

**EUROPEAN  
CURRICULUM VITAE  
FORMAT**



**PERSONAL INFORMATION**

Name  
Address  
Telephone  
Fax  
E-mail  
  
Nationality  
  
Date of birth

**STEFANO RIDOLFI**

25/01/2022

NATIONAL SCIENTIFIC QUALIFICATION AS ASSOCIATE IN THE ITALIAN HIGHER EDUCATION SYSTEM, IN THE CALL 2021/2023 FOR THE DISCIPLINARY FIELD OF 02/D1 -APPLIED PHYSICS, PHYSICS TEACHING AND HISTORY OF PHYSICS. (ACADEMIC RECRUITMENT ACCORDING TO THE NATIONAL CLASSIFICATION).

**WORK EXPERIENCE**

- Dates
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Main activities and responsibilities
  
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  - Occupation or position held
- Main activities and responsibilities

2001-

Ars Mensurae, 29, via Giovanni Aretusi, 00188, Rome, Italy ([www.arsmensurae.it](http://www.arsmensurae.it))  
Spectroscopy on Cultural Heritage and Bio-Medical  
CEO and Scientific Director

Plans diagnostic campaigns, coordinates technical teams, develops new instruments and procedure.

2016-2018

Sapienza University, Molecular Medicine Department, Rome  
Research grant, "Analyses of scintillation crystals in monolithic and matricial bulk form"  
Researcher

Development of non invasive SOP on hygroscopic crystals for qualitative and quantitative analyses

2002-

University "La Sapienza"  
Teaching and dissertation tutoring  
Adjunct Professor

Medical Physics (II Faculty of Medicine and Surgery), laboratory of Physics and laboratory of Archaeometry (Faculty of Mathematical, Physical and Natural Science).

2008

Sapienza University, Experimental Medicine Department, Rome

Research grant, "PET / SPECT imaging tomography in dual mode of breast cancer", Ricerche di Ateneo 2006

Researcher

Development and calibration of the detectors

- Dates 2007
- Name and address of employer Sapienza University, Experimental Medicine Department, Rome
- Type of business or sector Research grant, "Modular SPET cerebral tomography for submillimeter spatial resolution", Ricerche di Ateneo 2004
- Occupation or position held Researcher
- Main activities and responsibilities Improvement of hardware and writing of DAQ software
  
- Dates 2005-2009
- Name and address of employer Tari scpa Marcianise Caserta
- Type of business or sector Gold alloys
- Occupation or position held Director of laboratory
- Main activities and responsibilities Non invasive XRF analyses on jewelry, determination of fineness in gold alloys
  
- Dates 1989-1990
- Name and address of employer Italian Army
- Type of business or sector Anti-aircraft artillery.
- Occupation or position held Lieutenant
- Main activities and responsibilities Operative Platoon commander.

## EDUCATION AND TRAINING

- Dates 2001
- Name and type of organisation providing education and training Faculty of Science University of Rome "La Sapienza"
- Principal subjects/occupational skills covered Basic and Advanced Physics. Developing of research abilities
- Title of qualification awarded Degree of Physics (109/110)
- Level in national classification ISCED 5A (if appropriate)

## PERSONAL SKILLS AND COMPETENCES

### MOTHER TONGUE

ITALIAN

### OTHER LANGUAGES

#### ENGLISH

- Reading skills EXCELLENT
- Writing skills EXCELLENT
- Verbal skills EXCELLENT

#### GERMAN

- Reading skills GOOD
- Writing skills GOOD
- Verbal skills GOOD

### SOCIAL SKILLS AND COMPETENCES

Attitude to the interdisciplinary research work. Excellent relational skills.

### ORGANIZATIONAL SKILLS AND COMPETENCES

He coordinates national and international projects devoted to the development of new scientific instruments applied to Cultural Heritage and software development for Bio-Medical being principal investigator and investigator.  
He is CEO of Ars Mensurae in Rome and coordinates the work of the technical teams.

TECHNICAL SKILLS  
AND COMPETENCES

He is an expert of ND techniques applied to the diagnostic procedures in the field of Conservation. He is an expert in software development for spectroscopy applied to Bio-Medical. The main subjects of his activities are: X rays, imaging and spectrometry and development of related instrumentation. Multispectral imaging techniques.

OTHER SKILLS  
AND COMPETENCES

His research interest has been focused on the development of ND techniques, applied nuclear physics, imaging and image processing, archaeometry and conservation. He is author of several papers concerning the x ray physics and the development of techniques and procedures in journals of applied physics and, more recently, on case studies concerning the diagnostics on Cultural Heritage.

