Vincent Detalle

List of Publications by Year
in descending order

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74 papers	1,686 citations	331259 21 h-index	301761 39 g-index
75 all docs	75 docs citations	75 times ranked	1485 citing authors

#	Article	IF	Citations
1	Enhanced laser-induced breakdown spectroscopy using the combination of fourth-harmonic and fundamental Nd:YAG laser pulses. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 121-135.	1.5	221
2	Experimental investigations of laser ablation efficiency of pure metals with femto, pico and nanosecond pulses. Applied Surface Science, 1999, 138-139, 311-314.	3.1	183
3	Laser-induced breakdown spectroscopy for polymer identification. Analytical and Bioanalytical Chemistry, 2011, 400, 3331-3340.	1.9	100
4	An evaluation of a commercial Ã‰chelle spectrometer with intensified charge-coupled device detector for materials analysis by laser-induced plasma spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2001, 56, 1011-1025.	1.5	96
5	Chromatic alterations of red lead pigments in artworks: a review. Phase Transitions, 2008, 81, 145-154.	0.6	82
6	Stimulated infrared thermography applied to help restoring mural paintings. NDT and E International, 2012, 49, 40-46.	1.7	59
7	An example of the complementarity of laser-induced breakdown spectroscopy and Raman microscopy for wall painting pigments analysis. Journal of Raman Spectroscopy, 2007, 38, 909-915.	1.2	51
8	Comparative study of two new commercial echelle spectrometers equipped with intensified CCD for analysis of laser-induced breakdown spectroscopy. Applied Optics, 2003, 42, 6094.	2.1	50
9	Evaluation of the standard normal variate method for Laser-Induced Breakdown Spectroscopy data treatment applied to the discrimination of painting layers. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 114, 38-45.	1.5	49
10	Study of ultrathin polyamide-6,6 films on clean copper and platinum. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 353-364.	0.9	47
11	Non-destructive testing of works of art by stimulated infrared thermography. EPJ Applied Physics, 2012, 57, 21002.	0.3	47
12	Chemometrics and Laser Induced Breakdown Spectroscopy (LIBS) Analyses for Identification of Wall Paintings Pigments. Current Analytical Chemistry, 2010, 6, 60-65.	0.6	45
13	Correlation between native bonds in a polymeric material and molecular emissions from the laser-induced plasma observed with space and time resolved imaging. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 74-75, 31-37.	1.5	43
14	Laser ablation efficiency of metal samples with UV laser nanosecond pulses. Applied Surface Science, 1999, 138-139, 302-305.	3.1	38
15	Low-coherence interferometry â€“ an advanced technique for optical metrology in industry. Insight: Non-Destructive Testing and Condition Monitoring, 2005, 47, 216-219.	0.3	36
16	Near-crater discoloration of white lead in wall paintings during laser induced breakdown spectroscopy analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1590-1596.	1.5	32
17	Dual-wavelength differential spectroscopic imaging for diagnostics of laser-induced plasma. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 74-75, 11-17.	1.5	30
18	Analysis of heritage stones and model wall paintings by pulsed laser excitation of Raman, laser-induced fluorescence and laser-induced breakdown spectroscopy signals with a hybrid system. Journal of Cultural Heritage, 2018, 32, 1-8.	1.5	29

