

Josef Kaiser

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

233
papers

3,785
citations

34
h-index

49
g-index

263
ext. papers

4,652
ext. citations

4.1
avg, IF

5.47
L-index

#	Paper	IF	Citations
233	Application of laser-induced breakdown spectroscopy to in situ analysis of liquid samples. <i>Optical Engineering</i> , 2000 , 39, 2248	1.1	176
232	Trace elemental analysis by laser-induced breakdown spectroscopy Biological applications. <i>Surface Science Reports</i> , 2012 , 67, 233-243	12.9	121
231	Mapping of lead, magnesium and copper accumulation in plant tissues by laser-induced breakdown spectroscopy and laser-ablation inductively coupled plasma mass spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009 , 64, 67-73	3.1	120
230	On the utilization of principal component analysis in laser-induced breakdown spectroscopy data analysis, a review. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018 , 148, 65-82	3.1	93
229	Quantitative laser-induced breakdown spectroscopy analysis of calcified tissue samples. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2001 , 56, 865-875	3.1	88
228	The SYRMEP Beamline of Elettra: Clinical Mammography and Bio-medical Applications 2010 ,		72
227	Monitoring of the heavy-metal hyperaccumulation in vegetal tissues by X-ray radiography and by femto-second laser induced breakdown spectroscopy. <i>Microscopy Research and Technique</i> , 2007 , 70, 147-153	2.8	72
226	Investigation of heavy-metal accumulation in selected plant samples using laser induced breakdown spectroscopy and laser ablation inductively coupled plasma mass spectrometry. <i>Applied Physics A: Materials Science and Processing</i> , 2008 , 93, 917-922	2.6	63
225	Femtosecond laser spectrochemical analysis of plant samples. <i>Laser Physics Letters</i> , 2006 , 3, 21-25	1.5	58
224	Influence of Scanning Strategies on Processing of Aluminum Alloy EN AW 2618 Using Selective Laser Melting. <i>Materials</i> , 2018 , 11,	3.5	56
223	Utilization of laser induced breakdown spectroscopy for investigation of the metal accumulation in vegetal tissues. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007 , 62, 1597-1605	3.1	56
222	Backbone assignments in solid-state proteins using J-based 3D heteronuclear correlation spectroscopy. <i>Journal of the American Chemical Society</i> , 2007 , 129, 10650-1	16.4	55
221	Superficial cells are self-renewing chondrocyte progenitors, which form the articular cartilage in juvenile mice. <i>FASEB Journal</i> , 2017 , 31, 1067-1084	0.9	54
220	Modern micro and nanoparticle-based imaging techniques. <i>Sensors</i> , 2012 , 12, 14792-820	3.8	52
219	Multi-instrumental Analysis of Tissues of Sunflower Plants Treated with Silver(I) Ions - Plants as Bioindicators of Environmental Pollution. <i>Sensors</i> , 2008 , 8, 445-463	3.8	51
218	Mapping of different structures on large area of granite sample using laser-ablation based analytical techniques, an exploratory study. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008 , 63, 1139-1144	3.1	51
217	Quantitative analysis of trace metal accumulation in teeth using laser-induced breakdown spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , 1999 , 69, S179-S182	2.6	51

216	Fast identification of biominerals by means of stand-off laser-induced breakdown spectroscopy using linear discriminant analysis and artificial neural networks. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012 , 73, 1-6	3.1	50
215	Impact of Laser-Induced Breakdown Spectroscopy data normalization on multivariate classification accuracy. <i>Journal of Analytical Atomic Spectrometry</i> , 2017 , 32, 277-288	3.7	48
214	Algal biomass analysis by laser-based analytical techniques--a review. <i>Sensors</i> , 2014 , 14, 17725-52	3.8	48
213	Primary structure of and studies on Acanthamoeba actophorin. <i>Biochemistry</i> , 1993 , 32, 8525-33	3.2	48
212	Laser-induced breakdown spectroscopy for in situ qualitative and quantitative analysis of mineral ores. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014 , 101, 155-163	3.1	46
211	Comparative investigation of toxicity and bioaccumulation of Cd-based quantum dots and Cd salt in freshwater plant Lemna minor L. <i>Ecotoxicology and Environmental Safety</i> , 2018 , 147, 334-341	7	43
210	Multivariate approach to the chemical mapping of uranium in sandstone-hosted uranium ores analyzed using double pulse Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016 , 123, 143-149	3.1	42
209	Analysis of neural crest-derived clones reveals novel aspects of facial development. <i>Science Advances</i> , 2016 , 2, e1600060	14.3	42
208	Mapping of the metal intake in plants by large-field X-ray microradiography and preliminary feasibility studies in microtomography. <i>European Physical Journal D</i> , 2005 , 32, 113-118	1.3	42
207	Comparative study on fast classification of brick samples by combination of principal component analysis and linear discriminant analysis using stand-off and table-top laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014 , 101, 191-199	3.1	40
206	Short-term assessment of cadmium toxicity and uptake from different types of Cd-based Quantum Dots in the model plant Allium cepa L. <i>Ecotoxicology and Environmental Safety</i> , 2018 , 153, 23-31	7	37
205	The use of zinc and iron emission lines in the depth profile analysis of zinc-coated steel. <i>Applied Surface Science</i> , 2007 , 253, 3834-3842	6.7	37
204	Finite element analysis of dental implant loading on atrophic and non-atrophic cancellous and cortical mandibular bone - a feasibility study. <i>Journal of Biomechanics</i> , 2014 , 47, 3830-6	2.9	35
203	Sunflower Plants as Bioindicators of Environmental Pollution with Lead (II) Ions. <i>Sensors</i> , 2009 , 9, 5040-538	3.8	35
202	Capillary discharge soft X-ray lasng in Ne-like Ar pumped by long current pulses. <i>European Physical Journal D</i> , 2002 , 19, 73-77	1.3	35
201	Micro finite element analysis of dental implants under different loading conditions. <i>Computers in Biology and Medicine</i> , 2018 , 96, 157-165	7	34
200	Unique morphogenetic signatures define mammalian neck muscles and associated connective tissues. <i>ELife</i> , 2018 , 7,	8.9	34
199	Combination of laser-induced breakdown spectroscopy and Raman spectroscopy for multivariate classification of bacteria. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018 , 139, 6-12	3.1	34

