

# Stefano Legnaioli

## List of Publications by Year in descending order

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152  
papers

5,987  
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76326

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all docs

155  
docs citations

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times ranked

2916  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Local Thermodynamic Equilibrium in Laser-Induced Breakdown Spectroscopy: Beyond the McWhirter criterion. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 86-95.  | 2.9 | 514       |
| 2  | Calibration-Free Laser-Induced Breakdown Spectroscopy: State of the art. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 1-14.   | 2.9 | 362       |
| 3  | A procedure for correcting self-absorption in calibration free-laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 339-353.  | 2.9 | 293       |
| 4  | Evaluation of self-absorption coefficients of aluminum emission lines in laser-induced breakdown spectroscopy measurements. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 1573-1579.                                 | 2.9 | 261       |
| 5  | A numerical study of expected accuracy and precision in Calibration-Free Laser-Induced Breakdown Spectroscopy in the assumption of ideal analytical plasma. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1287-1302. | 2.9 | 204       |
| 6  | Three-dimensional analysis of laser induced plasmas in single and double pulse configuration. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2004, 59, 723-735.   | 2.9 | 150       |
| 7  | Influence of ambient gas pressure on laser-induced breakdown spectroscopy technique in the parallel double-pulse configuration. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2004, 59, 1907-1917.                             | 2.9 | 145       |
| 8  | Application of laser-induced breakdown spectroscopy technique to hair tissue mineral analysis. <i>Applied Optics</i> , 2003, 42, 6133.   | 2.1 | 119       |
| 9  | Applications of laser-induced breakdown spectroscopy in cultural heritage and archaeology: a critical review. <i>Journal of Analytical Atomic Spectrometry</i> , 2019, 34, 81-103.   | 3.0 | 118       |
| 10 | Elemental analysis by surface-enhanced Laser-Induced Breakdown Spectroscopy combined with liquid-liquid microextraction. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 79-80, 88-93.                                     | 2.9 | 117       |
| 11 | Evaluation of self-absorption of manganese emission lines in Laser Induced Breakdown Spectroscopy measurements. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2006, 61, 1294-1303.   | 2.9 | 116       |
| 12 | Effect of laser pulse energies in laser induced breakdown spectroscopy in double-pulse configuration. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 1392-1401.   | 2.9 | 112       |
| 13 | ModA-: a new mobile instrument for in situ double-pulse LIBS analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 385, 240-247.   | 3.7 | 105       |
| 14 | Double pulse, calibration-free laser-induced breakdown spectroscopy: A new technique for in situ standard-less analysis of polluted soils. <i>Applied Geochemistry</i> , 2006, 21, 748-755.  | 3.0 | 102       |
| 15 | Effect of Laser-Induced Crater Depth in Laser-Induced Breakdown Spectroscopy Emission Features. <i>Applied Spectroscopy</i> , 2005, 59, 853-860.   | 2.2 | 99        |
| 16 | Characterization of a collinear double pulse laser-induced plasma at several ambient gas pressures by spectrally- and time-resolved imaging. <i>Applied Physics B: Lasers and Optics</i> , 2005, 80, 559-568.                              | 2.2 | 83        |
| 17 | One-point calibration for calibration-free laser-induced breakdown spectroscopy quantitative analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 87, 51-56.  | 2.9 | 82        |
| 18 | Spectroscopic and shadowgraphic analysis of laser induced plasmas in the orthogonal double pulse pre-ablation configuration. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2006, 61, 340-350.                                  | 2.9 | 81        |