He is involved in international collaboration and was invited speaker in national and international conferences.

He is scientific expert for UNESCO for international missions in Serbia, Albania, Haiti.

He is scientific expert for IAEA (International Atomic Energy Agency) since 2010 with missions on the use of nuclear techniques for Cultural Heritage in Serbia, Albania, Turkey, EAU.

## DIAGNOSTIC EDUCATIONAL YARD

The Diagnostic Educational Yard is an innovative way to educate university students to Science applied to Cultural Heritage.

**2014** Musei Capitolini: "Natura morta" from a 17th century artist. 21 Students for the Sapienza international Master course ArchMat and mixed courses

**2015** Museo Napoleonico: "Napoleone nel costume SACRE" from Casarine Henriette Flore Davin. 22 Students for the Sapienza international Master course ArchMat and mixed courses

**2016** Galleria Nazionale di Arte Moderna e Contemporanea: "Allo specchio" from Giacomo Balla. 33 Students for the Sapienza international Master course ArchMat and mixed courses

**2017** Museo Canonica Roma: "Self portrai"t from Pietro Canonica. 32 Students for the Sapienza international Master course ArchMat

**2018** Museo Canonica Roma: 41 Students for the Sapienza international Master course ArchMat

**2019** Museo Canonica Roma: 38 Students for the Sapienza international Master course ArchMat

**2021** Chiesa "Santa Maria degli Angeli", Trevisani painting, 12 Students for the Sapienza international Master course ArchMat

## INTERNATIONAL INVITED LECTURES AND SCIENTIFIC COMMITTEE

### Invited lectures

- **XTACH 2011**, International conference on the use of X-ray and related techniques in Art and Cultural Heritage, American University of Sharjah, EAU. 7-8 December 2011
- **EXRS 2012**, European X-Ray Spectrometry Conference, IAEA Vien, Austria. 18-22 June 2012
- **EARJ 2014**, Escola de Arqueometria do Rio de Janeiro, Brasil. 12-14 September 2014
- **DXC 2016**, Denver X-ray Conference, Chicago, USA. 1-5 August 2016
- **DXC 2017**, Denver X-ray Conference, Chicago, USA. 31 July-4 August 2017
- **SmartArt 2021** "Art and Science Applied: Experience and Vision", 23-25- September 2021

### Scientific Committee

International Conference on "Non Destructive Investigations and Microanalysis for the Diagnostics and Conservation of Cultural and Environmental Heritage"

ART 2021 Buenos Aires Argentina

ART 2017 Turin Italy

ART 2014 Madrid Spain

ART 2008 Jerusalem Israel

## IAEA AND UNESCO ACTIVITY

### IAEA

#### Research Contracts

- 1) Chief Scientific Investigator. Research Contract Agreement number 16766, Optimization of EDXRF portable systems for low energy, surface analyses of Cultural Heritage, 2011-2014

#### International Expert

- 1) International Expert, National Workshop on nuclear and other instrumental techniques in investigation of Cultural Heritage artefacts, Serbia, from 16/04/2007 to 21/04/2007 RER1006

#### Senior Lecturer

- 1) Lecturer, Regional training course for end-users in nuclear techniques for the analysis of ceramics objects, Albania, from 26/05/2014 to 30/05/2014, RER0039
- 2) Lecturer, Regional training course on advanced characterization of Cultural Heritage artefacts using nuclear analytical techniques, Albania, from 14/05/2012 to 18/05/2012, RER0034
- 3) Lecturer, Regional training course on characterization of Cultural Heritage objects by using nuclear application techniques, Turkey, from 11/07/2011 to 15/07/2011, RER8015
- 4) Lecturer, National training course on advanced analysis techniques in arts and archeology using micro-XRF United Arab Emirates, Sharja, from 11/12/2010 to 13/12/2010, UAE0006

### UNESCO

- 1) Tutor, Workshop on X Ray Spectroscopy for Cultural Heritage, Albania, from 15/03/2009 to 21/03/2009, CIC 09-08 FR 3240198156

## PATENTS

- 1) **FIS2007000259**: Dual Mode XRF, 2010
- 2) **RM2010A000003**: Identification method for paintings, 2013
- 3) **RM2013A000705**: Apparatus and method for EDXRF analysis with open-air beams, 2016

## TECHNOLOGY TRANSFER

- 2001** New Company Ars Mensurae di Stefano Ridolfi, 100% shares  
**2017** Spin Off company University of Palermo Labor Artis CR Diagnostica srl, 50% shares  
**2021** Start Up company IDArtScience srls, 25% shares