198	Accelerated hardening of nanotextured 3D-plotted self-setting calcium phosphate inks. <i>Acta Biomaterialia</i> , 2018 , 75, 451-462	10.8	34
197	Methodology and applications of elemental mapping by laser induced breakdown spectroscopy. <i>Analytica Chimica Acta</i> , 2021 , 1147, 72-98	6.6	33
196	Mapping of the spatial distribution of silver nanoparticles in root tissues of <i>Vicia faba</i> by laser-induced breakdown spectroscopy (LIBS). <i>Talanta</i> , 2017 , 173, 28-35	6.2	32
195	Utilization of laser-assisted analytical methods for monitoring of lead and nutrition elements distribution in fresh and dried <i>Capsicum annum</i> l. leaves. <i>Microscopy Research and Technique</i> , 2011 , 74, 845-52	2.8	32
194	J-based 2D homonuclear and heteronuclear correlation in solid-state proteins. <i>Magnetic Resonance in Chemistry</i> , 2007 , 45 Suppl 1, S84-92	2.1	32
193	Photopolymerization of Organic Molecular Crystal Nanorods. <i>Macromolecules</i> , 2007 , 40, 9040-9044	5.5	31
192	Multielemental analysis of prehistoric animal teeth by laser-induced breakdown spectroscopy and laser ablation inductively coupled plasma mass spectrometry 2010 , 49, C191		30
191	Correlation of acoustic and optical emission signals produced at 1064 and 532 nm laser-induced breakdown spectroscopy (LIBS) of glazed wall tiles. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009 , 64, 74-78	3.1	30
190	Laser-Induced Breakdown Spectroscopy coupled with chemometrics for the analysis of steel: The issue of spectral outliers filtering. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016 , 123, 114-120	3.1	29
189	Clinical application of laser-induced breakdown spectroscopy to the analysis of teeth and dental materials. <i>Photomedicine and Laser Surgery</i> , 2000 , 18, 281-9		28
188	Oriented clonal cell dynamics enables accurate growth and shaping of vertebrate cartilage. <i>ELife</i> , 2017 , 6,	8.9	27
187	Detection of fluorine using laser-induced breakdown spectroscopy and Raman spectroscopy. <i>Journal of Analytical Atomic Spectrometry</i> , 2017 , 32, 1966-1974	3.7	27
186	Laser ablation methods for analysis of urinary calculi: Comparison study based on calibration pellets. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013 , 81, 43-49	3.1	25
185	Determination of Plant Thiols by Liquid Chromatography Coupled with Coulometric and Amperometric Detection in Lettuce Treated by Lead(II) Ions. <i>Electroanalysis</i> , 2010 , 22, 1248-1259	3	25
184	Damage and ablation of large bandgap dielectrics induced by a 46.9 nm laser beam. <i>Optics Letters</i> , 2006 , 31, 68-70	3	25
183	Mapping the intake of different elements in vegetal tissues by dual-energy X-ray imaging at DaPhine synchrotron light source. <i>Microscopy Research and Technique</i> , 2008 , 71, 179-85	2.8	24
182	Qualitative detection of Mg content in a leaf of <i>Hedera helix</i> by using X-ray radiation from a laser plasma source. <i>Microscopy Research and Technique</i> , 2008 , 71, 459-68	2.8	24
181	Markedly Improves Cognitive Functions in Animal Models and Modulate Oxidative Stress Markers in the Brain. <i>Medicina (Lithuania)</i> , 2019 , 55,	3.1	23

