Detection of chlorine and fluorine in air by laser-induce

Analytical Chemistry

55, 1252-1256

DOI: 10.1021/ac00259a017

Citation Report

#	Article	IF	Citations
1	Spectral analysis with laser atomization (Review). Journal of Applied Spectroscopy, 1985, 43, 941-954.	0.3	0
2	Measurement of the properties of a CO2 laser induced air-plasma by double floating probe and spectroscopic techniques. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1985, 40, 517-525.	1.5	26
3	Pulsed infrared laser thermal lens spectrometry of flowing gas samples. Analytical Chemistry, 1985, 57, 758-762.	3.2	76
4	Direct Detection of Beryllium on Filters Using the Laser Spark. Applied Spectroscopy, 1985, 39, 57-63.	1.2	76
5	Time-Resolved Laser-Induced Breakdown Spectrometry for the Rapid Determination of Beryllium in Beryllium-Copper Alloys. Applied Spectroscopy, 1986, 40, 491-494.	1.2	30
6	An Evaluation Of Factors Affecting The Analysis Of Metals Using Laser-Induced Breakdown Spectroscopy (LIBS). , 1986, , .		8
7	Determination of Uranium in Solution Using Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 1987, 41, 1042-1048.	1.2	192
8	Direct and near real-time determination of metals in the atmosphere by atomic spectroscopic techniques. TrAC - Trends in Analytical Chemistry, 1988, 7, 222-226.	5.8	8
9	Evaluation of an Isolated Droplet Sample Introduction System for Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 1988, 42, 741-746.	1.2	90
10	Laser Breakdown Acoustic Effect of Ultrafine Particle in Liquids and Its Application to Particle Counting. Japanese Journal of Applied Physics, 1988, 27, L983.	0.8	33
11	Plasma sources in inorganic-gas analysis (review). Journal of Applied Spectroscopy, 1989, 50, 123-129.	0.3	0
12	The possibility of the laser-induced fluorescence determination of metals in gases. Journal of Applied Spectroscopy, 1989, 51, 953-956.	0.3	0
13	Laser Breakdown Spectrochemical Analysis of Microparticles in Liquids. Chemistry Letters, 1989, 18, 2205-2208.	0.7	17
14	Analytical techniques using lasers. Progress in Quantum Electronics, 1990, 14, 131-249.	3.5	31
15	Laser-induced breakdown spectroscopy: principles, applications, and instruments. , 1990, 1318, 71.		7
16	Ultraviolet laser microplasmaâ€“gas chromatography detector: detection of species-specific fragment emission. Applied Optics, 1990, 29, 4987.	2.1	23
17	A Novel Detector for Gas Chromatography Based on UV Laser-Produced Microplasmas. Applied Spectroscopy, 1990, 44, 1040-1043.	1.2	23
18	Time-Resolved Laser-Induced Breakdown Spectroscopy of Iron Ore. Applied Spectroscopy, 1990, 44, 1711-1714.	1.2	63