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|----|--|-----|-----------|
| 19 | Comparison of detection limits, for two metallic matrices, of laser-induced breakdown spectroscopy in the single and double-pulse configurations. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 385, 316-325.  | 3.7 | 72        |
| 20 | Industrial applications of laser-induced breakdown spectroscopy: a review. <i>Analytical Methods</i> , 2020, 12, 1014-1029.  | 2.7 | 72        |
| 21 | Observation of different mass removal regimes during the laser ablation of an aluminium target in air. <i>Journal of Analytical Atomic Spectrometry</i> , 2008, 23, 1518.  | 3.0 | 71        |
| 22 | Spatial distribution of hydrogen and other emitters in aluminum laser-induced plasma in air and consequences on spatially integrated Laser-Induced Breakdown Spectroscopy measurements. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 980-987. | 2.9 | 69        |
| 23 | A review of the current analytical approaches for evaluating, compensating and exploiting self-absorption in Laser Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 169, 105878.                                      | 2.9 | 69        |
| 24 | An artificial neural network approach to laser-induced breakdown spectroscopy quantitative analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 99, 52-58.  | 2.9 | 68        |
| 25 | Effect of target composition on the emission enhancement observed in Double-Pulse Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 312-323.   | 2.9 | 65        |
| 26 | Quantitative analysis of aluminium alloys by low-energy, high-repetition rate laser-induced breakdown spectroscopy. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 697.  | 3.0 | 60        |
| 27 | Classical univariate calibration and partial least squares for quantitative analysis of brass samples by laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 658-663.  | 2.9 | 59        |
| 28 | Classification of wrought aluminum alloys by Artificial Neural Networks evaluation of Laser Induced Breakdown Spectroscopy spectra from aluminum scrap samples. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 134, 52-57.                          | 2.9 | 58        |
| 29 | Polymer-Based Black Phosphorus (bP) Hybrid Materials by in Situ Radical Polymerization: An Effective Tool To Exfoliate bP and Stabilize bP Nanoflakes. <i>Chemistry of Materials</i> , 2018, 30, 2036-2048.  | 6.7 | 57        |
| 30 | A hybrid calibration-free/artificial neural networks approach to the quantitative analysis of LIBS spectra. <i>Applied Physics B: Lasers and Optics</i> , 2015, 118, 353-360.  | 2.2 | 56        |
| 31 | In situ study of the Porticello Bronzes by portable X-ray fluorescence and laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1512-1518.  | 2.9 | 55        |
| 32 | Investigation on the role of air in the dynamical evolution and thermodynamic state of a laser-induced aluminium plasma by spatial- and time-resolved spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 787-796.                     | 2.9 | 54        |
| 33 | Diagnostics of high-temperature steel pipes in industrial environment by laser-induced breakdown spectroscopy technique: the LIBSGRAIN project. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 1181-1192.                                       | 2.9 | 50        |
| 34 | Analytical and mathematical methods for revealing hidden details in ancient manuscripts and paintings: A review. <i>Journal of Advanced Research</i> , 2019, 17, 31-42.  | 9.5 | 50        |
| 35 | X-Ray Fluorescence and Laser-Induced Breakdown Spectroscopy analysis of Roman silver denarii. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012, 74-75, 156-161.  | 2.9 | 48        |
| 36 | Archaeometric Analysis of Ancient Copper Artefacts by Laser-Induced Breakdown Spectroscopy Technique. <i>Mikrochimica Acta</i> , 2005, 152, 105-111.   | 5.0 | 47        |