180	Investigation of the microstructure and mineralogical composition of urinary calculi fragments by synchrotron radiation X-ray microtomography: a feasibility study. <i>Urological Research</i> , 2011 , 39, 259-67		23
179	DolnŮstŮnec IIa: Gravettian microstratigraphy, environment, and the origin of baked clay production in Moravia. <i>Quaternary International</i> , 2015 , 359-360, 195-210	2	22
178	Application of laser-induced breakdown spectroscopy to the analysis of algal biomass for industrial biotechnology. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012 , 74-75, 169-176	3.1	22
177	High-resolution imaging of a soft-X-ray laser beam by color centers excitation in lithium fluoride crystals. <i>Europhysics Letters</i> , 2003 , 63, 681-686	1.6	22
176	J-Based 3D sidechain correlation in solid-state proteins. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 7078-86	3.6	21
175	Chelation of a proton by an aliphatic tertiary diamine. <i>Journal of the American Chemical Society</i> , 2008 , 130, 7836-8	16.4	21
174	Laser-induced breakdown spectroscopy as a promising tool in the elemental bioimaging of plant tissues. <i>TrAC - Trends in Analytical Chemistry</i> , 2020 , 122, 115729	14.6	21
173	Finite element analysis of bone loss around failing implants. <i>Materials & Design</i> , 2014 , 61, 177-184		20
172	High strength, biodegradable and cytocompatible alpha tricalcium phosphate-iron composites for temporal reduction of bone fractures. <i>Acta Biomaterialia</i> , 2018 , 70, 293-303	10.8	18
171	Investigation of the osteitis deformans phases in snake vertebrae by double-pulse laser-induced breakdown spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2010 , 398, 1095-107	4.4	18
170	Quantitative analysis of trace metal accumulation in teeth using laser-induced breakdown spectroscopy. <i>Applied Physics A: Materials Science and Processing</i> , 1999 , 69, S179-S182	2.6	18
169	Accurate micro-computed tomography imaging of pore spaces in collagen-based scaffold. <i>Journal of Materials Science: Materials in Medicine</i> , 2016 , 27, 110	4.5	18
168	Computed tomography based procedure for reproducible porosity measurement of additive manufactured samples. <i>NDT and E International</i> , 2019 , 103, 111-118	4.1	17
167	Development of a remote laser-induced breakdown spectroscopy system for investigation of calcified tissue samples 2010 , 49, C16		17
166	Capillary discharge soft X-ray lasing in Ne-like Ar pumped by long current pulses 2002 , 19, 73		17
165	Classification of challenging Laser-Induced Breakdown Spectroscopy soil sample data - EMSLIBS contest. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020 , 169, 105872	3.1	16
164	Use of micro computed-tomography and 3D printing for reverse engineering of mouse embryo nasal capsule. <i>Journal of Instrumentation</i> , 2016 , 11, C03006-C03006	1	16
163	Intercomparison of Hantzsch and fiber-laser-induced-fluorescence formaldehyde measurements. <i>Atmospheric Measurement Techniques</i> , 2014 , 7, 1571-1580	4	16

162	Large area interference lithography using a table-top extreme ultraviolet laser: a systematic study of the degree of mutual coherence. <i>Nanotechnology</i> , 2009 , 20, 115303	3.4	16
161	Influence of physical properties and chemical composition of sample on formation of aerosol particles generated by nanosecond laser ablation at 213nm. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010 , 65, 51-60	3.1	16
160	Study of aerosols generated by 213 nm laser ablation of cobalt-cemented hard metals. <i>Journal of Analytical Atomic Spectrometry</i> , 2008 , 23, 1341	3.7	16
159	Signals from the brain and olfactory epithelium control shaping of the mammalian nasal capsule cartilage. <i>ELife</i> , 2018 , 7,	8.9	16
158	Age-related changes in the tooth-bone interface area of acrodont dentition in the chameleon. <i>Journal of Anatomy</i> , 2016 , 229, 356-68	2.9	15
157	A versatile interaction chamber for laser-based spectroscopic applications, with the emphasis on Laser-Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014 , 101, 149-154	3.1	15
156	Sub-milliradiant divergence soft-X-ray laser by active plasma waveguiding in z-pinch capillary discharge. <i>Europhysics Letters</i> , 2003 , 63, 694-700	1.6	15
155	Optimization of liquid jet system for laser-induced breakdown spectroscopy analysis. <i>Review of Scientific Instruments</i> , 2016 , 87, 043116	1.7	15
154	The effects of photon-upconversion nanoparticles on the growth of radish and duckweed: Bioaccumulation, imaging, and spectroscopic studies. <i>Chemosphere</i> , 2019 , 225, 723-734	8.4	14
153	Detection of tire tread particles using laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015 , 108, 1-7	3.1	14
152	Improvement of the Laser-Induced Breakdown Spectroscopy method sensitivity by the usage of combination of Ag-nanoparticles and vacuum conditions. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017 , 127, 48-55	3.1	14
151	Selective Laser Melting Strategy for Fabrication of Thin Struts Usable in Lattice Structures. <i>Materials</i> , 2018 , 11,	3.5	14
150	Effect of experimental parameters and resulting analytical signal statistics in laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016 , 126, 6-10	3.1	13
149	Laser ablation for mineral analysis in the human body: integration of LIFS with LIBS 1999 , 3570, 263		13
148	Triple-pulse LIBS: laser-induced breakdown spectroscopy signal enhancement by combination of pre-ablation and re-heating laser pulses. <i>Journal of Analytical Atomic Spectrometry</i> , 2020 , 35, 293-300	3.7	13
147	Depth-resolved analysis of historical painting model samples by means of laser-induced breakdown spectroscopy and handheld X-ray fluorescence. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018 , 147, 100-108	3.1	13
146	Comparison of different experimental approaches in the tomographic analysis of ancient violins. <i>Journal of Cultural Heritage</i> , 2017 , 27, S88-S92	2.9	12
145	Mechanical and Microstructural Properties of 2618 Al-Alloy Processed by SLM Remelting Strategy. <i>Materials Science Forum</i> , 2017 , 891, 343-349	0.4	12