#	Article	IF	Citations
19	Detection of Trace Concentrations of Column III and V Hydrides by Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 1991, 45, 949-952.	1.2	29
20	Effects of High-Pressure Buffer Gases on Emission from Laser-Induced Plasmas. Applied Spectroscopy, 1991, 45, 1463-1467.	1.2	36
21	Time-resolved LIBS experiment for quantitative determination of pollutant concentrations in air. Laser and Particle Beams, 1991, 9, 633-639.	0.4	50
22	Detection of Fine Particles in Liquids by Laser Breakdown Method. Japanese Journal of Applied Physics, 1992, 31, 1514-1518.	0.8	44
23	Spectroscopic Applications of Laser-Induced Plasmas. Critical Reviews in Analytical Chemistry, 1992, 23, 143-162.	1.8	134
24	Emission Spectrochemical Analysis of Halogen Atoms Using Shock Wave Plasma Induced by TEA CO2 Laser.. Journal of the Spectroscopical Society of Japan, 1992, 41, 21-30.	0.0	8
25	Lasers in atomic spectroscopy: Selected applications. Microchemical Journal, 1992, 45, 1-35.	2.3	29
26	A compact TEA CO2 laser for field-based spectrochemical analysis of geological samples. Optics and Laser Technology, 1992, 24, 273-277.	2.2	5
27	Laser-induced plasma atomic emission spectrometry in liquid aerosols. Analytica Chimica Acta, 1992, 269, 123-128.	2.6	28
28	Time-resolved emission studies of ArF-laser-produced microplasmas. Applied Optics, 1993, 32, 939.	2.1	80
29	Chapter 1 Sampling Techniques For Air Pollutants. Techniques and Instrumentation in Analytical Chemistry, 1993, , 3-22.	0.0	6
30	Environmental monitoring of soil contaminated with heavy metals using laser-induced breakdown spectroscopy. , 0, , .		2
31	Detection of mercury in air by time-resolved laser-induced breakdown spectroscopy technique. Laser and Particle Beams, 1994, 12, 525-530.	0.4	52
32	The velocity/kinetic energy distributions of Sc and ScO and optical spectra from the laser vaporization of Sc2O3. Chemical Physics Letters, 1994, 218, 309-313.	1.2	6
33	Quantitative Simultaneous Elemental Determinations in Alloys Using Laser-Induced Breakdown Spectroscopy (LIBS) in an Ultra-High Vacuum. Applied Spectroscopy, 1994, 48, 58-64.	1.2	63
34	19.O.01 In-situ and on-line analytical chemistry of aerosols. Journal of Aerosol Science, 1994, 25, 289-291.	1.8	3
35	Determination of colloidal iron in water by laser-induced breakdown spectroscopy. Analytica Chimica Acta, 1995, 299, 401-405.	2.6	91
36	Influences on Concentration Measurements of Liquid Aerosols by Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 1995, 49, 569-579.	1.2	51

#	Article	IF	Citations
37	Quantitative analysis of copper alloys by laser-produced plasma spectrometry. Journal of Analytical Atomic Spectrometry, 1995, 10, 643.	1.6	43
38	Spectroscopic Characterization of Laser-Produced Plasmas for In Situ Toxic Metal Monitoring. Hazardous Waste and Hazardous Materials, 1996, 13, 51-61.	0.4	34
39	Determination of an Iron Suspension in Water by Laser-Induced Breakdown Spectroscopy with Two Sequential Laser Pulses. Analytical Chemistry, 1996, 68, 2981-2986.	3.2	163
40	Trace pollutants analysis in soil by a time-resolved laser-induced breakdown spectroscopy technique. Applied Physics B: Lasers and Optics, 1996, 63, 185-190.	1.1	99
41	In Situ Determination of Lead in Paint by Laser-Induced Breakdown Spectroscopy Using a Fiber-Optic Probe. Analytical Chemistry, 1996, 68, 977-981.	3.2	119
42	Influences on detectability of heavy metals in soils by laser-induced breakdown spectroscopy. , 0, , .		3
43	Laser induced breakdown spectroscopy (LIBS) as an analytical tool for the detection of metal ions in aqueous solutions. Fresenius' Journal of Analytical Chemistry, 1996, 355, 16-20.	1.5	148
44	Element-specific determination of chlorine in gases by Laser-Induced-Breakdown-Spectroscopy (LIBS). Fresenius' Journal of Analytical Chemistry, 1996, 356, 21-26.	1.5	58
45	Detection of pollutants in liquids by laser induced breakdown spectroscopy technique. , 0, , .		6
46	Metal Emissions Monitoring Using Excimer Laser Fragmentation-Fluorescence Spectroscopy. Combustion Science and Technology, 1996, 118, 169-188.	1.2	32
47	Characteristics of a laser plasma induced by irradiation of a normal-oscillation YAG laser at low pressures. Journal Physics D: Applied Physics, 1997, 30, 3335-3345.	1.3	36
48	Applications of Laser-Induced Breakdown Spectrometry. Applied Spectroscopy Reviews, 1997, 32, 183-235.	3.4	244
49	Fundamentals and Applications of Laser-Induced Breakdown Spectroscopy. Critical Reviews in Analytical Chemistry, 1997, 27, 257-290.	1.8	438
50	Trace Element Analysis in Water by the Laser-Induced Breakdown Spectroscopy Technique. Applied Spectroscopy, 1997, 51, 1102-1105.	1.2	166
51	Laser-induced breakdown in aqueous media. Progress in Quantum Electronics, 1997, 21, 155-248.	3.5	288
52	Subsurface heavy-metal detection with the use of a laser-induced breakdown spectroscopy (LIBS) penetrometer system. Field Analytical Chemistry and Technology, 1998, 2, 75-87.	0.9	30
53	Depth-resolved analysis by laser-induced breakdown spectrometry at reduced pressure. Surface and Interface Analysis, 1998, 26, 995-1000.	0.8	54
54	Laser-Induced Breakdown Spectrometry. The Chemical Educator, 1998, 3, 1-7.	0.0	12