## JOURNAL REVIEWER

- 1) "Radiation Physics and Chemistry" from Elsevier
- 2) "X-Ray Spectrometry" from Wiley
- 3) "Natural Product Research" from Taylor & Francis

## NATIONAL AND INTERNATIONAL PROJECTS

The international and national projects with leading roles

- 2014-2015** Project leader for the bilateral project Italy-Serbia devoted to: "Development and implementation of two novel portable instruments for the analyses of Cultural Heritage: portable scanner XRF and portable XRD". Research Project of Particular Relevance. Granted by MAE the Italian Ministry of Foreign Affairs.
- 2013-2015** Partner in "LSP Her" multilateral project financed by the European Commission 530847-LLP-1-2012-GR-KA2-KA2MP.
- 2013-2015** Partner in "Scintigraphic and Goniometric probe for the localization of radio marked molecules for diagnostic and chirurgical use". POS FESR G17516 CUP F17112000180009, Structural European funds for SME.
- 2008-2010** National Coordinator of the Italy-Albania project: "Development of SOP's for the conservation of archeological materials with spectroscopic portable systems". Granted by MAE the Italian Ministry of Foreign Affairs.

The international and national projects on Cultural Heritage in which he was involved are:

- 2019-2021** "Iper3D" project in collaboration with CNR, grant from Lazio Innova.
- 2019-2020** "SUPERARE" project in collaboration with Roma3, grant from Lazio Innova.
- 2019-2020** "MUSA" project in collaboration with INFN and Roma3, grant from Lazio Innova.
- 2018-2021** Partner in "ED-ARCHMAT European Joint Doctorates" MSCA-ITN-EJD 766311, project financed by the European Commission
- 2016-2017** "HeritageBot" in collaboration with the University of Cassino and South Lazio. "Development of an UM robot for Cultural Heritage". Granted by LazioInnova.
- 2014-2015** "SIGLOD radioactive contamination detection system by drone" with the University of Palermo STEBICEF, PON project CUP B71H12000680005
- 2011-2012** "C.HE.MU.SY. Project" developed in collaboration with CNR and the private company Assing spa: Development of a micro XRF portable system devoted for Cultural Heritage. Granted by FILAS Lazio.
- 2011-2012** "Red Eyes Project" in collaboration with the private company CRISMA srl: Development of a novel system for high resolution infrared thermography. Granted by FILAS Lazio.
- 2008-2009** Development of a micro XRF and micro Raman system for NDT in situ analyses of Cultural Heritage. Granted by the city of Rome.
- 2005-2007** "SAIME Project": novel analytical systems for the analyses of the gold carat. Granted by the Italian Ministry of Research.
- 2002-2004** "SAPAB Project": analyses, protection and conservation of precious surfaces against smearing Granted by the Italian Ministry of Research.
- 1999-2001** Protection of cultural heritage "XRF ART": development of a new solid state detector for the analysis of the Cultural Heritage (SDD, silicon drift detector). Granted by EU

The national and regional Bio-Medical projects in which he was involved are:

- 2014-2015** "Innovative algorithms for the generation of a new class of scintillation products based on the holistic integration of specific functional properties, HOLISCINT", CUP F88C14000400007, Structural European funds for SME
- 2010-2012** "ADIMA". POS FESR asse I Attività I.1 CUP F87110000740007, Structural European funds for SME.
- 2008-2010** "Sistema avanzato di Imaging Molecolare per Biomedicina". FILAS project.
- 1999-2003** "Mammocam, position sensitive systems availing of crystals". Grant from MURST.

ADDITIONAL INFORMATION

He is II level expert of Infrared thermography applied to Cultural Heritage.  
He is qualified technical expert for the criminal court in Rome for antique, ancient and modern art.