144	Laboratory X-ray tomography for metal additive manufacturing: Round robin test. <i>Additive Manufacturing</i> , 2019 , 30, 100837	6.1	12
143	Sulfur determination in concrete samples using laser-induced breakdown spectroscopy and limestone standards. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018 , 142, 8-13	3.1	12
142	Identification of quantum dots labeled metallothionein by fast scanning laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014 , 101, 220-225	3.1	12
141	Heat treatment induced phase transformations in zirconia and yttria-stabilized zirconia monolithic aerogels. <i>Journal of Supercritical Fluids</i> , 2019 , 149, 54-63	4.2	12
140	Application of self-organizing maps to the study of U-Zr-Ti-Nb distribution in sandstone-hosted uranium ores. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017 , 131, 66-73	3.1	11
139	Effects of anodizing conditions and the addition of Al ₂ O ₃ /PTFE particles on the microstructure and the mechanical properties of porous anodic coatings on the AA1050 aluminium alloy. <i>Applied Surface Science</i> , 2020 , 513, 145780	6.7	11
138	Ciliopathy Protein Tmem107 Plays Multiple Roles in Craniofacial Development. <i>Journal of Dental Research</i> , 2018 , 97, 108-117	8.1	11
137	Deposition of hydroxyapatite and tricalcium phosphate coatings by suspension plasma spraying: Effects of torch speed. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 5489-5496	6	11
136	Feasibility of Nanoparticle-Enhanced Laser Ablation Inductively Coupled Plasma Mass Spectrometry. <i>Analytical Chemistry</i> , 2018 , 90, 11820-11826	7.8	11
135	High repetition rate laser-induced breakdown spectroscopy using acousto-optically gated detection. <i>Review of Scientific Instruments</i> , 2014 , 85, 073104	1.7	11
134	Stark spectroscopy measurements of electron density of ablative discharges in Teflon-(CF ₂) _n capillaries. <i>Journal Physics D: Applied Physics</i> , 2000 , 33, 1090-1092	3	11
133	Developmental mechanisms driving complex tooth shape in reptiles. <i>Developmental Dynamics</i> , 2020 , 249, 441-464	2.9	11
132	. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020 , 69, 1170-1178	5.2	11
131	2d distribution mapping of quantum dots injected onto filtration paper by laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017 , 131, 107-114	3.1	10
130	Detail investigation of toxicity, bioaccumulation, and translocation of Cd-based quantum dots and Cd salt in white mustard. <i>Chemosphere</i> , 2020 , 251, 126174	8.4	10
129	Epoxy-based gelcasting of machinable hydroxyapatite foams for medical applications. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 3317-3327	3.8	10
128	Strength and fracture mechanism of iron reinforced tricalcium phosphate cermet fabricated by spark plasma sintering. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 81, 16-25	4.1	10
127	Assessment of localized corrosion under simulated physiological conditions of magnesium samples with heterogeneous microstructure: Value of X-ray computed micro-tomography platform. <i>Corrosion Science</i> , 2016 , 104, 187-196	6.8	10

126	Laser-induced breakdown spectroscopy as a novel readout method for nanoparticle-based immunoassays. <i>Mikrochimica Acta</i> , 2019 , 186, 629	5.8	10
125	The Renchen L5-6 chondrite breccia [The first confirmed meteorite fall from Baden-Württemberg (Germany)]. <i>Chemie Der Erde</i> , 2019 , 79, 125525	4.3	10
124	Rare-Earth Zirconate LnZrO (Ln: La, Nd, Gd, and Dy) Powders, Xerogels, and Aerogels: Preparation, Structure, and Properties. <i>Inorganic Chemistry</i> , 2019 , 58, 14467-14477	5.1	10
123	Role of the wall ablation in the operation of a 46.9 nmAr capillary discharge soft x-ray laser. <i>Contributions To Plasma Physics</i> , 2003 , 43, 88-93	1.4	10
122	Generation of pure, high-density metal-vapor plasma by capillary discharge. <i>Applied Physics Letters</i> , 1999 , 74, 2779-2781	3.4	10
121	Robocasting of controlled porous CaSiO ₃ BiO ₂ structures: Architecture [Strength relationship and material catalytic behavior. <i>Ceramics International</i> , 2020 , 46, 8853-8861	5.1	10
120	SLM process parameters development of Cu-alloy Cu _{7.2} Ni _{1.8} Si ₁ Cr. <i>Rapid Prototyping Journal</i> , 2019 , 25, 266-276	3.8	10
119	Influence of baseline subtraction on laser-induced breakdown spectroscopic data. <i>Journal of Analytical Atomic Spectrometry</i> , 2018 , 33, 2107-2115	3.7	10
118	Multivariate classification of echellograms: a new perspective in Laser-Induced Breakdown Spectroscopy analysis. <i>Scientific Reports</i> , 2017 , 7, 3160	4.9	9
117	An interactive and intuitive visualisation method for X-ray computed tomography data of biological samples in 3D Portable Document Format. <i>Scientific Reports</i> , 2019 , 9, 14896	4.9	9
116	Chondrogenic potential of macroporous biodegradable cryogels based on synthetic poly(β-amino acids). <i>Soft Matter</i> , 2018 , 14, 228-238	3.6	9
115	Benchmark classification dataset for laser-induced breakdown spectroscopy. <i>Scientific Data</i> , 2020 , 7, 53	8.2	8
114	Atomic Model Calculations of Gain Saturation in the 46.9 nm Line of Ne-like Ar. <i>Contributions To Plasma Physics</i> , 2002 , 42, 109-118	1.4	8
113	Laser-Induced Breakdown Spectroscopy analysis of polymers in three different atmospheres. <i>Polymer Testing</i> , 2021 , 96, 107079	4.5	8
112	Effect of spherical gold nanoparticles size on nanoparticle enhanced Laser Induced Breakdown Spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2021 , 179, 106105	3.1	8
111	An RNA aptamer restores defective bone growth in FGFR3-related skeletal dysplasia in mice. <i>Science Translational Medicine</i> , 2021 , 13,	17.5	8
110	Restricted Boltzmann Machine method for dimensionality reduction of large spectroscopic data. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020 , 167, 105849	3.1	8
109	Imaging margins of skin tumors using laser-induced breakdown spectroscopy and machine learning. <i>Journal of Analytical Atomic Spectrometry</i> , 2021 , 36, 909-916	3.7	8