#	Article	IF	Citations
55	Investigation of lamp chemical composition by laser-induced breakdown spectroscopy. , 0, , .		0
56	Laser-Induced Breakdown Spectroscopy for Real-Time Detection of Halon Alternative Agents. Analytical Chemistry, 1998, 70, 1186-1191.	3.2	50
57	Laser-Induced Breakdown Spectroscopy of Liquids: Aqueous Solutions of Nickel and Chlorinated Hydrocarbons. Applied Spectroscopy, 1998, 52, 438-443.	1.2	78
58	Laser-Induced Breakdown Spectroscopy for Polymer Identification. Applied Spectroscopy, 1998, 52, 456-461.	1.2	188
59	Time-Resolved Laser-Induced Breakdown Spectroscopy: Application for Qualitative and Quantitative Detection of Fluorine, Chlorine, Sulfur, and Carbon in Air. Applied Spectroscopy, 1998, 52, 1321-1327.	1.2	171
60	Analysis of liquid samples using laser-induced breakdown spectroscopy. , 1998, 3504, 299.		0
61	Spectroscopic analysis of fire suppressants and refrigerants by laser-induced breakdown spectroscopy. Applied Optics, 1999, 38, 1476.	2.1	38
62	New Procedure for Quantitative Elemental Analysis by Laser-Induced Plasma Spectroscopy. Applied Spectroscopy, 1999, 53, 960-964.	1.2	736
63	Determination of Impurities in Uranium and Plutonium Dioxides by Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 1999, 53, 1111-1117.	1.2	99
64	Field instrumentation in atomic spectroscopy. Microchemical Journal, 2000, 66, 115-145.	2.3	95
65	Shock wave plasma induced by TEA CO2 laser bombardment on glass samples at high pressures. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2000, 55, 1591-1599.	1.5	28
66	Subtarget Effect on Laser Plasma Generated by Transversely Excited Atmospheric CO2Laser at Atmospheric Gas Pressure. Japanese Journal of Applied Physics, 2000, 39, 2643-2646.	0.8	30
67	Application of laser-induced breakdown spectroscopy to <italic>in situ</italic> analysis of liquid samples. Optical Engineering, 2000, 39, 2248.	0.5	202
68	Analysis of Sulfuric Acid Aerosols by Laser-Induced Breakdown Spectroscopy and Laser-Induced Photofragmentation. Applied Spectroscopy, 2000, 54, 1805-1816.	1.2	34
69	Determination of F, Cl, and Br in Solid Organic Compounds by Laser-Induced Plasma Spectroscopy. Applied Spectroscopy, 2001, 55, 739-744.	1.2	84
70	Detection of Gaseous and Particulate Fluorides by Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 2001, 55, 1455-1461.	1.2	54
71	Development of a method for automated quantitative analysis of ores using LIBS. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2001, 56, 707-714.	1.5	101
72	Analysis of environmental lead contamination: comparison of LIBS field and laboratory instruments. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2001, 56, 777-793.	1.5	150

