Methods in Archaeology) 2023 Convener of the Session “*Computational Approaches and Remote Sensing Applications in Desertic Areas*”

D.3 MEMBER OF SCIENTIFIC AND/OR PROGRAMME COMMITTEE OF INTERNATIONAL CONFERENCES

2007

- Firenze, 17-20 September 2007. Spie Europe Remote Sensing Conference. Member of the Programme Committee of the Conference “*Remote Sensing for Environmental Monitoring, GIS Applications, and Geology*”.

2008

- Cardiff, 15-19 September 2008. Spie Europe Remote Sensing Conference. Member of the Programme Committee of the Conference “*Remote Sensing for Environmental Monitoring, GIS Applications, and Geology*”.
- Rome, on 1-3 October 2008. Member of the Scientific and Programme Committee of the I EARSel Workshop “Advances in Remote Sensing for Archaeology and Cultural Heritage Management”

2009

- Kyung Hee University-Global Campus, Yongin (Korea), June 29th –July 2nd. Member of the Programme Committee of the *Fourth International Workshop on "Geographical Analysis, Urban Modeling, Spatial Statistics" GEOG-AN-MOD 09*.
- Berlin, 31 august – 3 September 2009. Spie Europe Remote Sensing Conference. Member of the Programme Committee of Conference “*Remote Sensing for Environmental Monitoring, GIS Applications, and Geology*”.

2010

- Fukuoka (Japan), 23-26 March 2010. Member of the Programme Committee of the 5th Workshop on "Geographical Analysis, Urban Modelling, Spatial Statistics" GEOG-AN-MOD 10
- Maryland, USA 28-30 July 2010. Member of Programme Committee of the Workshop Intelligent Spatial Decision Analysis ISDA '10 in conjunction with International Symposium on Intelligent Decision Technologies (IDT'10)
- Lecce, 21-25 June 2010. Member of the Organizing Committee of the XIII International Conference on Ground Penetrating Radar.

2011

- Gosier, Guadeloupe (France) February 23-28, 2011. Member of the Technical Program Committee of the Third International Conference on Advanced Geographic Information Systems, Applications, and Services: GEOProcessing 2011

2012

- Valencia, January 30-February 4, 2012. Member of the Technical Program Committee of “The Forth International Conference on Advanced Geographic Information Systems, Applications, and Services: GEOProcessing 2012”.

2013

- Nice, February 24-March 1 2013. Member of the Technical Program Committee of “The Fifth International Conference on Advanced Geographic Information Systems, Applications, and Services: GEO Processing 2013”.
- Paphos (Cyprus), 8-10 April 2013.. Member of the International Scientific Committee of the “First International Conference on Remote Sensing and Geoinformation of Environment” (RSCy 2014)
- Matera (Italia), 3-6 June. Member of the International Scientific Committee e Organizing Committee of the 33rd EARSel Symposium 2013 “Towards Horizon 2020: Earth Observation and Social Perspectives”

- Ho Chi Minh City (Vietnam), 24-27 giugno. Member of the Programme Committee of the 33rd International Conferences on Computational Science and Its Applications – ICCSA 2013
- Danang (Vietnam), 18-21 December 2013. Member of the International Scientific Committee of the “5th FTRA International Conference on Computer Science and its Applications (CSA-13)

2014

- Paphos (Cyprus), 7-10 April 2014. Member of the International Scientific Committee of the “Second International Conference on Remote Sensing and Geoinformation of Environment”. (RSCy 2014)
- Seville (Spain), 24-27 June 2014. member of the Scientific Committee of the International Congress on "Cultural Heritage, Science and Technology"
- Lemessos (Cyprus), 3-8 November 2014. Member of the International Scientific Committee of the International Conference on Cultural heritage - Euromed 2014.

2015

- Paphos (Cyprus), 16-19 March 2015. Member of the International Scientific Committee of the “Third International Conference on Remote Sensing and Geoinformation of Environment”. (RSCy 2015)
- Munich (Germany), 24-25 June 2015. Member of the Conference Committee of Conference "Optics for Arts, Architecture, and Archaeology V" in the context of SPIE Optical Metrology 2015
- Granada (Spain), 28 September - 2 October 2015. Member of the International Committee of "Digital Heritage International Congress 2015.

2016

- Madrid (Spain), 25-27 May 2016. Member of the International Committee of the International Conference YOCOCU (YOUTH in CONSERVATION of CULTURAL heritage)
- Paphos (Cyprus), 4-8 April 2016. Member of the Scientific Committee of the “Forth International Conference on Remote Sensing and Geoinformation of Environment”. (RSCy 2015)
- Sofia (Bulgaria), Bulgarian Academy of Sciences , 11-12 October 2016. Member of the Scientific Committee of the Third European SCGIS (Society for Conservation GIS) Conference of Geoinformation technologies for natural and cultural heritage conservation

2017

- Paphos (Cyprus), 20-23 March 2017. Member of the Scientific Committee of the “Eighth International Conference on Remote Sensing and Geoinformation of Environment”. (RSCy 2020)

2018

- Paphos (Cyprus), 26-29 March 2018. Member of the Scientific Committee of the “Sixth International Conference on Remote Sensing and Geoinformation of Environment”. (RSCy 2018)
- Matera, 23-25 May - Member of the Scientific Committee of the International **Conference** YOCOCU 2018 "Dialogues in Cultural Heritage

2019

- Paphos (Cyprus), 18-21 March 2019. Member of the Scientific Committee of the “Seventh International Conference on Remote Sensing and Geoinformation of Environment”. (RSCy 2019)

- Matera, 23-26 October - Member of the Scientific Committee of the International **Conference REUSO 2019** " *Documentazione, conservazione e recupero del patrimonio architettonico e tutela paesaggistica/ Documentation, conservation and recovery of the architectural heritage and landscape protection*"

2020

- Paphos (Cyprus), 16-18 March 2020. Member of the Scientific Committee of the “Eighth International Conference on Remote Sensing and Geoinformation of Environment”. (RSCy 2020)

- Tbilisi, 19-23 May - Member of the International Committee of the International **Conference YOCOCU 2018** " *Hands on Heritage: Experiencing Conservation, Mastering Management*"

2022

- Porto, 2-4 November - Member of the Scientific Committee of the Xth edition of International Conference ReUSO – *Documentation, Restoration and Reuse of Heritage*

D.4 CHAIRPERSON OF SCIENTIFIC SESSIONS OF INTERNATIONAL CONFERENCES

2008

- Rome, 1-3 October 2008. I EARSeL Workshop “Advances in Remote Sensing for Archaeology and Cultural Heritage Management”. Chairperson of the session : “*3D visualization and Virtual reconstruction of landscape and sites*”

2009

- Wien, 23 April. EGU General Assembly. Chairperson of the oral session “*Near surface geophysics for the study and the management of historical resources: past, present and future*”

- Berlin, 31 August – 3 settembre 2009. Spie Europe Remote Sensing Conference. Chairperson of the session “*Archaeology, Cultural and Natural Heritage Geospatial Infrastructure II*”

2010

- Fukuoka (Japan), 23-26 march 2010. 5th Workshop on "Geographical Analysis, Urban Modelling, Spatial Statistics" GEOG-AN-MOD 10. Chairperson of the session “Geosimulation of urban phenomena”, 23 march 2010..

- Wien, 2-7 May. EGU General Assembly. Chairperson of the oral session “From instrumentation to data analysis”, of the scientific session GI9”Integrated non-invasive sensing techniques and geophysical methods for the study and conservation of architectural, archaeological and artistic heritage.”

- Lecce, 23 June 2010. XIII International Conference on Ground Penetrating Radar. Chairperson of the oral session “*Diagnostic of historical buildings*”.

2011

- Vienna, 3-8 aprile. EGU General Assembly. Chairperson of the oral session GI9 "From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage"

2012

- Vienna, 22-27 aprile. EGU General Assembly. Chairperson of the oral session GI3.4 "From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage"
- Salvador de Bahia (Brazil), 18-21 June Chairperson of the oral session of the Workshop : "Remote sensing Data Analysis, modeling, interpretation and Applications: from a global view to a local analysis" in the framework of the Conference ICCSA 2012

2013

- Vienna, 7-12 April. EGU General Assembly. Chairperson of the oral session GI3.4 "From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage"

2014

- Seville (Spain), 24-27 June 2014. International Congress on "Cultural Heritage, Science and Technology", Chairperson of the oral session entitled:" Security technologies, remote sensing and G.I.S. for the protection and management of Cultural Heritage" held on June 26.
- Vienna, 27 April-2 May. EGU General Assembly Chairperson of oral session GI3.4 "*From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*"

2015

- Vienna, 12-17 April. EGU General Assembly Chairperson of oral session GI3.4 "*From artefact to historical site : geoscience and non-invasive methods for the study and conservation of cultural heritage.*"

2016

- Paphos, 4-7 April - RSCy 2016, Forth International Conference on Remote Sensing and Geoinformation of Environment. Chairman of the scientific session "*Sensing the Past: Remote Monitoring for Archaeology and Cultural Heritage*"
- Madrid (Spain), 25-27 May 2016. International Conference YOCOCU (YOUTH in CONSERVATION of CULTURAL heritage). Chairman of an oral session

2023

- Amsterdam, 3-6 Aprile. CAA (Computer Applications and Quantitive Methods in Archaeology) 2023 Chairman of the Session "*Computational Approaches and Remote Sensing Applications in Desertic Areas*"
- Rome, 19-21 Oct –IMEKO International Conference on Metrology for Archaeology and Cultural Heritage - MetroArchaeo2023. Chairman of the Session 1.3 - *Multiscale and multitemporal high resolution remote sensing and non-destructive testing for archaeology and monumental heritage: From research to preservation*

D.5 INVITED SPEAKER OR KEYNOTE AT INTERNATIONAL CONFERENCES and/or WORKSHOPS

2007

Invited to hold a seminar at CSIC-IGE, Madrid, 17 October 2007, entitled 'Monuments and historical sites. Integrated multiscale methodologies for conservation and enhancement'.

2009

- Tiwanaku, 20-22.05.2009. Ministerio de Desarrollo de Culturas de Bolivia. Invited Lecture entitled "Surveying techniques and monument restoration applied to archaeology"

2010

- Colonia, ISPRS Workshop on Remote Sensing Methods for Change Detection and Process Modelling, 18-19 November 2010. **Invited presentation entitled:** *LIDAR Remote Sensing for Archaeology Applications*

- Ankara, 19th International Geophysical Congress and Exhibition of Turkey, 23-25 November 2010. **Lecture entitled:** *Integrated approach to archaeogeophysics: methodological issues, applications and new perspectives*

2012

University of Cartagena (Colombia), 27 June 2012. Lecture entitled: "*Ciencias para la Conservacion y Puesta en Valor del Patrimonio Cultural*"

2011

Universidad Católica del Perú (PUCP), Lima 9 september 2011. Lecture entitled "Patrimonio y territorio: Conservacion y Tecnologia"

Istituto Italiano di Cultura a Lima, 7 December 2011. Lecture entitled : "*Más allá de lo visible*", una ventana sobre el pasado prehispánico. Estudios e investigaciones en arqueogeofísica y teledetección en el Perú (2007-2011)"

2013

Rome, Accademia dei Lincei, 3-5 April 2013. Bilateral Conference Italia-Brazilian "Culture, Science, Diritto and Sustainability: Tools for the Protection of Cultural Heritage". Lecture (3 April) entitled: "Key enabling technologies of earth observation for archaeology and the protection of cultural heritage"

Lima, UNIFE-Lima, 18 April 2013. Lecture entitled titulo "Conservación del patrimonio arquitectónico: enfoques metodológicos y nuevas tecnologías de diagnóstico"

Lima, 19 April 2013, Museo de la Nacion. Lecture entitled: "Arqueo.geofísica y teledeteccion. Aplicaciones y perspectivas futuras para la investigacion arqueologica y el manejo del Patrimonio Cultural"

Ho Chi Minh (Vietnam), 27 June 2013. Within Conference ICCSA 2013, he had a tutorial entitled: "Geospatial Analysis from Space: Data processing, information extraction and interpretation for Natural and Cultural heritage studies"

Rome, 28.10.2013. EUDAT 2nd Conference, Workshop "Social Sciences and Humanities (SSH) Tackle the big data challenge". Lecture entitled: "Satellite digital data for Cultural heritage: new strategies to share and extract information. The Virtual laboratory Italy-China".

2014

Roma, 28.10.2013. EUDAT 2nd Conference, Workshop "Social Sciences and Humanities (SSH) Tackle the big data challenge". Invited oral presentation entitled: "Satellite digital data for Cultural heritage: new strategies to share and extract information. The Virtual laboratory Italy-China".

Valencia, Universidad Politecnica. 7-8 April 2014.

Lecture 1: "Non invasive and integrated Diagnostics for conservation and structural rehabilitation of Monuments" [*Integracion de metodos diagnosticos non invasivo para la conservacion y restauracion estructural de monumentos*]

Lecture 2: "Architectural ruins: study approach, conservation and valorization" [*Las ruinas arquitectonica: enfoque al estudio, coservacion y puesta en valor*]

Huangshan city, Anhui, China, 26-29/05/2014. Conference co-organized by UNESCO and HIST "Huangshan Dialogue on Space Technologies for World Heritages sites, Biosphere Reserves, potential Geoparks". Invited presentation entitled: "*Space technologies and ICT for Cultural heritage from the Chinese and the Italian perspectives*"

Seville (Spain), 24-27 June 2014. International Congress on "Cultural Heritage, Science and Technology", Invited lecture entitled: "*Remote Sensing for the study, protection and conservation of cultural heritage. The experience of ITACA Mission in Southern America (2007-2013)*"

2015

Matera (Italy), 9 June. "Smart Spec Project", Programme ERRIN, Workshop " Smart Specialization Strategy (S3) and Creative Cluster strategies on CCI - "the case on Matera 2019" ". Invited presentation entitled : " The experience of Basilicata Region on S3 clustering"

Roma, Seat of MIBACT (Italian Ministry of Cultural heritage, Culture and Tourism), 28 July 2015. VII Bilateral Seminar of the Italian National School of Administration and Shanghai Administration Institute entitled " *Policies for the protection and management of cultural heritage in Italy and in China*". Invited oral presentation entitled" *Along the Silk Road: Archaeology and ancient landscapes observed by Space* "

Nasca (Peru), 5.09.2015. II SIMPOSIO DE ARQUEOLOGIA "Avances de las investigaciones arqueologicas de las misiones Italiana y Japonesa. Lecture entitled "*Arqueo-geofísica y teledetección para la investigacion arqueológica en el territorio de Nasca: resultados y perspectivas futuras*"

Frascati, Seat of European Space Agency, 12-13/11/2015. 5th EARSeL Workshop on "Advances in remote sensing for cultural heritage: from site detection, to documentation and risk monitoring". Invited keynote entitled : "Prayers and aqueducts: the response of Ancient Nasca to water shortages".

2016

Palma di Maiorca (Spain), Universitat de les Illes Balears 19 September 2016. Lecture: " *Conservacion y Restauracion : desde el conocimiento a la intervencion. El contributo de las ciencias y las tecnologías*"

Varsavia (Poland), University of Varsavia, 24 october 2016. Thirty years of Italian-Polish Cooperation in the Andes. Invited Lecture: "*Paisaje y arqueologia andina a través de la lente de sensores geofísicos y de satélite*"

Genova (Italy), Palazzo Ducale, Sala del Maggior Consiglio, **Festival della Scienza** (Science Festival), 28 October 2016. Conference “Tracce del tempo dall’Universo L’archeologia spaziale”. Invited Lecture entitled: "*Miradas de los Dioses. Spatial observation of Andean Past and Landscape*"

University of Varsavia, 24 October 2016. Thirty years of Italian-Polish Cooperation in the Andes. Invited Lecture: "*Paisaje y arqueologia andina a través de la lente de sensores geofísicos y de satélite*"

2017

Matera (Italy), 19.01.2017. School of Post-Graduate Studies in Archaeology at the University of Basilicata, Matera. **Lecture** entitled: "Archeologia e antichi Paesaggi dallo Spazio"

Zheng Zhou (China), 24.02.2017. Henan Academy of Sciences. **Invited lecture** entitled: "*Remote sensing and Digital technologies for archaeological research in Europe, Southern America and China*"

Beijing (China), 1.03.2017. Chinese Academy of Sciences, Institute of Remote Sensing and Digital Earth.. Lecture entitled: "*Archaeology and Cultural Heritage. The role of Remote Sensing*"

Matera (Italy), 21.06.2017. PhD School at University of Basilicata, Matera "Cities and Landscape: Architecture, Archaeology, Cultural heritage, History and resources". Invited Seminar entitled: "*Non invasive diagnostics for the knowledge and restoration of architectural heritage*"

Matera (Italy), 22.06.2017. PhD School at University of Basilicata, Matera "Cities and Landscape: Architecture, Archaeology, Cultural heritage, History and resources". Invited Seminar entitled: "*Archaeological Proxy indicators archeologici: reconnaissance and processing of remotely sensed data for the study of ancient landscapes*"

Prague (Czech Republic), 18-22.09.2017. Conference "*Natural stone for cultural heritage: local resources with a global impact*", organized by Charles University of Prague, Faculty of Science and Academy of Fine Arts Prague. **Keynote** held 21.09.2017, entitled "*Knowledge and Restoration of Architectural and Archaeological Monuments: from historical sources to in situ/remote sensing technologies*"

2018

London, 2.06.2018. 4th International Conference on Science and Engineering in Arts, Heritage and Archaeology (SEAHA) – London, Institute for Sustainable Heritage, University College London, 4-6 June 2018. Invited **Lecture** entitled: "*Earth Observation for archaeological research and cultural heritage management and monitoring. Approaches, Challenges and new Perspectives*"

Nasca (Peru), 25.08.2018. III SIMPOSIO DE ARQUEOLOGIA “Avances de las investigaciones arqueológicas de las misiones Italiana y Japonesa. **Lecture** entitled “*La “Re-descubierta “ de los geoglifos de Pampa de Atarco: Nuevas informaciones sobre los geoglifos y la relación entre el hombre y el medio ambiente a los tiempos de los Nascas*”

Lima (Peru), 27.09.2018. Museo Nacional de Arqueología, Antropología e Historia de Lima - Lecture entitled: "Mas alla de lo visible en Machu Picchu y Chachabamba"

El Cairo (Egypt), 24.11.2018. Mena House Hotel Greater Cairo. Workshop Eye on the Glòobe. COSMO SkyMed for Cultural Heritage. Lecture entitled: Study of human past by SAR: overview, use cases and future challenges using Cosmo SkyMed

Nuova Delhi (India), Auditorium of the National Museum Institute, 4-5.12.2018. Conferenza "EU-India Partnership for Cultural Heritage Conservation“. Lecture dal titolo: " *Earth Observation for the study of human past and cultural heritage management. State-of-the-art, case studies and new perspectives*"

Paris, École française d'Extrême-Orient , 11-12 December 2018. "Paris Dialogue on Archaeological Lidar". Keynote entitled: "*LiDAR and its impact to Medieval Archaeology in Southern Italy.*"

2019

El Cairo-Luxor (Egypt), 10-12 December 2019. Symposium "Sustainable conservation of UNESCO and other heritage sites through proactive geosciences". Lecture with Rosa Lasaponara entitled: "Artificial Intelligence and Big Earth observation data for the study of the human past"

2021

Cusco, 16.12.2021 XXI Meeting of Physics. Cusco, 16-18.12.2021. Keynote entitled "Teledeteccion y Geofisica aplicada a la Arqueologia" [Remote Sensing and Geophysics applied to archaeology]

2022

8.03.2022 In the context of 2022 East2022 IEEE Mediterranean and Middle-EastGeoscience SymposiumGeoscience and Remote Sensing Symposium. 7 - 9 March, 2022 • Virtual Conference, He had a lecture entitled " *Multisensor and multiscale remote sensing data integration approaches for archaeological looting analysis in Peru* "

7.07.2022. In the context of XR SALENTO 2022: 1st International Conference on eXtended Reality, Lecce 6-8.07.2022, he had a Keynote entitled "*Remote and Close Range Sensing, Imaging and eXtended Reality for the Interpretation and Conservation of Cultural Heritage*"

14.10.2022. In the context of the Conference "Research, Intelligence and Technology for Heritage and Market Security. How to Fight Illicit Trafficking of Cultural Heritage", Venice, 14.10.2022, he had a lecture entitled "Remote sensing based approach to archaeological looting feature detection in desert and under canopy"

20.10.2022 In the context of Metro Archaeo. 2022 IMEKO International Conference on Metrology for Archaeology and Cultural Heritage. Rende, University of Calabria, 19-21 October 2022, he had a tutorial entitled "Remote and close range sensing applied to cultural heritage and the study of human past

16.11.2022. Lund (Sweden), Lund University. "SHARE. Archaeological Dialogues" Invited lectures " *Remote and close range sensing applied to cultural heritage and the study of human past* " and "*E-RIHS the Italiano node of European Reserach Infrastructure fopr Heritage and MOLAB*"

2023

2023, 9 May. Rome, Campidoglio. GIORNATA DELL'ARCHEOLOGIA ITALIANA ALL'ESTERO. Diplomazia culturale e Archeologia, eccellenza della ricerca italiana nel mondo (DAY OF ITALIAN ARCHAEOLOGY ABROAD. Cultural Diplomacy and Archaeology, excellence of Italian research in the world). Presentation of the Italian Mission of CNR ITACA-Peru

2023, 14-16 Sep. XXII. Turin, Conference of the Italian Society of Archaeoastronomy - V. F. POLCARO School of Archaeoastronomy. Invited lecture entitled " Archeologia dall'alto: nuove frontiere del remote sensing per lo studio del passato umano" [Archaeology from above: new frontiers of remote sensing for the study of the human past]

2024

2024, 18-19 September. US Space and Rocket Center Education Training Facility (ETF) Huntsville, Alabama (USA). NASA Symposium in Honor of Thomas Sever "NASA and ARCHAEOLOGY from SPACE". Invited lecture entitled "*Remote Sensing Based Approaches to Prehispanic Archaeology in Southern America: Past, Present and Future Perspectives*"

2024, 24 October. Chengdu (China), 2nd International Workshop on *Space Archaeology of the Chengdu Plain*. Invited lecture entitled "*Remote sensing approaches to pre-Hispanic archaeology in South America: past, present and future perspectives*".

2025

2025, 30 January. Erathostene Center, Limassol (Cyprus). In the context of the Kick Poff Meeting of the project SATCULT, invited lecture entitled "*Earth Observation Based Approaches for Archaeological Interpretation and Cultural Heritage Protection and Conservation*"

2025, 9 June. Scuola di Dottorato dell'Università della Basilicata "Cities and Landscape: Architecture, Archaeology, Cultural heritage, History and resources". Seminar entitled: "*Tecnologie e approcci multiscala per il monitoraggio e la conservazione dei parchi archeologici* [Multiscala technologies and approaches for monitoring and conserving archaeological parks]"

2025, 11 September. Nicosia (Cyprus), ENGINEER Project Final Event. Invited as panelist to be part of the Panel discussion on the following themes: Climate change / Hazard /Digital Heritage / Research Opportunities and Collaborations in Cultural Heritage

2025, 25 September. Guimaraes (Portugal), Universidad do Minho, Departamento de Engenharia Civil. As part of the conference on "sustainability-oriented approaches to the rehabilitation and revitalisation of the built cultural heritage of the Montesinho Natural Park, related to the INHAVIT Project. Invited lecture entitled: "Conservation of vernacular heritage in Italy".

2025, 25 September. Guimaraes (Portugal), Universidad do Minho, Departamento de Engenharia Civil. As part of the conference on "sustainability-oriented approaches to the rehabilitation and revitalisation of the built cultural heritage of the Montesinho Natural Park, related to the INHAVIT Project. Invited lecture entitled: "Conservation of vernacular heritage in Italy".

2025, 18-20 October. Hangzhou (China), The Third Liangzhu Forum- Archaeology Sub-forum Preliminary Agenda. Invited lecture entitled: "From Space to Site: Remote Sensing Approaches for the Investigation and Conservation of Large Archaeological Complexes and Historical Built Heritage"

2025, 11-14 November. Arequipa (Peru), Congreso Nacional de Arqueología. Keynote entitled: "Hacia la arqueología del futuro: el papel de la teledetección en Sudamérica"

D.6.1 INTERNATIONAL WEBINAR

2020

8.06.2020 In the context of Webinar "Archaeology of Asia", organized by the Institute of Archaeology of University of Warsaw, he had a Keynote entitled "*Remote sensing based view of archaeology and archaeological landscape in China and in Asia*"

2022

8.03.2022 In the context of HSAcademy webinars organized by IPERION HS and E-RIHS he had a keynote entitled "*Remote sensing-based approaches for Cultural Heritage interpretation and monitoring*"

D.6.2 NATIONAL WEBINAR

2021

11.02.2021 - MEETINGS ON THE THEME: Landscape and fortifications. Organized by the Italian Institute of Castles. Webinar entitled: "Landscape and Rncastellation: the case of Basilicata"

D.7 INVITED ORAL PRESENTATION AT NATIONAL CONFERENCES.

1995

• Acerenza, 27-29 April International Conference entitled "Città e cattedrale" (Nell'ambito delle celebrazioni del IX centenario della Cattedrale di Acerenza). Invited oral presentation entitled: "*La Cattedrale di Acerenza : aspetti tecnico-costruttivi e analisi morfologica dell'impianto*". [trad. it. Acerenza Cathedral building features and morphological analysis of the architectural plan]

1997

• Castello di Lagopesole, 16-19 October 1997. Partecipa al Convegno Internazionale "Castra ipsa possunt et debent reparari. Indagini conoscitive e metodologie di restauro delle strutture castellane normanno-sveve", con una relazioni su invito, dal titolo: "*La fotointerpretazione aerea finalizzata allo studio morfologico dei siti urbani e fortificati medioevali della Basilicata*".

