Stefano Pagnotta

List of Publications by Year
in descending order

65 papers	**1,299** citations	304743 **22** h-index	395702 **33** g-index
68 all docs	**68** docs citations	**68** times ranked	**968** citing authors

#	Article	IF	Citations
1	Applications of laser-induced breakdown spectroscopy in cultural heritage and archaeology: a critical review. Journal of Analytical Atomic Spectrometry, 2019, 34, 81-103.	3.0	118
2	Industrial applications of laser-induced breakdown spectroscopy: a review. Analytical Methods, 2020, 12, 1014-1029.	2.7	72
3	An artificial neural network approach to laser-induced breakdown spectroscopy quantitative analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 99, 52-58.	2.9	68
4	Classification of wrought aluminum alloys by Artificial Neural Networks evaluation of Laser Induced Breakdown Spectroscopy spectra from aluminum scrap samples. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 134, 52-57.	2.9	58
5	A hybrid calibration-free/artificial neural networks approach to the quantitative analysis of LIBS spectra. Applied Physics B: Lasers and Optics, 2015, 118, 353-360.	2.2	56
6	Analytical and mathematical methods for revealing hidden details in ancient manuscripts and paintings: A review. Journal of Advanced Research, 2019, 17, 31-42.	9.5	50
7	From Calibration-Free to Fundamental Parameters Analysis: A comparison of three recently proposed approaches. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 124, 40-46.	2.9	44
8	Multivariate calibration in Laser-Induced Breakdown Spectroscopy quantitative analysis: The dangers of a â€˜black boxâ€™ approach and how to avoid them. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 144, 46-54.	2.9	42
9	Shock Waves in Laser-Induced Plasmas. Atoms, 2019, 7, 57.	1.6	39
10	Extracting Time-Resolved Information from Time-Integrated Laser-Induced Breakdown Spectra. Journal of Spectroscopy, 2014, 2014, 1-5.	1.3	36
11	Fast quantitative elemental mapping of highly inhomogeneous materials by micro-Laser-Induced Breakdown Spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 146, 9-15.	2.9	36
12	Determination of Ash Content of coal by Laser-Induced Breakdown Spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 155, 123-126.	2.9	36
13	Micro-Laser-Induced Breakdown Spectroscopy (Micro-LIBS) Study on Ancient Roman Mortars. Applied Spectroscopy, 2017, 71, 721-727.	2.2	35
14	Green-synthetized silver nanoparticles for Nanoparticle-Enhanced Laser Induced Breakdown Spectroscopy (NELIBS) using a mobile instrument. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 141, 53-58.	2.9	31
15	Classification of sedimentary and igneous rocks by laser induced breakdown spectroscopy and nanoparticle-enhanced laser induced breakdown spectroscopy combined with principal component analysis and graph theory. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 158, 105622.	2.9	30
16	Application of Laser Induced Breakdown Spectroscopy to the identification of emeralds from different synthetic processes. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 102, 48-51.	2.9	29
17	Comparison of brass alloys composition by laser-induced breakdown spectroscopy and self-organizing maps. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 103-104, 70-75.	2.9	28
18	Laser-based continuous monitoring and resolution of steel grades in sequence casting machines. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 112, 1-5.	2.9	27

#	Article	IF	Citations
19	Three-dimensional compositional mapping using double-pulse micro-laser-induced breakdown spectroscopy technique. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 127, 1-6.	2.9	26
20	Archaeometric study of mortars from the Pisaâ€™s Cathedral Square (Italy). Measurement: Journal of the International Measurement Confederation, 2018, 126, 322-331.	5.0	24
21	Identification of inorganic dyeing mordant in textiles by surface-enhanced laser-induced breakdown spectroscopy. Microchemical Journal, 2018, 139, 230-235.	4.5	23
22	Elemental and mineralogical imaging of a weathered limestone rock by double-pulse micro-Laser-Induced Breakdown Spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 143, 91-97.	2.9	23
23	Mineralogical, petrographic and physical-mechanical study of Roman construction materials from the Maritime Theatre of Hadrian's Villa (Rome, Italy). Measurement: Journal of the International Measurement Confederation, 2018, 127, 264-276.	5.0	23
24	Exploiting Self-Absorption for Plasma Characterization in Laser-Induced Breakdown Spectroscopy Experiments: A Comparison of Two Recent Approaches. Analytical Chemistry, 2019, 91, 8595-8601.	6.5	22
25	Application of Graph Theory to unsupervised classification of materials by Laser-Induced Breakdown Spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 118, 40-44.	2.9	21
26	Spectroscopic analysis of bones for forensic studies. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 99, 70-75.	2.9	19
27	The shining brightness of daylight fluorescent pigments: Raman and SERS study of a modern class of painting materials. Microchemical Journal, 2020, 152, 104292.	4.5	19
28	Construction and comparison of 3D multi-source multi-band models for cultural heritage applications. Journal of Cultural Heritage, 2018, 34, 261-267.	3.3	18
29	A new approach to non-linear multivariate calibration in laser-induced breakdown spectroscopy analysis of silicate rocks. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 166, 105804.	2.9	16
30	Laser-Induced Breakdown Spectroscopy analysis of the limestone Nuragic statues from Mont'e Prama site (Sardinia, Italy). Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 149, 62-70.	2.9	15
31	Improvement of the performances of a commercial hand-held laser-induced breakdown spectroscopy instrument for steel analysis using multiple artificial neural networks. Review of Scientific Instruments, 2020, 91, 073111.	1.3	13
32	X-Ray Fluorescence Analysis of XIIâ€"XIV Century Italian Gold Coins. Journal of Archaeology, 2014, 2014, 1-6.	0.5	12
33	Effect of Marble Waste Powder as a Binder Replacement on the Mechanical Resistance of Cement Mortars. Applied Sciences (Switzerland), 2022, 12, 4481.	2.5	12
34	High-resolution three-dimensional compositional imaging by double-pulse laser-induced breakdown spectroscopy. Journal of Instrumentation, 2016, 11, C08002-C08002.	1.2	11
35	Laser-Induced Breakdown Spectroscopy elemental mapping of the construction material from the Smederevo Fortress (Republic of Serbia). Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 181, 106219.	2.9	11
36	Xâ€"ray fluorescence analysis on a group of coins from the ancient roman city of *Tridentum* (Trento, Italy). X-Ray Spectrometry, 2014, 43, 370-374.	1.4	10

