

# Demetrios Anglos

## List of Publications by Year in descending order

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130  
papers

6,087  
citations

66343

42  
h-index

74163

75  
g-index

135  
all docs

135  
docs citations

135  
times ranked

5815  
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface Functionalized Carbogenic Quantum Dots. <i>Small</i> , 2008, 4, 455-458.	10.0	796
2	Photoluminescent Carbogenic Dots. <i>Chemistry of Materials</i> , 2008, 20, 4539-4541.	6.7	571
3	Laser-induced breakdown spectroscopy (LIBS) in archaeological science—applications and prospects. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 749-760.	3.7	198
4	Laser Diagnostics of Painted Artworks: Laser-Induced Breakdown Spectroscopy in Pigment Identification. <i>Applied Spectroscopy</i> , 1997, 51, 1025-1030.	2.2	191
5	Pigment identification in paintings employing laser induced breakdown spectroscopy and Raman microscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2001, 56, 905-913.	2.9	127
6	The application of LIBS for the analysis of archaeological ceramic and metal artifacts. <i>Applied Surface Science</i> , 2002, 197-198, 156-163.	6.1	116
7	Laser induced breakdown spectroscopy and hyper-spectral imaging analysis of pigments on an illuminated manuscript. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2001, 56, 2337-2346.	2.9	115
8	Pigment Identification in Painted Artworks: A Dual Analytical Approach Employing Laser-Induced Breakdown Spectroscopy and Raman Microscopy. <i>Applied Spectroscopy</i> , 2000, 54, 463-469.	2.2	114
9	Random laser action in organic–inorganic nanocomposites. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2004, 21, 208.	2.1	113
10	Functionalized ZnO Nanoparticles with Liquidlike Behavior and their Photoluminescence Properties. <i>Small</i> , 2006, 2, 513-516.	10.0	110
11	Mitigation strategies for radiation damage in the analysis of ancient materials. <i>TrAC - Trends in Analytical Chemistry</i> , 2015, 66, 128-145.	11.4	101
12	Ultraviolet laser filaments for remote laser-induced breakdown spectroscopy (LIBS) analysis: applications in cultural heritage monitoring. <i>Optics Letters</i> , 2006, 31, 1139.	3.3	98
13	Laser spectroscopies for elemental and molecular analysis in art and archaeology. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 106, 339-361.	2.3	92
14	Compositional characterization of encrustation on marble with laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2001, 56, 887-903.	2.9	91
15	Laser-Induced Fluorescence in Artwork Diagnostics: An Application in Pigment Analysis. <i>Applied Spectroscopy</i> , 1996, 50, 1331-1334.	2.2	88
16	Excimer laser restoration of painted artworks: procedures, mechanisms and effects. <i>Applied Surface Science</i> , 1998, 127-129, 738-745.	6.1	85
17	Raman Spectra of Proteinaceous Materials Used in Paintings: A Multivariate Analytical Approach for Classification and Identification. <i>Analytical Chemistry</i> , 2007, 79, 6143-6151.	6.5	84
18	Nanosecond and femtosecond Laser Induced Breakdown Spectroscopic analysis of bronze alloys. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 504-511.	2.9	82