2001

• Taranto, 18-21 ottobre. Partecipa su **invito** al III Convegno internazionale di Studi Melitensi, "Gli Archivi per la storia del Sovrano Ordine Militare di Malta", con una **relazione** dal titolo *Dall'architettura degli ordini cavallereschi in età medievale all'architettura militense in età moderna: quando il documento illustra*.

2003

• S. Giovanni in Fiore (CS), 25-30 marzo 2003. Partecipa su **invito** al Convegno internazionale di studio "I Luoghi di Gioacchino da Fiore", con una **relazione** dal titolo "*Complesso monastico e chiesa di S. Giovanni in Fiore : Analisi statistica per l'individuazione delle unità di misura*."

• Savelletri di Fasano, 27-29 novembre 2003. Partecipa su **invito** al I Convegno internazionale "La civiltà rupestre. Quando abitavamo in grotta", una **relazione** dal titolo "Metodologie di rilievo e di analisi della cultura costruttiva dell'architettura ipogea"

2006

• Roma, Consiglio Nazionale delle Ricerche, p.le Aldo Moro, 14 giugno 2006. "Il CNR e le strategie per la conservazione del Patrimonio Culturale." Convegno di studio in occasione del centenario della nascita di Cesare Brandi, una **relazione** dal titolo "Metodologie di indagine diagnostica per la conservazione del patrimonio architettonico: i casi della Cattedrale di Troia e del Teatro Petruzzelli di Bari".

2009

- Venosa, Castello ducale del Balzo 6 – 7 novembre 2009. Conference on “Il Vulture: una via per la Pace”. Invited oral presentation entitled: *Il castello di Melfi dai Cavalieri Normanni ai Principi Doria*

2013

L'Aquila, Archivio di Stato, 7.02.2013. Conference entitled " L'Aquila come cantiere per la ricostruzione. Innovazione e ricerca per tutelare dal rischio sismico il patrimonio culturale, modelli e tecniche di intervento nel post terremoto, ricostruzione del centro storico" Invited oral presentation entitled: " *Approcci e tecnologie abilitanti per la diagnosi di pronto intervento e la gestione dell'emergenza: l'esperienza del CNR-IBAM sul patrimonio culturale a L'Aquila*"

2019

- Rome, seat of Embassy of Brasil in Rome. 31 May. Conference organized by Embassy of Brasil in Rome in collaboration with talian-Latin America Institute entitles: “La Cooperazione Spaziale come strumento per il progresso economico, scientifico e culturale”. Presentation entitled “Space technologies and remote sensing the study of human past and cultural heritage management”

D.8 PARTECIPATION WITH ORAL PRESENTATION AT INTERNATIONAL CONFERENCES.

1996

- Roma, 4-8 March 1996. UNESCO International Congress on Environment/Climate (ICEC-96) Oral presentations entitled: *Morphological analysis, study of the materials and constructive techniques and photogrammetry applied to the Acerenza cathedral and Reconstruction of Monte Serico's medieval forma urbis.*

1997

- Rhodes, 6-11 May 1997 - 4th International Symposium on the Conservation of Monuments in the Mediterranean. Oral presentation entitled: *Reconstruction of the medieval forma urbis of some demic sites in terra of Lucania (Basilicata, Italy).*

1998

- Tricesimo (UD), 20-21 November 1998. Colloqui internazionali "Castelli e Citta Fortificate" dal titolo *De castelli di pietra e di .. cristallo* , organizzati dal Dipartimento di Ingegneria Civile dell'Università degli Studi di Trieste e Udine. Oral presentation entitled : “*Iconografia dell'architettura federiciana in Italia meridionale: analisi metrologica dei castelli a "Pyramidenturm"*”

1999

- Dresda, 22-25 june 1999. 6th International Conference “Structural Studies, Repairs and Maintenance of Historical Building” STREMAH 99. Oral presentation entitled: “*Conservation of the Cathedral of Acerenza by means of a muldisciplinary approach*”.
- Paris, 5-9 july 1999. 2^{ème} Congrès International sur “*Science et technologie pour la sauvegarde du patrimoine culturel dans la Pays du Bassin Méditerranéen*”. Two oral presentations entitled: “*Statistical method for the individuation of the original units of measure of an historical architecture: criteria, boundaries and application of a relative dating instrument*” e “*Survey and analyses for the study of the rupestrian environment: Santa Maria delle Grazie di San Marzano di San Giuseppe*”.

2001

- Bologna, 27-29 may 2001. 7th International Conference “Structural Studies, Repairs and Maintenance of Historical Building” STREMAH 2001. Oral presentation entitled: “*Interdisciplinary approach for the restoration of the Church "La Madonna della Pietà"*”

- Alcalá (Spagna), 9-14 July 2001. 3rd International Congress on Science and Technology for the Safeguard of Cultural Heritage in the Mediterranean Basin. Oral presentation entitled: *Statistical analyses for the individuation of the original units of measure of an historical architecture: criteria and application of a relative dating method*
- Stoccarda (Germania) – Biblioteca dell'Università, 26 novembre 2001. Partecipa su **invito** al Simposio "Itinerari federiciani. Viaggio nei castelli di Federico II in Basilicata", con una **relazione** dal titolo *L'architettura fortificata nel segno di Federico II in Italia meridionale e in Basilicata*.

2006

- Madrid, 21-24 June 2006. International Conference on Heritage, Weathering and Conservation. Three Oral presentations entitled:
 - *Integration of NDT techniques for the restoration of a rose-window: case study*
 - *Catalogue of building techniques of vernacular architecture: case study in Southern Italy*
 - *VHR satellite images for the knowledge and the enhancement of cultural landscapes: the medieval deserted villages in Basilicata (Southern Italy)*
- Rome, 4-7 dicembre 2006, 2nd International Conference on Remote Sensing in Archaeology. Oral presentation entitled: *Evaluation of the spectral capability of quickbird imagery for the detection of archaeological buried remains*

2007

- Firenze, 17-20 September 2007. Spie Europe Remote Sensing Conference. Oral presentation entitled: *On the use of satellite QuickBird imagery in an archaeological context*
- Athens, 1-6 October 2007. XXI CIPA International Symposium. Oral presentation entitled *QuickBird imagery processing for the extraction of archaeological features: performance from data fusion algorithms*.

2008

- Cardiff, 15-19 September 2008. Spie Europe Remote Sensing Conference. Oral presentation
- Rome, 31 September-4 October 2008. I EARSel Workshop "Advances in remote sensing, GIS and ITC technologies for Archaeology and Cultural Heritage". Two Oral presentations
- Tolosa, 24 April 2008. Atelier CNES "Archeologie et Teledetection". Oral presentation entitled: *Satellite Image and signal processing for archaeological applications*.

2009

- Vienna, 19-24 April. EGU General Assembly. Oral presentation entitled: *On the detection of adobe buried archaeological structures using multiscale remote sensing techniques: Piramida Naranjada in Cahuachi (Peru)*
- Berlino, 31 August – 3 September 2009. Spie Europe Remote Sensing Symposium. Oral presentation entitled: *An integrated methodology for landscape reconstruction ; the abandoned villages in Basilicata*.
- El Cairo, 4-8 December 2009. IV International Congress "Science and Technology for the Safeguard of Cultural Heritage of the Mediterranean Basin". Oral presentation entitled: *On the use of VHR satellite data in archaeology and paleoenvironmental studies*

2010

- Fukuoka (Japan), 23-26 March 2010. 5th Workshop on "Geographical Analysis, Urban Modeling, Spatial Statistics" GEOG-AN-MOD 10. Oral presentation entitled: *"Facing the archaeological looting in Peru by local spatial autocorrelation statistics of Very high resolution satellite imagery"*

- Vienna, 2-7 May. EGU General Assembly. Session GI9 Integrated non-invasive sensing techniques and geophysical methods for the study and conservation of architectural, archaeological and artistic heritage. Oral presentation entitled: *“Correlation between porosimetric and penetrometric test on masonry mortar”*

2012

Salvador de Bahia (Brasile), 18-21 giugno. 12th International Conference on Computational Science and Its Applications, ICCSA 2012. Oral presentation entitled: *“Investigating satellite Landsat TM and ASTER multitemporal data set to discover ancient canals and aqueduct systems”*

2013

- Milano, 20 June. Built Heritage 2013 Monitoring Conservation Management. n. 2 Oral presentations entitled : *“Enhancement of the information content available from non invasive diagnostics for restoration and knowledge of architectural heritage”* and *“Approach to the study of conservation of historical masonry mortars by means of the correlation between porosimetry and penetrometric test. First results”*

2015

- Vienna, 12-17 Aprile. EGU General Assembly.n. 2 Presentazioni orali dal titolo: *“Stability and subsidence across Rome (Italy) in 2011-2013 based on COSMO-SkyMed Persistent Scatterer Interferometry”* ; *“ Satellite SAR data assessment for Silk Road archaeological prospection”* e presentazione di un poster dal titolo : *“On the use of COSMO-SkyMed time series for the identification of Archaeological traces dating from the Eastern-Han to Northern-Wei Dynasties in Luoyang city”*
- San Salvador (Salvador), 13-17 Luglio 2015, Congreso Internacional de Americanistas " Conflicto, paz y construcción de identidades en las Américas". 3 presentazioni orali dai seguenti titoli: *“Monitoring and facing man-made risks affecting the archaeological heritage in the Nazca region by Remote Sensing”* ; *“New approaches for the investigations of ancient Nazca acueducts”*; *“Geophysics and remote sensing for the Prehispanic preventive Archaeology: the experience of ITACA Mission (2007-2013) in the Nazca drainage basin”*

2016

- Paphos, 4-7 April - RSCy 2016, Forth International Conference on Remote Sensing and Geoinformation of Environment. Oral presentation entitled: *“Remote sensing Nasca aqueducts and geoglyphs in Southern Peru”*.
- Beijing, 7-8 July - 6th Digital Earth Summit. Oral presentation entitled: *“ Proxy Indicators for the Detection of Archaeological Features by Active and Passive Remote Sensing: Strategies of Data Processing and Interpretation”*.
- Beijing, 4-7 July - International Conference on Computational Science and Its Applications, ICCSA 2016. Oral presentation entitled: *“ Spatial analysis for the study of environmental settlement patterns: the archaeological sites of the Santa Cruz County”*
- Madrid (Spagna), 25-27 May 2016. International Conference YOCOCU (YOUTH in CONSERVATION of CULTURAL heritage). Oral presentation entitled: *“Diagnostics for the conservation of frescoes in Pompeii. Preliminary results from GPR and IRT investigations ”*

2023

- Rome, 19-21 Oct –IMEKO International Conference on Metrology for Archaeology and Cultural Heritage - MetroArchaeo2023. Oral presentation entitled: *From Space to Tree: multisensor and multiscale remote sensing based approach for monitoring monumental trees. The case of archaeological park of Colosseum in Rome. Preliminary results*

E. Reviewer of Projects

E.1 Reviewer for the following National and International Research Projects and Programme

- **2011. Research Programme for Earth Observation "Stereo II" (2006-13) BELSPO (Belgium).** Reviewer of a project
- **2012. Portuguese Foundation for Science and Technology (FCT): proposal PTDC/EPH-ARQ/5201/2012.).** Reviewer a project
- **2013. Czech Science Foundation.** Reviewer of a project
- **2014/15: Italian Ministry of Economics: reviewer of "Fondo Crescita Sostenibile" (Sustainable Growth Fund)**
- **2017. Italian Ministry of Economics: "Fondo Crescita Sostenibile" (Sustainable Growth Fund).** Horizon 2020 - PON 2014/2020.
- **2017, October: National Science Center of Poland.** Review of a grant proposal for the section *The study of the human past which encompasses history, archeology, ethnology and cultural anthropology*
- **2017, November: National Centre of Science and Technology of Kazakhstan.** Review of two projects
- **2018, November: Pontificia Universidad Catolica del Perú (PUCP).** Concurso Anual de Proyectos - CAP 2019. Reviewer of a Project
- **2019, February:** Reviewer of postdoctoral fellowship application in the frame of Research Foundaton Flanders' (FWO).
- **2019, December: National Centre of Science and Technology of Kazakhstan.** Review of two projects
- **2020, April. Aarhus Institute of Advanced Studies COFUND fellowships** for researchers in 2020/2021 funded by the European Union's Horizon 2020 Research and Innovation Programme under the **Marie Skłodowska-Curie** actions
- **2020, September: National Centre of Science and Technology of Kazakhstan.** Review of eight projects
- **2020, December: Institut Català d'Arqueologia Clàssica .**
- **2021, March: National Centre of Science and Technology of Kazakhstan.** Review of three projects
- **2021, October: National Science Center of Poland.** Review of two projects for the section : *The study of the human past which encompasses history, archeology, ethnology and cultural anthropology.*
- **2021, National Agency for the Evaluation of Universities and Research Institutes of Italy. VQR Auditor (Research Quality Assessment) - Years 2015-2019**
- **2022, April: National Science Center of Poland. Evaluation of a grant proposal for the section : SONATA-17.**

E.2 Member of Committee/Panels

2012

Member of the Italian National Consultant Panel as stakeholder of activities of the Joint Programming Initiative on "Cultural Heritage and global change: a new Challenge for Europe"

2015

Member of the Joint Committee of the Framework Convention between the National Research Council and the University of Basilicata

F. PUBLICATIONS

F) LIST OF PUBLICATIONS

F1A	Papers on international journals	145
F1B	Papers on national journals	11
F2	Patent	1
F3	Editors of Special issues of International journals	17
F4A	International Books	9
F4B	National Books	11
F5A	International Book chapters	71
F5B	National Book chapters	53
F6A	Papers on international conference proceedings	77
F6B	Papers on national conference proceedings	24
F7	Encyclopedia articles	2
F8	Abstracts or short papers on international journals	37
F9	Preface of International Books	1
F10	National Books without ISBN	3
F11	Divulgative publications	7
Total		471
Total SCOPUS indexed		245

F.1A) PAPERS ON INTERNATIONAL JOURNALS

[N.145]

1. L. Luo et al., "SAR in Archaeology (1980–2024): Forty-five years of progress and future frontiers," in *IEEE Geoscience and Remote Sensing Magazine*, doi: 10.1109/MGRS.2026.3667587.
2. Danese, M.; Florio, V.; Masini, N.; Lasaponara, R. GeoAI for safeguarding rural cultural heritage: Environmental downscaling and wildfire exposure mapping in Basilicata, Italy. *J. Cult. Herit.* **2026**, *79*, 107–118. <https://doi.org/10.1016/j.culher.2026.02.015>
3. De Simone, C.S.; Masini, N.; Abate, N. Satellite Remote Sensing for Cultural Heritage Protection: The Consensus Platform and AI-Assisted Bibliometric Analysis of Scientific and Grey Literature (2010–2025). *Heritage* **2026**, *9*, 149. <https://doi.org/10.3390/heritage9040149>
4. Altamura, D.; Fiore, G.; Manicone, A.; Lamacchia, E.; Priore, A.; Masini, N.; Ermini, R.; Guida, A.; Bernardo, G. Interdisciplinary Analysis of Water UBH: The Palombaro Purgatorio Vecchio Infrastructure in Matera. *Heritage* **2026**, *9*, 102. <https://doi.org/10.3390/heritage9030102>
5. Frisetti, A.; Abate, N.; Minervino Amodio, A.; Gioia, D.; Corrado, G.; Danese, M.; Ciccone, G.; Masini, N. Assessing the Relationship Between Erosion Risk, Climate Change and Archaeological Heritage: Medieval Sites in the Basilicata Region, Italy. *Heritage* **2026**, *9*, 89. <https://doi.org/10.3390/heritage9030089>
6. Altamura, D.; Lamacchia, E.; Ermini, R.; Masini, N.; Schiattarella, M. Interdisciplinary Method to Analyze Historical Water Resource Management Systems: The Case Study of Masseria del Cristo in Matera, Italy. *TEMA: Technologies, Engineering, Materials and Architecture* **2026**. <https://doi.org/10.36253/tema-16900>
7. Abate, N.; Ronchi, D.; Zaia, S.E.; Ciccone, G.; Frisetti, A.; Sileo, M.; Masini, N.; Lasaponara, R.; Pedrazzi, T.; Pucci, M. Multi-Resolution and Multi-Temporal Satellite Remote Sensing Analysis to Understand Human-Induced Changes in the Landscape for the Protection of Cultural Heritage: The Case Study of the MapDam Project, Syria. *Land*, **2025**, *14*, 2233. <https://doi.org/10.3390/land14112233>

8. Ciccone, G., Frisetti, A., Abate, N., Goffredo, R., Dato, G., Minervino Amodio, A., Sileo, M., Lasaponara, R., e Masini, N. "Unveiling Medieval Landscapes: A Virtual Reconstruction through LiDAR and Extended Matrix Methodology, the Case of Torre di Castiglione (BA)." *Digital Applications in Archaeology and Cultural Heritage* 39 (2025): e00464. <https://doi.org/10.1016/j.daach.2025.e00464>
9. Danese, M., Sogliani, F., Sileo, M., Abate N., Biscione M., Pepe L., Lasaponara R., Masini N. AI methods for enhancing and recognizing archaeological features in heterogeneous geophysical datasets. *Sci Rep* 15, 32742 (2025). <https://doi.org/10.1038/s41598-025-05539-3>
10. F. Sabatini, F. Albertin, B. Doherty, L. Monico, F. Rosi, D. Buti, A. Romani, A. Pecci, N. Abate, M. Sileo, A.M. Amodio, N. Masini, S. Pizzimenti, I. Degano, F. Modugno, B. Campanella, S. Legnaioli, & L. Cartechini, Unveiling street art: A multimodal and multitechnique approach for analyzing and mapping painting materials on large murals, *Proc. Natl. Acad. Sci. U.S.A.* 122 (35) e2504918122,
11. Vicari Sottosanti, Maria Agata, Maria Danese, and Nicola Masini. 2025. "A GIS Approach for Ancient Numismatics: Spatial Analysis of Antoniniani in Sicily (3rd Century AD)" *Heritage* 8, no. 6: 222. <https://doi.org/10.3390/heritage8060222>
12. Masini, N., Sileo, M., Gizzi, F. T., De Giorgi, L., e Leucci, G. "The Domus Nozze D'Argento in Pompeii: Structural Diagnosis Using Geophysical Methods." *Archaeological Prospection*, 2025, 1–12. <https://doi.org/10.1002/arp.1998>
13. Visone, F.; Abate, N.; Sileo, M.; Masini, N. Assessing Stone Material Recession of Cultural Heritage: New Approach Based on Satellite-Based Rainfall Data and Dose-Response Functions—Case of UNESCO Site of Matera. *Remote Sens.* **2025**, *17*, 1443. <https://doi.org/10.3390/rs17081443>
14. Abate, N., Roubis, D., Aggeli, A. *et al.* An Open-Source Machine Learning–Based Methodological Approach for Processing High-Resolution UAS LiDAR Data in Archaeological Contexts: A Case Study from Epirus, Greece. *J Archaeol Method Theory* **32**, 38 (2025). <https://doi.org/10.1007/s10816-025-09706-8>
15. Abate, N.; Goffredo, R.; Dato, G.; Minervino Amodio, A.; Loperte, A.; Frisetti, A.; Ciccone, G.; Zaia, S.E.; Sileo, M.; Lasaponara, R.; et al. Adopting an Open-Source Processing Strategy for LiDAR Drone Data Analysis in Under-Canopy Archaeological Sites: A Case Study of Torre Castiglione (Apulia). *Remote Sens.* **2025**, *17*, 1134. <https://doi.org/10.3390/rs17071134>
16. Sileo, M., Conte, D., Donvito, A., D'Andrea, L., Porfido, A., Liaci, S., Lasaponara R., Masini, N. (2025). On the Museum Monitoring at the Time of COVID-19. Methodological Approach and Application to Palazzo Altemps in Rome. *International Journal of Architectural Heritage*, 1–14. <https://doi.org/10.1080/15583058.2024.2440770>
17. Vitale, V., Abate, N., e Masini, N. "Castello di Seluci (Lauria, Basilicata). Utilizzo e gestione di dati LiDAR per lo studio dei contesti archeologici invisibili." In *Archeologia Aerea. Studi di Aerotopografia Archeologica*, n. 18 (2024), *Le città invisibili. Remote e Proximal Sensing in Archeologia. Metodologie non invasive per lo studio della città antica. Atti del Terzo Convegno Internazionale (Lecce, 19–21 maggio 2022)*, a cura di Giuseppe Ceraudo, Veronica Ferrari e Giuseppe Scardozi, 175–182. Foggia: Claudio Grenzi Editore
18. Grano, M. C., Sileo, M., Innella, C., Vitulli, R., & Masini, N. (2024). La conservazione preventiva, programmata e partecipata dei beni culturali in ottica circolare. Casi studio e sfide aperte nel progetto Basilicata Heritage Smart Lab / Preventive, planned and participatory conservation of cultural heritage in a circular perspective. Case studies and open challenges in the Basilicata Heritage Smart Lab project. *Il Capitale Culturale. Studies on the Value of Cultural Heritage*, (29), 105–119. <https://doi.org/10.13138/2039-2362/3400>
19. Abate, N.; Violante, C.; Masini, N. A Semi-Automatic-Based Approach to the Extraction of Underwater Archaeological Features from Ultra-High-Resolution Bathymetric Data: The Case of the Submerged Baia Archaeological Park. *Remote Sens.* 2024, *16*, 1908. <https://doi.org/10.3390/rs16111908>
20. R. Lasaponara, N. Abate and N. Masini, "Early Identification of Vegetation Pest Diseases Using Sentinel 2 NDVI Time Series 2016–2023: The Case of *Toumeyella Parvicorvis* at Castel

Porziano (Italy)," in *IEEE Geoscience and Remote Sensing Letters*, vol. 21, pp. 1-5, 2024, Art no. 2502305, doi: 10.1109/LGRS.2024.3386218..

21. Bentivenga, M.; Pescatore, E.; Piccarreta, M.; Gizzi, F.T.; Masini, N.; Giano, S.I. Geoheritage and Geoconservation, from Theory to Practice: The Ghost Town of Craco (Matera District, Basilicata Region, Southern Italy). *Sustainability* 2024, *16*, 2761. <https://doi.org/10.3390/su16072761>

22. Masini, N., Romano, G., Sieczkowska, D., Capozzoli L., Spizzichino D., Gabellone F., Bastante J., Scavone M., Sileo M., Abate N., Margottini C., Lasaponara R. Non invasive subsurface imaging to investigate the site evolution of Machu Picchu. *Scientific Reports*, *13*, 16035 (2023). <https://doi.org/10.1038/s41598-023-43361-x> (ISI)

23. Marilisa Biscione, Federica Gaspari, Giuseppe Romagnoli & Nicola Masini (2023) A late 16th century garden in Ponte dell'Elce (Viterbo, Italy): research improvement and conservation issues, *Studies in the History of Gardens & Designed Landscapes*, DOI: 10.1080/14601176.2023.2231772 (ISI)

24. Nicodemo Abate, D. Roubis, F. Sogliani, V. Vitale, M. Sileo, P. Arzu, R. Lasaponara & N. Masini (2023): Integrated use of GIS and remote sensing techniques for landscape-scale archaeological analysis: the case study of Metaponto, Basilicata, Italy, *Exploration Geophysics*, DOI: 10.1080/08123985.2023.2242885

25. Telesca, L.; Lovallo, M.; Cardettini, G.; Aromando, A.; Abate, N.; Proto, M.; Loperte, A.; Masini, N.; Lasaponara, R. Urban and Peri-Urban Vegetation Monitoring Using Satellite MODIS NDVI Time Series, Singular Spectrum Analysis, and Fisher–Shannon Statistical Method. *Sustainability*, **2023**, *15*, 11039. <https://doi.org/10.3390/su151411039>

26. Abate, N.; Visone, F.; Sileo, M.; Danese, M.; Minervino Amodio, A.; Lasaponara, R.; Masini, N. Potential Impact of Using ChatGPT-3.5 in the Theoretical and Practical Multi-Level Approach to Open-Source Remote Sensing Archaeology, Preliminary Considerations. *Heritage* **2023**, *6*, 7640-7659. <https://doi.org/10.3390/heritage6120402>

27. Minervino Amodio, A.; Gioia, D.; Danese, M.; Masini, N.; Sabia, C.A. Land-Use Change Effects on Soil Erosion: The Case of Roman “Via Herculia” (Southern Italy)—Combining Historical Maps, Aerial Images and Soil Erosion Model. *Sustainability*, **2023**, *15*, 9479. <https://doi.org/10.3390/su15129479>

28. Nicodemo Abate; Diego Ronchi; Valentino Vitale; Nicola Masini; Andrea Angelini; Francesco Giuri; Antonio Minervino Amodio; Andrea Maria Gennaro; Daniele Ferdani. **2023**. "Integrated Close Range Remote Sensing Techniques for Detecting, Documenting, and Interpreting Lost Medieval Settlements under Canopy: The Case of Altanum (RC, Italy)." *Land* *12*, no. 2: 310, doi: [10.3390/land12020310](https://doi.org/10.3390/land12020310)

29. Masini, N.; Abate, N.; Gizzi, F.T.; Vitale, V.; Minervino Amodio, A.; Sileo, M.; Biscione, M.; Lasaponara, R.; Bentivenga, M.; Cavalcante, F. UAV LiDAR Based Approach for the Detection and Interpretation of Archaeological Micro Topography under Canopy—The Rediscovery of Peticara (Basilicata, Italy). *Remote Sens.* 2022, *14*, 6074. <https://doi.org/10.3390/rs14236074>

30. F. Chen, H. Guo, D. Tapete, F. Cigna, S. Piro, R. Lasaponara, and N. Masini (2022). The role of imaging radar in cultural heritage: From technologies to applications. *International Journal of Applied Earth Observation and Geoinformation*. Volume 112, August 2022, 102907, doi: 10.1016/j.jag.2022.102907