108	Assessment of the most effective part of echelle laser-induced plasma spectra for further classification using Czerny-Turner spectrometer. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016 , 124, 116-123	3.1	7
107	Effect of particle size distribution in laser-induced breakdown spectroscopy analysis of mesoporous VBiO ₂ catalysts. <i>Journal of Analytical Atomic Spectrometry</i> , 2011 , 26, 2281	3.7	7
106	Measurement of the Porosity of Additive-Manufactured Al-Cu Alloy Using X-Ray Computed Tomography. <i>Solid State Phenomena</i> , 2016 , 258, 448-451	0.4	7
105	Spark Plasma Sintering of Load-Bearing IronCarbon Nanotube-Tricalcium Phosphate CerMets for Orthopaedic Applications. <i>Jom</i> , 2016 , 68, 1134-1142	2.1	7
104	Joint utilization of double-pulse laser-induced breakdown spectroscopy and X-ray computed tomography for volumetric information of geological samples. <i>Journal of Analytical Atomic Spectrometry</i> , 2018 , 33, 1993-1999	3.7	7
103	Mouse Model of Congenital Heart Defects, Dysmorphic Facial Features and Intellectual Developmental Disorders as a Result of Non-functional CDK13. <i>Frontiers in Cell and Developmental Biology</i> , 2019 , 7, 155	5.7	6
102	Estimating the grade of Mg corrosion using laser-induced breakdown spectroscopy. <i>Journal of Analytical Atomic Spectrometry</i> , 2015 , 30, 2099-2106	3.7	6
101	High-contrast differentiation resolution 3D imaging of rodent brain by X-ray computed microtomography. <i>Journal of Instrumentation</i> , 2018 , 13, C02039-C02039	1	6
100	Determination of the cause of selected canine urolith formation by advanced analytical methods. <i>Journal of Small Animal Practice</i> , 2012 , 53, 646-51	1.6	6
99	Implementation of an autofocus algorithm based on searching the best in-focus image into a table-top laser-induced breakdown spectroscopy setup. <i>Optical Engineering</i> , 2009 , 48, 103604	1.1	6
98	Fabrication of metallic micropatterns using table top extreme ultraviolet laser interferometric lithography. <i>Plasma Sources Science and Technology</i> , 2008 , 17, 024019	3.5	6
97	Local retinoic acid signaling directs emergence of the extraocular muscle functional unit. <i>PLoS Biology</i> , 2020 , 18, e3000902	9.7	6
96	The effect of oral and nasal breathing on the deposition of inhaled particles in upper and tracheobronchial airways. <i>Journal of Aerosol Science</i> , 2020 , 150, 105649	4.3	6
95	On the application of bootstrapping to laser-induced breakdown spectroscopy data. <i>Journal of Analytical Atomic Spectrometry</i> , 2019 , 34, 2411-2419	3.7	6
94	The 3D imaging of mesenchymal stem cells on porous scaffolds using high-contrasted x-ray computed nanotomography. <i>Journal of Microscopy</i> , 2019 , 273, 169-177	1.9	6
93	Methodology for the Implementation of Internal Standard to Laser-Induced Breakdown Spectroscopy Analysis of Soft Tissues. <i>Sensors</i> , 2021 , 21,	3.8	6
92	Chemical and physical properties of Ennad Sāvou L chondrite and porosity differentiation using computed tomography. <i>Meteoritics and Planetary Science</i> , 2020 , 55, 1073-1081	2.8	5
91	Detection of visually unrecognizable braking tracks using Laser-Induced Breakdown Spectroscopy, a feasibility study. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016 , 118, 90-97	3.1	5