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19	Photoluminescence of hexagonal boron nitride: Effect of surface oxidation under UV-laser irradiation. <i>Journal of Luminescence</i> , 2007, 127, 595-600.	3.1	79
20	Double pulse laser-induced breakdown spectroscopy with femtosecond laser pulses. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 1006-1010.	2.9	79
21	Spectroscopic analysis using a hybrid LIBS-Raman system. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 83, 537-541.	2.3	78
22	An ethanol vapor detection probe based on a ZnO nanorod coated optical fiber long period grating. <i>Optics Express</i> , 2012, 20, 8472.	3.4	78
23	Mechanisms of the laser plume expansion during the ablation of LiMn2O4. <i>Journal of Applied Physics</i> , 2009, 105, .	2.5	75
24	Studying pigments on painted plaster in Minoan, Roman and Early Byzantine Crete. A multi-analytical technique approach. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 1413-1432.	3.7	75
25	Analysis of pigments in polychromes by use of laser induced breakdown spectroscopy and Raman microscopy. <i>Journal of Molecular Structure</i> , 2000, 550-551, 191-198.	3.6	68
26	Plume emissions accompanying 248 nm laser ablation of graphite in vacuum: Effects of pulse duration. <i>Journal of Applied Physics</i> , 2002, 91, 6162-6172.	2.5	62
27	Pigment analysis in Bronze Age Aegean and Eastern Mediterranean painted plaster by laser-induced breakdown spectroscopy (LIBS). <i>Journal of Archaeological Science</i> , 2006, 33, 1095-1104.	2.4	59
28	Femtosecond and picosecond ultraviolet laser filaments in air: experiments and simulations. <i>Optics Communications</i> , 2001, 197, 131-143.	2.1	58
29	In situ interferometric depth and topography monitoring in LIBS elemental profiling of multi-layer structures. <i>Journal of Analytical Atomic Spectrometry</i> , 2004, 19, 483.	3.0	58
30	Study of Aging in Oil Paintings by 1D and 2D NMR Spectroscopy. <i>Analytical Chemistry</i> , 2004, 76, 4929-4936.	6.5	58
31	Long-range electronic interactions in peptides: the remote heavy atom effect. <i>Journal of the American Chemical Society</i> , 1990, 112, 9410-9411.	13.7	56
32	Optical emission studies of plasma induced by single and double femtosecond laser pulses. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009, 64, 950-960.	2.9	56
33	Measuring the thickness of protective coatings on historic metal objects using nanosecond and femtosecond laser induced breakdown spectroscopy depth profiling. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 1163-1171.	2.9	55
34	Dynamics of confined plumes during short and ultrashort pulsed laser ablation of graphite. <i>Physical Review B</i> , 2005, 72, .	3.2	55
35	Synthesis of fluorescent carbon dots by a microwave heating process: structural characterization and cell imaging applications. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	1.9	53
36	Analysis of protein-based binding media found in paintings using laser induced fluorescence spectroscopy. <i>Analytica Chimica Acta</i> , 2006, 573-574, 341-346.	5.4	52

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37	Laser-Induced Breakdown Spectroscopy for the Analysis of 150-Year-Old Daguerreotypes. <i>Applied Spectroscopy</i> , 2002, 56, 423-432.	2.2	51
38	Characterization of Iron age pottery from eastern Turkey by laser- induced breakdown spectroscopy (LIBS). <i>Journal of Archaeological Science</i> , 2008, 35, 2486-2494.	2.4	50
39	The analysis of naturally and artificially aged protein-based paint media using Raman spectroscopy combined with Principal Component Analysis. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 993-1000.	2.5	49
40	A compact and portable laser-induced breakdown spectroscopy instrument for single and double pulse applications. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 1091-1096.	2.9	43
41	Effect of experimental conditions on surface hardness measurements of calcified tissues via LIBS. <i>Applied Physics B: Lasers and Optics</i> , 2009, 94, 141-147.	2.2	43
42	Time-resolved fluorescence spectroscopy and imaging of proteinaceous binders used in paintings. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 388, 1897-1905.	3.7	42
43	Photochemical effects in the UV laser ablation of polymers: Implications for laser restoration of painted artworks. <i>Applied Physics A: Materials Science and Processing</i> , 1999, 69, 363-367.	2.3	40
44	Growth of ZnO thin films by ultraviolet pulsed-laser ablation: Study of plume dynamics. <i>Journal of Applied Physics</i> , 2005, 98, 123301.	2.5	39
45	Micro-Raman and fluorescence spectroscopy for the assessment of the effects of the exposure to light on films of egg white and egg yolk. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 307-313.	2.5	37
46	An Optimization of Parameters for Application of a Laser-Induced Breakdown Spectroscopy Microprobe for the Analysis of Works of Art. <i>Applied Spectroscopy</i> , 2008, 62, 1242-1249.	2.2	36
47	Combined in situ micro-XRF, LIBS and SEM-EDS analysis of base metal and corrosion products for Islamic copper alloyed artefacts from Umm Qais museum, Jordan. <i>Journal of Cultural Heritage</i> , 2013, 14, 261-269.	3.3	35
48	Depth-Resolved Multilayer Pigment Identification in Paintings: Combined Use of Laser-Induced Breakdown Spectroscopy (LIBS) and Optical Coherence Tomography (OCT). <i>Applied Spectroscopy</i> , 2013, 67, 960-972.	2.2	34
49	The influence of visible light and inorganic pigments on fluorescence excitation emission spectra of egg-, casein- and collagen-based painting media. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 92, 69-76.	2.3	32
50	Photoinduced electron transfer and long-lived charge separation in rigid peptide architectures. <i>Journal of the Chemical Society Chemical Communications</i> , 1994, , 213.	2.0	29
51	Investigation of the laserlike behavior of polymeric scattering gain media under subpicosecond laser excitation. <i>Applied Optics</i> , 1999, 38, 6087.	2.1	29
52	Single-shot temporal coherence measurements of random lasing media. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2007, 24, 31.	2.1	29
53	A multi-technique approach, based on mobile/portable laser instruments, for the in situ pigment characterization of stone sculptures on the island of Crete dating from Venetian and Ottoman period. <i>Heritage Science</i> , 2016, 4, .	2.3	29
54	Portable laser-induced breakdown spectroscopy/diffuse reflectance hybrid spectrometer for analysis of inorganic pigments. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 137, 93-100.	2.9	28