31. Bachagha, N.; Xu, W.; Luo, X.; Masini, N.; Brahmi, M.; Wang, X.; Souei, F.; Lasaponara, R. On the Discovery of a Roman Fortified Site in Gafsa, Southern Tunisia, Based on High-

- Resolution X-Band Satellite Radar Data. *Remote Sens.* 2022, 14, 2128. <https://doi.org/10.3390/rs14092128>
32. Danese, M.; Gioia, D.; Vitale, V.; Abate, N.; Amodio, A.M.; Lasaponara, R.; Masini, N. Pattern Recognition Approach and LiDAR for the Analysis and Mapping of Archaeological Looting: Application to an Etruscan Site. *Remote Sens.* 2022, 14, 1587. <https://doi.org/10.3390/rs14071587>
33. Giano, S.I., Pescatore, E., Biscione, M., Masini N. et al. Geo- and Archaeo-heritage in the Mount Vulture Area: List, Data Management, Communication, and Dissemination. A Preliminary note. *Geoheritage* 14, 10 (2022). <https://doi.org/10.1007/s12371-021-00623-2>
34. M. Sileo, F. T. Gizzi, A. Donvito, R. Lasaponara, F. Fiore & N. Masini (2022) Multi-Scale Monitoring of Rupestrian Heritage: Methodological Approach and Application to a Case Study, *International Journal of Architectural Heritage*, DOI: 10.1080/15583058.2020.1799261
35. F. Chen, H. Guo, D. Tapete, N. Masini, F. Cigna, R. Lasaponara, S. Piro, H. Lin and P. Ma (2021) Interdisciplinary approaches based on imaging radar enable cutting-edge cultural heritage applications. *National Science Review*, Volume 8, Issue 9, September 2021, nwab123, <https://doi.org/10.1093/nsr/nwab123>
36. N Abate, D Roubis, V Vitale, M Sileo, F Sogliani, N Masini, R Lasaponara (2022). Integrated use of multi-temporal multi-sensor and multiscale Remote Sensing data for the understanding of archaeological contexts: the case study of Metaponto, Basilicata. *Journal of Physics: Conference Series*. Volume 2204, Issue 1, Article number 012020, doi: 10.1088/1742-6596/2204/1/012020
37. Abate N., Lasaponara R., Masini N (2022) Terrestrial and UAV based infrared thermography for mapping and investigating the humidity of historical buildings. The case of the Castle in Calvello. *Journal of Physics: Conference Series*. Volume 2204, Issue 1, Article number 012019, doi: 10.1088/1742-6596/2204/1/012019
38. Masini N., Sogliani, F., Sileo, M., Abate, N., Danese, M., Vitale, V., Lasaponara, R., Piro, S. (2022). Fusion and integration of heterogeneous close range remote sensing and geophysical data. the case of Grumentum. *Journal of Physics: Conference Series*. Volume 2204, Issue 1, Article number 012018, doi: 10.1088/1742-6596/2204/1/012018
39. Abate, N.; Frisetti, A.; Marazzi, F.; Masini, N.; Lasaponara, R. Multitemporal–Multispectral UAS Surveys for Archaeological Research: The Case Study of San Vincenzo Al Volturno (Molise, Italy). *Remote Sens.* 2021, 13, 2719. <https://doi.org/10.3390/rs13142719>
40. Masini, N. and Lasaponara, R., 2021. Remote and Close Range Sensing for the Automatic Identification and Characterization of Archaeological Looting. The Case of Peru. *Journal of Computer Applications in Archaeology*, 4(1), pp.126–144. DOI: <http://doi.org/10.5334/jcaa.73>
41. Yan, L.; Lu, P.; Chen, P.; Danese, M.; Li, X.; Masini, N.; Wang, X.; Guo, L.; Zhao, D. Towards an Operative Predictive Model for the Songshan Area during the Yangshao Period. *ISPRS Int. J. Geo-Inf.* 2021, 10, 217. <https://doi.org/10.3390/ijgi10040217>
42. Fattore, C.; Abate, N.; Faridani, F.; Masini, N.; Lasaponara, R. Google Earth Engine as Multi-Sensor Open-Source Tool for Supporting the Preservation of Archaeological Areas: The Case Study of Flood and Fire Mapping in Metaponto, Italy. *Sensors* 2021, 21, 1791. <https://doi.org/10.3390/s21051791>
43. Lasaponara, R.; Abate, N.; Masini, N. (2021) On the Use of Google Earth Engine and Sentinel Data to Detect “Lost” Sections of Ancient Roads. The Case of Via Appia. *IEEE Geoscience and Remote Sensing Letters*, doi: 10.1109/LGRS.2021.3054168
44. Masini, N., Lasaponara, R. (2020) On the Reuse of Multiscale LiDAR Data to Investigate the Resilience in the Late Medieval Time: the Case Study of Basilicata in South of Italy. *J Archaeol Method Theory*. <https://doi.org/10.1007/s10816-020-09495-2>
45. Elfadaly, A.; Abate, N.; Masini, N.; Lasaponara, R. SAR Sentinel 1 Imaging and Detection of Palaeo-Landscape Features in the Mediterranean Area. *Remote Sens.* 2020, 12, 2611, doi:

46. Masini, N.; Leucci, G.; Vera, D.; Sileo, M.; Pecci, A.; Garcia, S.; López, R.; Holguín, H.; Lasaponara, R. Towards Urban Archaeo-Geophysics in Peru. The Case Study of Plaza de Armas in Cusco. *Sensors* 2020, 20, 2869, DOI: 10.1080/15583058.2020.1799261
47. Abate, N.; Elfadaly, A.; Masini, N.; Lasaponara, R. Multitemporal 2016-2018 Sentinel-2 Data Enhancement for Landscape Archaeology: The Case Study of the Foggia Province, Southern Italy. *Remote Sens.* 2020, 12, 1309, DOI: 10.3390/RS12081309
48. Bachagha, N.; Luo, L.; Wang, X.; Masini, N.; Moussa, T.; Khatteli, H.; Lasaponara, R. Mapping the Roman Water Supply System of the Wadi el Melah Valley in Gafsa, Tunisia, Using Remote Sensing. *Sustainability* 2020, 12, 567.
49. N. Masini, R. Lasaponara (2020). Satellite and close range analysis for the surveillance and knowledge improvement of the Nasca geoglyphs. *Remote sensing of environment*. Volume 236, January 2020, 111447
50. F.T. Gizzi, M. Biscione, M. Danese, A. Maggio, A. Pecci, M. Sileo, M.R. Potenza, N. Masini et al. (2019). Students meet cultural heritage. An experience within the framework of the Italian School Work Alternation (SWA): from the outcomes to outlooks. *Heritage*. 2019, 2, 1986-2016
51. Gizzi, F.T., Bentivenga, M., Lasaponara, R., Potenza M.R., Sileo M., Masini N. (2019), Natural Hazards, Human Factors, and “Ghost Towns”: a Multi-Level Approach. *Geoheritage*, <https://doi.org/10.1007/s12371-019-00377-y>
52. L. Luo, X. Wang, H. Guo, R. Lasaponara, X. Zong, N. Masini et al. (2019). Airborne and spaceborne remote sensing for archaeological and cultural heritage applications: A review of the century (1907–2017). *Remote Sensing of Environment*, 232, 111280, <https://doi.org/10.1016/j.rse.2019.111280>
53. Kalayci, T.; Lasaponara, R.; Wainwright, J.; Masini, N. (2019) Multispectral Contrast of Archaeological Features: A Quantitative Evaluation. *Remote Sens.*, 11, 913
54. Lu P., Chen P., Tiana Y., Hea Y., Moc D., Rang R., Lasaponara R., Masini N. (2019). Reconstructing settlement evolution from neolithic to Shang dynasty in Songshan mountain area of central China based on self-organizing feature map. *Journal of Cultural Heritage*, <https://doi.org/10.1016/j.culher.2018.08.006>, 36, pp. 23-31
55. Pozzi-Escot D., Oshiro J., Romano G., Capozzoli L., Lasaponara R., Masini N. (2018) Traces in the desert: use of new technologies for the study and valorization of the Pachacamac sanctuary—Lima, Peru. *Heritage Science*, (2018) 6:68, <https://doi.org/10.1186/s40494-018-0230-1>
56. Masini N., Gizzi F.T., Biscione M., Fundone V., Sedile M., Sileo M., Pecci A., Lacovara B., Lasaponara R. (2018). Medieval archaeology under the canopy with LiDAR. The (re)discovery of a medieval fortified settlement in Southern Italy. *Remote Sens.* 2018, 10, 1598; doi:10.3390/rs10101598
57. L. Luo, X. Wang, H. Guo, R. Lasaponara, P. Shi, N. Bachagha, L. Li, Y. Yao, N. Masini, F. Chen, W. Ji, H. Cao, C Li, N. Hu (2018) Google Earth as a Powerful Tool for Archaeological and Cultural Heritage Applications: A Review. *Remote Sensing*. 10, 1558; doi:10.3390/rs10101558
58. Masini N., Capozzoli L., Romano G., Sieczkowska D., Sileo M., Bastante J., Astete Victoria F., Ziolkowski M., Lasaponara R. (2018). Archaeogeophysical based approach for Inca archaeology: overview and one operational application. *Survey in Geophysics*, doi: 10.1007/s10712-018-9502-2
59. Biscione M., Danese M., Masini N. (2018). A framework for cultural heritage management and research: the Cancellara case study. *Journal of Maps* (in print) (ISI)
60. R. Lasaponara, R. Yang, F. Chen, X. Li, N. Masini. (2018). Corona Satellite Pictures for Archaeological Studies: A Review and Application to the Lost Forbidden City of the Han–Wei Dynasties. *Surveys in Geophysics*, 1-20
61. M. Danese, M. Sileo, N. Masini (2018). Geophysical Methods and Spatial Information for the Analysis of Decaying Frescoes. *Surveys in Geophysics*, 1-18.
62. Lasaponara R., Masini N. (2018). Space-Based Identification of Archaeological Illegal Excavations and a New Automatic Method for Looting Feature Extraction in Desert Areas. *Surv Geophys* (2018). <https://doi.org/10.1007/s10712-018-9480-4>
63. F Soldovieri, N Masini. (2018) An Open Access Journal of Knowledge, Conservation, and Management of Cultural and Natural Heritage *Heritage*, 1 (1), 4
64. Tang, P., Chen, F., Jiang, A., Zhou W., Wang G., Leucci G., de Giorgi L., Sileo M., Luo R., Lasaponara R., Masini N. (2018) Multi-frequency Electromagnetic Induction Survey for Archaeological Prospection: Approach and Results in Han Hangu Pass and Xishan Yang in China. *Surv Geophys* (2018).

<https://doi.org/10.1007/s10712-018-9471-5>

65. Masini N., Marzo C., Manzari P., Belmonte A., Sabia C., Lasaponara R. (2018). On the characterization of temporal and spatial patterns of archaeological crop-marks. *Journal of Cultural Heritage*, doi: 10.1016/j.culher.2017.12.009.
66. Chen F., You J., Tanh P., Zhou W., Masini N., Lasaponara R. (2018). Unique performance of spaceborne SAR remote sensing in cultural heritage applications: Overviews and perspectives. *Archaeological Prospection*, DOI: 10.1002/arp.1591
67. Graves K., Carson D., Catapano I., Chiari G., Gennarelli G., Heginbotham A., Masini N., Piqué F., Sileo M., Rainer L. (2017). Portable in practice: investigations using portable instrumentation for materials analysis and mapping of decorated architectural surfaces in the tablinum of the House of the Bicentenary at Herculaneum. *MRS Advances*, 2(33-34), 1831-1848. doi:10.1557/adv.2017.317
68. Masini N., Capozzoli L., Chen P., Chen F., Romano G., Lu P., Tang P., Sileo M., Ge Q., Lasaponara R. (2017) Towards an operational use of geophysics for Archaeology in Henan (China): Archaeogeophysical investigations, approach and results in Kaifeng. *Remote Sensing* 9 (8), 809, doi: 10.3390/rs9080809
69. Peng Lu, Mo D., Wang H., Yang R., Tian Y., Chen P., Masini N., Lasaponara R. (2017). GIS-based Research of Relationship between Holocene Geomorphic Evolution of Rivers and Prehistoric Settlements Distribution in the Songshan Mountain Region of China. *Sustainability*, 9, 114, doi:10.3390/su9010114
70. Lasaponara R., Masini N., Pecci A., Perciante A., Pozzi Escot D., Rizzo E., Scavone M., Sileo M. (2016). Qualitative evaluation of COSMO SkyMed in the detection of earthen archaeological remains: The case of Pachamacac (Peru). *Journal of Cultural Heritage*, <http://dx.doi.org/10.1016/j.culher.2015.12.010>.
71. Gabellone F., Lanorte A., Masini N., Lasaponara R. (2016). From remote sensing to a serious game: Digital reconstruction of an abandoned medieval village in Southern Italy. *Journal of Cultural Heritage* <http://dx.doi.org/10.1016/j.culher.2016.01.012>.
72. Lu P., Yang R., Guo Y., Chen F., Masini N., Lasaponara R. (2016) On the use of historical archive of aerial photographs for the discovery and interpretation of ancient hidden linear cultural relics in the alluvial plain of eastern Henan, China. *Journal of Cultural Heritage*, <http://dx.doi.org/10.1016/j.culher.2015.09.010>.
73. Sileo M., Gizzi F.T., Masini N. (2016). Low cost monitoring approach for the conservation of frescoes: The crypt of St. Francesco d'Assisi in Irsina (Basilicata, Southern Italy). *Journal of Cultural Heritage*, <http://dx.doi.org/10.1016/j.culher.2016.11.011>
74. Jiang A., Chen F., Masini N., Capozzoli L., Romano G., Sileo M., Yang R., Tang P., Cheng P., Lasaponara R., Liua G. (2016), Archeological crop marks identified from Cosmo-SkyMed timeseries: the case of Han-Wei capital city, Luoyang, China. *International Journal of Digital Earth*, 2016, <http://dx.doi.org/10.1080/17538947.2016.1254686>
75. Agapiou A., Lysandrou V., Lasaponara R., Masini N., Hadjimitsis D. G. (2016). Study of the Variations of Archaeological Marks at Neolithic Site of Lucera, Italy Using High-Resolution Multispectral Datasets. *Remote Sens.* 2016, 8, 723; doi:10.3390/rs8090723.
76. Liberatore D., Masini N., Sorrentino L., Racina V., Sileo M., AlShawa O., Frezza L. (2016). Static penetration test for historical masonry mortar. *Construction and Building Materials*, 122 (2016) 810–822, doi:10.1016/j.conbuildmat.2016.07.097
77. F. Chen, N. Masini, Jie Liu, Jiangbin You & R. Lasaponara (2016): Multi-frequency satellite radar imaging of cultural heritage: the case studies of the Yumen Frontier Pass and Niya ruins in the Western Regions of the Silk Road Corridor, *International Journal of Digital Earth*, doi: 10.1080/17538947.2016.1181213
78. Lasaponara R., Leucci G., Masini N., Persico R., Scardozi G. (2016) Towards an operative use of remote sensing for exploring the past using satellite data: The case study of Hierapolis (Turkey). *Remote Sensing of Environment* 174, 148-164
79. Chen F., Lasaponara R., Masini N., Multi-frequency satellite radar imaging of cultural heritage: the case studies of the Yumen Frontier Pass: From site detection to monitoring, *Journal of Cultural Heritage* (2015), <http://dx.doi.org/10.1016/j.culher.2015.05.003>
80. Masini N., A Maxwellian Look beyond Opaque Interfaces. *Remote Sens.* 2015, 7(3), 2471-2473; doi: 10.3390/rs70302471
81. Chen F., Masini N., Yang R., Milillo P., Feng D., Lasaponara R., 2015. A Space View of Radar Archaeological Marks: First Applications of COSMO-SkyMed X-Band Data. *Remote Sens.* 2015, 7, 24-50; doi:10.3390/rs70100024
82. Roubis D., Sogliani F., Masini N., Vitale V., Leucci G., Rizzo E. (2015) *Archeologia dei paesaggi*

montani in Basilicata: una ricerca integrata nel territorio di Calvello, PZ (Basilicata). «Il capitale culturale», XII (2015), pp. 385-419. ISSN 2039-2362 (online).

83. Giovanni Leucci, Nicola Masini, Enzo Rizzo, Luigi Capozzoli, Gregory De Martino, Lara De Giorgi, Cosimo Marzo, Dimitris Roubis, Francesca Sogliani (2015). Integrated Archaeogeophysical Approach for the Study of a Medieval Monastic Settlement in Basilicata. *Open Archaeology* 2015; 1: 236–246; doi: 10.1515/opar-2015-0014

84. Malfitana D., Leucci G., Fragalà G., Masini N., Scardozzi G., Cacciaguerra G., Santagati C., Shehi E. 2015. The potential of integrated GPR survey and aerial photographic analysis of historic urban areas: A case study and digital reconstruction of a Late Roman villa in Durrës (Albania). *Journal of Archaeological Science: Reports* 4 (2015) 276–284, <http://dx.doi.org/10.1016/j.jasrep.2015.09.018>

85. Danese M., Gioia D., Biscione M., Masini N. 2014. Spatial Methods for Archaeological Flood Risk: The Case Study of the Neolithic Sites in the Apulia Region (Southern Italy). *Computational Science and Its Applications – ICCSA 2014 Lecture Notes in Computer Science, Volume 579, 2014*, pp 423-439

86. Cigna F., Lasaponara R., Masini N., Milillo P., Tapete D. 2014. Persistent Scatterer Interferometry processing of COSMO-SkyMed StripMap HIMAGE time series to depict deformation of the historic centre of Rome, Italy. *Remote Sens.* 2014, 6, 12593-12618; doi:10.3390/rs61212593

87. Danese M., Masini N., Biscione M., Lasaponara R. 2014. Predictive modeling for preventive Archaeology: Overview and case study. *Central European Journal of Geosciences*. March 2014, Volume 6, Issue 1, 42-55

88. Lasaponara R., Leucci G., Masini N., Persico R. 2014. Investigating archaeological looting using satellite images and GEORADAR: the experience in Lambayeque in North Peru. *Journal of Archaeological Science*, 42, 216-230, <http://dx.doi.org/10.1016/j.jas.2013.10.032>

89. Lasaponara R., Masini N. 2014. Beyond modern landscape features: New insights in the archaeological area of Tiwanaku in Bolivia from satellite data. *International Journal of Applied Earth Observation and Geoinformation*, 26, 464–471, <http://dx.doi.org/10.1016/j.jag.2013.09.00>.

90. Lasaponara R., Murgante B., Masini N., Yong Ge, Asche H. 2014. Advance in geocomputation. *International Journal of Applied Earth Observation and Geoinformation*, 26, 429–431, <http://dx.doi.org/10.1016/j.jag.2013.10.004>

91. Lasaponara R., Masini N. 2013. Satellite Synthetic Aperture Radar in Archaeology and Cultural Landscape: An Overview. *Archaeological Prospection*, 20, 71-78, doi: 10.1002/arp.1452

92. Cigna F., Tapete D., Lasaponara R., Masini N., Amplitude change detection with ENVISAT ASAR to image the cultural landscape of the Nasca region, Peru, *Archaeological Prospection*, 20, 117-131, doi: 10.1002/arp.1451

93. Tapete D., Cigna F., Masini N., Lasaponara R., Prospection and monitoring of the archaeological heritage of Nasca, Peru, with ENVISAT ASAR, *Archaeological Prospection*, 20, 133-147, doi: 10.1002/arp.1449

94. F. Gabellone, G. Leucci, N. Masini, R. Persico, G. Quarta and F. Grasso 2013. Non-destructive prospecting and virtual reconstruction of the chapel of the Holy Spirit in Lecce, Italy. *Near Surface Geophysics*, doi: 10.3997/1873-0604.2012030

95. R. Lasaponara, N. Masini 2013. Remote Sensing in Archaeology: an overview, *Journal of Aeronautics and Space Technologies*, 6 (1), 7-17

96. Gallipoli M. R., Gizzi F. T., Rizzo E., Masini N., Potenza M. R., Albarello D., and Lapenna V. 2012. Site features responsible for neve seismic effects in historical centre of Melfi (Basilicata, Southern Italy), *Disaster Advances*, 5 (3), 125-137.

97. Masini N, Soldovieri F, Alvarez de Buergo M, Dumoulin J (2012). Cultural heritage and civil engineering. *Journal of Geophysics and Engineering*, vol. 9, ISSN: 1742-2132, doi: 10.1088/1742-2132/9/4/E01

98. Lasaponara R., Masini N., Holmgren R., Backe Forsberg Y. (2012). Integration of aerial and satellite remote sensing for archaeological investigations: a case study of the Etruscan site San Giovenale, *Journal of Geophysics and Engineering*, vol. 9, S26-S39, doi:10.1088/1742-2132/9/4/S26.

99. Leucci G., Masini N., Persico G. 2012. Time–frequency analysis of GPR data to investigate the damage of monumental buildings. *Journal of Geophysics and Engineering* vol. 9, S81-S91, doi:10.1088/1742-2132/9/4/S81.

100. Calia A., Leucci G., Masini N., Matera L., Persico R., Sileo M., 2012. Integrated prospecting in the Crypt of the Basilica of Saint Nicholas in Bari, Italy. *Journal of Geophysics and Engineering*, 9(3),

[doi:10.1088/1742-2132/9/3/271](https://doi.org/10.1088/1742-2132/9/3/271)

101. Leucci G., Masini N., Persico R., Quarta G., Dolce C. 2011. A multidisciplinary analysis of the Crypt of the Holy Spirit in Monopoli (southern Italy), *Near Surface Geophysics*, doi: 10.3997/1873-0604.2011032
102. Leucci G., Masini N., Persico R., Soldovieri F. 2011. GPR and sonic tomography for structural restoration: the case of the cathedral of Tricarico, *Journal of Geophysics and Engineering*, 8 (3), 76-92, doi:10.1088/1742-2132/8/3/S08.
103. Masini N., Soldovieri F. 2011. Editorial: Integrated non-invasive sensing techniques and geophysical methods for the study and conservation of architectural, archaeological and artistic heritage, *Journal of Geophysics and Engineering*, 8 (3), 1-2, doi:10.1088/1742-2132/8/3/E01.
104. Romano F. P., Pappalardo L., Masini N., Pappalardo G., Rizzo F. 2011. The compositional and mineralogical analysis of fired pigments in Nasca pottery from Cahuachi (Peru) by the combined use of the portable PIXE-alpha and portable XRD techniques, *Microchemical Journal*, 99 (2), 449-453, doi:10.1016/j.microc.2011.06.020
105. Lasaponara R., Masini N. 2011, Satellite Remote Sensing in Archaeology : past, present and future, *Journal of Archaeological Science*, **38**, 1995–2002, doi:10.1016/j.jas.2011.02.002.
106. Lasaponara R., Masini N., Rizzo E., Orefici G. 2011. New discoveries in the Piramide Naranjada in Cahuachi (Peru) using satellite, Ground Probing Radar and magnetic investigations, *Journal of Archaeological Science*, **38**, 2031-2039, doi:10.1016/j.jas.2010.12.010.
107. Masini N., Lasaponara R., Lancho Rojas J. 2011. On the contribution of satellite data for archaeological research in the Nazca Basin: spanning from site discovery and documentation to palaeo-environmental investigations, *Thule. Rivista italiana di studi americanistici*, vol. 30/31, pp. 81-118.
108. Fragasso L., Masini N. 2011. Postprocessing of Infrared Reflectography to Support the Study of a Painting: The Case of Vivarini's Polyptych, *International Journal of Geophysics*, 2011, 1-8, doi:10.1155/2011/738279.
109. Lasaponara R., Masini N., Rizzo E., Orefici G. 2011. On the capability of Very High Resolution satellite and Ground Probing radar techniques for detecting buried archaeological adobe structures, *Revue française de photogrammétrie et de télédétection*, 193, pp. 61-70, ISSN 1768-9791.
110. Lasaponara R., Coluzzi R., Masini N., 2011, Flights into the past: Full-Waveform airborne laser scanning data for archaeological investigation, *Journal of Archaeological Science*, **38**, 2061-2070, doi: 10.1016/j.jas.2010.10.003.
111. Masini N., Soldovieri F. 2010, Foreword of Special Issue "GPR in Archaeology", *Near Surface Geophysics*, **8**, 353-354; doi:10.3997/1873-0604.2010044).
112. Rizzo E., Masini N., Lasaponara R., Orefici G. 2010, ArchaeoGeophysical methods in the Templo del Escalonado (Cahuachi, Nasca, Perú), *Near Surface Geophysics* 8, 433-439, doi:10.3997/1873-0604.2010030.
113. Masini N., Persico R., Rizzo E., Calia A., Giannotta M.T., Quarta G., Pagliuca A. 2010, Integrated Techniques for Analysis and Monitoring of Historical Monuments: the case of S.Giovanni al Sepolcro in Brindisi (Southern Italy), *Near Surface Geophysics*, 8, 423-432, doi:10.3997/1873-0604.2010012.
114. Masini N., Coluzzi R., Lasaponara R. 2010, Investigating lost medieval villages using Satellite and Airborne Laser Scanning: the case of Yrsum in Basilicata (Southern Italy), *Archeologia e Calcolatori*, 121, pp. 127-144.
115. Masini N., Coluzzi R., Lasaponara R. 2010. Contribution d'un système Lidar pour la reconstruction de la trame urbaine d'un village médiéval abandonné, *Photo Interpretation European Journal of Applied Remote Sensing*, 46: 21-27, 30-40.
116. Nuzzo L., Calia A., Liberatore D., Masini N., Rizzo E. 2010, Integration of ground-penetrating radar, ultrasonic tests and infrared thermography for the analysis of a precious medieval rose window, *Advances in Geoscience*, 24, 69-82.
117. Gizzi F.T., Loperte A., Lapenna V., **Masini N.**, Proto M. 2010, Georadar investigations to detect cavities in a historical town damaged by an earthquake of the past, *Advances in Geoscience*, 24, 15-21.
118. Eppelbaum L.V., **Masini N.**, Soldovieri F. 2010, Preface "Near surface geophysics for the study and the management of historical resources: past, present and future (EGU GI9 Session 2009)", *Advances in Geoscience*, 24, 1-1.
119. Eppelbaum L., Masini N., Soldovieri F. 2010, Special issue on near surface geophysics for the study and the management of historical resources. Editorial, *Journal Geophysics Engineering*, 7.

doi:10.1088/1742-2132/7/2/E01.