#	Article	IF	Citations
19	Influence of Er:YAG and Nd:YAG wavelengths on laser-induced breakdown spectroscopy measurements under air or helium atmosphere. Applied Optics, 2003, 42, 5971.	2.1	28
20	Cultural Heritage Applications of LIBS. Springer Series in Optical Sciences, 2014, , 531-554.	0.5	27
21	Toward a multimodal fusion of layered cultural object images: complementarity of optical coherence tomography and terahertz time-domain imaging in the heritage field. Applied Optics, 2019, 58, 1281.	0.9	22
22	Trace element quantification of lead based roof sheets of historical monuments by Laser Induced Breakdown Spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 103-104, 34-42.	1.5	21
23	The assets of laser-induced breakdown spectroscopy (LIBS) for the future of heritage science. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 191, 106407.	1.5	21
24	<title>Laser ablation efficiency of pure metals with femtosecond, picosecond, and nanosecond pulses</title>. , 1998, 3343, 1049.		19
25	Characterization of defects situated in a fresco by stimulated infrared thermography. EPJ Applied Physics, 2012, 57, 11002.	0.3	19
26	Non-destructive Testing by Infrared Thermography Under Random Excitation and ARMA Analysis. International Journal of Thermophysics, 2012, 33, 2011-2015.	1.0	18
27	Investigation of laser plasma for solid element composition microanalysis. Applied Surface Science, 1999, 138-139, 299-301.	3.1	15
28	Technical study of Germollesâ€™ wall paintings: the inputof imaging technique. Virtual Archaeology Review, 2016, 7, 1.	0.8	15
29	Stimulated infrared thermography applied to thermophysical characterization of cultural heritage mural paintings. EPJ Applied Physics, 2012, 60, 21003.	0.3	14
30	Characterization of an Inclusion of Plastazote Located in an Academic Fresco by Photothermal Thermography. International Journal of Thermophysics, 2013, 34, 1633-1637.	1.0	14
31	Calcium alkoxides as alternative consolidants for wall paintings: Evaluation of their performance in laboratory and on site, on model and original samples, in comparison to conventional products. Journal of Cultural Heritage, 2018, 29, 54-66.	1.5	14
32	Influence of ns-laser wavelength in laser-induced breakdown spectroscopy for discrimination of painting techniques. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 134, 81-90.	1.5	13
33	Novel approach of signal normalization for depth profile of cultural heritage materials. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 127, 28-33.	1.5	13
34	Laser-induced emission, fluorescence and Raman hybrid setup: A versatile instrument to analyze materials from cultural heritage. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 140, 44-53.	1.5	13
35	Photothermal Thermography Applied to the Non-destructive Testing of Different Types of Works of Art. International Journal of Thermophysics, 2012, 33, 1996-2000.	1.0	12
36	Non destructive testing in situ, of works of art by stimulated infra-red thermography. Journal of Physics: Conference Series, 2010, 214, 012068.	0.3	11

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37	Improvement of the Non-Destructive Testing of Heritage Mural Paintings Using Stimulated Infrared Thermography and Frequency Image Processing. Journal of Imaging, 2019, 5, 72.	1.7	10
38	A non-invasive multi-technique investigation of Banqueting House Whitehall Rubens ceiling paintings. Microchemical Journal, 2020, 156, 104797.	2.3	10
39	Non-destructive Testing of Forged Metallic Materials by Active Infrared Thermography. International Journal of Thermophysics, 2012, 33, 1982.	1.0	9
40	Contribution to the improvement of heritage mural painting non-destructive testing by stimulated infrared thermography. EPJ Applied Physics, 2013, 64, 11002.	0.3	9
41	Terahertz applications in cultural heritage: case studies. Proceedings of SPIE, 2013, , .	0.8	8
42	Terahertz analysis of stratified wall plaster at buildings of cultural importance across Europe. , 2013, , .		8
43	Cyclododecane as a Contrast Improving Substance for the Terahertz Imaging of Artworks. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 1005-1011.	2.0	6
44	The first evaluation of diagenesis rate of ancient bones by laser-induced breakdown spectroscopy in archaeological context prior to radiocarbon dating. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 158, 105606.	1.5	6
45	Integrating LIBS LIF Raman into a single multi-spectroscopic mobile device for in situ cultural heritage analysis. , 2019, , .		6
46	Infra-red photothermal thermography: A tool of assistance for the restoration of murals paintings?. , 2006, , .		6
47	<title>Experimental investigation of laser ablation efficiency of metals</title>. , 1998, , .		5
48	Approach of the measurement of thermal diffusivity of mural paintings by front face photothermal radiometry. Journal of Physics: Conference Series, 2010, 214, 012094.	0.3	5
49	Aesthetic compatibility assessment of consolidants for wall paintings by means of multivariate analysis of colorimetric data. Chemistry Central Journal, 2018, 12, 98.	2.6	5
50	A Combined Non-Invasive Approach to the Study of A Mosaic Model: First Laboratory Experimental Results. Journal of Imaging, 2019, 5, 58.	1.7	5
51	Impact of laser-induced breakdown spectroscopy implementation for the quantification of carbon content distribution in archaeological ferrous metals. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 172, 105964.	1.5	4
52	<title>Influence of laser pulse duration on the ablation efficiency of metals</title>. , 1998, , .		3
53	Rear-Face Photothermal Analysis Under Random Excitation and Parametric Analysis: Application to Thermal-Diffusivity Measurement. International Journal of Thermophysics, 2012, 33, 1976-1981.	1.0	3
54	Case study of Sainte-Marie Chapel, Fontaine Chaalis (France): complementarity of different optical techniques. Proceedings of SPIE, 2015, , .	0.8	3