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|----|---|-----|-----------|
| 37 | Effect of laser parameters on plasma shielding in single and double pulse configurations during the ablation of an aluminium target. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 225207.  | 2.8 | 47        |
| 38 | On the determination of plasma electron number density from Stark broadened hydrogen Balmer series lines in Laser-Induced Breakdown Spectroscopy experiments. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 88, 98-103.   | 2.9 | 46        |
| 39 | Temporal and Spatial Evolution of a Laser-Induced Plasma from a Steel Target. <i>Applied Spectroscopy</i> , 2003, 57, 715-721.  | 2.2 | 44        |
| 40 | From Calibration-Free to Fundamental Parameters Analysis: A comparison of three recently proposed approaches. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 124, 40-46.   | 2.9 | 44        |
| 41 | Multivariate calibration in Laser-Induced Breakdown Spectroscopy quantitative analysis: The dangers of a "black box" approach and how to avoid them. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 144, 46-54.  | 2.9 | 42        |
| 42 | Study of foxing stains on paper by chemical methods, infrared spectroscopy, micro-X-ray fluorescence spectrometry and laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 1235-1249.  | 2.9 | 40        |
| 43 | Determination of the deuterium/hydrogen ratio in gas reaction products by laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2006, 61, 797-802.  | 2.9 | 39        |
| 44 | Wood coated with plasma-polymer for water repellence. <i>Wood Science and Technology</i> , 2008, 42, 149-160.   | 3.2 | 39        |
| 45 | Shock Waves in Laser-Induced Plasmas. <i>Atoms</i> , 2019, 7, 57.   | 1.6 | 39        |
| 46 | Measurement of Stark broadening of Mn I and Mn II spectral lines in plasmas used for Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1237-1245.   | 2.9 | 38        |
| 47 | Characterization of historical mortars from the bell tower of St. Nicholas church (Pisa, Italy). <i>Construction and Building Materials</i> , 2014, 69, 203-212.  | 7.2 | 38        |
| 48 | Quantitative analysis of metals in waste foundry sands by calibration free-laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 131, 58-65.  | 2.9 | 38        |
| 49 | Extracting Time-Resolved Information from Time-Integrated Laser-Induced Breakdown Spectra. <i>Journal of Spectroscopy</i> , 2014, 2014, 1-5.  | 1.3 | 36        |
| 50 | Fast quantitative elemental mapping of highly inhomogeneous materials by micro-Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 146, 9-15.   | 2.9 | 36        |
| 51 | Determination of Ash Content of coal by Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2019, 155, 123-126.   | 2.9 | 36        |
| 52 | Micro-Laser-Induced Breakdown Spectroscopy (Micro-LIBS) Study on Ancient Roman Mortars. <i>Applied Spectroscopy</i> , 2017, 71, 721-727.  | 2.2 | 35        |
| 53 | Combination of the ionic-to-atomic line intensity ratios from two test elements for the diagnostic of plasma temperature and electron number density in Inductively Coupled Plasma Atomic Emission Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 435-443. | 2.9 | 33        |
| 54 | Green-synthesized silver nanoparticles for Nanoparticle-Enhanced Laser Induced Breakdown Spectroscopy (NELIBS) using a mobile instrument. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 141, 53-58.   | 2.9 | 31        |

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|----|--|-----|-----------|
| 55 | Determination of excitation temperature in laser-induced plasmas using columnar density Saha-Boltzmann plot. <i>Journal of Advanced Research</i> , 2019, 18, 1-7.  | 9.5 | 30        |
| 56 | Progress towards an unassisted element identification from Laser Induced Breakdown Spectra with automatic ranking techniques inspired by text retrieval. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 664-670.                  | 2.9 | 29        |
| 57 | Recovery of archaeological wall paintings using novel multispectral imaging approaches. <i>Heritage Science</i> , 2013, 1, .   | 2.3 | 29        |
| 58 | Application of Laser Induced Breakdown Spectroscopy to the identification of emeralds from different synthetic processes. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 102, 48-51.  | 2.9 | 29        |
| 59 | Fast analysis of complex metallic alloys by double-pulse time-integrated Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009, 64, 1068-1072.  | 2.9 | 28        |
| 60 | Comparison of brass alloys composition by laser-induced breakdown spectroscopy and self-organizing maps. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 103-104, 70-75.   | 2.9 | 28        |
| 61 | Evaluation of Thin Film Microextraction for trace elemental analysis of liquid samples using LIBS detection. <i>Talanta</i> , 2021, 223, 121736.   | 5.5 | 28        |
| 62 | Laser-based continuous monitoring and resolution of steel grades in sequence casting machines. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 112, 1-5.   | 2.9 | 27        |
| 63 | Three-dimensional compositional mapping using double-pulse micro-laser-induced breakdown spectroscopy technique. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 127, 1-6.   | 2.9 | 26        |
| 64 | Real time measurement of the electron density of a laser generated plasma using a RC circuit. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 836-840.   | 2.9 | 23        |
| 65 | Identification of inorganic dyeing mordant in textiles by surface-enhanced laser-induced breakdown spectroscopy. <i>Microchemical Journal</i> , 2018, 139, 230-235.  | 4.5 | 23        |
| 66 | Elemental and mineralogical imaging of a weathered limestone rock by double-pulse micro-Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 143, 91-97.  | 2.9 | 23        |
| 67 | Mineralogical, petrographic and physical-mechanical study of Roman construction materials from the Maritime Theatre of Hadrian's Villa (Rome, Italy). <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 127, 264-276. | 5.0 | 23        |
| 68 | Novel polystyrene-based nanocomposites by phosphorene dispersion. <i>RSC Advances</i> , 2016, 6, 53777-53783.  | 3.6 | 22        |
| 69 | Exploiting Self-Absorption for Plasma Characterization in Laser-Induced Breakdown Spectroscopy Experiments: A Comparison of Two Recent Approaches. <i>Analytical Chemistry</i> , 2019, 91, 8595-8601.  | 6.5 | 22        |
| 70 | Application of Graph Theory to unsupervised classification of materials by Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 118, 40-44.   | 2.9 | 21        |
| 71 | Laser-Induced Breakdown Spectroscopy for Determination of Spectral Fundamental Parameters. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4973.   | 2.5 | 21        |
| 72 | New evidence for the intentional use of calomel as a white pigment. <i>Journal of Raman Spectroscopy</i> , 2021, 52, 15-22.  | 2.5 | 21        |