120. Masini N., Persico R., Rizzo E. 2010, Some Examples of GPR Prospecting for Monitoring of the Monumental Heritage, *Journal Geophysics Engineering* **7**, 190-199, doi:10.1088/1742-2132/7/2/S05.
121. Lasaponara R., Coluzzi R., Gizzi F.T., Masini N. 2010, On the LiDAR contribution for the archaeological and geomorphological study of a deserted medieval village in Southern Italy, *Journal Geophysics Engineering*, **7**, pp. 155-163, doi:10.1088/1742-2132/7/2/S01.
122. Danese M., Demšar U., Masini N., Charlton M. 2009, Investigating material decay of historic buildings using Visual Analytics with multi-temporal infrared thermographic data, *Archaeometry*, [doi: 10.1111/j.1475-4754.2009.00485.x] .
123. Lazzari M, Danese M., Masini N. 2009, A new GIS based integrated approach to analyse the anthropic-geomorphological risk and recovery the vernacular architecture, *Journal of Cultural Heritage*, **10S**, pp. e104–e111 [doi:10.1016/j.culher.2009.10.003].
124. Masini N., Lasaponara N., Orefici G. 2009, Addressing the challenge of detecting archaeological adobe structures in Southern Peru using QuickBird imagery, *Journal of Cultural Heritage*, **10S**, pp. e3–e9 [doi:10.1016/j.culher.2009.10.005].
125. Lasaponara R., Masini N. 2009, Full-waveform Airborne Laser Scanning for the detection of medieval archaeological microtopographic relief, *Journal of Cultural Heritage*, **10S**, pp. e78–e82 [doi:10.1016/j.culher.2009.10.004].
126. Lasaponara R., Masini N. 2009, Editorial of Special Issue on “Remote Sensing for Cultural Heritage Management and Documentation”, *Journal of Cultural Heritage*, **10S**, pp. e1–e2 [doi:10.1016/j.culher.2009.10.006].
127. Ciminale M., Gallo D., Lasaponara R., Masini N. 2009, A Multiscale Approach for Reconstructing Archaeological Landscapes: Applications in Northern Apulia (Italy), *Archaeological Prospection*, **16**, pp. 143–153 [doi: 10.1002/arp.356].
128. Gallo D., Ciminale M., Becker H., Masini N. 2009, Remote sensing techniques for reconstructing a vast Neolithic settlement in Southern Italy, *Journal of Archaeological Science*, **36**, pp. 43–50. [ISSN: 0305-4403] [doi:10.1016/j.jas.2008.07.002].
129. Lasaponara R., Masini N., and Scardozzi G. 2008, New perspectives for satellite-based archaeological research in the ancient territory of Hierapolis (Turkey), *Advances in Geosciences*, **19**, 87-96 [ISSN: 1680-7340]
130. Masini N., Rizzo E., Lasaponara R., and Orefici G. 2008, Integrated remote sensing techniques for the detection of buried archaeological adobe structures: preliminary results in Cahuachi (Peru), *Advances in Geosciences*, **19**, 75-82. [ISSN: 1680-7359]
131. Gizzi F. T., Lapenna V., Masini N., and Rizzo E. 2008, Historical damage pattern and causes of differential damage: an approach based on combining geophysical prospecting, geological and historical-technical data, *Advances in Geosciences*, **19**, 23-32. [ISSN: 1680-7359]
132. Masini N., Persico R., Guida A., and Pagliuca A. 2008, A multifrequency and multisensor approach for the study and the restoration of monuments : the case of the Cathedral of Matera, *Advances in Geosciences*, **19**, 17-22. [ISSN: 1680-7359]
133. Lasaponara R., Masini N. 2007, Detection of archaeological crop marks by using satellite QuickBird, *Journal of Archaeological Science*, **34**, pp. 214-221 [ISSN: 0305-4403] [10.1016/j.jas.2006.04.014].
134. Gizzi F.T., Masini N., Historical earthquakes and damage patterns in Potenza (Basilicata, southern Italy), *Annals of Geophysics*, **50** (5), pp.675-687. [ISSN: 1593-5213]
135. Masini N., Nuzzo L., Rizzo E. 2007, GPR investigations for the study and the restoration of the Rose Window of Troia Cathedral (Southern Italy), *Near Surface Geophysics*, **5** (5), pp. 287-300 [ISSN: 1569-4445; doi: 10.3997/1873-0604.2007010]
136. Masini N., Lasaponara R. 2007, Investigating the spectral capability of QuickBird data to detect archaeological remains buried under vegetated and not vegetated areas , *Journal of Cultural Heritage*, **8** (1), pp. 53-60. [ISSN: 1296-2074]
137. Lasaponara R., Masini N., Scardozzi G. 2007, Immagini satellitari ad alta risoluzione e ricerca archeologica: applicazioni e casi di studio con riprese pancromatiche e multispettrali di QuickBird, in *Archeologia e Calcolatori*, **18**, pp. 187-227. [ISSN: 1120-6861]
138. Gizzi F.T., Masini N. 2006, Urban damage pattern and causes of differential seismic effects: a case

- study from Basilicata, Southern Italy, *Engineering Geology*, **88**, pp. 41-58. [ISSN: 0013-7952] [doi:10.1016/j.enggeo.2006.08.001]
139. Masini N., Lasaponara R. 2006, Satellite-based recognition of landscape archaeological features related to ancient human transformation, *Journal of Geophysics and Engineering*, **3**, pp. 230-235. [ISSN: 1742-2132] [doi:10.1088/1742-2132/3/3/004]
140. Lasaponara R., Masini N. 2006, Identification of archaeological buried remains based on Normalized Difference Vegetation Index (NDVI) from Quickbird satellite data, *IEEE Geoscience and Remote Sensing Letters*, vol. **3**(3), pp. 325-328 [ISSN: 1545-598X] [doi: 10.1109/LGRS.2006.871747]
141. Lasaponara R., Masini N. 2006, On the potential of Quickbird data for archaeological prospection, *International Journal of Remote Sensing*, **27** (15-16), pp. 3607-3614. [ISSN: 0143-1161] [DOI: 10.1080/01431160500333983]
142. Lasaponara R., Masini N. 2005, QuickBird-based analysis for the spatial characterization of archaeological sites: case study of the Monte Serico Medioeval village, *Geophysical Research Letter*, **32**(12), L12313 [ISSN: 0094-8276] [doi:10.1029/2005GL022445] Impact factor : 2,959.
143. Gizzi F. T., Masini N. 2005, Damage scenario of the earthquake on 23 July 1930 in Melfi: the contribution of the technical documentation, *Annals of Geophysics*, **7** (5), 2004, pp. 1641-1663 [ISSN: 1593-5213] Impact factor : 0,418.
144. Masini N., Fonseca C.D., Gherardi E., Sabino G. 2004, Method and statistical algorithm for the individualization of the original units of measurement in medieval architecture, *Journal of Cultural Heritage*, **5**, pp. 7-15. [ISSN: 1296-2074] [doi:10.1016/j.culher.2002.12.001]
145. Cinquegrana L., Masini N., Pellettieri A., Potenza M.R. 1997, Architectural Photogrammetry in the Study of the Building and Period Techniques: la Chiesa Madre di Atella in Basilicata, *ISPRS*, VOL. XXXII, T. 6W1, pp. 103-106.

F.1B) PAPERS ON NATIONAL JOURNALS.

[N.11]

146. M. Danese, R. Lasaponara, N. Masini (2019). Proximal Remote Sensing e Spatial Analysis per la Conservazione delle Pitture Parietali Pompeiane. il Caso del Gymnasium. *Archeomedia*, **2**, 12-16
147. N Masini, R Lasaponara (2019). Archeologia dei villaggi medievali abbandonati in Basilicata: il contributo del LiDAR. *Leukanika*, **2**, 77-86
148. Maggio A., Gizzi F.T., Masini N. (2018). Innovazione e tecnologia: le nuove frontiere della ricerca nell'ambito dei beni culturali. *Knowledge Transfer Review*, vol. 1, pp. 158-163, ISBN: 9788894404302 (Riv. Naz)
149. Maggio A., Fiore F., Gizzi F.T., Masini N. (2018). Dall'idea al progetto: l'Istituto per i Beni Archeologici e Monumentali del Consiglio Nazionale delle Ricerche. *Knowledge Transfer Review*, vol. 1, pp. 164-173, ISBN: 9788894404302 (Riv. Naz)
150. N Masini, R Lasaponara, G Scardozzi (2017). Potenzialità dei dati satellitari SAR Cosmo-SkyMed per l'archeologia: primi risultati a Hierapolis di Frigia (Turchia). *Archeologia Aerea* **11**, 145-154
151. Masini N., Ciriello R., Marchetta I., Guariglia A., Coluzzi R., Lasaponara R. 2011, La ricostruzione della forma urbis del casale medievale abbandonato di Monte Serico. Nuovi risultati da dati Lidar e ricognizioni sul campo, *Archeologia Aerea*, **5**, pp. 273-282
152. R. Lasaponara, N. Masini 2009, La piramide di Cahuachi. Nell'area desertica di Rio Nazca una prospezione archeologica da satellite riporta alla luce un grande complesso cerimoniale realizzato in terra cruda, *Darwin*, **29** (2009), gennaio-febbraio, pp. 46-51 [ISSN: 1824-2448]
153. Gizzi F.T., Gherardi E., Masini N, Risposta sismica locale: confronto tra dati empirici di danneggiamento ed un metodo analitico di previsione, in *Bollettino Geofisico* XXVII (3-4), 2004, pp. 45-54 [ISSN: 0393-0742]
154. N. Masini, Architettura monastica della Congregazione di S. Maria di Pulsano: il caso di S. Pietro a Cellaria a Calvello, *Bollettino Storico della Basilicata*, **13** (1997), pp. 41-54.[ISSN: 0394-1841]
155. N. Masini, A. Pellettieri, M.R. Potenza, La cartografia finalizzata alla ricostruzione del disegno

urbano dei centri demici abbandonati nella Lucania medioevale, *Bollettino dell'Associazione Italiana di Cartografia*, XXXIII, n.96-97, gennaio-agosto 1996, pp. 43-54 [ISSN 0044-9733]

156. Masini N., *Note storico-topografiche e fotointerpretazione aerea per la ricostruzione della "forma urbis" del sito medievale di Monte Serico*, in <<Tarsia>>, 16-17 (1995), pp. 45-64.

F.2) PATENT

[N.1]

157. Persico R., Masini N., Soldovieri F., Patent on GPR Stepped Frequency System (deposito presso la CCIAA di Roma in data 5/8/2009, numero di domanda RM 2009 A 000422, concessione in data 5 settembre 2012)

F.3) EDITORS OF SPECIAL ISSUES OF INTERNATIONAL JOURNALS

[N.17]

158. Lasaponara R., Masini N. 2019-0 Special issue on "New Perspectives of Remote Sensing for Archaeology", *Sustainability*, ISSN 2071-1050

159. Masini N., Prestileo F., Schiavon N. 2018-2019. Special issue on "Sharing and Discussion of Experiences and Approaches to Interpretation, Conservation and Management of Archaeological and Architectural Heritage", *Heritage*, ISSN 2571-9408

160. Lasaponara R., Masini N. 2014-15. Special issue on "New Perspectives of Remote Sensing for Archaeology", *Remote Sensing*, ISSN 2072-4292

161. Lasaponara R., Murgante B., Masini N., Yong Ge, Asche H. 2014. Special issue on "Advance in geocomputation", *International Journal of Applied Earth Observation and Geoinformation*, 26.

162. Lasaponara R., Masini N. 2013. Special issue on "Satellite Radar in Archaeology and Cultural landscape", *Archaeological Prospection*, vol. 20, issue 2

163. Masini N., Soldovieri F., Alvarez De Buergo M., Dumoulin J. 2012, Special Issue on "Cultural heritage and civil engineering", *Journal of Geophysics and Engineering*, vol. 9

164. Soldovieri F., Dumoulin J., Masini N., Solimene R., and Utsi E. 2012, Special Issue on "Noninvasive Sensing Techniques 2012", *International Journal of Geophysics*, vol. 2012

165. Lasaponara R., Masini N. 2011, Special Issue on "Satellite remote sensing in archaeology: past, present and future perspectives", *Journal of Archaeological Science*, vol. 38.

166. Masini N., Soldovieri F. 2011, Special Issue on "Integrated non-invasive sensing techniques and geophysical methods for the study and conservation of architectural, archaeological and artistic heritage", *Journal of Geophysics and Engineering*, vol. 8.

167. Soldovieri F., Dumoulin J., Masini N., Utsi 2011. Special Issue on "Noninvasive Sensing Techniques and Geophysical Methods for Cultural Heritage and Civil Infrastructures Monitoring", *International Journal of Geophysics*, vol. 2011

168. Masini N., Soldovieri F. 2010, Special Issue on "GPR in Archaeology", *Near Surface Geophysics*, vol. 8.

169. Eppelbaum L., Masini N., Soldovieri F. 2010, Special Issue on "Near surface geophysics for the study and the management of historical resources", *Journal of Geophysics and Engineering*, vol. 7.

170. Eppelbaum L., Masini N., Soldovieri F. 2010, Special Issue on "Near surface geophysics for the study and the management of historical resources: past, present and future", *Advances in Geoscience*, vol. 24.

171. Lasaponara R., Hernandez M., Masini N., Deroin J.-P., 2010. Special Issue on "Aerial and Spatial Archaeology: from Historical Photographs to Lidar". *Photo Interpretation European Journal of Applied Remote Sensing*, vol. 46

172. Masini N., Soldovieri F. 2010. Special issue on "Heritage" entitled: "Features Papers"

173. Masini N., Prestileo F., Schiavon N. 2018-19, Special issue on *Heritage* entitled: "Sharing

and Discussion of Experiences and Approaches to Interpretation, Conservation and Management of Archaeological and Architectural Heritage"

174. Lasaponara R., Masini N. 2019. *Sustainability* (2019), Special issue on *Sustainability* entitled: " *New Perspectives of Remote Sensing for Archaeology*"

F.4A) INTERNATIONAL BOOKS

[N.9]

175. Ziółkowski M., Masini N., Bastante J.M. (2022) *Machu Picchu in Context. Interdisciplinary Approaches to the Study of Human Past*. Springer Cham, eISBN 978-3-030-92766-0, ISBN 978-3-030-92765-3, <https://doi.org/10.1007/978-3-030-92766-0>
176. Javier Ortega, Margarita Gonzalez, Nicola Masini, et al. (2021) *Heritage Within*. European Research Project , 2021
177. Hadjimitsis D. G., Themistocleous K, Agapiou A., Cuca B., Lysandrou V., Lasaponara R., Masini N., Schreier G. (Eds) (2019) *Remote Sensing for Archaeology and Cultural Landscapes Best Practices and Perspectives Across Europe and the Middle East*, Springer Remote Sensing/Photogrammetry. Springer, Cham, <https://doi.org/10.1007/978-3-030-10979-0>
178. Masini N., Soldovieri F. (Eds) (2017). *Sensing the Past. From From artifact to historical site*. Series: *Geotechnologies and the Environment*, Vol. 16. Springer International Publishing, ISBN: 978-3-319-50516-9, doi: 10.1007/978-3-319-50518-3
179. Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, ISBN: 978-3-319-47050-4 (Print) 978-3-319-47052-8 (Online), doi: 10.1007/978-3-319-47052-8
180. Lasaponara R., Masini N., Biscione M., Hernandez M. 2013 (Eds). *Earth Observation: a window on the Past*. Proceedings of the 4th EARSeL Workshop on "Remote Sensing for Cultural Heritage", 6-7 June 2013 - Matera, Italy. EARSeL and CNR IBAM/IMAA Publishers, Potenza.
181. Lasaponara R., Masini N., Biscione M. 2013 (Eds), *Earth Observation and Social Perspectives. Towards Horizon 2020*. Proceedings of the 33rd EARSeL Symposium. Matera (Italy), 3-6 June 2013. EARSeL and CNR publisher, 2013.
182. Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, Series: *Remote Sensing and Digital Image Processing*, Vol. 16, 364 p. 150 illus., 88 in color, ISBN 978-90-481-8800-0
183. Lasaponara R., Masini N. (Eds.) 2008, *Advances in Remote Sensing for Archaeology and Cultural Heritage Management*, Proc. of I International EARSeL Workshop "Advances in Remote Sensing for Archaeology and Cultural Heritage Management", Rome 30 settembre-4 October, 2008, Aracne, Roma, 2008. ISBN: 978-88-548-2030-2

F.4B) NATIONAL BOOKS

[N.11]

184. Masini, N., e Fiore, G. *Verso un restauro digitalmente inteso*. Prefazione di G. Tucci. Roma: Gangemi Editore, 2025. ISBN 978-88-492-5394-8
185. Maria Danese, Nicola Masini, Marilisa Biscione (2024). *Gli Open Data per il patrimonio culturale: aspetti teorici ed esperienze in Italia*, CNR Edizioni
186. Aimi A., Masini N. (2021). *La scoperta di Machu Picchu*. Collana "Grandi Impreswe della Storia", Corriere della Sera, Grafica Veneta, Trebaseleghe (PD), 160pp
187. Masini N., Roubis D., Sogliani F. (2016) (Eds.). *Calvello*. San Pietro di Cellaria. Un progetto di ricerca tra geofisica ed archeologia. Matera, Antezza, 2016
188. Gizzi F., Masini N. (Eds), *Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale*.

Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7

189. D'Auria M., Colella C., Masini N. (Eds) 2014. *Francesco Mauro. Un chimico lucano*. ESI, Napoli, ISBN 978-88-495-2778-0

190. Gizzi F.T., Masini N. (Eds) 2010, *Dalle Fonti all'Evento. Percorsi, strumenti e metodi per l'analisi del terremoto del 23 luglio 1930 nell'area del Vulture*, Napoli, ESI, 288 pp., ISBN 978-88-495-2050-7

191. D'Andria F., Malfitana D., Masini N., Scardozzi G. (Eds.) 2010, *Il Dialogo dei saperi. Metodologie integrate per i beni Culturali*, ESI, Napoli, 2 voll, ISBN: 8849519117.

192. Ciriello R., Masini N., Pellettieri A., Tomay L. 2002, *Viaggio nella Regione del Vulture. Archeologia e architettura medievale*, Milano, Ed. Franco Angeli. ISBN 10: 8846437683.

193. Masini N. 1996, *Calvello : dal castrum al palazzo*, Collana dell'Istituto Internazionale di Studi Federiciani - Acta et Documenta, 2, Ed. ESI, Napoli - EAN 9788881142743

194. Masini N. - A. Pellettieri (Eds.), *Città, Cattedrali e Castelli in età normanno-sveva : storia, territorio e tecnica di rilevamento*, Miscellanea di studi in onore di Cosimo Damiano Fonseca, Rionero 1996.

F.5A) INTERNATIONAL BOOK CHAPTERS

[N.71]

195. Morero, L., Guida, A., e Masini, N. "Anamnesi del restauro come strumento di conoscenza: il caso studio della Basilica di San Nicola a Bari." In *Conservation of Architectural and Urban Heritage*, a cura di T. Teba e A. Di Raimo, 247–255. *Advances in Science, Technology & Innovation*. Cham: Springer Nature Switzerland, 2025. https://doi.org/10.1007/978-3-031-71145-9_18.

196. Danese, M., Villani, F., Filitti, D., Scaramuzzo, G., Biscione, M., Masini, N. (2025). Digital Tools Empowering Tourism Development: A Business Intelligence Platform for the Basilicata Regional Growth. In: Gervasi, O., et al. *Computational Science and Its Applications – ICCSA 2025 Workshops*. ICCSA 2025. *Lecture Notes in Computer Science*, vol 15894. Springer, Cham. https://doi.org/10.1007/978-3-031-97648-3_12

197. Lasaponara, R., Wang, X., Masini, N. (2023). Notes on Artificial Intelligence and Big Earth Observation Data for the Study of the Human Past. In: El-Qady, G.M., Margottini, C. (eds) *Sustainable Conservation of UNESCO and Other Heritage Sites Through Proactive Geosciences*. Springer Geology. Springer, Cham. https://doi.org/10.1007/978-3-031-13810-2_29

198. Spizzichino, D., Masini, N., Lasaponara, R., Margottini, C. (2022). Machu Picchu Physiographic and Environmental Settings. In: Ziólkowski, M., Masini, N., Bastante, J.M. (eds) *Machu Picchu in Context*. Springer, Cham. https://doi.org/10.1007/978-3-030-92766-0_1

199. Masini, N., Abate, N., Scavone, M., Lasaponara, R. (2022). Machu Picchu in Context: The Inca Building Culture. In: Ziólkowski, M., Masini, N., Bastante, J.M. (eds) *Machu Picchu in Context*. Springer, Cham. https://doi.org/10.1007/978-3-030-92766-0_4

200. Lasaponara, R., Abate, N., Fattore, C., Masini, N. (2022). Open Big Earth Observation Data and Artificial Intelligence for the Study and Preservation of UNESCO Natural and Cultural Heritage: The Case of Machu Picchu. In: Ziólkowski, M., Masini, N., Bastante, J.M. (eds) *Machu Picchu in Context*. Springer, Cham. https://doi.org/10.1007/978-3-030-92766-0_6

201. Capozzoli, L. et al. (2022). New Results from Archaeogeophysical Investigations in Machu Picchu. In: Ziólkowski, M., Masini, N., Bastante, J.M. (eds) *Machu Picchu in Context*. Springer, Cham. https://doi.org/10.1007/978-3-030-92766-0_7

202. Morero L., Guida A., Porcari V., Masini N. (2021) Knowledge and Big Data: New Approaches to the Anamnesis and Diagnosis of the Architectural Heritage's Conservation Status. State of Art and Future Perspectives. In: Gervasi O. et al. (eds) *Computational Science and Its Applications – ICCSA 2021*. ICCSA 2021. *Lecture Notes in Computer Science*, vol 12956. Springer, Cham. pp.109-124 https://doi.org/10.1007/978-3-030-87010-2_8

203. Masini N., Capozzoli L., Romano G., Sieczkowska D., Sileo M., Bastante J., Astete Victoria F.,

- Ziolkowski M., Lasaponara R. (2020). Arqueogeofísica aplicada a la arqueología inca: el caso del monumento arqueológico Chachabamba. In Astete F., Bastante J. (Eds). Machupicchu Investigaciones Interdisciplinarias. Lima, GD Impactos, 2020, tomo II, pp. 305-320
204. N. Masini, M. Biscione, M. Danese, Predicting Archaeology by means of spatial analysis and remote sensing. In: A. Bertini, I. Caruso, G.T. Colesanti, T. Vitolo (a cura di). CULTURA IN TRANSITO. Roma - Bristol CT, «L'ERMA» di BRETSCHNEIDER, 2020, pp. 161-17
205. Astete F., Bastante J., Masini N., Machu Picchu: tra conoscenza e gestione. In Russo A., Della Giovampaola I. (a cura di), Monitoraggio e manutenzione delle aree archeologiche Cambiamenti climatici, dissesto idrogeologico, degrado chimico-ambientale. Atti del Convegno Internazionale di Studi Roma, Curia Iulia, 20-21 Marzo 2019. Roma-Bristol «L'ERMA» di BRETSCHNEIDER, 2020, pp. 79-86
206. Lasaponara R., Masini N. (2020) Active Satellite Sensors in Cultural Heritage Research: The Use of SAR for Archaeological Prospection. In: Hadjimitsis D. et al. (eds) Remote Sensing for Archaeology and Cultural Landscapes. Springer Remote Sensing/Photogrammetry. Springer, Cham
207. Masini N., Lasaponara R. (2020) Recent and Past Archaeological Looting by Satellite Remote Sensing: Approach and Application in Syria. In: Hadjimitsis D. et al. (eds) Remote Sensing for Archaeology and Cultural Landscapes. Springer Remote Sensing/Photogrammetry. Springer, Cham
208. Lasaponara R., Masini N. (2020) Big Earth Data for Cultural Heritage in the Copernicus Era. In: Hadjimitsis D. et al. (eds) Remote Sensing for Archaeology and Cultural Landscapes. Springer Remote Sensing/Photogrammetry. Springer, Cham
209. Fabrizio Terenzio Gizzi, Beniamino Murgante, Marilisa Biscione, Maria Danese, Maria Sileo, Maria Rosaria Potenza, and Nicola Masini (2018). Mobile Technology to Contribute Operatively to the Safeguard of Cultural Heritage. In: G. Schiuma & D. Carlucci (Eds), Big Data in the Arts and Humanities Theory and Practice, CRC Press Taylor & Francis Group, Chapter: 14
210. Wang Xinyuan, Rosa Lasaponara, Shahina Tariq, Houcine Khatteli, Luo Lei, Liu Jie, Nicola Masini, Natarajan Ishwaran, Chen Fulong (2017). Conservation and Utilization of Cultural Heritage along the Belt and Road: Challenges and Solutions. Bulletin of Chinese Academy of Sciences 2017 . Vol.32 . Z 1
211. Lasaponara R., Masini N. Space Based Monitoring of Archaeological Looting: An Overview in Peruvian Archaeological Areas. In: Gervasi et al. (Eds). Computational Science and Its Applications – ICCSA 2017. 17th International Conference, Trieste, Italy, July 3-6, 2017, Proceedings, Part V, pp. 713-727
212. Masini N., Soldovieri F. (2017). Cultural Heritage Sites and Sustainable Management Strategies. In: Masini N., Soldovieri F. (Eds) (2017). Sensing the Past. From From artifact to historical site. Springer International Publishing, pp. 1-19, doi: 10.1007/978-3-319-50518-3_1.
213. Masini N., Lasaponara R. (2017). Sensing the Past from Space: Approaches to Site Detection In: Masini N., Soldovieri F. (Eds) (2017). Sensing the Past. From From artifact to historical site. Springer International Publishing, pp. 23-60, doi: 10.1007/978-3-319-50518-3_2.
214. Lasaponara R. Masini N., (2017). Sensing the Past from Space: Approaches to Site Detection In: Masini N., Soldovieri F. (Eds) (2017). Sensing the Past. From From artifact to historical site. Springer International Publishing, pp. 61-88, doi: 10.1007/978-3-319-50518-3_3.
215. Romano F.P., Pappalardo L., Biondi G., Caliri C., Masini N., Rizzo F., and Cristine Santos H. (2017). FF-XRF, XRD, and PIXE for the Nondestructive Investigation of Archaeological Pigments. In: Masini N., Soldovieri F. (Eds) (2017). Sensing the Past. From From artifact to historical site. Springer International Publishing, pp. 325-336, doi: 10.1007/978-3-319-50518-3_15.
216. Chen F., Masini N., Rizzo E., Yang R., Romano G., Pecci A., and Lasaponara R. (2017). Investigating Luoyang by Remote Sensing: First Results. In: Masini N., Soldovieri F. (Eds) (2017). Sensing the Past. From From artifact to historical site. Springer International Publishing, pp. 535-556, doi: 10.1007/978-3-319-50518-3_28.
217. Masini N., Sileo M., Leucci G., Soldovieri F., D'Antonio A., De Giorgi L., Pecci A., and Scavone M. (2017). Integrated In Situ Investigations for the Restoration: The Case of Regio VIII in Pompeii. In: Masini N., Soldovieri F. (Eds) (2017). Sensing the Past. From From artifact to historical site. Springer