SCIENTIFIC PRODUCTIVITY

**Scopus Author ID: 7801640160, ORCID iD: 0000-0002-2866-6344**

Publications in international journals with referees  
68 since 2002

Contributions in international conferences proceedings  
69 since 2002

Scientific Books chapters  
4 since 2005

Chapters in Books for Scientific Dissemination  
26 since 2005

Total Citations  
482

Citations per publication  
7.1

H Index  
13

- PUBLICATIONS
- Cu **Scientific articles in international journals**  
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- 1) Cesareo, R., Gigante, G.E., Castellano, A., Ridolfi, S., Barcellos Lins, S.A., From Raphael (La Deposizione) to Raphael (La Fornarina): a Circumnavigation Accompanying the Evolution of Energy-Dispersive XRF Devices, *Brazilian Journal of Physics* [this link is disabled](#), 2022, 52(2), 54
  - 2) Cesareo, R., Lins, S.A., Ridolfi, S., Brunetti, A. Thin thickness gilding determined by x-rays ratios from EDXRF-spectra, *X-Ray Spectrometry* [this link is disabled](#), 2022, 51(2), pp. 170–177
  - 3) Ruggiero, L., Zuena, M., Baroni, L., Valbonetti, L., Ridolfi, S., Ricci, M.A., Sodo, A. The Minnesang riddle: A multi-analytical approach to an undated colour woodcut (2022) *Microchemical Journal*, 174, art. no. 107072, .  
DOI: 10.1016/j.microc.2021.107072
  - 4) Shrestha, R., Sfarra, S., Ridolfi, S., Gargiulo, G., Kim, W. A numerical–thermal–thermographic NDT evaluation of an ancient marquetry integrated with X-ray and XRF surveys (2022) *Journal of Thermal Analysis and Calorimetry*, 147 (3), pp. 2265-2279.  
DOI: 10.1007/s10973-021-10571-2
  - 5) Zuena, M., Baroni, L., Graziani, V., Iorio, M., Lins, S., Ricci, M.A., Ridolfi, S., Ruggiero, L., Tortora, L., Valbonetti, L., Sodo, A. The techniques and materials of a 16th century drawing by Giorgio Vasari: A multi-analytical investigation (2021) *Microchemical Journal*, 170, art. no. 106757, .  
DOI: 10.1016/j.microc.2021.106757
  - 6) Lins, S.A.B., Manso, M., Lins, P.A.B., Brunetti, A., Sodo, A., Gigante, G.E., Fabbri, A., Branchini, P., Tortora, L., Ridolfi, S. Modular ma-xrf scanner development in the multi-analytical characterisation of a 17th century Azulejo from Portugal† (2021) *Sensors*, 21 (5), art. no. 1913, pp. 1-13.  
DOI: 10.3390/s21051913
  - 7) Ridolfi, S., Crescenzi, S., Zeli, F., Perilli, S., Sfarra, S. Evaluation of the heat changes in an ancient church because of restoration works: A microclimatic study supported by thermal images (2021) *Indoor and Built Environment*, .  
DOI: 10.1177/1420326X21994625
  - 8) Zuena, M., et alii, The techniques and materials of a 16th century drawing by Giorgio Vasari: A multi-analytical investigation, *Microchemical Journal* [this link is disabled](#), 2021, 170, 106757
  - 9) Lins, S.A.B., Gigante, G.E., Cesareo, R., Ridolfi, S., Brunetti, A. Testing the accuracy of the calculation of gold leaf thickness by mc simulations and MA-XRF scanning (2020) *Applied Sciences (Switzerland)*, 10 (10), art. no. 3582, .  
DOI: 10.3390/app10103582
  - 10) Albin, M., Ridolfi, S., Giuliani, C., Pascucci, M., Staccioli, M.P., Riccucci, C. Multi-Spectroscopic Approach for the Non-invasive Characterization of Paintings on Metal Surfaces (2020) *Frontiers in Chemistry*, 8, art. no. 289, .  
DOI: 10.3389/fchem.2020.00289
  - 11) Barcellos Lins, S.A., Ridolfi, S., Gigante, G.E., Cesareo, R., Albin, M., Riccucci, C., di Carlo, G., Fabbri, A., Branchini, P., Tortora, L. Differential X-Ray Attenuation in MA-XRF Analysis for a Non-invasive Determination of Gilding Thickness (2020) *Frontiers in Chemistry*, 8, art. no. 175, .  
DOI: 10.3389/fchem.2020.00175
  - 12) Francia, E.D., Grassini, S., Gigante, G.E., Ridolfi, S., Barcellos Lins, S.A. Characterisation of corrosion products on copper-based artefacts: Potential of MA-XRF measurements (2020) *Acta IMEKO*, 10 (1), pp. 136-141.  
DOI: 10.21014/ACTA\_IMEKO.V10I1.859
  - 13) Lins, S.A.B., Manso, M., Gigante, G.E., Cesareo, R., Tortora, L., Branchini, P., Ridolfi, S. Modular MA-XRF scanner potentialities and further advances (2020) 2020 IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage, pp. 496-500.