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|----|--|-----|-----------|
| 73 | The constituents of the ink from a Qumran inkwell: new prospects for provenancing the ink on the Dead Sea Scrolls. <i>Journal of Archaeological Science</i> , 2012, 39, 2956-2968.                     | 2.4 | 19        |
| 74 | Spectroscopic analysis of bones for forensic studies. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 99, 70-75.   | 2.9 | 19        |
| 75 | The Choir Books of San Giorgio Maggiore in Venice: Results of in Depth Non-Invasive Analyses. <i>Heritage</i> , 2019, 2, 1684-1701.  | 1.9 | 19        |
| 76 | The shining brightness of daylight fluorescent pigments: Raman and SERS study of a modern class of painting materials. <i>Microchemical Journal</i> , 2020, 152, 104292.                               | 4.5 | 19        |
| 77 | Reconstruction of laser-induced plasma spectral emissivity in non-axisymmetric conditions. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 888-896.                                | 2.9 | 18        |
| 78 | A multidisciplinary approach for the study and the virtual reconstruction of the ancient polychromy of Roman sarcophagi. <i>Journal of Cultural Heritage</i> , 2015, 16, 307-314.                      | 3.3 | 18        |
| 79 | Construction and comparison of 3D multi-source multi-band models for cultural heritage applications. <i>Journal of Cultural Heritage</i> , 2018, 34, 261-267.  | 3.3 | 18        |
| 80 | Aquazol as a binder for retouching paints. An evaluation through analytical pyrolysis and thermal analysis. <i>Polymer Degradation and Stability</i> , 2017, 144, 508-519.                             | 5.8 | 17        |
| 81 | Discovering "The Italian Flag" by Fernando Melani (1907-1985). <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2016, 168, 52-59.  | 3.9 | 16        |
| 82 | Analysis of Serra d'Alto figuline pottery (Matera, Italy): Characterization of the dark decorations using XRF. <i>Microchemical Journal</i> , 2018, 137, 174-180.                                      | 4.5 | 16        |
| 83 | A multi-analytical characterization of artists' carbon-based black pigments. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 138, 3287-3299.  | 3.6 | 16        |
| 84 | A new approach to non-linear multivariate calibration in laser-induced breakdown spectroscopy analysis of silicate rocks. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 166, 105804. | 2.9 | 16        |
| 85 | Measurement of the Stark Broadening of Atomic Emission Lines in Non-Optically Thin Plasmas by Laser-Induced Breakdown Spectroscopy. <i>Spectroscopy Letters</i> , 2007, 40, 643-658.                   | 1.0 | 15        |
| 86 | Enhancement of hidden patterns in paintings using statistical analysis. <i>Journal of Cultural Heritage</i> , 2013, 14, S66-S70.   | 3.3 | 15        |
| 87 | Laser-Induced Breakdown Spectroscopy analysis of the limestone Nuragic statues from Mont'e Prama site (Sardinia, Italy). <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 149, 62-70.   | 2.9 | 15        |
| 88 | Stratigraphic analysis of historical wooden samples from ancient bowed string instruments by laser induced breakdown spectroscopy. <i>Journal of Cultural Heritage</i> , 2020, 44, 275-284.            | 3.3 | 15        |
| 89 | 60 years of street art: A comparative study of the artists' materials through spectroscopic and mass spectrometric approaches. <i>Journal of Cultural Heritage</i> , 2021, 48, 129-140.                | 3.3 | 15        |
| 90 | Applications of LIBS to the Analysis of Metals. <i>Springer Series in Optical Sciences</i> , 2014, , 169-193.  | 0.7 | 15        |