International Publishing, pp. 557-586, doi: 10.1007/978-3-319-50518-3_29

218. Giardino M., Masini N. (2017), Remote Sensing of Vegetation as a Proxy for the Discovery and Delineation of Archaeological Sites. In Santini L. M, VanEssendelft W., Davenport B. (Editors), *Archaeological Methods & Applications in Multispectral Image Processing*. ISBN: 9781785707322, Oxford Books, 2017

219. Orefici G., Masini N., Lasaponara R. (2016). Thirty Years of Investigations in Nasca: From Proyecto Nasca to the ITACA Mission. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 1-20, doi: 10.1007/978-3-319-47052-8_1

220. Masini N., Orefici G., Lancho Rojas J. (2016). Nasca Geoglyphs: Technical Aspects and Overview of Studies and Interpretations. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 217-238, doi: 10.1007/978-3-319-47052-8_11

221. Masini N., Orefici G., Danese M., Pecci A., Scavone M., Lasaponara R. (2016). Cahuachi and Pampa de Atarco: Towards Greater Comprehension of Nasca Geoglyphs. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 239-278, doi: 10.1007/978-3-319-47052-8_12

222. Lasaponara R., Lancho Rojas J., Masini N., (2016). Puquios: The Nasca Response to Water Shortage. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 279-327, doi: 10.1007/978-3-319-47052-8_13

223. Masini N., Rizzo E., Capozzoli L., Leucci G., Pecci A., Romano G., Sileo M., Lasaponara R. (2016). Remote Sensing and Geophysics for the Study of the Human Past in the Nasca Drainage. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 469-527, doi: 10.1007/978-3-319-47052-8_20

224. Lasaponara R., Nolè G., Rizzo E., Capozzoli L., Romano G., Danese M., Masini N. (2016). Puquios: New Insights from the Integration of Remote Sensing, GIS-Based Analyses and Geophysical Investigations. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 543-580, doi: 10.1007/978-3-319-47052-8_22

225. Pappalardo L., Masini N., Rizzo F., Romano F. P., (2016). The Polychromy of Nasca Pottery: A Nondestructive Analytical Approach for Compositional and Mineralogical Investigation of Pigments. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 593-603, doi: 10.1007/978-3-319-47052-8_24

226. Lasaponara R., Masini N. (2016). Combating Illegal Excavations in Cahuachi: Ancient Problems and Modern Technologies. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 605-633, doi: 10.1007/978-3-319-47052-8_25

227. Masini N., Danese M., Pecci A., Scavone M., Lasaponara R. (2016). Nasca Lines: Space Tracking of Vandalism. In: Lasaponara R., Masini N., Orefici G. (Eds). *The Ancient Nasca World New Insights from Science and Archaeology*. Springer International Publishing, 2016, pp. 635-656, doi: 10.1007/978-3-319-47052-8_26

228. Hadjimitsis D. G., Agapiou A., Lysandrou V., Themistocleous K., Cuca B., Nisantzi A., Lasaponara R., Krauss T., Cerra D., Gessner U., Schreier G (2016). Establishing a Remote Sensing Science Center in Cyprus: First Year of Activities of ATHENA Project. *Digital Heritage. Progress in Cultural Heritage: Documentation, Preservation, and Protection*, Vol. 10059, Series Lecture Notes in Computer Science pp 275-282

229. Masini N., FT Gizzi, M Biscione, M Danese, A Pecci, MR Potenza, M Scavone, M Sileo (2016). Sensing the Risk: New Approaches and Technologies for Protection and Security of Cultural Heritage. The "PRO_CULT" Project. *Digital Heritage. Progress in Cultural Heritage: Documentation,*

Preservation, and Protection, Vol. 10059, Series Lecture Notes in Computer Science, pp 99-106

230. M Danese, G Cassiodoro, F Guichón, R Goñi, N Masini, G Nolè, R. Lasaponara (2016). Spatial Analysis for the Study of Environmental Settlement Patterns: The Archaeological Sites of the Santa Cruz Province. Computational Science and Its Applications – ICCSA 2016, Volume 9787 of the series Lecture Notes in Computer Science, pp. 191-203
231. Lasaponara R., Masini N. (2016). Living in the Golden Age of Digital Archaeology. Computational Science and Its Applications – ICCSA 2016. Volume 9787 of the series Lecture Notes in Computer Science
232. Tapete D, Cigna F, Lasaponara R, Masini N (2015) Multi-scale detection of changing cultural landscapes in Nasca (Peru) through ENVISAT ASAR and TerraSAR-X. In: Lollino G et al (eds), Engineering Geology for Society and Territory - Vol. 8, Springer Int. Publishing, p 339–343
233. F . T . Gizzi, N . Masini, M . Sileo, C . Zotta, M . Scavone, M . R . Potenza, D . Liberatore, L . Sorrentino, and M . Bruno 2014. Building features and safeguard of church towers in Basilicata (Southern Italy). In Science, Technology and Cultural Heritage (Ed. M.A. Rogerio-Candelera), CRC Press, Print ISBN: 978-1-138-02744-2, eBook ISBN: 978-1-315-71242-0, pp. 369-374
234. N. Masini and R . Lasaponara 2014. Remote sensing for the study, protection and conservation of Cultural Heritage: The experience of ITACA Mission in Southern America (2007–2013). In Science, Technology and Cultural Heritage (Ed. M.A. Rogerio-Candelera), CRC Press, Print ISBN: 978-1-138-02744-2, eBook ISBN: 978-1-315-71242-0, pp. 375–395
235. M. Biscione, M. Danese, N. Masini, L. Fachechi, D. Bellusci, and W. Lorenzetti 2014. Artworks in high-risk context: Integrated and low cost approach to theft and dispersion protection. In *Science, Technology and Cultural Heritage* (Ed. M.A. Rogerio-Candelera), CRC Press, Print ISBN: 978-1-138-02744-2, eBook ISBN: 978-1-315-71242-0, pp. 397–402
236. M. Danese, M. Biscione & N. Masini 2014. Spatial analysis for archaeological predictive models: Preliminary results for the Roman Age in the Basilicata Region. In *Science, Technology and Cultural Heritage* (Ed. M.A. Rogerio-Candelera), CRC Press, Print ISBN: 978-1-138-02744-2, eBook ISBN: 978-1-315-71242-0, pp. 403–409
237. N. Masini, M. Scavone & A. Pagliuca 2014. Approaches to restoration project of monuments and historical sites in Southern Italy. In *Science, Technology and Cultural Heritage* (Ed. M.A. Rogerio-Candelera), CRC Press, Print ISBN: 978-1-138-02744-2, eBook ISBN: 978-1-315-71242-0, pp. 465–470.
238. M. Sileo, M. Biscione, F.T. Gizzi, N. Masini & M.I. Martinez-Garrido 2014. Low cost strategies for the environmental monitoring of Cultural Heritage: Preliminary data from the crypt of St. Francesco d’Assisi, Irsina (Basilicata, Southern Italy). in Science, Technology and Cultural Heritage (Ed. M.A. Rogerio-Candelera), CRC Press, Print ISBN: 978-1-138-02744-2, eBook ISBN: 978-1-315-71242-0, pp. 27-34
239. Tapete D., Cigna F., Lasaponara R., Masini N. 2014, Investigating Natural Hazards in the Peruvian Region of Nasca with Space-Borne Radar Sensors. K. Sassa et al. (eds.), *Landslide Science for a Safer Geoenvironment*, Vol. 3, DOI 10.1007/978-3-319-04996-0_54, Springer International Publishing Switzerland, pp. 357-362
240. Gizzi F. T., Tilio L., Masini N., Murgante B., Potenza M. R. and Zotta C. 2014. *High-Detail Damage Pattern in Towns Hit by Earthquakes of the Past*. In Bostenaru M., Armas I., Goretti A., An Approach to Evaluate the Reliability of the Historical Sources. In: *Earthquake Hazard Impact and Urban Planning Environmental Hazards*, Springer Netherlands, series Environmental Hazards, part. II, doi 10.1007/978-94-007-7981-5_6, ISBN 978-94-007-7980-8, pp 105-125
241. A. Guida, A. Pagliuca, N. Cardinale, N. Masini, G. Rospi, M. De Luca Picione, D. De Tommasi, I. Mecca, T. Cardinale 2013. Energy efficiency improvement and suitability interventions on vernacular Geocluster (Basilicata). In: (a cura di): Ural O., Pizzi E., Croce S., *Changing Needs, Adaptive Buildings, Smart Cities*. vol. 2, p. 143-150, MILANO:Poliscript - Politecnico di Milano, ISBN: 978-88-6493-0206
242. A. Guida, A. Pagliuca, N. Cardinale, N. Masini, G. Rospi, M. De Luca Picione, D. De Tommasi, I. Mecca, T. Cardinale 2013.. Processi di recupero tecnologico del patrimonio edilizio identificabile con il geocluster regionale vernacolare. In: (a cura di): Susana Mora Alonso-MunoYerro, Adela Rueda Marquez de

la Plata, Pablo Alejandro Cruz Franco, La experiencia del Reuso Vol. 1 Criterio Y Metodo en Epoca de Crisis & Ingenieria Y Tecnica al Servicio de la Restauracion . vol. 1, p. 429-436, Madrid:c2o Servicios Editoriales, ISBN: 978-84-15321-73-6

243. Rizzo E., Masini N., Capozzoli L. 2013. *GPR investigations at Llamacorral*. In Rosini C., Benozzi E. (Eds), *Archaeology of an Andean Pacarina. Settlement patterns and rituality aound Lake Puruhuay, Ancash, Peru*. BAR International Series 2576, 2013, pp. 29-30.

244. Masini N., Lasaponara R. 2013. Airborne Lidar in Archaeology: Overview and a Case Study. In: Computational Science and Its Applications – ICCSA 2013, Lecture Notes in Computer Science Volume 7972, 2013, pp 663-676, doi: 10.1007/978-3-642-39643-4_48, ISSN: 0302-9743, Springer Berlin Heidelberg.

245. Lasaponara R., Masini N. 2012. Investigating satellite Landsat TM and ASTER multitemporal data set to discover ancient canals and aqueduct systems, in Lecture Notes in Computer Science, Vol. 7335, Issue 3, 2012, Pages 497-511, 12th International Conference on Computational Science and Its Applications, ICCSA 2012;Salvador de Bahia;18 June-21 June 2012

246. Lasaponara R., Masini N. 2012. Remote Sensing in Archaeology: From Visual Data Interpretation to Digital Data Manipulation, In: Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, ISBN 978-90-481-8800-0, pp. 3-16

247. Lasaponara R., Masini N. 2012. Image Enhancement, Feature Extraction and Geospatial Analysis in an Archaeological Perspective, In: Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, ISBN 978-90-481-8800-0, pp. 17-64

248. Lasaponara R., Masini N. 2012. Pattern Recognition and Classification Using VHR Data for Archaeological Research, In: Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, ISBN 978-90-481-8800-0, pp. 65-86.

249. Lasaponara R., Masini N. 2012. Pan-Sharpening Techniques to Enhance Archaeological Marks: An Overview, In: Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, ISBN 978-90-481-8800-0, pp. 87-110.

250. Lasaponara R., Danese M., Masini N. 2012. Satellite-Based Monitoring of Archaeological Looting in Peru, In: Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, ISBN 978-90-481-8800-0, pp. 177-193.

251. Lasaponara R., Masini N. 2012. Following the Ancient Nasca Puquios from Space, In: Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, ISBN 978-90-481-8800-0, pp. 269-290.

252. Masini N., Lasaponara R., Rizzo E., Orefici G. 2012. Integrated Remote Sensing Approach in Cahuachi (Peru): Studies and Results of the ITACA Mission (2007–2010), In: Lasaponara R., Masini N. (Eds) 2012, *Satellite Remote Sensing: a new tool for Archaeology*, Springer, Verlag Berlin Heidelberg, ISBN 978-90-481-8800-0, pp. 307-344.

253. Lasaponara R., Masini N. 2011. On the Processing of Aerial LiDAR Data for Supporting Enhancement, Interpretation and Mapping of Archaeological Features. In B. Murgante et al. (Eds.), Computational Science and its applications - ICCSA 2011, Part II, LNCS 6783, pp. 392–406, Springer-Verlag Berlin Heidelberg, ISBN 978-3-642-21886-6, doi 10.1007/978-3-642-21887-3.

254. Masini N., Coluzzi R., Lasaponara R. 2011. On the Airborne Lidar Contribution in Archaeology: from Site Identification to Landscape Investigation. In : Laser Scanning, Theory and Applications, Chau-Chang Wang (Ed.), Publisher Intech, ISBN 978-953-307-205-0, pp. 263-290.

255. Masini N., Lasaponara R. 2010, *Facing the archaeological looting in Peru by local spatial autocorrelation statistics of Very high resolution satellite imagery*, Proceedings of ICSSA, The 2010 International Conference on Computational Science and its Application (Fukuoka-Japan, March 23 – 26, 2010), David Taniar, Osvaldo Gervasi, Beniamino Murgante, Eric Pardede, Bernady O. Apduhan (Ed.), Springer, Berlin,, pp. 261-269.

256. Gizzi F., Masini N., Potenza M.R., Zotta C., Tilio L., Danese M., Murgante B 2010. *Assessing*

Macroseismic Data Reliability through Rough Set Theory: The Case of Rapolla (Basilicata, Southern Italy), Lecture Notes in Computer Science vol. 6016, pp. 320–330. Springer-Verlag, Berlin. ISSN: 0302-9743, doi:10.1007/978-3-642-12156-2_25.

257. Gizzi F., Masini N., Potenza M.R., Zotta C., Tilio L., Danese M., Murgante B. (2010) “Assessing Macroseismic Data Reliability through Rough Set Theory: Application on Vulture Area (Basilicata, Southern Italy)” in Phillips-Wren G., Jain L. C., Nakamatsu K., Howlett R. J. (Eds), *Advances in Intelligent Decision Technologies, Smart Innovation, Systems and Technologies*, Vol. 4, VII., pp. 279-288, Springer-Verlag, Berlin, DOI: 10.1007/978-3-642-14616-9_27

258. Lasaponara R., Coluzzi R., Lanorte A., Masini N. 2010, Estimating burn severity in a fragmented *landscape using satellite MODIS data*, Proceedings of ICSSA, The 2010 International Conference on Computational Science and its Application (Fukuoka-Japan, March 23 – 26, 2010), David Taniar, Osvaldo Gervasi, Beniamino Murgante, Eric Pardede, Bernady O. Apduhan (Ed.), Springer, Berlin, pp. 372-385.

259. Danese M., Biscione M., Coluzzi R., Lasaponara R., Murgante B., Masini N. 2009, An Integrated Methodology for Medieval Landscape Reconstruction: The Case Study of Monte Serico, in O. Gervasi et al. (Eds.), *Computational Science and Its Applications – ICCSA 2009, Proceedings of International Conference*, Seoul, Korea, June 29-July 2, 2009, © Springer-Verlag Berlin Heidelberg, part. I, LNCS 5592, pp. 328–340

260. Masini N., Rizzo E., Lasaponara R. 2009. *Teledeteccion y Investigaciones geofisicas en Cahuachi : primeros resultados*, in AA.VV., Nasca. El Desierto de los Dioses de Cahuachi, Graph Ediciones, Lima, pp.250-277 [ISBN-10: 6124535920 ISBN-13: 9786124535925]

261. Liberatore D., Mucciarelli M., Gallipoli M. R., Masini N. 2008, Two Applications of the HVSR Technique to Cultural Heritage and Historical Masonry in Increasing Seismic Safety by Combining Engineering Technologies and Seismological Data, M. Mucciarelli, M. Herak and J. Cassidy eds., Springer, [ISBN 978-1-4020-9196-4], 325-336

262. Liberatore D., Spera G., Mucciarelli M., Gallipoli M.R., Santarsiero D., Tancredi C., Masini N., Racina V., Capriuoli A., Cividini A., Tedeschi C. 2006, *Typological and experimental investigation on the adobe buildings of Aliano (Basilicata, Italy)*, in *Structural Analysis of Historical Constructions*, P.B. Lourenço, P. Roca, C. Modena, S. Agrawal (Eds.), New Delhi, ISBN 972-8692-27-7.

263. Liberatore D., Spera G., Mucciarelli M., Masini N., Calia A., Capriuoli A., Racina V., Nuzzo L., Rizzo E., Binda L., Cantini L., *The façade and the rose-window of Troia Cathedral (Apulia, Italy)*, in *Structural Analysis of Historical Constructions*, P.B. Lourenço, P. Roca, C. Modena, S. Agrawal (Eds.), New Delhi 2006, ISBN 972-8692-27-7.

264. Caputo V., Gizzi F., Guida A., Masini N., Tataranno A. 2002, *Interdisciplinary approach for the restoration of the Church “La Madonna della Pietà”*, in *Structural Studies, Repairs and Maintenance of Historical Buildings*, VII, WIT Press, Southampton, Boston, 2002, pp. 645-659.- ISBN 10: 1853128694

265. Gizzi F.T., Masini N., Pellettieri A., Potenza M.R. 2009, *Conservation of Cathedral of Acerenza by means of a multidisciplinary approach*, in *Structural Studies, Repairs and Maintenance of Historical Buildings VI*, WIT Press, Southampton, Boston, ISBN: 1-85312-690-X.

F.5B) NATIONAL BOOK CHAPTERS

[N.53]

266. Masini, N. (2026). Interazione uomo-natura nelle culture della costa peruviana nel periodo intermedio antico: Il caso dei Nasca. In G. Garbati (Ed.), *Ex nihilo nihil fit. L'interazione tra uomo e natura in età premoderna* (pp. 359–377). CNR Edizioni, ISBN: 978 88 8080 828 2, doi: 10.19282/tcm.03.2026

267. Masini N., Cardone S. (2024), La rovina tra conservazione, protezione e riuso, in Susanna Caccia Gherardini; Maurizio De Vita (Eds), 1964–2024. La Carta di Venezia. Riflessioni teoriche e prassi operative nel progetto di restauro, RA | Restauro Archeologico. Conoscenza, conservazione e valorizzazione del patrimonio architettonico, anno XXXII, n. 2/2024, vol. 1, Firenze, Firenze University Press, pp. 492–497, ISSN 1724-9686 (print), ISSN 2465-2377 (online).

268. Masini N., Gizzi F.T. (2020). Torre di Cisterna: Ri-scoperta di un sito fortificato medievale attraverso il telerilevamento LiDAR. In: Melfi tra Longobardi e Bizantini. Atti del Convegno internazionale

di studio promosso per il millenario di fondazione della città fortificata di Melfi (1018-2018). Melfi, 10-12 Ottobre 2019. Bari, Mario Adda Editore, ISBN 9788867175260, pp. 321-346.

269. Masini N., Lasaponara R. (2016). La missione Itaca per lo studio delle civiltà preispaniche in Perù. In: Caravale A. (Ed.), Scavare, Documentare, Conservare. Viaggio nella ricerca archeologica del CNR, CNR Edizioni, ISBN 9788880801955, pp. 188-193

270. M. Sileo, F.T. Gizzi, N. Masini, *Monitoraggio microclimatico: passato, presente e prospettive future*. In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 27-52

271. M. Sileo, F.T. Gizzi, N. Masini, M. Biscione, M.P. Boccia - Approcci low-cost al monitoraggio microclimatico di ambienti confinati: il caso della Cripta di S.Francesco in Irsina (Matera). In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 53-94

272. Giuzio, N. Masini, M. Scavone, M. Álvarez de Buergo, E. Vasanelli - Metodologie ultrasoniche per la diagnostica del Patrimonio Culturale: sperimentazioni in laboratorio. In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 95-122

273. D. Liberatore, N. Masini, L. Sorrentino, V. Racina, L. Frezza, M. Sileo - Una prova penetrometrica statica per lo studio di malte storiche: primi risultati applicativi e future prospettive di impiego . In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 123-146

274. F.T. Gizzi, N. Masini, B. Murgante, N. Saulino, M. Biscione, M. Danese, M. Sileo, C. Zotta, M.R. Potenza - SaveHer: un'applicazione (App) per contribuire attivamente alla salvaguardia del Patrimonio Culturale . In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 201-214

275. M. Biscione, M. Danese, N. Masini Ubiquitous Computing e Patrimonio Culturale: dalla fruizione alla salvaguardia . In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 215-224

276. M. Biscione, M. Danese, N. Masini - Un approccio operativo e a basso costo alla protezione del Patrimonio artistico: il sistema zbSens. In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 225-242

277. F.T. Gizzi, D. Liberatore, N. Masini, M. Bruno, M.R. Potenza, M. Scavone, M. Sileo, L. Sorrentino, C. Zotta, T. Pagnoni - Patrimonio storico-architettonico e salvaguardia: analisi delle caratteristiche costruttive e dinamiche dei campanili delle Chiese in Basilicata . In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 299-324

278. M. Danese, M. Biscione, N. Masini, R. Lasaponara. *Archeologia preventiva: il ruolo delle analisi spaziali e del remote sensing nei modelli predittivi* . In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 325-340

279. M. Danese, M. Biscione, N. Masini. *Modelli predittivi per un'archeologia preventiva operativa: note metodologiche e applicazioni* . In Gizzi F., Masini N. (Eds), Salvaguardia, Conservazione e Sicurezza del Patrimonio Culturale. Nuove metodologie e tecnologie operative - Zaccara Editore, Lagonegro (PZ) pp. 384 (2015), ISBN 978-88-995-2000-7, pp. 341-358

280. Masini N. 2014. Calvello. Cenni storici dalla fondazione medievale ai giorni della giovinezza di

- Mauro. In D'Auria M., Colella C., Masini N. (Eds) 2014. *Francesco Mauro. Un chimico lucano*. ESI, Napoli, pp. 43-56, ISBN 978-88-495-2778-0
281. Colella C., Masini N. 2014. Francesco Mauro: la vita e le opere. In D'Auria M., Colella C., Masini N. (Eds.) 2014. *Francesco Mauro. Un chimico lucano*. ESI, Napoli, pp. 57-86, ISBN 978-88-495-2778-0.
282. Gizzi F.T., Masini N., Potenza M.R., Zotta, C. 2010. L'analisi del danno: fonti documentarie, criteri interpretativi e parametrizzazione, in Gizzi F.T., Masini N. 2010 (Eds), *Dalle Fonti all'Evento. Percorsi, strumenti e metodi per l'analisi del terremoto del 23 luglio 1930 nell'area del Vulture*, Napoli, ESI, ISBN 978-88-495-2050-7., pp. 143-154.
283. Masini N. 2010. Il sisma ed il patrimonio monumentale: quadro dei danni, prassi amministrativa e criteri di intervento, in Gizzi F.T., Masini N. 2010 (Eds), *Dalle Fonti all'Evento. Percorsi, strumenti e metodi per l'analisi del terremoto del 23 luglio 1930 nell'area del Vulture*, Napoli, ESI, ISBN 978-88-495-2050-7., pp. 183-200.
284. Gizzi F.T., Masini N., Potenza M.R., Zotta C. 2010. La risposta istituzionale all'evento: modalità, tempi ed aspetti economici, in Gizzi F.T., Masini N. 2010 (a cura di), *Dalle Fonti all'Evento. Percorsi, strumenti e metodi per l'analisi del terremoto del 23 luglio 1930 nell'area del Vulture*, Napoli, ESI, ISBN 978-88-495-2050-7., pp. 245-266.
285. Del Lungo S., Gizzi F., Masini N., Ruggieri N., Geraldini E., Gabellone F., Pagliuca A. 2010. La ricognizione sul campo, il monitoraggio e la diagnostica applicate ai beni Culturali in aree di crisi: l'esperienza dell'Aquila fra intervento diretto e proposte, in I Giorni dell'Aquila (Eds. CNR), Pacini Editore, Pisa, pp. 202-217, ISBN: 978-88-6315-266-1
286. Masini N., Lasaponara R. 2010, *Processing di immagini satellitari ad alta risoluzione per l'archeologia: metodologia e casi studio*, in F. D'Andria, D. Malfitana, N. Masini, G. Scardozzi (a cura di), *Il Dialogo dei saperi. Metodologie integrate per i beni Culturali*, ESI, Napoli, vol. II, pp. 463-478, ISBN: 8849519117.
287. Lasaponara R., Masini N., Scardozzi G. 2010, *Elaborazione di immagini satellitari ad alta risoluzione e ricognizione archeologica per la conoscenza degli insediamenti rurali del territorio di Hierapolis di Frigia (Turchia)*, in F. D'Andria, D. Malfitana, N. Masini, G. Scardozzi (a cura di), *Il Dialogo dei saperi. Metodologie integrate per i beni Culturali*, ESI, Napoli, vol. II, pp. 479-494, ISBN: 8849519117.
288. Masini N. 2010, Metodologie di indagine per la conoscenza e la conservazione dei beni archeologici, monumentali e del patrimonio industriale. Introduzione, in F. D'Andria, D. Malfitana, N. Masini, G. Scardozzi (a cura di), *Il Dialogo dei saperi. Metodologie integrate per i beni Culturali*, ESI, Napoli, vol. II, pp. 555-562, ISBN: 8849519117.
289. Masini N., Nuzzo L., Rizzo E., Liberatore D. 2010, *Integrazione di indagini non invasive per lo studio delle tecniche costruttive e il restauro: il caso del rosone della cattedrale di Troia*, in F. D'Andria, D. Malfitana, N. Masini, G. Scardozzi (a cura di), *Il Dialogo dei saperi. Metodologie integrate per i beni Culturali*, ESI, Napoli, vol. II, pp. 563-580, ISBN: 8849519117.
290. Calia A., Liberatore D., Masini N., Racina V., Galizia A. 2010, *Sviluppo di un algoritmo di correlazione tra analisi porosimetriche e prove penetrometriche per la caratterizzazione meccanica delle malte: primi risultati*, in F. D'Andria, D. Malfitana, N. Masini, G. Scardozzi (a cura di), *Metodologie integrate per la ricerca archeologica, la conservazione e valorizzazione del patrimonio culturale*, ESI, Napoli, vol. II, pp. 653-670, ISBN: 8849519117.
291. Masini N. 2010, *Monitoraggio e analisi integrate dei rischi naturali e antropici per la conservazione del patrimonio culturale. Introduzione*, in F. D'Andria, D. Malfitana, N. Masini, G. Scardozzi (a cura di), *Il Dialogo dei saperi. Metodologie integrate per i beni Culturali*, ESI, Napoli, vol. II, pp. 771-776, ISBN: 8849519117.
292. Biscione M., Masini N. (2009). La forma e i materiali del costruire in Lucania. In : Ferrari G. (Ed.). *Viaggio nelle aree del terremoto del 16 dicembre 1857, L'opera di Robert Mallet nel contesto scientifico e ambientale attuale del Vallo di Diano e della Val d'Agri*. BOLOGNA: SGA Storia Geofisica Ambiente, ISBN/ISSN: 978-88- 85213-16-6, vol. X, pp. 235-269
293. Gizzi F.T., Masini N., Potenza M.R. 2007, "Scenari" di danneggiamento storico, in AA.VV., 16

dicembre 1857 un grande disastro sismico. Da un terremoto laboratorio a laboratori sul territorio, a cura di Graziano Ferrari SGA, Bologna, pp. 161-179. - ISBN: 8885213138

294. Lasaponara R., Masini N. 2007, *Primi rilievi dell'insediamento medievale di Monte Irsi attraverso tecniche di telerilevamento satellitare*, in AA.VV.: *Archivi e reti monastiche tra Alvernia e Basilicata: il priorato di Santa Maria di Jusso e la Chaise-Dieu*, a cura di F. Panarelli, Congedo Ed., Galatina, pp. 193-204, ISBN: 9788880867357.