- 14) Sodo, A., Ruggiero, L., Ridolfi, S., Savage, E., Valbonetti, L., Antonietta Ricci, M. Dating of a unique six-colour relief print by historical and archaeometric methods (2019) *European Physical Journal Plus*, 134 (6), art. no. 276, .  
DOI: 10.1140/epjp/i2019-12718-7
- 15) Ridolfi, S., Laurenzi Tabasso, M., Askari Chaverdi, A., Callieri, P. The Finishing Technique of the Stone Monuments of Persepolis: Further Studies and New Findings Through the Use of Non-Destructive Analytical Techniques (2019) *Archaeometry*, 61 (2), pp. 272-281.  
DOI: 10.1111/arcm.12417
- 16) Lins, S.A.B., Gigante, G.E., Cesareo, R., Ridolfi, S. Recent developments on portable XRF scanner (2019) 2019 IMEKO TC4 International Conference on Metrology for Archaeology and Cultural Heritage, *MetroArchaeo* 2019, pp. 109-113.
- 17) Lins, S.A.B., Di Francia, E., Grassini, S., Gigante, G.E., Ridolfi, S. MA-XRF measurement for corrosion assessment on bronze artefacts (2019) 2019 IMEKO TC4 International Conference on Metrology for Archaeology and Cultural Heritage, *MetroArchaeo* 2019, pp. 538-542.
- 18) Iorio, M., Graziani, V., Lins, S., Ridolfi, S., Branchini, P., Fabbri, A., Ingo, G., Di Carlo, G., Tortora, L. Exploring manufacturing process and degradation products of gilt and painted leather (2019) *Applied Sciences (Switzerland)*, 9 (15), art. no. 3016, .  
DOI: 10.3390/app9153016
- 19) Dos Anjos, M.J., De Assis, J.T., Cesareo, R., Ridolfi, S., Lopes, R.T., Dos Santos, R.S., Gama Filho, H.S., Oliveira, D.F. Gilding thickness measurements using EDXRF-analysis (2019) IMEKO International Conference on Metrology for Archaeology and Cultural Heritage, *MetroArchaeo* 2017, pp. 467-471.
- 20) Cesareo, R., Bustamante, A., Jordán, R.F., Fernandez, A., Azeredo, S., Lopes, R.T., Alva, W., Chero, L., Brunetti, A., Gigante, G.E., Ridolfi, S. Welding brazing and soldering of gold and silver by the Moche tombs "Señor de Sipán" and "Señora de Cao" (2019) IMEKO International Conference on Metrology for Archaeology and Cultural Heritage, *MetroArchaeo* 2017, pp. 240-243.
- 21) Cesareo, R., Ridolfi, S., Brunetti, A., Lopes, R.T., Gigante, G.E. 3D imaging of paintings by scanning with a portable EDXRF-device (2019) IMEKO International Conference on Metrology for Archaeology and Cultural Heritage, *MetroArchaeo* 2017, pp. 250-253.
- 22) Cesareo, R., Bustamante, A., Jordán, R.F., Fernandez, A., Azeredo, S., Lopes, R.T., Alva, W., Chero, L., Brunetti, A., Gigante, G.E., Ridolfi, S. Gold and silver joining technologies in the moche tombs Señor de Sipán and Señora de Cao jewellery (2018) *Acta IMEKO*, 7 (3), pp. 3-7.  
DOI: 10.21014/acta\_imeko.v7i3.548
- 23) Cesareo, R., Ridolfi, S., Brunetti, A., Lopes, R.T., Gigante, G.E. First results on the use of a EDXRF scanner for 3D imaging of paintings (2018) *Acta IMEKO*, 7 (3), pp. 8-12.  
DOI: 10.21014/acta\_imeko.v7i3.549
- 24) Ridolfi, S.  
Gilded copper studied by non-destructive energy-dispersive X-ray fluorescence (2018) *Insight: Non-Destructive Testing and Condition Monitoring*, 60 (1), pp. 37-41.  
DOI: 10.1784/insi.2018.60.1.37
- 25) Caponetti, E., Armetta, F., Brusca, L., Chillura Martino, D., Saladino, M.L., Ridolfi, S., Chirco, G., Berrettoni, M., Conti, P., Bruno, N., Tusa, S. A multivariate approach to the study of orichalcum ingots from the underwater Gela's archaeological site (2017) *Microchemical Journal*, 135, pp. 163-170.  
DOI: 10.1016/j.microc.2017.09.003
- 26) Saladino, M.L., Ridolfi, S., Carocci, I., Martino, D.C., Lombardo, R., Spinella, A., Traina, G., Caponetti, E. A multi-analytical non-invasive and micro-invasive approach to canvas oil paintings. General considerations from a specific case (2017) *Microchemical Journal*, 133, pp. 607-613.  
DOI: 10.1016/j.microc.2017.04.039