90	Investigations of Wettability of Wear Resistant Coatings Produced by Atmospheric Plasma Spraying. <i>Solid State Phenomena</i> , 2017 , 270, 230-235	0.4	5
89	Tungsten carbide precursors as an example for influence of a binder on the particle formation in the nanosecond laser ablation of powdered materials. <i>Talanta</i> , 2010 , 80, 1862-7	6.2	5
88	Laser-induced breakdown spectroscopy as a readout method for immunocytochemistry with upconversion nanoparticles. <i>Mikrochimica Acta</i> , 2021 , 188, 147	5.8	5
87	An Innovative Detection of Mechanically Separated Meat in Meat Products. <i>Food Analytical Methods</i> , 2019 , 12, 652-657	3.4	5
86	Spark Plasma Extrusion and the Thermal Barrier Concept. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2019 , 50, 656-665	2.5	5
85	Sensing nanoparticle-protein corona using nanoparticle enhanced Laser Induced Breakdown Spectroscopy signal enhancement. <i>Talanta</i> , 2021 , 235, 122741	6.2	5
84	X-ray micro-CT measurement of large parts at very low temperature. <i>Review of Scientific Instruments</i> , 2017 , 88, 033707	1.7	4
83	Wide-Cone Angle Phase-Contrast X-Ray Computed Tomography of Synthetic Polymer Materials. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020 , 69, 8910-8918	5.2	4
82	Time-Dependent Growth of Silica Shells on CdTe Quantum Dots. <i>Nanomaterials</i> , 2018 , 8,	5.4	4
81	Effect of deriving periosteal and endosteal contours from microCT scans on computation of cross-sectional properties in non-adults: the femur. <i>Journal of Anatomy</i> , 2018 , 233, 381	2.9	4
80	The possibilities of studying human embryos and foetuses using micro-CT: a technical note. <i>Anatomical Science International</i> , 2017 , 92, 299-303	2	4
79	Interface Behavior and Interface Tensile Strength of a Hardened Concrete Mixture with a Coarse Aggregate for Additive Manufacturing. <i>Materials</i> , 2020 , 13,	3.5	4
78	Tomography of double-pulse laser-induced plasmas in the orthogonal geometry. <i>Analytica Chimica Acta</i> , 2020 , 1135, 1-11	6.6	4
77	A Simple Drug Delivery System for Platelet-Derived Bioactive Molecules, to Improve Melanocyte Stimulation in Vitiligo Treatment. <i>Nanomaterials</i> , 2020 , 10,	5.4	4
76	On the limits of finite element models created from (micro)CT datasets and used in studies of bone-implant-related biomechanical problems. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 117, 104393	4.1	4
75	Microstructural Finite-Element Analysis of Influence of Bone Density and Histomorphometric Parameters on Mechanical Behavior of Mandibular Cancellous Bone Structure. <i>Solid State Phenomena</i> , 2016 , 258, 362-365	0.4	4
74	Classification of materials for selective laser melting by laser-induced breakdown spectroscopy. <i>Chemical Papers</i> , 2019 , 73, 2897-2905	1.9	4
73	A quantitative analysis of 3D-cell distribution in regenerating muscle-skeletal system with synchrotron X-ray computed microtomography. <i>Scientific Reports</i> , 2018 , 8, 14145	4.9	4

72	Nerve-associated Schwann cell precursors contribute extracutaneous melanocytes to the heart, inner ear, supraorbital locations and brain meninges. <i>Cellular and Molecular Life Sciences</i> , 2021 , 78, 6033-6049	10.3	4
71	Determination of initial expansion energy with shadowgraphy in laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2021 , 182, 106254	3.1	4
70	Imaging laser-induced plasma under different laser irradiances. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020 , 168, 105874	3.1	3
69	Factors governing the dimensional accuracy and fracture modes under compression of regular and shifted orthogonal scaffolds. <i>Journal of the European Ceramic Society</i> , 2020 , 40, 4923-4931	6	3
68	Characterization of inner structure of limestone by X-ray computed sub-micron tomography. <i>Construction and Building Materials</i> , 2018 , 174, 693-700	6.7	3
67	Utilization of selected laser-ablation-based diagnostic methods for study of elemental distribution in various solid samples 2010 ,		3
66	Intense XUV emission generated by a capillary discharge based apparatus. <i>European Physical Journal D</i> , 2002 , 52, 405-416		3
65	Study of plasma evolution in argon-filled capillary Z-pinch devoted to x-ray production. <i>Plasma Sources Science and Technology</i> , 2001 , 10, 567-572	3.5	3
64	Contrast enhanced X-ray computed tomography imaging of amyloid plaques in Alzheimer disease rat model on lab based micro CT system. <i>Scientific Reports</i> , 2021 , 11, 5999	4.9	3
63	Ablation of CNTN2+ Pyramidal Neurons During Development Results in Defects in Neocortical Size and Axonal Tract Formation. <i>Frontiers in Cellular Neuroscience</i> , 2019 , 13, 454	6.1	3
62	Influence of sample surface topography on laser ablation process. <i>Talanta</i> , 2021 , 222, 121512	6.2	3
61	Lyophilized Polyvinylpyrrolidone Hydrogel for Culture of Human Oral Mucosa Stem Cells. <i>Materials</i> , 2021 , 14,	3.5	3
60	Use of polymer concrete for large-scale 3D printing. <i>Rapid Prototyping Journal</i> , 2021 , 27, 465-474	3.8	3
59	Microstructural Analysis of Fly Ash-Based Stabilizer for Track Bed. <i>Key Engineering Materials</i> , 2017 , 731, 66-73	0.4	2
58	Interpenetrated Magnesium-Tricalcium Phosphate Composite: Manufacture, Characterization and In Vitro Degradation Test. <i>Acta Metallurgica Sinica (English Letters)</i> , 2017 , 30, 319-325	2.5	2
57	Influence of laser wavelength and laser energy on depth profiling of easel painting samples. <i>Chemical Papers</i> , 2019 , 73, 2937-2943	1.9	2
56	Effects of Cryopreservation on Cell Metabolic Activity and Function of Biofabricated Structures Laden with Osteoblasts. <i>Materials</i> , 2020 , 13,	3.5	2
55	Preparation of Metallographic Samples with Anodic Layers. <i>Materials Science Forum</i> , 2017 , 891, 106-110	0.4	2