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55	Cultural Heritage Applications of LIBS. Springer Series in Optical Sciences, 2014, , 531-554.	0.7	27
56	Studies of organic paint binders by NMR spectroscopy. Applied Physics A: Materials Science and Processing, 2006, 83, 705-708.	2.3	26
57	Fluorescence quenching in a strongly helical peptide series: The role of noncovalent pathways in modulating electronic interactions. Biochemistry, 1993, 32, 3067-3076.	2.5	25
58	Laser characterization and cleaning of 19th century daguerreotypes II. Journal of Cultural Heritage, 2003, 4, 134-139.	3.3	25
59	Random lasing from surface modified films of zinc oxide nanoparticles. Applied Surface Science, 2005, 247, 18-24.	6.1	25
60	Elemental mapping of Mg/Ca intensity ratios in marine mollusc shells using laser-induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2017, 32, 1467-1472.	3.0	25
61	Spin-forbidden excitation transfer and heavy-atom induced intersystem crossing in linear and cyclic peptides. The Journal of Physical Chemistry, 1993, 97, 3956-3967.	2.9	22
62	Laser-induced breakdown spectroscopy and Raman microscopy for analysis of pigments in polychromes. Journal of Cultural Heritage, 2000, 1, S297-S302.	3.3	22
63	Microwave heating of arginine yields highly fluorescent nanoparticles. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	22
64	ZnO@PDMS Nanohybrids: A Novel Optical Sensing Platform for Ethanol Vapor Detection at Room Temperature. Journal of Physical Chemistry C, 2015, 119, 623-631.	3.1	22
65	Reaction of graphite fluoride with NaOH@KOH eutectic. Journal of Fluorine Chemistry, 2008, 129, 720-724.	1.7	21
66	Adapting and testing a portable Raman spectrometer for SERS analysis of amino acids and small peptides. Journal of Molecular Structure, 2013, 1044, 121-127.	3.6	21
67	Corneal Hydration Monitored by Laser-induced Breakdown Spectroscopy. Journal of Refractive Surgery, 1998, 14, 655-660.	2.3	21
68	Product Formation in the Laser Irradiation of Doped Poly(methyl methacrylate) at 248 nm: Implications for Chemical Effects in UV Ablation. Journal of Physical Chemistry B, 2004, 108, 7052-7060.	2.6	19
69	Photons in the service of our past: lasers in the preservation of cultural heritage. Contemporary Physics, 2008, 49, 1-27.	1.8	19
70	Friedel-Crafts Approach to Electron Deficient Cyclic $\beta$ -Amino Acids. Tetrahedron Letters, 1992, 33, 1569-1572.	1.4	18
71	A comparative study of the photochemical modifications effected in the UV laser ablation of doped polymer substrates. Applied Surface Science, 2000, 154-155, 89-94.	6.1	18
72	Assisted Interpretation of Laser-Induced Fluorescence Spectra of Egg-Based Binding Media Using Total Emission Fluorescence Spectroscopy. Laser Chemistry, 2006, 2006, 1-5.	0.5	18