- 27) Ridolfi, S.  
Portable EDXRF in a multi-technique approach for the analyses of paintings (2017) *Insight: Non-Destructive Testing and Condition Monitoring*, 59 (5), pp. 273-275.  
DOI: 10.1784/insi.2017.59.5.273
- 28) Caponetti, E., Francesco, A., Martino, D.C., Saladino, M.L., Ridolfi, S., Chirco, G., Berrettoni, M., Conti, P., Bruno, N., Tusa, S. First discovery of orichalcum ingots from the remains of a 6th century BC shipwreck near Gela (Sicily) seabed (2017) *Mediterranean Archaeology and Archaeometry*, 17 (2), pp. 11-18.  
DOI: 10.5281/zenodo.581716
- 29) Fichera, G.V., Dondi, P., Licchelli, M., Lombardi, L., Ridolfi, S., Malagodi, M.  
A combined approach for the attribution of handwriting: the case of Antonio Stradivari's manuscripts (2016) *Applied Physics A: Materials Science and Processing*, 122 (11), art. no. 970.  
DOI: 10.1007/s00339-016-0497-6
- 30) Saladino, M.L., Ridolfi, S., Carocci, I., Chirco, G., Caramanna, S., Caponetti, E.  
A multi-disciplinary investigation of the "Tavolette fuori posto" of the "Hall of Barons" wooden ceiling of the "Steri" (Palermo, Italy) (2016) *Microchemical Journal*, 126, pp. 132-137.  
DOI: 10.1016/j.microc.2015.12.004
- 31) Cesareo, R., Buccolieri, G., Castellano, A., Lopes, R.T., De Assis, J.T., Ridolfi, S., Brunetti, A., Bustamante, A. The structure of two-layered objects reconstructed using EDXRF-analysis and internal X-ray ratios (2015) *X-Ray Spectrometry*, 44 (4), pp. 233-238.  
DOI: 10.1002/xrs.2611
- 32) Visco, G., Plattner, S.H., Guida, G., Ridolfi, S., Gigante, G.E. Rings or daggers, axes or fibulae have a different composition? A multivariate study on Central Italy bronzes from eneolithic to early iron age (2015) *Chemistry Central Journal*, 9 (1), art. no. 15, .  
DOI: 10.1186/s13065-015-0090-7
- 33) Sfarra, S., Ibarra-Castanedo, C., Ridolfi, S., Cerichelli, G., Ambrosini, D., Paoletti, D., Maldague, X. Holographic Interferometry (HI), Infrared Vision and X-Ray Fluorescence (XRF) spectroscopy for the assessment of painted wooden statues: A new integrated approach (2014) *Applied Physics A: Materials Science and Processing*, 115 (3), pp. 1041-1056.  
DOI: 10.1007/s00339-013-7939-1
- 34) Ridolfi, S.  
Portable X-ray Fluorescence Spectrometry for the analyses of Cultural Heritage (2012) *IOP Conference Series: Materials Science and Engineering*, 37 (1), art. no. 012001, .  
DOI: 10.1088/1757-899X/37/1/012001
- 35) Gigante, G.E., Ridolfi, S., Ferro, D.  
Diagnostic investigations and statistical validation of EDXRF mapping of the burial monument of Pope Sixtus IV by Antonio Pollaiuolo (1493) in the Vatican (2012) *Journal of Cultural Heritage*, 13 (3), pp. 345-351.  
DOI: 10.1016/j.culher.2011.11.003
- 36) Visco, G., Ridolfi, S., Plattner, S.H., Gigante, G.E. Razors, horse bits or axes; search of the different composition in common use bronze Villanovan objects (VIII-VII century B.C., Italy) by multivariate analysis (2010) *Current Analytical Chemistry*, 6 (1), pp. 11-18.  
DOI: 10.2174/157341110790069574
- 37) Mascelloni, M.L., Cerichelli, G., Ridolfi, S. A multi-disciplinary approach to the study of an assemblage of copper-based finds assigned to the prehistory and proto-history of Fucino, Abruzzo, Italy (2009) *Journal of Mining and Metallurgy, Section B: Metallurgy*, 45 (2), pp. 175-185.  
DOI: 10.2298/JMMB0902175M
- 38) Cesareo, R., Brunetti, A., Ridolfi, S. Pigment layers and precious metal sheets by energy-dispersive x-ray fluorescence analysis (2008) *X-Ray Spectrometry*, 37 (4), pp. 309-316.  
DOI: 10.1002/xrs.1078