295. Lasaponara R., Potenza M.R., Coluzzi R., Lanorte A., Masini N., *Applicazione di tecniche di remote sensing per lo studio del primo insediamento fiorentino a Jure Vetere*, in AA.VV., *Jure Vetere. Ricerche archeologiche nella prima fondazione monastica di Gioacchino da Fiore (indagini 2001-2005)*, a cura di C.D. Fonseca, D. Roubis, F. Sogliani, Ed. Rubbettino, Soneria Mannelli (CZ), 2007, pp. 67-76. ISBN: 8849818459

296. Masini N. 2006, *Dai Normanni agli Angioini: castelli e fortificazioni della Basilicata*, in AA.VV., *Storia della Basilicata. Il Medioevo*, a c. di C.D. Fonseca, Bari-Roma, Editori Laterza, pp.689-753. ISBN: 8842075094

297. Masini N. 2006, *Protocenobio di Jure Vetere: analisi metrologica*, in AA.VV. *I Luoghi di Gioacchino da Fiore*, a cura di C.D. Fonseca, Roma, Viella libreria editrice, ISBN-10: 88-8334-236-4.

298. Masini N. 2005, *Natura-tempo versus architettura: intorno al progetto di restauro*, in AA.VV., *Città-Natura archeologia paesaggio*, a cura di I. Macaione, allegato a "Siti", 4, pp. 82-87, ISBN :

299. Gizzi F.T., Masini N. 2004, *Il terremoto irpino del 23 Novembre 1980 a Tursi: dal dato parametrico a quello descrittivo*, in AA.VV., *Tursi. La Rabatana*, a cura di C.D. Fonseca, Altrimedia, Bari, pp. 305-316 – EAN 9788886820363

300. Masini N. 2004, *Analisi del lessico costruttivo della Rabatana di Tursi: un contributo per la redazione di un codice di pratica*, in AA.VV., *Tursi. La Rabatana*, a cura di C.D. Fonseca, Altrimedia, Bari, pp. 157-210. EAN 9788886820363

301. Masini N. 2004, *Metodologie di rilievo e di analisi della cultura costruttiva dell'architettura ipogea*, in AA.VV., *Quando abitavamo in grotta*, Atti del I Convegno internazionale sulla civiltà rupestre. (Savelletri di Fasano, 27-29 novembre 2003), Centro Italiano di Studi sull'Alto Medioevo, Spoleto, pp. 97-108. ISBN : 8879881930

302. Masini N., Tataranno A. 2003, *Chiesa di S. Maria della Pietà. Irsina (MT)* in "Trattato sul consolidamento", Ed. Mancosu, pp. C526-C535, Roma - ISBN: 8887017069

303. Masini N., Pellettieri A. 2002, *Architettura e urbanistica nel Vulture medievale*, in AA.VV., *Viaggio nella Regione del Vulture. Archeologia e architettura medievale*, Milano, Ed. Franco Angeli, pp. 67-123 - ISBN 10: 8846437683.

304. Masini N. 2001, *Evoluzione delle fasi di escavazione ed elementi architettonici del Santuario*, in AA.VV., *Dalla 'difensa' di San Giorgio alla 'lama' della Madonna delle Grazie. Il santuario rupestre di San Marzano (TA)*, a cura di C.D. Fonseca, Galatina, Congedo Ed., pp. 61-86, ISBN : 8880863649.

305. Masini N. 2000, *Fotointerpretazione aerea per la ricostruzione della forma urbis della città storica*, in AA.VV., *Insegnare urbanistica*, a cura di P. G. Caputi, Ed. Fiorentino & New Technology, Napoli, pp. 80-85.

306. Masini N. 1999, *Il ciclo della trasformazione dell'acqua in risorsa. Il caso dei mulini di Tramutola in Val d'Agri*, in AA.VV., *Architetture ecologiche nel turismo, nel recupero, nelle città-natura della Basilicata*, a cura di I. Macaione e A. Sichenze, *Turismo, consumi tempo libero*, Ed. Franco Angeli, Milano, pp. 154-163, ISBN 10: 8846416260,

307. Masini N., Pellettieri A., Potenza M.R. 1998, *Satriano: città fortificata*, in "Castra ipsa possunt et debent reparari." *Indagini conoscitive e metodologie di restauro delle strutture castellane normanno-sveve*, a cura C. D. Fonseca, Roma, Edizioni De Luca, 1998, tomo II, pp. 779-786, ISBN: 8880162888

308. Masini N. 1998, *La fotointerpretazione aerea finalizzata allo studio morfologico dei siti urbani e fortificati medioevali della Basilicata*, in "Castra ipsa possunt et debent reparari." *Indagini conoscitive e metodologie di restauro delle strutture castellane normanno-sveve*, a cura C. D. Fonseca, Roma, Edizioni De

Luca, tomo I, pp. 205-250, ISBN: 8880162888.

309. Masini N. 1997, *Flussi di risorse. Architettura e natura nel medioevo.*, pp. 321-331, in AA.VV., *Urbsturismo. Dimensioni culturali, progetto e prime esperienze in Basilicata*, a cura di I. Macaione e A. Sichenze, Milano, Franco Angeli Editore, 1997, ISBN 10: 8846402847.
310. Masini N. 1997, *La città dei de Guevara e il ruolo dei francescani*, in AA.VV., *Le città della Storia d'Italia. Potenza*, a cura di A. Buccaro, Ed. Laterza, Bari-Roma, pp. 36-40, 138-139, ISBN: 9788842053781.
311. Masini N., *La cinta muraria e la crescita urbana nel XV secolo*, in AA.VV., *Le città della Storia d'Italia. Potenza*, a cura di A. Buccaro, Ed. Laterza, Bari-Roma 1997, pp. 40-42, 139-140, ISBN: 9788842053781.
312. Masini N. 1997, *Elementi di architettura tardogotica*, in AA.VV., *Le città della Storia d'Italia. Potenza*, a cura di A. Buccaro, Ed. Laterza, Bari-Roma, pp. 42-44, 140-141, ISBN: 9788842053781
313. Masini N. 1997, *Urbanistica e architettura del ventennio fascista*, in AA.VV., *Le città della Storia d'Italia. Potenza* a cura di A. Buccaro, Ed. Laterza, Bari-Roma, pp. 111-118, 159-162, ISBN: 9788842053781.
314. Masini N. 1997, *L'impianto urbano di Atella nel Tardo medioevo*, in AA.VV., *Dal casale alla terra di Atella*, Collana dell'Istituto Internazionale di Studi Federiciani - Acta et Documenta, 3, Venosa, Appia 2 Editrice, 1996, pp. 51-74.
315. Masini N. 1996, *Il castello normanno-svevo di Monte Serico*, in N. **Masini**- A. Pellettieri (a cura di), *Città, Cattedrali e Castelli in età normanno-sveva : storia, territorio e tecnica di rilevamento*, Miscellanea di studi in onore di Cosimo Damiano Fonseca, Rionero, pp. 47-63
316. Masini N. 1995, *Materiali lapidei nell'edilizia storica in Basilicata.*, in AA.VV., *Il Recupero degli edifici antichi. Manualistica e nuove tecnologie.* in Atti del Convegno Internazionale, Napoli, 29-30 ottobre 1993, Ed. CUEN, Napoli, vol. 1, pp. 247-253.
317. Masini N. 1993, *Aspetti metodologici e analisi diffrattometriche ai raggi X per lo studio dei materiali costruttivi tradizionali*, in AA.VV., *Le Pietre da costruzione : il tufo calcareo e la pietra leccese*, a cura di M. Stella, Bari, pp. 489-496
318. Masini N. 1992, *L'uso dell'informazione nel progetto di restauro*, in AA.VV., *Il progetto si informa*, a cura di I. Macaione e A. Sichenze, Ed. Franco Angeli, Milano, pp. 310-315, ISBN 10: 8820475588.

F.6A) PAPERS ON INTERNATIONAL CONFERENCE PROCEEDINGS [N.77]

319. A Lamacchia, E.; Altamura, D.; Ermini, R.; Masini, N.; Guida, A. Urban Water Infrastructures of the 20th Century in Historical Contexts: The Case Study of the Grabigliani in the Sassi of Matera, Italy. In *Proceedings of the 3rd Stati Generali del Patrimonio Industriale*, Bari–Matera–Lecce, Italy, 5–8 February 2026.
320. Altamura, D.; Lamacchia, E.; Ermini, R.; Guida, A.; Masini, N. From Digital Survey to Analysis and Virtual Reality of Rural Heritage: The Case Study of Masseria del Cristo Water Systems in Matera, Italy. In *Proceedings of CITTAM 2025*; Matera, Italy, 2025
321. Altamura, D., Lamacchia, E., Ermini, R., Guida, A., e Masini, N. “Digitalization and Analysis of Fragile and Inaccessible Architectural Heritage: The Case Study of Masseria del Cristo in Matera, Italy.” In *Colloqui.AT.e 2025*, a cura di R. Albatici et al., 23–39. Lecture Notes in Civil Engineering 764. Cham: Springer Nature Switzerland, 2025. https://doi.org/10.1007/978-3-032-06974-0_2
322. Masini N., G. Strano, C. Fiorentino, D. Conte, N. Abate, A. Loperte, A. M. Amodio, A. Russo, A. Donvito, and R. Lasaponara. 2023. “From Space to Tree: Multisensor and Multiscale Remote Sensing Based Approach for Monitoring Monumental Trees. The Case of Archaeological Park of Colosseum in Rome. Preliminary Results.” Paper presented at IMEKO TC4 International

Conference on Metrology for Archaeology and Cultural Heritage (MetroArchaeo 2023), Rome, Italy, October 19–21. <https://doi.org/10.21014/tc4-ARC-2023.03>

323. Valentino Vitale, Nicodemo Abate, Antonio Minervino Amodio, Daniele Ferdani, Nicola Masini, LiDAR based investigation of subtle microtopographical proxy indicators: the case of Seluci Castle (Lauria, Basilicata), 2022) 2022 IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage, MetroArchaeo 2022, doi: 10.21014/tc4-ARC-2022.051, p.268-272

324. N. Masini and R. Lasaponara, "Multisensor and Multiscale Remote Sensing Data Integration Approaches for Archaeological Looting Analysis in Peru," *2022 IEEE Mediterranean and Middle-East Geoscience and Remote Sensing Symposium (M2GARSS)*, Istanbul, Turkey, 2022, pp. 130-133, doi: 10.1109/M2GARSS52314.2022.9839941.

325. De Giorgi L., Leucci G., Longhitano L., Masini N., Torre C. The complex bedrock structure at the Manfredi Castle (Supersano, Lecce). (2022) 2022 IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage, MetroArchaeo 2022, pp. 370 – 373, doi: 10.21014/tc4-ARC-2022.070.

326. Morero L., Visone F., Abate N., Vitale V., Minervino Amodio A., Prodomo M., Gioia D., Scavone M., Sileo M., Loperte A., Masini N. Towards the creation of an Open Source HBIM tool for planning diagnostic and restoration activities: the example of the Troia Cathedral rose window. (2022) 2022 IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage, MetroArchaeo 2022, pp. 273 – 277, doi : 10.21014/tc4-ARC-2022.052

327. Abate N., Prodomo M., Frisetti A., Masini N. HBIM and Extended Matrix for the archaeological reconstruction of the excavated medieval contexts: the case of the castle of Monteforte Irpino (AV). (2022) 2022 IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage, MetroArchaeo 2022, pp. 360 – 364, doi: 10.21014/tc4-ARC-2022.068.

328. Nicodemo Abate, Rosa Lasaponara, Nicola Masini, Terrestrial and UAV based infrared thermography for mapping and investigating the humidity of historical buildings. The case of the Castle in Calvello, 2022 J. Phys.: Conf. Ser. 2204 012019, doi: 10.1088/1742-6596/2204/1/012019

329. N Masini, F Sogliani, M Sileo, N Abate, M Danese, V Vitale, R Lasaponara and S Piro. 2022 Fusion and integration of heterogeneous close range remote sensing and geophysical data. The case of Grumentum, *J. Phys.: Conf. Ser.* 2204 012018, DOI:10.1088/1742-6596/2204/1/012018,

330. N Abate, D Roubis, V Vitale, M Sileo, F Sogliani, N Masini, R Lasaponara 2022 Integrated use of multi-temporal multi-sensor and multiscale Remote Sensing data for the understanding of archaeological contexts: the case study of Metaponto, Basilicata, *J. Phys.: Conf. Ser.* 2204 012020, DOI 10.1088/1742-6596/2204/1/012020

331. Kyriakides N., Illampas R., Lysandrou V., Agapiou A., Masini N., Sileo M., Catapano I., Gennarelli G., Lasaponara R., Soldovieri F., Hadjimitsis D. G., Study of ancient monuments' seismic performance based on Passive and Remote Techniques, 16th European Conference on Earthquake Engineering (16ECEE), 18-21, June, 2018, Thessaloniki, Greece

332. Hadjimitsis D. G., Agapiou A., Lysandrou V., Themistocleous K., Cuca B., Nisantzi A., Lasaponara R., Masini N., Krauss T., Cerra D., Gessner U., Schreier G., Educational activities of remote sensing archaeology (Conference Presentation). *Proc. SPIE 10005, Earth Resources and Environmental Remote Sensing/GIS Applications VII, 100050L* (December 9, 2016); doi:10.1117/12.2242109

333. Hadjimitsis D. G., Agapiou A., Lysandrou V., Themistocleous K., Cuca B., Nisantzi A., Lasaponara R., Nolè G. Tucci B., Masini N., Krauss T., Cerra D., Gessner U., Schreier G. (2016). Athena: center of excellence in Cyprus in the field of remote sensing for cultural heritage in the areas of archaeology and cultural heritage. In: *GEOBIA 2016 : Solutions and Synergies.*, 14 September 2016 - 16 September 2016, University of Twente Faculty of Geo-Information and Earth Observation (ITC) .

334. Masini N., La cinta muraria e lo sviluppo urbano di Potenza nel XV secolo. In: *Defensive*

Architecture of the Mediterranean XV to XVIII Centuries / Vol. IV Giorgio Verdiani (Ed.) FORTMED 2016 10th-12th November – www.fortmed.eu ©2016 Dipartimento di Architettura (DIDA) Firenze, pp. 509-516

335. Biscione M, Danese M., D'Antonio A., Scavone M., Sileo M., Pecci A., Masini N., BasiliCastle: the digital Atlas of Castles in Basilicata (Southern Italy). . In: Defensive Architecture of the Mediterranean XV to XVIII Centuries / Vol. IV Giorgio Verdiani (Ed.) FORTMED 2016 10th-12th November –Dipartimento di Architettura (DIDA) Firenze, pp. 537-544
336. A. Agapiou, V. Lysandrou, K. Themistocleous, A. Nisantzil, R. Lasaponara, N. Masini et al. (2016), Searching data for supporting archaeo-landscapes in Cyprus: an overview of aerial, satellite, and cartographic datasets of the island. Proc. SPIE 9688, Fourth International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2016), 96881W (August 12, 2016); doi:10.1117/12.2241973
337. Liberatore, D., Sorrentino, L., Frezza, L., Masini, N., Sileo, M., & Racina, V. (2016). Application of the mortar static penetration test to historical buildings. In *Emerging Technologies in Non-Destructive Testing VI - Proceedings of the 6th International Conference on Emerging Technologies in Nondestructive Testing, ETNDT 2016*. (pp. 449-456). CRC Press/Balkema
338. Liberatore D., Masini N., Sorrentino L., Racina V., Frezza L., Sileo M. 2014. A static penetration test for masonry mortar. In Proceedings of SAHC2014 – 9th International Conference on Structural Analysis of Historical Constructions F. Peña & M. Chávez (eds.) Mexico City, Mexico, 14–17 October 2014
339. Liberatore D., Masini N. 2014. L'acciaio nel restauro : dalla diagnostica all'intervento. caso di studio. In Proceedings of REHABEND 2014 1-4 April, 2014, Santander
340. Malfitana D., Leucci G., Fragalà G., Masini N., Scardozzi G., Cacciaguerra G. Visualizing the invisible Digital restitution from an integrated archaeological, remote sensing, and geophysical research of a Late Roman villa in Durres (Albania). Digital Heritage International Congress (DigitalHeritage), 2013 (Volume:2), [10.1109/DigitalHeritage.2013.6744819](https://doi.org/10.1109/DigitalHeritage.2013.6744819), Publisher: IEEE, pp. 511 - 517
341. Gabellone F., Lanorte A., Lasaponara R., Masini N. 2013. Development of a Serious Game on the history of a medieval village based on remote sensing. In: Lasaponara R., Masini N., Biscione M., Hernandez M. 2013 (Eds). Earth Observation: a window on the Past. Proceedings of the 4th EARSeL Workshop on "Remote Sensing for Cultural Heritage", 6-7 June 2013 - Matera, Italy. EARSeL and CNR IBAM/IMAA Publishers, Potenza, pp. 43-54
342. Gabellone F., Leucci G., Masini N., Persico R. Quarta G. 2013. Geophysical surveys and virtual reading of the archaeometric data: new possibilities and perspectives. In: Lasaponara R., Masini N., Biscione M., Hernandez M. 2013 (Eds). Earth Observation: a window on the Past. Proceedings of the 4th EARSeL Workshop on "Remote Sensing for Cultural Heritage", 6-7 June 2013 - Matera, Italy. EARSeL and CNR IBAM/IMAA Publishers, Potenza, pp. 73-80
343. Gizzi F.T., Biscione M., Danese M., Deufemia V., Masini N., Murgante B., Paolino L., Saulino N., Sileo M., Potenza M.R. 2013. SAVHER: an App for smart and community-shared approaches to the safeguard of cultural heritage. In: Lasaponara R., Masini N., Biscione M., Hernandez M. 2013 (Eds). Earth Observation: a window on the Past. Proceedings of the 4th EARSeL Workshop on "Remote Sensing for Cultural Heritage", 6-7 June 2013 - Matera, Italy. EARSeL and CNR IBAM/IMAA Publishers, Potenza, pp. 251-260
344. Sabia C., Masini N., Lasaponara R. 2013. On the visibility of crop marks through seasons preliminary results from multi-date Google Earth pictures and ground truth. In: Lasaponara R., Masini N., Biscione M., Hernandez M. 2013 (Eds). Earth Observation: a window on the Past. Proceedings of the 4th EARSeL Workshop on "Remote Sensing for Cultural Heritage", 6-7 June 2013 - Matera, Italy. EARSeL and CNR IBAM/IMAA Publishers, Potenza, pp. 377-388.
345. Danese M., Murgante B., Masini N. 2013. Archaeological risk and spatial analysis. How to compare urban sprawl and archaeological sensibility maps. In Lasaponara R., Masini N., Biscione M. (Eds), Earth Observation and Social Perspectives. Towards Horizon 2020. Proceedings of the 33rd EARSeL Symposium. Matera (Italy), 3-6 June 2013. EARSeL and CNR publisher, 2013, pp. 869-874.
346. Masini N., Gabellone F., Leucci G., Persico R., Soldovieri F. 2013. *Enhancement of the information content available from non invasive diagnostics for restoration and knowledge of architectural heritage*. In

- Proceedings of “Built Heritage 2013 Monitoring Conservation Management”, Milano, 18-20/11/2013, pp. 824-828
347. Calia A., Liberatore D., Masini N. 2013. *Approach to the study of conservation of historical masonry mortars by means of the correlation between porosimetry and penetrometric test. First results.* In Proceedings of “Built Heritage 2013 Monitoring Conservation Management”, Milano, 18-20/11/2013, pp. 1133-1140
348. Danese M., Masini N., Biscione M., Lasaponara R. 2013. GIS and archaeology: a spatial predictive model for neolithic sites of the Tavoliere (Apulia), Proc. SPIE 8795, First International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2013), 87950I (August 5, 2013); doi:10.1117/12.2027954
349. Masini N., Liberatore D., Gizzi F., Leucci G., Quarta G., Persico R. 2012. Analysis of damage and diagnostic investigations on Tricarico Cathedral (Italy). In Proceedings SAHC2012, 8th International Conference on Structural Analysis of Historical Constructions. Wroclaw (Poland), October 15-17, 2012
350. Leucci G., Masini N., Persico R., Soldovieri F. 2012, Integrated non invasive tests for the architectural restoration of the Tricarico Cathedral, 2012. In: Proceedings of 14th International Conference on Ground Penetrating Radar (GPR) June 4-8, 2012, Shanghai, China @ ISBN 978-1-4673-2663-6, pp. 607-609, doi: [10.1109/ICGPR.2012.6254935](https://doi.org/10.1109/ICGPR.2012.6254935).
351. Grasso F., Leucci G., Masini N., Persico R. 2011. GPR Prospecting in Renaissance and Baroque Monuments in Lecce (Southern Italy). In: Proceedings of 6th International Workshop on Advanced Ground Penetrating Radar (IWAGPR), 2011, Aachen, Germany, 22. - 24.06.2011, doi: [10.1109/IWAGPR.2011.5963851](https://doi.org/10.1109/IWAGPR.2011.5963851)
352. Masini N., Coluzzi R., Lasaponara R. 2011. Lidar-based remote sensing for archaeological applications, in Victoria Lenz-Wiedemann and Georg Bareth (eds), :Proceedings of the ISPRS WG VII/5 Workshop, 18.-19.11.2010, Cologne, pp. 79-91.
353. Masini N., Ciminale M., Lasaponara R., Persico R., Integrated approach to archaeogeophysics: methodological issues, applications and new perspectives, in S. Kadioglu (Ed.), Proceedings of the 19th International Geophysical Congress and Exhibition of Turkey, Ankara, 23-25.11.2010
354. Lasaponara R., Coluzzi R., Guariglia A., Masini N. 2010. On the integration of airborne of full-waform laser scanning and satellite images to detect and map archaeological remains . In Guarino A. (Ed.), Proceedings of 4th International Congress on “Science and Technology for the Safeguard of Cultural heritage of the Mediterranean Basin, Cairo, 6-8.12.2009, vol. I, pp. 220-223
355. Lasaponara R., Coluzzi R., Masini N. 2010. On the use of VHR satellite sata in Archaeology and Palaeoenvironmental studies. In Guarino A. (Ed.), Proceedings of 4th International Congress on “Science and Technology for the Safeguard of Cultural heritage of the Mediterranean Basin, Cairo, 6-8.12.2009, vol. I, p. 219
356. Dolce C., Masini N., Leucci G., Persico R., Quarta G. 2010. Integrated Prospecting in the Crypt of the Holy Spirit in Monopoli (Southern Italy). Proceedings XIII International Conference on GPR, Lecce 21-25 June 2010, IEEE, 413-416
357. Persico R., Fedi M., Garofalo B., Leucci G, Masini N. 2008, Linear Inverse Scattering Applied to Monument Monitoring, 12th International Conference on Ground Penetrating Radar, GPR2008, Birmingham (UK), June
358. Alvarez De Buergo M, Masini N., Perez-Monserrat E, Calia A, Varas M.J, Quarta G, Fort R, Giannotta M.T, Vazquez-Calvo C, Danese M, Sileo M. 2008, Geomonumental Routes: the granitic bridges over the Guadarrama River (Madrid, Spain) and the cacarenitic coastal towers from the Salento (Italy), In: Proceed. 11th Int. Congr. On Deterioration and Conservation of Stone, Torun. 15-20 settembre 2008.
359. Lasaponara R., N. Masini 2007, Statistical evaluation of spectral capability of satellite QuickBird data in detecting archaeological buried remains. 27th EARSel Symposium Geoinformation in Europe Bolzano/Bozen, Italy, 4-7 June 2007.
360. Lasaponara R, Masini N., Aiazzi B, Alparone L, Baronti S. 2008, Satellite-based enhancement of

archaeological marks through data fusion techniques, in Proceedings of SPIE, Remote Sensing for Environmental Monitoring, GIS Applications, and Geology VIII, vol. 7110, Ulrich Michel; Daniel L. Civco; Manfred Ehlers; Hermann J. Kaufmann, Editors, 711024.