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55	LIBS-LIF-Raman: a new tool for the future E-RIHS. , 2017, , .		3
56	Insights into the Blanching of Water-Damaged Varnish by Means of Spectral-Domain Optical Coherence Tomography. Studies in Conservation, 2020, , 1-10.	0.6	3
57	Non destructive testing of works of art by terahertz analysis. EPJ Applied Physics, 2013, 64, 21001.	0.3	3
58	Nd:YAG vs Er:YAG : a comparative study of laser varnish removal on easel paintings. , 2019, , .		3
59	Continuous wave laser thermal restoration of oxidized lead-based pigments in mural paintings. Applied Physics B: Lasers and Optics, 2021, 127, 1.	1.1	3
60	Influence of the Electronic Structure of the Metal at the Polymer/Metal Interface: A Tentative Interpretation on the Basis of Lewis Acid-Base Reactions. Journal of Adhesion, 1998, 66, 275-287.	1.8	2
61	Periodic variations of plasma optical emission during repetitive pulsed-laser irradiation of aluminum in ambient air. Applied Physics A: Materials Science and Processing, 2004, 79, 1361-1364.	1.1	2
62	Terahertz and multispectral imaging of a Tanda painting. Proceedings of SPIE, 2015, , .	0.8	2
63	Laser-induced breakdown spectroscopy: A new tool for materials analysis. , 2003, , .		1
64	Terahertz pulse investigation of Paleolithic wall etchings. , 2014, , .		1
65	Combination of interferometry and thermography data for cultural heritage structural diagnostic research. Proceedings of SPIE, 2017, , .	0.8	1
66	Mapping of Defect Structural Micro-morphology in the Documentation of Conservation Approaches. Lecture Notes in Computer Science, 2012, , 86-96.	1.0	1
67	Terahertz time domain imaging and optical coherence tomography for the subsurface noninvasive inspection of a 21st dynasty Egyptian coffin. , 2019, , .		1
68	Comparative study on quantitative carbon content mapping in archaeological ferrous metals with laser-induced plasma spectroscopy (LIBS) and nuclear reaction analysis (NRA) for 3D representation by LIBS. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 194, 106454.	1.5	1
69	New spectral detectors for LIBS. , 0, , 556-584.		0
70	Application of laser in conservation and restoration of historical building. Proceedings of SPIE, 2010, , .	0.8	0
71	Cyclododecane as a reversible contrast enhancer for the terahertz imaging of frescos. , 2015, , .		0
72	Detecting capacity of THz method applied to art painting. , 2021, , .		0

#	Article	IF	Citations
73	Stimulated infrared thermography application to the conservation of heritage wall paintings: interest of a material and software combined approach. , 2019, , .		0
74	Follow-up of restoration of works of art of the patrimony by infrared thermography. , 2019, , .		0