54	Temperature effect on the microstructural development of AlNi layered binary couples produced by an unconventional method. <i>Surface and Coatings Technology</i> , 2014 , 258, 95-101	4.4	2
53	Investigation of Cheb relief intarsia and the study of the technological process of its production by micro computed tomography. <i>Journal of Cultural Heritage</i> , 2014 , 15, 609-613	2.9	2
52	Detailed structure of fs pulses passing through straight and tapered optical waveguides. <i>Optics Communications</i> , 2001 , 192, 225-229	2	2
51	Physical processes in high-density ablation-controlled capillary plasmas. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1999 , 258, 335-341	2.3	2
50	Interpreting support vector machines applied in laser-induced breakdown spectroscopy.. <i>Analytica Chimica Acta</i> , 2022 , 1192, 339352	6.6	2
49	The effect of nanoparticle presence on aerosol formation during nanoparticle-enhanced laser ablation inductively coupled plasma mass spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2020 , 35, 2893-2900	3.7	2
48	Polarized Sonic Hedgehog Protein Localization and a Shift in the Expression of Region-Specific Molecules Is Associated With the Secondary Palate Development in the Veiled Chameleon. <i>Frontiers in Cell and Developmental Biology</i> , 2020 , 8, 572	5.7	2
47	Benchmarking of additive manufacturing technologies for commercially-pure-titanium bone-tissue-engineering scaffolds: processing-microstructure-property relationship. <i>Additive Manufacturing</i> , 2020 , 36, 101516	6.1	2
46	Processing of AlSi9Cu3 alloy by selective laser melting. <i>Powder Metallurgy</i> , 2020 , 63, 197-211	1.9	2
45	Laser-induced breakdown spectroscopy as a straightforward bioimaging tool for plant biologists; the case study for assessment of photon-upconversion nanoparticles in Brassica oleracea L. plant. <i>Ecotoxicology and Environmental Safety</i> , 2021 , 214, 112113	7	2
44	Tricalcium Phosphate - Magnesium Interface: Microstructure and Properties. <i>Solid State Phenomena</i> , 2016 , 258, 412-415	0.4	2
43	Spatiotemporal spectroscopic characterization of plasmas induced by non-orthogonal laser ablation. <i>Analyst, The</i> , 2021 , 146, 920-929	5	2
42	Addressing the sparsity of laser-induced breakdown spectroscopy data with randomized sparse principal component analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2021 , 36, 1410-1421	3.7	2
41	Review of porosity uncertainty estimation methods in computed tomography dataset. <i>Measurement Science and Technology</i> , 2021 , 32, 122001	2	2
40	Characterization of the Morphological Nature of Hollow Spray Dried Dispersion Particles Using X-ray Submicron-Computed Tomography.. <i>AAPS PharmSciTech</i> , 2021 , 23, 40	3.9	2
39	Thermal cycling effect on the phase stability and fracture resistance of synthetic barium/magnesium aluminosilicate systems. <i>Ceramics International</i> , 2020 , 46, 24129-24136	5.1	1
38	Application of Non-Destructive Methods for the Determination of Microstructural Parameters of Recycled Asphalt Concrete in Track Bed. <i>Key Engineering Materials</i> , 2016 , 722, 235-240	0.4	1
37	Error in the estimation of periosteal and endosteal contours from micro-CT scans for nonadult tibiae and humeri. <i>American Journal of Physical Anthropology</i> , 2019 , 170, 275-294	2.5	1