361. L. Nuzzo, **N. Masini**; E. Rizzo, R. Lasaponara 2007, Integrated and multiscale NDT for the study of architectural heritage, in Proceedings of SPIE, Remote Sensing for Environmental Monitoring, GIS Applications, and Geology VIII, vol. 7110, Ulrich Michel; Daniel L. Civco; Manfred Ehlers; Hermann J. Kaufmann, Editors, 711015

362. A. Calia, **N. Masini**, G. Quarta 2007, Metodologie di indagine diagnostica per la conservazione e la conoscenza del patrimonio architettonico: i casi della Cattedrale di Troia e del Teatro Petruzzelli di Bari, In Il CNR e le strategie per la conservazione del patrimonio culturale, Convegno di studio in onore di Cesare Brandi, Consiglio Nazionale delle Ricerche, Roma, 2007, pp. 7-12

363. Masini N., Lasaponara R., Coluzzi R., Orefici G. 2008, *New perspectives for archaeological research by satellite imagery in Cahuachi (Peru)*, in Advances in Remote Sensing for Archaeology and Cultural Heritage Management, R. Lasaponara & N. Masini (Eds), Aracne, Roma, ISBN: 978-88-548-2030-2, pp.429-433.

364. F.T. Gizzi, M.R. Potenza, **N. Masini**, *Using GIS for storing and analysing information concerning the consequences of earthquakes in historical centres*, in Advances in Remote Sensing for Archaeology and Cultural Heritage Management, R. Lasaponara & N. Masini (Eds), Aracne, Roma, 2008, ISBN: 978-88-548-2030-2 , pp. 359-362

365. M. Lazzari, M. Danese, **N. Masini**, *GIS applications for recovery and management of historical-architectonic heritage: case study of Tursi-Rabatana medieval site (Southern Italy)*, in Advances in Remote Sensing for Archaeology and Cultural Heritage Management, R. Lasaponara & N. Masini (Eds), Aracne, Roma, 2008, ISBN: 978-88-548-2030-2 , pp. 347-350.

366. Y. Backe Forsberg , R. Holmgren, A. Lanorte, R. Lasaponara, **N. Masini**, *Airborne and satellite Multispectral imagery at the Etruscan site of San Giovenale, Blera (Lazio) – Preliminary results*, in Advances in Remote Sensing for Archaeology and Cultural Heritage Management, R. Lasaponara & N. Masini (Eds), Aracne, Roma, 2008, ISBN: 978-88-548-2030-2, pp. 225-228

367. **Masini N.**, Rizzo E., Lasaponara R., Orefici G. 2008, *Integrated remote sensing techniques for the detection of buried archaeological adobe structures: Preliminary results in Cahuachi (Peru)*, in Advances in Remote Sensing for Archaeology and Cultural Heritage Management, R. Lasaponara & N. Masini (Eds), Aracne, Roma, ISBN: 978-88-548-2030-2 , pp. 213-218.

368. M. Ciminale, D. Gallo, R. Lasaponara, **N. Masini**, Ground-based, aerial and satellite remote sensing to investigate archaeological and palaeoenvironmental features: the study case of Tavoliere (Apulia, Italy), in *Advances in Remote Sensing for Archaeology and Cultural Heritage Management*, R. Lasaponara & N. Masini (Eds), Aracne, Roma, 2008, ISBN: 978-88-548-2030-2 , pp.31-36.

369. B. Aiazzi, S. Baronti, L. Alparone, R. Lasaponara, **N. Masini**, Data fusion techniques for supporting and improving satellite-based archaeological research, in *Advances in Remote Sensing for Archaeology and Cultural Heritage Management*, R. Lasaponara & N. Masini (Eds), Aracne, Roma, 2008, ISBN: 978-88-548-2030-2 , pp.31-36

370. R. Lasaponara, **N. Masini**, G. Scardozzi, *Satellite-based archaeological research in the ancient territory of Hierapolis (Turkey)*, in Advances in Remote Sensing for Archaeology and Cultural Heritage Management, R. Lasaponara & N. Masini (Eds), Aracne, Roma, 2008, ISBN: 978-88-548-2030-2 , pp. 11-16

371. R. Lasaponara, A. Lanorte, R. Coluzzi, **N. Masini**, Performance evaluation of data fusion techniques for archaeological prospection based on satellite data, Proc. of SPIE Remote Sensing for Environmental Monitoring, GIS Applications, and Geology VII, edited by M. Ehlers, U. Michel, Vol. 6749, 67492W, 2007, · 0277-786X/07/\$18 · doi: 10.1117/12.738204, pp. 1-11.

372. R. Lasaponara, A. Lanorte, R. Coluzzi, N. Masini, *Quickbird imagery processing for archaeological applications: performance evaluation from data fusion algorithms*, ISPRS International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, volume XXXVI-5/C53, Proceedings of 21st CIPA Symposium, Atene, 1-6 giugno 2007, pp. 817-822.

373. R. Lasaponara, **N. Masini**, *Improving satellite quickbird-based identification of landscape archaeological features through Tasseled Cap Transformation and PCA.*, ISPRS International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, volume XXXVI-5/C53, Proceedings of 21st CIPA Symposium, Atene, 1-6 giugno 2007, pp. 812-816
374. R. LASAPONARA, **N. MASINI**, *Quickbird-based analyses for archaeological investigations*, in Global Developments in Environmental Earth Observation from Space, Marçal (ed.), (Proceedings of EARSEL, Porto, XXX June 2005), 2006 Millpress, Rotterdam, ISBN 90 5966 042 0, pp. 629-634.
375. Lasaponara R., **Masini N.**, Satellite-based identification of archaeological features, Proceedings of the 2nd Workshop of the EARSEL SIG on Land Use and Land Cover, Center for Remote Sensing of Land Surfaces, Bonn, 28-30 September 2006, pp. 276-281.
376. Lasaponara R., **Masini N.**, Archaeological prospection based on satellite QuickBird imagery, Proceedings of SPIE, Conference Remote Sensing for Environmental Monitoring, GIS Applications, and Geology VI, vol. 6366, 2006, doi : 10.1117/12.683087
377. Lasaponara R., **Masini N.**, *Performance evaluation of data fusion algorithms for the detection of archaeological features by using satellite QuickBird data*, in *Space to place*, S. Campana – M. Forte (Ed.), Proceedings of 2nd International Conference on Remote Sensing in Archaeology (Rome, December 4-7, 2006), BAR International Series, 2006, pp. 13-20.
378. Masini N., Lasaponara R., *Evaluation of the spectral capability of quickbird imagery for the detection of archaeological buried remains*, in *Space to place*, S. Campana – M. Forte (Ed.), Proceedings of 2nd International Conference on Remote Sensing in Archaeology (Rome, December 4-7, 2006), BAR International Series, 2006, pp. 21-29.
379. R. Lasaponara, A. Lanorte, M.R. Potenza, **N. Masini**, *VHR satellite images for the knowledge and the enhancement of cultural landscapes: the medieval deserted villages in Basilicata (Southern Italy)*, in Heritage, Weathering and Conservation, a cura di R. Fort, M. Alvarez de Buergo, M. Gomez-Heras & C. Vasquez-Calvo, Proceedings of the International Conference on Heritage, Weathering and Conservation, HWC 2006, 21 – 24 June 2006, Madrid, vol II, pp. 841-846.
380. **N. Masini**, *Catalogue of building techniques of vernacular architecture: case study in Southern Italy*, in Heritage, Weathering and Conservation, a cura di R. Fort, M. Alvarez de Buergo, M. Gomez-Heras & C. Vasquez-Calvo, Proceedings of the International Conference on Heritage, Weathering and Conservation, HWC 2006, 21 – 24 June 2006, Madrid, vol II, pp. 833-840
381. L. NUZZO, E. RIZZO, **N. Masini**, *Georadar investigations for the diagnosis of the rose window of the cathedral of Troia (Southern Italy): preliminary results*, in Proceedings of art'05 - 8th International Conference on "Non Destructive Investigations and Micronalysis for the Diagnostics and Conservation of the Cultural and Environmental Heritage." Lecce (Italy), May 15th - 19th, 2005
382. **N. Masini**, *Caratteri distributivi dell'architettura melitense in età moderna tra Puglia e Basilicata attraverso i cabrei*, in *Gli Archivi per la storia del Sovrano Militare Ordine di Malta* (Atti del III Convegno internazionale di Studi Melitensi, Taranto, 18-21 ottobre 2001), Taranto 2005, pp. 407-436
383. R. LASAPONARA, **N. MASINI**, *Evaluation of potentialities of satellite Quickbird imagery for archaeological prospection: preliminary results*, in Proceedings of 6th International Conference on Archaeological Prospection, Roma, CNR, september 14-17, 2005, ed. S. Piro, Roma 2005, pp. 392-395
384. Lasaponara, R., Lanorte, A., **Masini, N.**, "Estimation of seasonal trends of satellite-based parameters useful for the monitoring of surface moisture content: preliminary results by using NIR-SWIR data of SPOT vegetation" in *Remote Sensing for Agriculture, Ecosystems, and Hydrology V*, edited by Manfred Owe, Guido D'Urso, Jose F. Moreno, Alfonso Calera, Proceedings of SPIE Vol. 5232 (SPIE, Bellingham, WA 2004) pp. 408-417.
385. R. LASAPONARA, T. SIMONIELLO, **N. MASINI**, V. CUOMO, *Performance evaluation of AVHRR-based methods for the estimation of fire susceptibility in southern Italy*, in Proceedings of SPIE -- Volume 5232, Remote Sensing for Agriculture, Ecosystems, and Hydrology V, Manfred Owe, Guido D'Urso, Jose F. Moreno, Alfonso Calera, Editors, 2004, pp. 219-227.
386. G. COLESANTI, M. DELLI SANTI, F. GIZZI, **N. MASINI**, A. PELLETTIERI, M. R. POTENZA, *La forma*

urbis degli insediamenti demici della Basilicata tra XI e XV secolo, in Atti del Congresso de Historia de la Corona de Aragón, Barcelona-Lleida, 7-12 settembre 2000, Barcelona 2003, vol. II, pp. 831-843.

387. FONSECA C.D., COLESANTI G., DELLI SANTI M., GERALDI E., GIZZI F.T., MASINI N., MONTESANO N., PELLETTIERI A., POTENZA M.R., *A GIS for cataloguing, managing and improving the Cultural Heritage in the area of Vulture in Basilicata*, in Proceedings of the 3rd International Congress on Science and Technology for the Safeguard of Cultural Heritage in the Mediterranean Basin (Alcalà de Henares – Spagna, 9-14 luglio 2001).

388. MASINI N., FONSECA C.D., PELLETTIERI A., SABINO G., *Statistical analyses for the individuation of the original units of measure of an historical architecture: criteria and application of a relative dating method*, in Proceedings of the 3rd International Congress on Science and Technology for the Safeguard of Cultural Heritage in the Mediterranean Basin (Alcalà de Henares – Spagna, 9-14 luglio 2001).

389. G. COLESANTI, M. DELLI SANTI, C.D. FONSECA, E. GERALDI, F.T. GIZZI, N. MASINI, N. MONTESANO, M.R. POTENZA, *Atella, town of Angevin foundation: cataloguing, management and improvement of the architectural historical patrimony through a geographical information system*, in Proceedings of Italy-Canada 2001 Workshop, "RD Digital Imaging and Modelling Applications of : Heritage, Industry, Medicine & Land", Padova. April 3-4 2001.

390. F.T. GIZZI, N. MASINI, *A computer program for seismic hazard estimation by probabilistic attenuation law*, in Atti del VI Workshop di Informatica applicata alle scienze della terra (Sansepolcro (AR), 14-16 settembre 1999), a cura di G. Nardi e M. Vigliotti, Napoli 2001, pp. 253-266.

391. L. DEROSA, C.D. FONSECA, F.T. GIZZI, N. MASINI, A. PELLETTIERI, M.R. POTENZA, *Survey and analyses for the study of the rupestrian environment: Santa Maria delle Grazie di San Marzano di San Giuseppe*, in Proceedings of 2^{ème} Congrès International sur "Science et technologie pour la sauvegarde du patrimoine culturel dans la Pays du Bassin Méditerranéen", Paris 5-9 luglio 1999, Ed. Elsevier, Paris 2000, pp. 795-798.

392. N. MASINI, *Incografia dell'architettura federiciana in Italia meridionale: analisi metrologica dei castelli a "Pyramidenturm"*, in Atti dei Colloqui internazionali Castelli e Città Fortificate. Storia, recupero, valorizzazione de' Castelli di pietra e di ... cristallo (Tricesimo (UD), Castello Valentini, 20-21 novembre 1998), Fagagna (UD) 1999, pp. 154-164.

393. F.T. GIZZI, N. MASINI, A. PELLETTIERI, M.R. POTENZA, *Protection and preservation of historical cities against seismic risk by a cross-disciplinary approach: the case of Potenza (Basilicata, Italy)*, in Proceedings of ART 99, 6th International Conference on "Non-destructive testing and microanalysis for the diagnostics and conservation of the Cultural and Environmental Heritage" [Roma 17-20 maggio 1999], Roma 1999, vol. 1, pp. 781-796

394. N. MASINI, A. PELLETTIERI, M. R. POTENZA, *Ricostruzione della forma urbis medievale di due città della Basilicata : note storico-topografiche, analisi morfologica, fotointerpretazione e fotogrammetria aerea del centro storico della città di Potenza e dell'antica Satrionum*, in atti 1st International Congress on "Science and technology for the Safeguard of Cultural Heritage in the Mediterranean Basin"(Catania-Siracusa, 27 novembre - 2 dicembre 1995).

395. C.D. FONSECA, L. CINQUEGRANA de Divitiis, N. MASINI, A. PELLETTIERI, M.R. POTENZA, *Reconstruction of the medieval forma urbis of some demic sites in terra of Lucania (Basilicata, Italy)*, in *New concepts, technologies and materials for the conservation and management of historic cities, sites and complexes* a cura di A. Moropoulou, F. Zezza, E. Kollias, I. Papachristodolou [Proceedings 4th International Symposium on the Conservation of Monuments in the Mediterranean, Rhodes, 6-11 May 1997], 1997, vol. 3, pp. 515-531.

F.6B) PAPERS ON NATIONAL CONFERENCE PROCEEDINGS

[N.24]

396. Gabellone F., Masini N., *Verso il Gemello Digitale quale strumento di gestione e supporto alla conoscenza e al monitoraggio*. In Memoria e Innovazione. Colloqui.AT.e 2022. Edic Edizioni 2022, pp. 1329-1340.

397. L. Morero, F. Visone, V.D. Porcari, A. Guida, N. Masini, L'anamnesi dei restauri come strumento di conoscenza. Il caso emblematico della Cattedrale di Troia. In Memoria e Innovazione. Colloqui.AT.e 2022. Edic Edizioni 2022, pp. 361-378.
398. Marchi M.L., Forte G., La Trofa M., Masini N., Muntoni I.M., Savino G., Sileo M. (2018) La villa e la necropoli tardoantica di Masseria Romano (Pietramontecorvino FG): tra indagini aero-topografiche e archeologia d'emergenza. Sogliani F., Gargiulo B., Annunziata E., Vitale V. (Eds). Proceeding of the VIII National Conference of Medieval Archaeology. All'Insegna del Giglio s.a.s, vol. 2, sezione III, pp. 223-227
399. Masini N., Forlenza G., Guida A. 2017. Architettura in terra cruda: problematiche di dissesto. Il caso della Basilicata. In Atti del Convegno Colloqui.AT.e 2017. " Demolition or Reconstruction" pp. 149-162
400. Masini N., Liberatore D., Pagliuca A. 2016. Il restauro strutturale come atto critico. il caso del rosone di Troia. In Atti del Convegno Colloqui.AT.e 2016 MATER(I)A
401. Ni. Masini, Na. Masini, E. Ruggieri 2012. Storia di un chimico lucano: Francesco Mauro allievo di Cannizzaro, in Atti del XIV Convegno Nazionale "Storia e Fondamenti della Chimica". Accademia Nazionale delle Scienze, Aracne, Roma, pp. XX-XX
402. Gizzi F.T., Masini N., Potenza M.R., Zotta C. 2009. Dalle fonti archivistiche all'analisi multi-livello dei terremoti storici, in O. Diandaca & R. Lione (Eds), *Il sisma. Ricordare, prevenire, progettare. (Atti ARTEC)*, Aliena, Firenze, pp. 83-98, ISBN : 9788860554604.
403. Malfitana D., Leucci G., Shehi E., Scardozzi G., Masini N., Fragalà G. 2010. L'integrazione dei metodi di indagine non invasiva a supporto delle ricerche di archeologia urbana: il caso delle indagini su una villa romana a Durazzo (Albania). Atti del 29° Convegno Nazionale GNGTS, Prato 26-28 Ottobre 2010.
404. A. Caprioli, M. Delli Santi, A. Galizia, N. Masini, *Prove ultrasoniche per la caratterizzazione meccanica e l'analisi dello stato di degrado dei marmi e delle pietre delle cattedrali di Troia ed Acerenza*, in Atti del Convegno "Le risorse lapidee dall'antichità ad oggi in Area Mediterranea", [Canosa, 24-27 settembre 2006].
405. R. Lasaponara, R. Coluzzi, A. Lanorte, N. Masini, M.R. Potenza, *Integrazione dei dati satellitari QuickBird e foto aeree in ambito archeologico: il caso di Iure Vetere in Calabria*, in Atti della 9ª CONFERENZA NAZIONALE ASITA [15 – 18 novembre 2005, Centro Congressuale "Le Ciminiere", Catania], pp. 1327-1332
406. Nuzzo L., Rizzo E., Masini N, *Indagini GPR per il restauro del rosone della Cattedrale di Troia*, GNGTS 2005, pp. 387-391.
407. E. Gherardi, F.T. Gizzi, Masini N. (2004). *Termografia all'infrarosso ed archeologia dell'architettura:alcuni esempi*. Atti del 22° Convegno del Gruppo Nazionale di Geofisica delle Terra solida. Sessione geofisica applicata ai Beni Culturali. Roma, 18-20 novembre 2003. CD-ROM
408. F.T. Gizzi, N. Masini, G. Locuratolo, D. Masiello (2004). *La tomografia elettrica applicata allo studio di un movimento franoso causa di dissesti strutturali in un edificio di culto*. Atti del 22° Convegno del Gruppo Nazionale di Geofisica delle Terra solida Sessione Geofisica ambientale. Roma, 18-20 novembre 2003. CD-ROM
409. N. Masini, A. Tataranno, F.T. Gizzi, A. Guida, *Tecniche di intervento mutate dalla tradizione costruttiva: il caso del consolidamento e restauro della chiesa della Madonna della Pietà ad Irsina (MT)*, in Atti del III Convegno "Restauro e Conservazione dei Beni Culturali : Materiali e Tecniche", Cassino 3-4 ottobre 2003, Cassino, Idea Stampa, 2003, pp. 297-311.
410. M. Delli Santi, Masini N., N. Montesano, A. Pellettieri, M.R. Potenza, *G.I.S. e Beni Culturali: i centri scomparsi nella Basilicata*, in Atti della V Conferenza Nazionale ASITA: *La qualità nell'Informazione Geografica*, [Rimini, 9-12 ottobre 2001].
411. M. Delli Santi, F.T. Gizzi, Masini N., A. Pellettieri, M.R. Potenza, P. Santagata, *Il GIS nella fotointerpretazione aerea di un territorio: Monte Serico in Basilicata*, in Atti della III Conferenza Nazionale ASITA: *Informazioni Territoriali e Rischi Ambientali*, [Napoli, 9-12 novembre 1999], vol. II, pp. 703-708

412. F.T. GIZZI, Masini N., A. Pellettieri, M.R. Potenza, *Il GIS tra catalogazione e ricerca: I Beni Culturali nel territorio del Vulture (Basilicata)*, in Atti della II Conferenza Nazionale ASITA: *Rilevamento, rappresentazione e gestione dei dati territoriali e ambientali* [Bolzano, 24-27 novembre 1998], 1998, vol. II, pp. 97-100
413. Masini N., *I castelli e gli itinerari medievali in Basilicata*, in AA.VV., *Basilicata: il turismo possibile*, in <<Basilicata Regione Notizie>>, 3-4 (1997), n.s., pp. 83-90.
414. Masini N., *L'architettura fortificata sveva in Basilicata. Note e considerazioni*, in <<AB. Architetti di Basilicata>>, 4 (gennaio-giugno 1997), pp. 25-29.
415. Masini N., *Castello di Calvello. Progetto di restauro, riuso e consolidamento*, in Atti delle Giornate di Studio "Materiali e tecniche per il restauro", Cassino 3-4 marzo 1997, Cassino, Idea Stampa, 1997, pp. 191-206.
416. Masini N., *Fotointerpretazione aerea per la ricostruzione della 'forma urbis' di Monte Serico*, in Conferenza sulla ricerca scientifica in Basilicata (Potenza, 29 febbraio-1 marzo 1996), Potenza 1996, pp. 31-32.
417. Masini N., *La domus federiciana di Lagopesole*, in <<Le Dimore Storiche>>, 27 (1995), pp. 4-6.
418. Masini N., *Il castello di Brindisi di Montagna in età medievale*, in "Regione Basilicata", 3 (1994), pp. 65-72.
419. Masini N., *Il cenobio pulsanese di S. Pietro a Calvello*, in "Regione Basilicata", 5 (1993), pp. 41-50.