39) Diana, M., Gabrielli, N., Ridolfi, S. Sulfur determination on stone monuments with a transportable EDXRF system (2007) *X-Ray Spectrometry*, 36 (6), pp. 424-428.  
DOI: 10.1002/xrs.1005

40) Cesareo, R., Ferretti, M., Gigante, G.E., Guida, G., Molioli, P., Ridolfi, S., Garcia, C.R. The use of a European coinage alloy to compare the detection limits of mobile XRF systems. A feasibility study (2007) *X-Ray Spectrometry*, 36 (3), pp. 167-172.  
DOI: 10.1002/xrs.960

41) Cesareo, R., Ridolfi, S., Castellano, A., Marabelli, M., Buccolieri, G., Quarta, S., Gigante, G.E. From giotto to de chirico to verrocchio: Analyses of paintings and historical bronze alloys availing of portable EDXRF equipment (2006) *Journal of Neutron Research*, 14 (1), pp. 17-27.  
DOI: 10.1080/10238160600672997

#### **Scientific Books chapters**

- 1) G.E. Gigante, S. Ridolfi (2013). "X-Ray Techniques and X-Ray Fluorescence with Portable Systems", and "Study of Vatican Masterpieces" in "Conservation Science for the Cultural Heritage", Springer, ISBN 978-3-642-30984-4.
- 2) G. Guida, D. Artioli, S. Ridolfi, G.E. Gigante (2010). "Study by Mobile Non Destructive Testing of The Bronze Statue of The "Satiro" of Marsala, Science for Cultural Heritage, Technological Innovation and Case Studies in Marine and Land Archaeology in the Adriatic Region and Inland, 2010, World Scientific Publishing Co., Singapore ISBN-13 978-981-4307-06-2 or 978-981-4307-07-9 (eBook).
- 3) R. Cesareo, S. Ridolfi et al (2008). "Portable systems for EDXRF Analysis of Works of Art", in "Portable X-ray Fluorescence Spectrometry", The Royal Society of Chemistry, ISBN 978-0-85404-552-5.
- 4) G.E. Gigante, S. Ridolfi, P. Ricciardi, M. Colapietro (2005). "Quantitative analysis of ancient metal artefacts by means of portable energy-dispersive X-ray fluorescence spectrometers: a critical review", in "Cultural Heritage conservation and environmental impact assessment", Balkema publisher ISBN: 9058096815

#### **Encyclopedia Monographic Chapter**

- 1) S. Ridolfi. "Portable Systems for Energy Dispersive X Ray Fluorescence Analysis" on Encyclopedia of Analytical Chemistry John Wiley & Sons, Ltd 2017 DOI: 10.1002/9780470027318.a6803.pub3

#### **Chapters in Books for Scientific Dissemination**

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### **Bronze alloys**

Prehistoric bronzes from the San Francesco collection, Civic Museum, Bologna.  
Prehistoric e early history collections, Archaeological Museum, Chieti.  
Archaeological dig of Pyrgos and Sotira Kaminoudhia, Ciprus.  
Bronzes from the far East, National Museum of Oriental Art, Rome.  
Roman statue " The Dancing Satyr of Mazara del Vallo", Istituto Centrale del Restauro, Rome.  
Bronze statue "Ercole saettante" of Emile Bourdelle, National Gallery of Modern Art, Rome.  
Equestrian statue "Colleoni" of Andrea del Verrocchio, Venezia.  
"The black Saint Peters", bronze statue, Saint Peter's Basilica, Vatican.  
" Equestrian statue to Duca d'Aosta" of Davide Calandra, Turin.  
"Monument to Vincenzo Vela" of Davide Calandra, Turin.  
"Funerary monument to Sisto IV" of Antonio del Pollaiuolo, Treasure museum, Vatican.  
Golden globe on the top of the Saint Peter's Basilica, Vatican.

### **Precious alloys**

Crucifix in silver embossed plate X century, Pavia;  
Mycenaean daggers in gold and silver and funeral mask of Agamemnon, Archaeological Museum of Athens, Greece;  
Paliotto of Nicola of Guardiagrele, Teramo;  
"Cross of Sant'Agostino", "Croce di Guardiagrele", "Cross of San Giovanni in Laterano", "Cross of Antrodoco", "Ostensory of Francavilla", "Ostensory of Atessa" in silver and enamels of Nicola di Guardiagrele, Rome;  
Paliotto in silver of Cathedral of Ascoli;  
"The silver sky", Istituto Centrale per il Restauro (I.C.R.), Rome;  
Treasure of San Gennaro, Naples.