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73	Extensive elemental mapping unlocks Mg/Ca ratios as climate proxy in seasonal records of Mediterranean limpets. <i>Scientific Reports</i> , 2019, 9, 3698.	3.3	18
74	Femtosecond pulse shaping for phase and morphology control in PLD: Synthesis of cubic SiC. <i>Applied Surface Science</i> , 2006, 252, 4857-4862.	6.1	16
75	Pyrolytic formation and photoluminescence properties of a new layered carbonaceous material with graphite oxide-mimicking characteristics. <i>Carbon</i> , 2009, 47, 519-526.	10.3	16
76	Lasers in the Analysis of Cultural Heritage Materials. <i>Journal of Nano Research</i> , 2009, 8, 47-60.	0.8	16
77	Femtosecond UV laser non-ablative surface structuring of ZnO crystal: impact on exciton photoluminescence. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2010, 27, 531.	2.1	16
78	Synthesis of a novel constrained Î±-amino acid with quinoxaline side chain: 7-amino-6,7-dihydro-8H-cyclopenta[g]quinoxaline-7-carboxylic acid. <i>Tetrahedron Letters</i> , 1997, 38, 9031-9034.	1.4	14
79	Analysis of Protein-Based Media Commonly Found in Paintings Using Synchronous Fluorescence Spectroscopy Combined with Multivariate Statistical Analysis. <i>Applied Spectroscopy</i> , 2008, 62, 481-489.	2.2	14
80	Effect of ambient conditions on ultraviolet femtosecond pulse laser induced breakdown spectra. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012, 74-75, 18-23.	2.9	14
81	Egg yolk identification and aging in mixed paint binding media by NMR spectroscopy. <i>Magnetic Resonance in Chemistry</i> , 2015, 53, 22-26.	1.9	14
82	UV laser ablation of halonaphthalene-doped PMMA: chemical modifications above versus below the ablation threshold. <i>Applied Physics A: Materials Science and Processing</i> , 1999, 69, S285-S289.	2.3	13
83	A comparative examination of photoproducts formed in the 248 and 193 nm ablation of doped PMMA. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001, 145, 229-236.	3.9	13
84	Comparative study of laser induced breakdown spectroscopy and mass spectrometry for the analysis of cultural heritage materials. <i>Journal of Molecular Structure</i> , 2013, 1044, 160-166.	3.6	12
85	Materials analyses of pyrotechnological objects from LBA Tiryns, Greece, by means of Laser-Induced Breakdown Spectroscopy (LIBS): Results and a critical assessment of the method. <i>Journal of Archaeological Science</i> , 2017, 83, 49-61.	2.4	12
86	Surface structuring of rutile TiO <sub>2</sub> (100) and (001) single crystals with femtosecond pulsed laser irradiation. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2018, 35, 2600.	2.1	12
87	Assessing the type and quality of high voltage composite outdoor insulators by remote laser-induced breakdown spectroscopy analysis: A feasibility study. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020, 165, 105768.	2.9	12
88	Laser Cleaning and Spectroscopy: A Synergistic Approach in the Conservation of a Modern Painting. <i>Laser Chemistry</i> , 2006, 2006, 1-5.	0.5	11
89	Nanosecond and femtosecond ablation of La <sub>0.6</sub> Ca <sub>0.4</sub> CoO <sub>3</sub> : a comparison between plume dynamics and composition of the films. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 105, 167-176.	2.3	11
90	Examination of chemical and structural modifications in the UV ablation of polymers. <i>Applied Surface Science</i> , 2002, 197-198, 757-763.	6.1	10

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91	Surface modification of monocrystalline zinc oxide induced by high-density electronic excitation. Journal of Applied Physics, 2011, 110, .	2.5	10
92	Carbon-dot organic surface modifier analysis by solution-state NMR spectroscopy. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	10
93	Characterization of organic photovoltaic devices using femtosecond laser induced breakdown spectroscopy. Applied Surface Science, 2017, 418, 542-547.	6.1	10
94	Determining optimum irradiation conditions for the analysis of vermilion by Raman spectroscopy. European Physical Journal Plus, 2021, 136, 1.	2.6	10
95	Dynamics of dopant product formation in the nanosecond irradiation of doped PMMA at 248 and 193 nm: Temporal evolution of temperature and viscosity. Chemical Physics Letters, 2006, 418, 317-322.	2.6	9
96	Random lasing action from ZnO-silica nanohybrids. Journal of Optics (United Kingdom), 2010, 12, 024006.	2.2	9
97	The potential use of plume imaging for real-time monitoring of laser ablation cleaning of stonework. Applied Physics B: Lasers and Optics, 2011, 105, 485-492.	2.2	9
98	Chemical analysis of industrial scale deposits by combined use of correlation coefficients with emission line detection of laser induced breakdown spectroscopy spectra. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2013, 87, 86-91.	2.9	9
99	Surface Enhanced Raman and 2D-Fluorescence spectroscopy for the investigation of amino acids and egg proteins. Microchemical Journal, 2016, 126, 230-236.	4.5	9
100	Laser technology in art conservation. AIP Conference Proceedings, 1997, , .	0.4	8
101	Analysis of Archaeological Objects with LMntI, a New Transportable LIBS Instrument. Springer Proceedings in Physics, 2005, , 443-449.	0.2	8
102	Laser Induced Breakdown Spectroscopy in the Analysis of Pigments in Painted Artworks. A Database of Pigments and Spectra. , 2000, , 163-168.		8
103	Deposition, evaluation and control of 4H and 6H SiC epitaxial layers for device applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 80, 332-336.	3.5	6
104	Picosecond laser structuration under high pressures: Observation of boron nitride nanorods. Journal of Applied Physics, 2008, 104, .	2.5	6
105	Effect of laser polarization and crystalline orientation on ZnO surface nanostructuring in the regime of high-density electronic excitation. Journal of the Optical Society of America B: Optical Physics, 2014, 31, C44.	2.1	6
106	Shedding light on the past: optical technologies applied to cultural heritage. Heritage Science, 2017, 5, .	2.3	5
107	Laser-induced breakdown spectroscopy in heritage science. Physical Sciences Reviews, 2019, 4, .	0.8	5
108	Pathways control in modification of solid surfaces induced by temporarily separated femtosecond laser pulses. Applied Surface Science, 2021, 566, 150611.	6.1	5