F.7) ENCYCLOPEDIA ARTICLES

[N.2]

420. N. Masini 2005, "*Gravina, Castello di e Parco dell'Uccellagione di*", *Enciclopedia Fridericiana* published by Enciclopedia Treccani.
421. Lasaponara R., Masini N., Sampling in Airborne Field . In: The Encyclopedia of Archaeological Sciences. John Wiley & Sons, <https://doi.org/10.1002/9781119188230.saseas0511>

F.8) ABSTRACTS OR SHORT PAPERS ON INTERNATIONAL JOURNALS [N.37]

422. I. Catapano, V. Lysandrou, A. Agapiou, N. Masini, R. Lasaponara, F. Soldovieri (2019), GPR surveys at the 'Tombs of the Kings', Paphos, Cyprus, Geophysical Research Abstracts, Vol. 21, EGU2019-13140, 2019.
423. N. Masini, M. Danese, R. Lasaponara, F. Soldovieri (2019), Geovisualization and Remote Sensing: new perspectives for cultural heritage, Geophysical Research Abstracts, Vol. 21, EGU2019-17993, 2019
424. Hadjimitsis D. G., Agapiou A., Lysandrou V., Nisantzi A., Christofe A., Tzouvaras M., Papoutsis C., Mamouri R.-E., Mettas C., Evagorou E., Themistocleous K., Lasaponara R., Masini N., Danese M., Sileo M., Krauss T., Cerra D., Gessner U., Schreier G., Earth observation technologies and cultural heritage needs through the "ATHENA TWINNING PROJECT", in Proceedings of Computer Applications and Quantitative Methods in Archaeology 2018
425. D Hadjimitsis, A Christofe, A Agapiou, V Lysandrou, K Themistocleous, R. Lasaponara, N. Masini (2018). ATHENA project: training activities for the detection of looted archaeological sites. Geophysical Research Abstracts Vol. 20, EGU2018-8065, 2018 20
426. Nicola Masini, Vasiliki Lysandrou, Athos Agapiou, Francesco Soldovieri, Nicholas Kyriakides, Maria Sileo, Ilaria Catapano, Rosa Lasaponara, and Diofantos Hadjimitsis (2018). GPR based investigations of rock-cut monuments: the case study of the 'Tombs of the Kings' necropolis in Cyprus. Geophysical Research Abstracts Vol. 20, EGU2018-17052, 2018 20

427. Hadjimitsis D. G., Christofe A., Agapiou A., Lysandrou V., Nisantzi A., Tzouvaras M., Papoutsas C., Mamouri R.-E., Mettas C., Evagorou E., Themistocleous K., Lasaponara R., Masini N., Danese M., Sileo M., Krauss T., Cerra D., Gessner U., Schreier G. (2018) Knowledge transfer through the ATHENA Twinning project: Remote sensing for cultural heritage, Geophysical Research Abstracts, EGU2018, Vienna, Austria
428. Soldovieri F., Masini N., Persico R., Catapano I. (2017). GPR Diagnostics of columns in archaeological contexts. Geophysical Research Abstracts, Vol. 19, EGU2017-14498.
429. D. Kouhartsiouk, A. Agapiou, V. Lysandrou, K. Themistocleous, A. Nisantzi, D. G. Hadjimitsis, R. Lasaponara, N. Masini, R. Brcic, M. Eineder, T. Krauss, D. Cerra, U. Gessner, and G. Schreier (2017). Active Satellite Sensors for the needs of Cultural Heritage: Introducing SAR applications in Cyprus through ATHENA project. Geophysical Research Abstracts, Vol. 19, EGU2017- 11758
430. N. Masini, M. Sileo, R. Lasaponara, G. Leucci, G. Orefici, and E. Rizzo (2017). . Archaeogeophysical investigations in Tiwanaku: preliminary results. Geophysical Research Abstracts, Vol. 19, EGU2017- 16603
431. Diofantos G Hadjimitsis, Athos Agapiou, Vasiliki Lysandrou, Kyriakos Themistocleous, Branka Cuca, Rosa Lasaponara, Nicola Masini, Thomas Krauss, Daniele Cerra, Ursula Gessner, Gunter Schreie. ATHENA: Remote Sensing Science Center for Cultural Heritage in Cyprus, Geophysical Research Abstracts Vol. 18, EGU2016-9191, 2016
432. Biscione M., Danese M., Masini N., Sabia C. (2016). Predictive models and spatial analysis for the study of deserted medieval villages in Basilicata Region (Italy). Geophysical Research Abstracts Vol. 18, EGU2016-17122, 2016
433. Soldovieri F., Masini N. (2016). Non invasive sensing technologies for cultural heritage management and fruition. Geophysical Research Abstracts Vol. 18, EGU2016-13079, 2016
434. Chen F., Lasaponara R., Masini N., Yang Ruixia, Satellite SAR data assessment for Silk Road archaeological prospection. Geophysical Research Abstracts, Vol. 17, EGU2015-10059, 2015
435. Chen Fulong Masini Nicola, Yang Ruixia, Dexian Feng, Lasaponara Rosa, On the use of COSMO-SkyMed time series for the identification of Archaeological traces dating from the Eastern-Han to Northern-Wei Dynasties in Luoyang city. Geophysical Research Abstracts, Vol. 17, EGU2015- 10786, 2015
436. Cigna F., Lasaponara M., Masini Nicola, Tapete T., Stability and subsidence across Rome (Italy) in 2011-2013 based on COSMO-SkyMed Persistent Scatterer Interferometry, Geophysical Research Abstracts, Vol. 17, EGU2015- 9346-1, 2015
437. Giuzio B., Alvarez de Buergo M., Fort R., Masini N., Influence of coupling substances in the measurement of ultrasound velocity in stone materials. Geophysical Research Abstracts, Vol. 17, EGU2015- 6623-1, 2015
438. Gizzi F., Leuzzi G., Masini N., Persico R., Quarta G., Integrated approach based on non-invasive investigations for the structural diagnosis of monuments: the case of the San Francesco della Scarpa Church in Lecce. Geophysical Research Abstracts, Vol. 17, EGU2015- 13839, 2015
439. Sileo M., Gizzi F., Masini N., The environmental monitoring of Cultural Heritage through Low Cost strategies: The frescoes of the crypt of St. Francesco d'Assisi's, Irsina (Basilicata, Southern Italy). Geophysical Research Abstracts, Vol. 17, EGU2015- 13932, 2015
440. Danese M., Gioia D., Masini N., Interactions between soil consumption and archaeological heritage: spatial analysis for hydrogeological risk evaluation and urban sprawl in the Tavoliere di Puglia (southern Italy). Geophysical Research Abstracts, Vol. 17, EGU2015- 14148, 2015
441. Persico R., Matera L., Bianco N., Masini N., Leopizzi G., GPR Prospecting and Endoscopic Investigation in a Renaissance Church. Geophysical Research Abstracts, Vol. 17, EGU2015- 14449, 2015
442. Masini N., Lasaponara R., Multiscale, multispectral and multitemporal satellite data to identify

- archaeological remains in the archaeological area of Tiwanaku (Bolivia). *Geophysical Research Abstracts*, Vol. 17, EGU2015- 14841, 2015
443. Masini N., Lasaponara R., On the use of Multisensor and multitemporal data for monitoring risk degradation and looting in archaeological site. *Geophysical Research Abstracts*, Vol. 17, EGU2015- 15207, 2015
444. R. Lasaponara, N. Masini 2014. Multitemporal satellite data analyses for archaeological mark detection: preliminary results in Italy and Argentina. *Geophysical Research Abstracts*, Vol. 16, EGU2014-16920, 2014
445. R. Lasaponara, N. Masini, C. Sabia 2014. Multitemporal analysis of Pleiades data for study of archaeological crop marks. *Geophysical Research Abstracts*, Vol. 16, EGU2014- 7534, 2014
446. N. Masini, F. Chen, D. Feng, F. Gabellone, R. Lasaponara, R. Yang. 2014. Along Silk Road: Earth observation and ICT for Cultural Heritage from Italian and Chinese perspectives. *Geophysical Research Abstracts*, Vol. 16, EGU2014-15550, 2014.
447. F. T. Gizzi, D. Liberatore, N. Masini, M. Sileo, C. Zotta, M. R. Potenza, M. Scavone, L. Sorrentino, The analysis of fundamental period of cultural heritage buildings: experimental data for church towers in Basilicata (Southern Italy). *Geophysical Research Abstracts*, Vol. 16, EGU2014-12946, 2014.
448. Calia A., Liberatore D., Masini N., Racina V., Correlation between porosimetric test and penetrometric test on masonry mortar, *Geophysical Research Abstracts*, Vol. 12, EGU2010-4563, 2010
449. Cavalli R.M., Masini N., Pascucci S., Palombo A., Pignatti S., Integration of thermal and hyperspectral VNIR imagery for architectural and artistic heritage analysis and monitoring, *Geophysical Research Abstracts*, Vol. 12, EGU2010-4919, 2010.
450. Malfitana D., Shehi E., Masini N., Scardozzi G., Integration of historical aerial and satellite photos, recent satellite images and geophysical surveys for the knowledge of the ancient Dyrrachium (Dures, Albania), *Geophysical Research Abstracts*, Vol. 12, EGU2010-6085, 2010.
451. Calia A., Leucci G., Masini N., Persico R., Quarta R., Integration of in situ NDT tests with petro-physical analyses for the characterization of materials and constructive techniques of ancient masonries, *Geophysical Research Abstracts*, Vol. 12, EGU2010-12963, 2010.
452. Danese M., Capozzoli L., Research of the best spatial analysis method for IR multitemporal thermographic datasets. Cluster analysis analyses for the characterization of materials and constructive techniques of ancient masonries, *Geophysical Research Abstracts*, Vol. 12, EGU2010-6857, 2010.
453. Calia A., Giannotta M.T., Masini N., Quarta G., Persico R. 2009, Integrated Techniques for Analysis and Monitoring of Historical Monuments: the case of S.Giovanni al Sepolcro in Brindisi (Southern Italy), *Geophysical Research Abstracts*, Vol. 11, EGU2009-11682, [eISSN: 1607-7962]
454. Coluzzi R., Guariglia A., Lacovara B., Lasaponara R., Masini N. 2009, On the integration of Airborne full-waveform laser scanning and optical imagery for Site Detection and Mapping: Monteserico study case, *Geophysical Research Abstracts*, Vol. 11, EGU2009-11352, [eISSN: 1607-7962]
455. Nuzzo L., **Masini N.**, Rizzo E. 2009, Study of a brittle and precious medieval rose-window by means of the integration of GPR, stress wave tests and infrared thermography, *Geophysical Research Abstracts*, Vol. 11, EGU2009-11112 [eISSN: 1607-7962]
456. Masini N., Rizzo E., Lasaponara R., Orefici G. 2009, On the detection of adobe buried archaeological structures using multiscale remote sensing techniques : El Templo Naranja in Cahuachi (Peru), *Geophysical Research Abstracts*, Vol. 11, EGU2009-6982 [eISSN: 1607-7962]
457. **Masini N.**, Tancredi C., Persico R. 2008, Integrated and Multi-Scale NDT Tests for the Study of Artifacts and Architectural Heritage, *Geophysical Research Abstracts*, Vol. 10, EGU2008-A-07840. [eISSN: 1607-7962]
458. Gizzi F. T., Lazzari M., Masini N., Zotta C., 2007 *Geological-geophysical and historical-macroseismic data implemented in a geodatabase: a GIS integrated approach for seismic microzonation*, *Geophysical Research Abstracts*, Vol. 9, 09522 [ISSN: 1029-7006]

F.9) PREFACE OF INTERNATIONAL BOOKS [N.1]

459. N. Masini, Preface-Editorial II- Ge-Conservacion, Volume 1, Issue 11, 2017, Page 8, ISSN: 1989-8568

F.10) BOOKS WITHOUT ISBN [N.3]

460. N. Masini, *Potenza nel XV secolo. Ricostruzione dell'impianto urbano e architettura*, STES, Potenza 1996.

461. N. Masini, *Potenza in età fascista, tra progetti e trasformazioni urbane*, STES, Potenza 1996

462. Masini N., *Il castello di Lagopesole nel contesto dell'architettura dell'Italia meridionale nel segno di Federico II. Brevi note*. Rotary Clu Potenza, Potenza, 2015.

F.11) DIVULGATIVE PUBLICATIONS [N.7]

463. Masini N., Roubis D., Sogliani F. 2010. ByHeriNet, nuove metodologie per la valorizzazione e fruizione del patrimonio culturale bizantino, in AA.VV., *Le tecnologie del CNR per i beni culturali*, CNR, BetMultimedia, Roma, p. 22

464. Masini N. 2010. Tecniche di diagnostica non invasiva per la tutela e la conservazione dei beni architettonici e monumentali, in AA.VV., *Le tecnologie del CNR per i beni culturali*, CNR, BetMultimedia, Roma, p. 52

465. Masini N. 2010. Procedura di monitoraggio dei siti archeologici dal rischio di scavi clandestini mediante metodi di autocorrelazione spaziale applicati a immagini satellitari ad alta risoluzione, in AA.VV., *Le tecnologie del CNR per i beni culturali*, CNR, BetMultimedia, Roma, p. 53

466. Masini N. 2010. Sensoristica e location based services per la tracciabilità dei beni artistici mobili, in AA.VV., *Le tecnologie del CNR per i beni culturali*, CNR, BetMultimedia, Roma, p. 54

467. Calia A., Giannotta M.T., Gabellone F., Masini N., Quarta G. 2007. Gli ipogei funerari e le cripte in Puglia: problemi di conservazione, valorizzazione e fruizione, in *Tecnologie dell'Informazione e della Comunicazione Culturale. Tokyo 16-17 aprile 2007*, CNR, Dipartimento Patrimonio Culturale, Roma, Stampa IGER, pp. 15-16.

468. R. LASAPONARA, N. MASINI, G. SCARDOZZI, L'uso di immagini satellitari per la conoscenza e la valorizzazione del patrimonio archeologico, in *Tecnologie dell'Informazione e della Comunicazione Culturale. Tokyo 16-17 aprile 2007.*, CNR, Dipartimento Patrimonio Culturale, Roma, Stampa IGER, 2007, pp. 55-56.

469. Calia A., Gabellone F., Giannotta M.T., Masini N., Quarta G., Roubis D., Sogliani F., *ByHeriNet (Byzantine Heritage Network). Recupero, valorizzazione e gestione del Patrimonio Culturale Bizantino nel Mediterraneo Orientale*, in *Tecnologie dell'Informazione e della Comunicazione Culturale. Tokyo 16-17 aprile 2007.*, CNR, Dipartimento Patrimonio Culturale, Roma, Stampa IGER, 2007, pp. 62-63.

G. TEACHING ACTIVITY

G) TEACHING ACTIVITY

G.1 VISITING PROFESSOR

2014, 4-10 April: Visiting professor at **Universidad Politecnica de Valencia (ETSIE)** – (Escuela Técnica Superior de Ingeniería de Edificación) in the framework of Erasmus Programme Staff Mobility - Teaching Assignment

2015, 20-30 November : Visiting Professor at **Henan Academy of Sciences** di Zheng Zhou (Cina)

2016, 20 June-20 July: Visiting Professor at **Chinese Academy of Sciences (CAS)**, Institute of Remote Sensing and Digital Earth (RADI), Pechino (assigned after winning the PIFI CAS President's International Fellowship Initiative (PIFI))

2016, 18-22 September: Visiting Professor at the Universitat de les Illes Balears – Palma di Maiorca (Erasmus Staff Mobility for teaching)

2017, 8 February-9 March: Visiting Professor at **Chinese Academy of Sciences (CAS)**, Institute of Remote Sensing and Digital Earth (RADI), Pechino (assigned after winning the PIFI CAS President's International Fellowship Initiative (PIFI))

2017, 13-26 November : Visiting Professor at **Henan Academy of Sciences** di Zheng Zhou (Cina)

G.2 PROFESSOR OF PHD SCHOOL

2014-15 - Component of the PhD School "Studi sul Patrimonio Culturale" of **University of Catania** Dipartimento di Scienze Umanistiche (XXX Cicle)

2015-on going- Member of the Academic Board of the PhD School " Cities and Landscapes: Architecture, Archaeology, Cultural Heritage, History and Resources " of **University of Basilicata, Department DICEM, Matera** - (XXXI-XXXII-XXXIII-XXXIV Cicles)

2022-on going - Member of the Academic Board of the National PhD School in *Design for Made in Italy: Identity, Innovation and Sustainability* " (XXXVIII Cycle)

G.3 UNIVERSITY TEACHING

N.	Year	Teaching	Degree	Università
1	1998-99	<i>Laboratory of Technical Architecture</i>	Building Engineering.	Univ. Basilicata – Potenza
2	1999-00	<i>Laboratory of Technical Architecture</i>	Building Engineering	Univ. Basilicata – Potenza
3	2002-03	<i>Restoration</i>	Building Engineering (triennial degree)	Univ. Basilicata – Matera
4	2002-03	<i>Architectural Restoration</i>	Building Engineering	Univ. Basilicata – Potenza
5	2003-04	<i>Restoration</i>	Building Engineering (triennial degree)	Univ. Basilicata – Matera
6	2003-04	<i>Restoration of Architecture</i>	Building Engineering	Univ. Basilicata – Potenza
7	2003-04	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza

8	2004-05	<i>Restoration of Architecture</i>	Building Engineering	Univ. Basilicata – Potenza
9	2004-05	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
10	2004-05	<i>Laboratory of Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
11	2005-06	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
12	2005-06	<i>Laboratory of Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
13	2006-07	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
14	2006-07	<i>Laboratory of Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
15	2007-08	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
16	2007-08	<i>Laboratory of Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
17	2008-09	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
18	2008-09	<i>Laboratory of Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
19	2009-10	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
20	2009-10	<i>Laboratory of Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
21	2010-11	<i>Architectural Restoration</i>	Building Engineering and Architecture	Univ. Basilicata – Potenza
22	2011-12	<i>Science for Conservation and restoration of Architectural Heritage</i>	Civil Engineering	Univ. Basilicata – Potenza
23	2011-11	<i>Laboratory of Architectural Restoration</i>	Architecture	Univ. Basilicata – Matera
24	2012-13	<i>Science for Conservation and restoration of Architectural Heritage</i>	Civil Engineering	Univ. Basilicata – Potenza
25	2012-13	<i>Architectural Restoration</i>	Architecture	Univ. Basilicata – Matera
26	2013-14	<i>Architectural Restoration</i>	Architecture	Univ. Basilicata – Matera
27	2013-14	<i>Science for Conservation and restoration of Architectural Heritage</i>	Civil Engineering	Univ. Basilicata – Potenza
28	2015-16	<i>Fundamentals of Architectural Restoration</i>	Architecture	Univ. Basilicata – Matera
29	2016-17	<i>Fundamentals of Architectural Restoration</i>	Architecture	Univ. Basilicata – Matera
30	2017-18	<i>Fundamentals of Architectural Restoration</i>	Architecture	Univ. Basilicata – Matera
31	2018-19	<i>Fundamentals of Architectural Restoration</i>	Architecture	Univ. Basilicata – Matera
32	2018-19	<i>Restoration</i>	Conservation and Restoration of Cultural heritage	University of Calabria
31	2019-20	<i>Fundamentals of Architectural</i>	Architecture	Univ. Basilicata –

	<i>Restoration</i>		Matera
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G.4 SCIENTIFIC RESPONSIBLE OF INTERNATIONAL SCHOOLS AND COURSES

2013

Matera, 3-5 June 2013. Co-Chair with R. Lasaponara and F. Sarti of ESA Course on *Remote Sensing Applications for the Study and Observation of Archaeological sites*, in the framework of the 4th EARSeL Workshop on Cultural and Natural Heritage, Matera 3-5 June 2013.

2016

Pompeii, 9-13 May 2016. Co-chair with R. Persico e F. Soldovieri of the I International School on *GRSA 2016 - Geophysics and Remote Sensing for Archaeology*"

G.5 MASTER POST-DEGREE

2003-2004

Master MacBeth : “Management on cultural activity and cultural heritage by using new technologies”, organized by University of Lecce and AFOR. Teaching of “Strategies for the valorization of the Cultural Heritage”.

Master “Reopolis : Manager for the rehabilitation of historical centres” “, (University of Basilicata, Apof, CSEA, Lsidea). Teaching of “Architectural Restoration “- section Techniques of building repair.

2005

Master “New tool for the government and management of the territory (University of Basilicata) Teaching of “Census and valorization of architectural and cultural heritage”

2006

Master “GIS and remote sensing” (University of Basilicata). Teaching of “Rehabilitation of historical centres: cataloguing on GIS platform of building elements aimed at a restoration handbook”

Master “New tool for the government and management of the territory (University of Basilicata) Teaching of “Census and valorization of architectural and cultural heritage”

G.6 HIGH TRAINING COURSES

2011

- Matera, 23-28.03 2011 e 30.06.2011. Corso di alta Formazione “nuove tecnologie digitali applicate ai Beni Culturali Archeologici e Monumentali” organizzato dalla Società Pragma srl con sede in Matera. Docenze di n.16 ore su “Indagini diagnostiche basate sull’infrarosso sul Patrimonio Culturale” e di n.6 ore su “Project work: sviluppo delle idee progettuali, redazione delle tesi di accompagnamento al progetto”
- Potenza, 13 giugno 2011. Corso di alta Formazione in “Organizzazione e Management della Produzione e Distribuzione Cinematografica” (PO FSE Basilicata 2007/13) organizzato dalla Noeltan Film. Docenza di n.6 ore in qualità di testimonial dell’esperienza scientifica in Peru.
- Lecce, 13 luglio- 15 ottobre 2011. Corso di alta Formazione annesso a Progetto Strategico “Protezione, consolidamento e pulitura di materiali lapidei caratteristici della Regione Puglia: sperimentazione di prodotti a basso impatto ambientale e monitoraggio di trattamenti”, finalizzato alla formazione di giovani laureati e tecnici specializzati in “Tecniche di protezione e conservazione dei beni Culturali” organizzato dal Dipartimento di Ingegneria dell’Innovazione dell’Università del Salento. Docenza di n.15 ore su “Lineamenti di storia del restauro e fondamenti di teoria del restauro” e “L’azione dell’umidità: umidità di risalita per capillarità, di condensa e di

infiltrazione".

- Potenza, settembre-dicembre 2011. **Docenza** di n. 10 ore nell'ambito del Corso di formazione del progetto "*Esperto in virtualizzazione e valorizzazione del patrimonio culturale*" (PO Basilicata FSE 2007/13), ente di formazione Risorse srl
- Potenza, marzo-giugno 2011. **Docenza** di n. 18 ore dei moduli : "il modello del distretto culturale", "l'impresa culturale e case studies di gestione", "project work" nell'ambito del Corso di alta Formazione del Progetto "Esperto nelle nuove modalità di messa in valore, fruizione e gestione del patrimonio culturale". Società di formazione: Forcopim, Potenza

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2012

- Poznan (Polonia), 30/07/2012 – 3/08/2012. **Teaching** at the **Summer School** on "Potential of satellite images and hyper/multispectral recording in archaeology, in the framework of The EU Project ArchaeoLandscapes Europe, organized by University of Poznan and co-organized by IBAM-CNR (responsibile Nicola Masini) and IMAA-CNR
- Potenza, 8/10/2012 – 30/10/2012. Teaching of n. 18 hours entitled "" Remote sensing for archaeological research and the management of cultural heritage "as part of the Advanced Training Course" Identification of good ICT practices and skills applied to the management and enhancement of the archaeological and cultural heritage "which is part of the Project" Culture in Formation £ co-financed by the ESF within the scope of the FESE Basilicata Operational Program ". Organized by the company EvolutionCISF srl and Co-organized by IBAM-CNR (scientific responsible Nicola Masini)

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2013

- Matera, 24-25.10.2013; 31.10.2013. Advanced training course "New digital technologies applied to Cultural. Archaeological and Monumental Heritage", organized by Pragma srl. Teaching of 18 hours for didactic unit "*Archaeological applications of earth observation by means of remote sensing*"

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- Matera, 3-5 June. 2nd ESA Course on Remote Sensing Applications for the Study and Observation of Archaeological sites. Matera. Teaching on Satellite remote sensing for Archaeology Cultural Heritage.

2015

- 3rd ESA-EARSEL Course on Remote Sensing for Archaeology, 9-11 November 2015. Frascati, seat of ESA. Teaching on Low-cost remote sensing applications for Archaeology Cultural Heritage.

2016

- Pompeii, 9-13 May 2016. I International School onGRSA 2016 - Geophysics and Remote Sensing for Archaeology". Lecture on "*Remote sensing and geophysics for archaeology and cultural heritage: the interpretation issue*

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- **G.7 SUPERVISOR OF GRANT MARIE SKŁODOWSKA-CURIE**

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- 2017-19 Supervisor of Tuna Kalayci (Project GeoMOP "*Modern Geospatial Practices for Ancient Movement Praxis*" [**H2020-MSCA-IF-2016**]

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G.8A REVIEWER OF PHD THESIS

2017 - University of Rome 'Tor Vergata' - Department of Civil Engineering and Computer Science - XXVI Cycle Doctorate - Reviewer of Chris Stewart's Doctoral thesis entitled "*Archaeological Propection using Spaceborne Synthetic Aperture Radar*"

G.8B SUPERVISOR OF PHD THESIS

2024

- University of Basilicata - Department of European and Mediterranean Cultures' - PhD | Cities and Landscapes: Architecture, Archaeology, Cultural Heritage, History and Resources - XXXVI Cycle - Supervisor of Laura Morero's doctoral thesis entitled "From archive data to digital: integrated approaches for the diagnosis of the state of conservation of monuments"
- University of Basilicata - Department of European and Mediterranean Cultures' - PhD | Cities and Landscapes: Architecture, Archaeology, Cultural Heritage, History and Resources - XXXVII Cycle - Supervisor of Silvia Liaci's doctoral thesis entitled "Digital Twin and eXtended Reality: Development of an Integrated Information System for the monitoring, management and analysis of indoor environments of cultural interest "
- University of Basilicata - Department of European and Mediterranean Cultures' - PhD | Cities and Landscapes: Architecture, Archaeology, Cultural Heritage, History and Resources - XXXVII Cycle - Supervisor of Francesca Visone's doctoral thesis entitled "Preserving heritage in a changing environment. Proactive strategies for the consolidation of porous stone materials: the case of the Sassi di Matera "

G.8C Chair / External Examiner of PhD's Thesis

2025

Chair / External Examiner – PhD Dissertation Committee

Cyprus University of Technology, Dept. of Civil Engineering & Geomatics (2025).

Doctoral dissertation by **Argyro Argyrou** on UAV-based remote sensing and machine learning for archaeological ceramic detection.

G.8D SUPERVISOR OF MASTER'S THESIS

2025

Institute for Geodesy and Geoinformation Science Faculty VI Planning Building Environment - **Technischen Universität Berlin** - Supervisor of Maria Isabel Pinto Bernardes. Master's Thesis entitled "*Interpreting Machine Learning Predictions for Looting Pit Detection: An Explainable AI Approach of San Giovenale* "

H) OTHER: EXHIBITIONS

H.1 EXHIBITIONS

2013, 3-6 June, Matera, Scientific responsible (with R. Lasaponara, G. Milillo and C. Serio) of the Exhibition "*Archaeo-Sat: from space a window on the past*"

2013, 26 August - 2 September, Roma, Scientific responsible (with R. Lasaponara, G. Milillo and C. Serio) of the Exhibition "Sensing the Past: COSMO SkyMed and radar technologies for archaeology", in the framework of European Space Expo

2015, 15 October-15 November. Lima, Museo Nacional de Arqueología, Antropología e Historia del Perú. Scientific responsible (with Alvaro Higuera and Rosa Lasaponara) of the Exhibition "Miradas de los Dioses. Observacion espacial del patrimonio Andino"

2016. Traveling exhibition "Miradas de los Dioses. Observacion espacial del patrimonio Andino" (Scientific responsible with Alvaro Higuera and Rosa Lasaponara). 27 September - 25 October: Museo de Arqueología, Antropología e Historia de la Universidad Nacional de Trujillo; 29 September - 25 October: Museo Arqueológico Nacional Hans H. Bruüing de Lambayeque

2025, May. Shanghai, Scientific responsible (with Rosa Lasaponara and Raffaele Vitulli) of the Exhibition "*Between Heaven and Earth: From Space to the Roots of History*"