### **Mobile paintings**

Paintings on paper and silk from the far East, National Museum of Oriental Art, Rome.  
Paintings of Giorgio De Chirico, De Chirico Foundation collection, Rome.  
Paintings of Giorgio De Chirico, National Gallery of Modern Art (G.N.A.M.), Rome.  
Paintings of Giacomo Balla and Giovanni Fattori, National Gallery of Modern Art (G.N.A.M.), Rome.  
"Portrait of a young man with a black dress" on canvas, of Amedeo Modigliani, Grenoble museum, France.  
Paintings on canvas Amedeo Modigliani, National Gallery of Modern Art (G.N.A.M.), Roma.  
"The martyrdom Santa Caterina" canvas, of Mattia Preti, La Valletta, Malta.  
Paintings on canvas "Il mattino", "Le nubi", "La quiete" di A. Fontanesi, National Gallery of modern Art (G.A.M.), Turin.  
"Flowers", serigraphy of Andy Warhol.  
"Two cart drivers at night" of Renato Guttuso, gouache on paper, Guttuso Foudation, Rome.  
"Croix of Santa Giulia" multimateric on wood Cattedrale of San Martino, Museum of Guinigi Palace, Lucca.  
"Vision of Holy Amedeo Menez", wooden painting of PseudoBramantino, National Museum of Antic Art Barberini Palace, Rome.  
"Breakfast on the beaches of Posillipo" canvas, of Pietro Fabris, Royal Palace of Caserta, Caserta.  
"Wheat field", "Desert evening" canvas, of Mario Schifano, Rome.  
"Nativity of the Vergin" canvas, Antonio Gherardi, Narni.  
Painted wood of Palma the Hold "The Holy conversation", National Museum of Belgrade, Serbia.  
"Pietà" wood painting, Giovanni Bellini, Uffizi Museum, Florence.  
Polychrome wooden crucifix, Foiano della Chiana.  
Icon "Deisis" from Tirana Historical Museum, Albania.  
Chinese screens Coromandel of polychrome lacquer on wood, XVIII century, Home of the American embassy in Rome.  
Liturgical register ("Cantorini") XIV century from the Archival Superintendency for Umbria, Perugia, Historical Archive.  
Photographic album for the Enrico De Nicola president (1923), from the Historical Archives of the Presidency of the Republic, Rome.  
Codex of 1587 Actorum Civilium, Historical archive Ravenna.  
Parchment Codex, Historical archive Assisi.

### **Unmovable paintings**

Frescoes from the Annunziata chappel, Quirinale Presidential Palace, Roma.  
Frescoes from the Livia roman villa, National Roman Museum of Palazzo Massimo alle Terme, Rome.

Frescoes of Ludovico Pozzoserrato from the facade of the Confraternita di Santa Maria dei Battuti, Conegliano Veneto.  
Frescoes from Antonio Cesa chapel, Santo Stefano church, Belluno.  
Frescoes from Giulio II castle, Ostia.  
Frescoes from the roman Mithraeum of Sutri.  
"Mosaic of the harvest", roman, Colle Oppio, Rome.  
Mosaic of the Triumphal Arch of the Basilica of San Lorenzo Fuori le Mura, Rome.  
"Secret closet of the Duchesses", polychrome wood, Estense castle, Ferrara.  
Marble tabernacle from Donatello, Treasure Museum, Vatican.

### **Statues**

"The Maiden of Anzio," roman marble statue, National Roman Museum of Palazzo Massimo alle Terme, Rome.  
"Sarcophagus of Bonifacio VIII" marble, di Arnolfo di Cambio, Vatican grottoes, Vatican.  
"Veiled Christ" marble from Giuseppe Sammartino, Sansevero chappel, Napoli.  
"Apollo of Veio" terracotta, from the Etruscan temple of Portonaccio, Veio.  
Bas-reliefs and decorations Etruscan polychrome terracotta, Museum of the city of Cori, Cori.  
Polychrome wooden statue of the "Immacolata" of Paolo Saverio di Zinno, Rome.  
Polychrome wooden statue of the "Madonna della Luna Nera", Rome.  
Polychrome wooden statue of the Indian "Bodhisattva", National Museum of Oriental Art, Rome

Rome 28/06/2022

Signature S. Ridolfi