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|-----|---|-----|-----------|
| 91  | Crater drilling enhancement obtained in parallel non-collinear double-pulse laser ablation. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 98, 219-225.   | 2.3 | 14        |
| 92  | Laser-induced breakdown spectroscopy application to control of the process of precious metal recovery and recycling. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012, 71-72, 123-126.  | 2.9 | 14        |
| 93  | Multi-technique study of a ceramic archaeological artifact and its content. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 100, 144-148.  | 3.9 | 13        |
| 94  | Improvement of the performances of a commercial hand-held laser-induced breakdown spectroscopy instrument for steel analysis using multiple artificial neural networks. <i>Review of Scientific Instruments</i> , 2020, 91, 073111.           | 1.3 | 13        |
| 95  | X-Ray Fluorescence Analysis of XIII–XIV Century Italian Gold Coins. <i>Journal of Archaeology</i> , 2014, 2014, 1-6.  | 0.5 | 12        |
| 96  | High-resolution three-dimensional compositional imaging by double-pulse laser-induced breakdown spectroscopy. <i>Journal of Instrumentation</i> , 2016, 11, C08002-C08002.  | 1.2 | 11        |
| 97  | Chemistry of modern paint media: The strained and collapsed painting by Alexis Harding. <i>Microchemical Journal</i> , 2020, 155, 104659.   | 4.5 | 11        |
| 98  | Laser-Induced Breakdown Spectroscopy elemental mapping of the construction material from the Smederevo Fortress (Republic of Serbia). <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2021, 181, 106219.                            | 2.9 | 11        |
| 99  | Towards a calibration-less ICP-AES method for the determination of trace elements in aqueous solutions: Double ratio plasma diagnostics combined with an internal standard. <i>Journal of Analytical Atomic Spectrometry</i> , 2009, 24, 655. | 3.0 | 10        |
| 100 | Hydrogen Balmer $\hat{\pm}$ line behavior in Laser-Induced Breakdown Spectroscopy depth scans of Au, Cu, Mn, Pb targets in air. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 557-564.                                  | 2.9 | 10        |
| 101 | X-ray fluorescence analysis on a group of coins from the ancient roman city of <i>Tridentum</i> (Trento, Italy). <i>X-Ray Spectrometry</i> , 2014, 43, 370-374.   | 1.4 | 10        |
| 102 | A multidisciplinary approach to the investigation of "La Caverna dell'Antimateria" (1958–1959) by Pinot, Gallizio. <i>Heritage Science</i> , 2014, 2, .   | 2.3 | 10        |
| 103 | Walking in the Streets of Pisa to Discover the Stones Used in the Middle Ages. <i>Geoheritage</i> , 2019, 11, 1631-1641.  | 2.8 | 10        |
| 104 | Introduction to vibrational spectroscopies. <i>ChemTexts</i> , 2021, 7, 1.  | 1.9 | 10        |
| 105 | Spectroscopic Techniques Applied to the Study of Italian Painted Neolithic Potteries. <i>Laser Chemistry</i> , 2006, 2006, 1-7.   | 0.5 | 9         |
| 106 | Determination of electron temperature temporal evolution in laser-induced plasmas through Independent Component Analysis and 3D Boltzmann plot. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 135, 48-53.                   | 2.9 | 9         |
| 107 | Multi-technique characterization of madder lakes: A comparison between non- and micro-destructive methods. <i>Journal of Cultural Heritage</i> , 2018, 33, 208-212.   | 3.3 | 9         |
| 108 | An integrated diagnostic approach to Max Ernst's painting materials in his <i>Attirement of the Bride</i> . <i>Journal of Cultural Heritage</i> , 2020, 43, 329-337.  | 3.3 | 9         |