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109	Random Lasers Based on Organic-Inorganic Hybrids. Materials Research Society Symposia Proceedings, 2002, 726, .	0.1	4
110	Laser and Material Parameter Dependence of the Chemical Modifications in the UV Laser Processing of Model Polymeric Solids. Laser Chemistry, 2002, 20, 1-21.	0.5	4
111	Insulators' pollution problem: Experience from the coastal transmission system of Crete. , 2017, , .		4
112	Low Energy Pulsed Laser Excitation in UV Enhances the Gas Sensing Capacity of Photoluminescent ZnO Nanohybrids. Sensors, 2019, 19, 5490.	3.8	4
113	Expansion velocities of 0.5Âps KrF excimer laser induced plasma by Doppler-shift analysis of pump and probe measurements. Applied Physics A: Materials Science and Processing, 2004, 79, 1287-1290.	2.3	3
114	A new compact laser source for portable LIBS applications. Proceedings of SPIE, 2008, , .	0.8	3
115	Modification of ZnO thin films induced by high-density electronic excitation of femtosecond KrF laser. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1351.	2.1	3
116	Application of laser-induced breakdown spectroscopy and neural networks on archaeological human bones for the discrimination of distinct individuals. Journal of Archaeological Science: Reports, 2021, 35, 102769.	0.5	3
117	Laser-induced fluorescence as a non-invasive tool to monitor laser-assisted thinning of aged varnish layers on paintings: fundamental issues and critical thresholds. European Physical Journal Plus, 2021, 136, 1.	2.6	3
118	THE HEIGHT OF DENIER TOURNOIS MINTING IN GREECE (1289â€“1313) ACCORDING TO NEW ARCHAEOLOGICAL DATA. Annual of the British School at Athens, 2017, 112, 267-307.	0.5	2
119	Materials analyses of stone artifacts from the EBA to MBA Minoan Tholos tomb P at Porti, Greece (Crete), by means of Raman spectroscopy: Results and a critical assessment of the method. Journal of Archaeological Science: Reports, 2020, 32, 102436.	0.5	2
120	A Parametric Linear Correlation Method for the Analysis of LIBS Spectral Data. , 2007, , 377-382.		2
121	Corneal hydration monitored by laser-induced breakdown spectroscopy. Journal of Refractive Surgery, 1998, 14, 655-60.	2.3	2
122	Longitudinal coherence of organic-based microcavity lasers. Optics Express, 2008, 16, 10384.	3.4	1
123	Laser-Like Emission From Highly Scattering ZnO Nanoparticle Films. , 2009, , .		1
124	Non-destructive and microanalytical techniques in art and cultural heritage (Technart 2009). Analytical and Bioanalytical Chemistry, 2009, 395, 1947-1948.	3.7	1
125	Long period optical fiber grating outcladding overlaid sensors: A versatile photonic platform for health and bio applications. , 2011, , .		1
126	Molecular Optical Rails Based on Aib. , 1997, , 503-516.		1



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127	Random laser action in ZnO nanohybrids. , 2007, , .		0
128	Elemental and molecular analysis of metal containing biomolecules using laser induced breakdown spectroscopy and sonic spray ionization mass spectrometry: A step towards full integration and simultaneous analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 126, 103-109.	2.9	0
129	4. Laser-induced breakdown spectroscopy in heritage science. , 2020, , 77-98.		0
130	Open-air Laser-induced Breakdown Spectroscopy (LIBS). RSC Detection Science, 2021, , 45-74.	0.0	0