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37	A multidisciplinary approach to the investigation of "La Caverna dell'Antimateria"(1958–1959) by Pinot Gallizio. Heritage Science, 2014, 2, .	2.3	10
38	Walking in the Streets of Pisa to Discover the Stones Used in the Middle Ages. Geoheritage, 2019, 11, 1631-1641.	2.8	10
39	Determination of electron temperature temporal evolution in laser-induced plasmas through Independent Component Analysis and 3D Boltzmann plot. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 135, 48-53.	2.9	9
40	Multi-technique characterization of madder lakes: A comparison between non- and micro-destructive methods. Journal of Cultural Heritage, 2018, 33, 208-212.	3.3	9
41	Investigating double pulse nanoparticle enhanced laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 167, 105845.	2.9	9
42	X-Ray Fluorescence Analysis and Self-Organizing Maps Classification of the Etruscan Gold Coin Collection at the Monetiere of Florence. Applied Spectroscopy, 2017, 71, 817-822.	2.2	8
43	Quantitative analysis of major components of mineral particulate matter by calibration free laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 171, 105918.	2.9	8
44	The chemical-physical knowledge before the restoration: the case of "The Plague in Lucca", a masterpiece of Lorenzo Viani (1882–1936). Heritage Science, 2015, 3, .	2.3	7
45	Direct analysis of anthraquinone dyed textiles by Surface Enhanced Raman Spectroscopy and Ag nanoparticles obtained by pulsed laser ablation. European Physical Journal Plus, 2019, 134, 1.	2.6	7
46	Electroless deposited silver dendrites for SERS identification of natural dyes on laboratory-dyed and historic textiles. European Physical Journal Plus, 2018, 133, 1.	2.6	6
47	Determining the composition of bronze alloys by means of high-dimensional feature selection and Artificial Neural Networks. , 2015, , .		5
48	Provenance of marbles used for building the internal spiral staircase of the bell tower of St. Nicholas Church (Pisa, Italy). Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	5
49	Analysis of the middle Neolithic trichrome pottery: Characterization of the decoration using X-Ray fluorescence and Raman spectroscopy. Journal of Archaeological Science: Reports, 2019, 24, 192-197.	0.5	5
50	Analysis of Diagnostic Images of Artworks and Feature Extraction: Design of a Methodology. Journal of Imaging, 2021, 7, 53.	3.0	5
51	Geopolymers as a potential material for preservation and restoration of Urban Build Heritage: an overview. IOP Conference Series: Earth and Environmental Science, 0, 609, 012057.	0.3	5
52	A New Infrared True-Color Approach for Visible-Infrared Multispectral Image Analysis. Journal on Computing and Cultural Heritage, 2019, 12, 1-11.	2.1	4
53	The Crystallization Effect of Sodium Sulfate on Some Italian Marbles, Calcarenites and Sandstones. Heritage, 2022, 5, 1449-1461.	1.9	4
54	Social and technological changes in the ceramic production of the Northern Levant during the LBA/IA transition: New evidence about the Sea People issue through archaeometry. Journal of Anthropological Archaeology, 2019, 56, 101087.	1.6	3

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55	Self-calibrated methods for LIBS quantitative analysis. , 2020, , 561-580.		2
56	Image analysis applied to the planning of a canvas painting restoration intervention. Ge-Conservacion, 2020, 18, 339-346.	0.2	2
57	Application of Graph Theory to the elaboration of personal genomic data for genealogical research. PeerJ Computer Science, 0, 1, e27.	4.5	2
58	Marbles from Castagneto Carducci Area (Tuscany, Italy). IOP Conference Series: Earth and Environmental Science, 2021, 906, 012122.	0.3	2
59	Smartphone application for ancient mortars identification developed by a multi-analytical approach. Journal of Archaeological Science: Reports, 2022, 43, 103433.	0.5	2
60	The Cultural Heritage of â€œBlack Stonesâ€•(Lapis Aequipondus/Martyrum) of Leopardiâ€™s Child Home (Recanati, Italy). Materials, 2022, 15, 3828.	2.9	2
61	A stochastic model of the process of sequence casting of steel, taking into account imperfect mixing. Applied Physics B: Lasers and Optics, 2019, 125, 1.	2.2	1
62	Panchina Calcarenite: A Building Material from Tuscany Coast. IOP Conference Series: Earth and Environmental Science, 0, 609, 012077.	0.3	1
63	A fast and user-friendly software for quantitative chemical analysis through XRF. IOP Conference Series: Earth and Environmental Science, 0, 609, 012058.	0.3	0
64	The Source Materials for Lime Production in the Monte Pisano Area (NW Tuscany, Italy). IOP Conference Series: Earth and Environmental Science, 0, 609, 012078.	0.3	0
65	Image Segmentation for Reflected-Light Microscopy: Some Theoretical Approaches. IOP Conference Series: Earth and Environmental Science, 2021, 906, 012121.	0.3	0