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|-----|---|-----|-----------|
| 109 | Determination of the Stark broadening coefficients of tantalum emission lines by time-independent Extended C-sigma method. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 167, 105829.                             | 2.9 | 9         |
| 110 | Investigating double pulse nanoparticle enhanced laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 167, 105845.   | 2.9 | 9         |
| 111 | X-Ray Fluorescence Analysis and Self-Organizing Maps Classification of the Etruscan Gold Coin Collection at the Monetiere of Florence. <i>Applied Spectroscopy</i> , 2017, 71, 817-822.   | 2.2 | 8         |
| 112 | Quantitative analysis of major components of mineral particulate matter by calibration free laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 171, 105918.                      | 2.9 | 8         |
| 113 | Graph clustering and portable X-Ray Fluorescence: An application for in situ, fast and preliminary classification of transport amphoras. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 172, 105966.               | 2.9 | 8         |
| 114 | Raman spectroscopy and multivariate analysis as potential tool to follow Alzheimer's disease progression. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 4667-4675.   | 3.7 | 8         |
| 115 | Graphene thin film microextraction and nanoparticle enhancement for fast LIBS metal trace analysis in liquids. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2022, 194, 106471.   | 2.9 | 8         |
| 116 | 1/4-LIBS/1/4-Raman spectroscopic analysis of pigments in a Roman fresco. , 2001, , .  |     | 7         |
| 117 | Authors' reply to Wen et al.'s comment. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 872-875.  | 2.9 | 7         |
| 118 | The chemical-physical knowledge before the restoration: the case of "The Plague in Lucca", a masterpiece of Lorenzo Viani (1882-1936). <i>Heritage Science</i> , 2015, 3, .   | 2.3 | 7         |
| 119 | Direct analysis of anthraquinone dyed textiles by Surface Enhanced Raman Spectroscopy and Ag nanoparticles obtained by pulsed laser ablation. <i>European Physical Journal Plus</i> , 2019, 134, 1.                                 | 2.6 | 7         |
| 120 | Evaluation of Microbial Adhesion and Biofilm Formation on Nano-Structured and Nano-Coated Ortho-Prosthetic Materials by a Dynamic Model. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 1013. | 2.6 | 7         |
| 121 | Comparison of Convolutional and Conventional Artificial Neural Networks for Laser-Induced Breakdown Spectroscopy Quantitative Analysis. <i>Applied Spectroscopy</i> , 2022, 76, 959-966.  | 2.2 | 7         |
| 122 | Double-pulse laser-induced breakdown spectroscopy analysis of scales from petroleum pipelines. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 87, 188-191.   | 2.9 | 6         |
| 123 | Electroless deposited silver dendrites for SERS identification of natural dyes on laboratory-dyed and historic textiles. <i>European Physical Journal Plus</i> , 2018, 133, 1.  | 2.6 | 6         |
| 124 | Double and Multiple Pulse LIBS Techniques. <i>Springer Series in Optical Sciences</i> , 2014, , 117-141.  | 0.7 | 6         |
| 125 | Increasing resolution in chemical mapping of geomaterials: From X-ray fluorescence to laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2022, 194, 106482.                            | 2.9 | 6         |
| 126 | Provenance of marbles used for building the internal spiral staircase of the bell tower of St. Nicholas Church (Pisa, Italy). <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1.                            | 2.3 | 5         |



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|-----|---|-----|-----------|
| 127 | Analysis of the middle Neolithic trichrome pottery: Characterization of the decoration using X-Ray fluorescence and Raman spectroscopy. <i>Journal of Archaeological Science: Reports</i> , 2019, 24, 192-197.  | 0.5 | 5         |
| 128 | About the use of inverse calibration in laser-induced breakdown spectroscopy quantitative analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 170, 105917.  | 2.9 | 5         |
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