36	Application of Metallographic Analysis Techniques for Detection and Identification of Spray Paint Defects. <i>Solid State Phenomena</i> , 2017 , 270, 118-123	0.4	1
35	Far-field, near-field, and interference patterns imaging in LiF crystals from a 46.9-nm capillary-discharge-pumped soft x-ray laser 2003 ,		1
34	Investigation on the application of the capillary-discharge based metal-vapor generator and the 46.9 nm Ar capillary-discharge soft X-ray laser		1
33	Coordinated labio-lingual asymmetries in dental and bone development create a symmetrical acrodont dentition. <i>Scientific Reports</i> , 2020 , 10, 22040	4.9	1
32	Calibration standards for Laser-Induced Breakdown Spectroscopy analysis of asphalts. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020 , 170, 105919	3.1	1
31	X-ray micro computed tomography-aided calibration of laser-induced breakdown spectroscopy depth profiling for archaeological ceramics examination. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2020 , 172, 105965	3.1	1
30	X-ray microtomography-based atlas of mouse cranial development. <i>GigaScience</i> , 2021 , 10,	7.6	1
29	Lumbar Interbody Fusion Conducted on a Porcine Model with a Bioresorbable Ceramic/Biopolymer Hybrid Implant Enriched with Hyperstable Fibroblast Growth Factor 2. <i>Biomedicines</i> , 2021 , 9,	4.8	1
28	Anodizing of Zinc-Titanium Alloy in NaOH and KOH Baths. <i>Solid State Phenomena</i> , 2016 , 258, 399-402	0.4	1
27	Ex-vivo biomechanical testing of pig femur diaphysis B type fracture fixed by novel biodegradable bone glue. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 115, 104249	4.1	1
26	DUCT reveals architectural mechanisms contributing to bile duct recovery in a mouse model for Alagille syndrome. <i>ELife</i> , 2021 , 10,	8.9	1
25	Loss of Sprouty Produces a Ciliopathic Skeletal Phenotype in Mice Through Upregulation of Hedgehog Signaling. <i>Journal of Bone and Mineral Research</i> , 2021 , 36, 2258-2274	6.3	1
24	Multi-scale visualization of uranium-rich domains dispersed in U-Zr mineralization of sandstone-type (Břevnič) (Czech Republic). <i>Ore Geology Reviews</i> , 2021 , 138, 104358	3.2	1
23	X-ray microtomography imaging of craniofacial hard tissues in selected reptile species with different types of dentition.. <i>GigaScience</i> , 2022 , 11,	7.6	1
22	Living in darkness: Exploring adaptation of <i>Proteus anguinus</i> in 3 dimensions by X-ray imaging.. <i>GigaScience</i> , 2022 , 11,	7.6	1
21	Non-destructive lock-picking of a historical treasure chest by means of X-ray computed tomography. <i>PLoS ONE</i> , 2020 , 15, e0235316	3.7	0
20	Non-ablative capillary z-pinch for plasma-based waveguide. <i>European Physical Journal D</i> , 2005 , 55, 35-44		0
19	Contour laser strategy and its benefits for lattice structure manufacturing by selective laser melting technology. <i>Journal of Manufacturing Processes</i> , 2022 , 74, 640-657	5	0

18	Characterization of porosity and hollow defects in ceramic objects built by extrusion additive manufacturing. <i>Additive Manufacturing</i> , 2021 , 47, 102272	6.1	0
17	Enhancement of Magnetic Properties of 41CrMo4 Steel by Means of Diffusion Coatings. <i>Materials Science Forum</i> , 2017 , 891, 560-564	0.4	
16	Detection of lead in Zea mays by dual-energy X-ray microtomography at the SYRMEP beamline of the ELETTRA synchrotron and by atomic absorption spectroscopy. <i>Microscopy Research and Technique</i> , 2010 , 73, 638-49	2.8	
15	Analysis of liquid samples using laser-induced breakdown spectroscopy 1998 , 3504, 299		
14	Fracture Mechanism of Interpenetrating Iron-Tricalcium Phosphate Composite. <i>Solid State Phenomena</i> , 2016 , 258, 333-336	0.4	
13	Serious chronic disease of the cervical spine and trauma in a young female from the middle ages (Czech Republic). <i>International Journal of Paleopathology</i> , 2019 , 24, 185-196	1.5	
12	Microcomputed tomographic, biomechanical and histological analyses of lumbar interbody fusion with iliac crest bone graft in a pig model. <i>Acta Veterinaria Brno</i> , 2021 , 90, 69-75	0.8	
11	Automatic 3D analysis of the ex-vivo porcine lumbar interbody fusion based on X-ray micro computed tomography data.. <i>Computers in Biology and Medicine</i> , 2022 , 145, 105438	7	
10	Local retinoic acid signaling directs emergence of the extraocular muscle functional unit 2020 , 18, e3000902		
9	Local retinoic acid signaling directs emergence of the extraocular muscle functional unit 2020 , 18, e3000902		
8	Local retinoic acid signaling directs emergence of the extraocular muscle functional unit 2020 , 18, e3000902		
7	Local retinoic acid signaling directs emergence of the extraocular muscle functional unit 2020 , 18, e3000902		
6	Local retinoic acid signaling directs emergence of the extraocular muscle functional unit 2020 , 18, e3000902		
5	Local retinoic acid signaling directs emergence of the extraocular muscle functional unit 2020 , 18, e3000902		
4	Non-destructive lock-picking of a historical treasure chest by means of X-ray computed tomography 2020 , 15, e0235316		
3	Non-destructive lock-picking of a historical treasure chest by means of X-ray computed tomography 2020 , 15, e0235316		
2	Non-destructive lock-picking of a historical treasure chest by means of X-ray computed tomography 2020 , 15, e0235316		
1	Non-destructive lock-picking of a historical treasure chest by means of X-ray computed tomography 2020 , 15, e0235316		