#	Article	IF	Citations
73	Low-Background Laser Plasma Induced by Nd-YAG Laser at Low Pressures. Japanese Journal of Applied Physics, 2001, 40, 188-194.	0.8	3
74	Comprehensive study on the pressure dependence of shock wave plasma generation under TEA CO2laser bombardment on metal sample. Journal Physics D: Applied Physics, 2001, 34, 758-771.	1.3	25
75	Laserâ€“assisted solid sampling. Techniques and Instrumentation in Analytical Chemistry, 2002, , 435-499.	0.0	0
76	Evaluation of the Potential of Laser-Induced Breakdown Spectroscopy for Detection of Trace Element in Liquid. Journal of the Air and Waste Management Association, 2002, 52, 1307-1315.	0.9	84
77	From LASER to LIBS, the path of technology development. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 1109-1113.	1.5	241
78	Panoramic laser-induced breakdown spectrometry of water. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 1141-1153.	1.5	116
79	Diagnostics of high-temperature steel pipes in industrial environment by laser-induced breakdown spectroscopy technique: the LIBSGRAIN project. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 1181-1192.	1.5	50
80	Quantitative analysis of pharmaceutical products by laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 1131-1140.	1.5	184
81	Laser-induced breakdown spectroscopy of molten aluminum alloy. Applied Optics, 2003, 42, 2078.	2.1	103
82	Laser-induced plasma spectroscopy to as low as 130 nm when a gas-purged spectrograph and ICCD detection are used. Applied Optics, 2003, 42, 6036.	2.1	15
83	Super-sensitive detection of sodium in water using dual-pulse laser-induced breakdown spectroscopy. Bunseki Kagaku, 2003, 52, 425-431.	0.1	2
84	A comparison of elemental analysis techniques requiring no sample preparation: scanning electron microscopy and laser induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2004, 19, 929.	1.6	5
85	Determination of Cl/C and Br/C ratios in pure organic solids using laser-induced plasma spectroscopy in near vacuum ultraviolet. Journal of Analytical Atomic Spectrometry, 2004, 19, 474-478.	1.6	31
86	Sensing of Halocarbons Using Femtosecond Laser-Induced Fluorescence. Analytical Chemistry, 2004, 76, 4799-4805.	3.2	80
87	Characteristics of Induced Current Due to Laser Plasma and Its Application to Laser Processing Monitoring. Japanese Journal of Applied Physics, 2004, 43, 1018-1027.	0.8	14
88	Laser in Environmental and Life Sciences. , 2004, , .		11
89	Laser-induced breakdown spectroscopy as an analytical tool for equivalence ratio measurement in methaneâ€“air premixed flames. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 1092-1097.	1.5	69
90	Controlled inert gas environment for enhanced chlorine and fluorine detection in the visible and near-infrared by laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 1132-1139.	1.5	85

#	Article	IF	Citations
91	Quantitative local equivalence ratio determination in laminar premixed methaneâ€“air flames by laser induced breakdown spectroscopy (LIBS). Chemical Physics Letters, 2005, 404, 309-314.	1.2	70
92	Laser-induced breakdown spectroscopy (LIBS): a promising versatile chemical sensor technology for hazardous material detection. IEEE Sensors Journal, 2005, 5, 681-689.	2.4	153
93	Glass-batch composition monitoring by laser-induced breakdown spectroscopy. Applied Optics, 2005, 44, 3668.	2.1	18
94	Laser-induced breakdown spectroscopy â€“ An emerging chemical sensor technology for real-time field-portable, geochemical, mineralogical, and environmental applications. Applied Geochemistry, 2006, 21, 730-747.	1.4	170
95	Detection of heavy metals in Arabian crude oil residue using laser induced breakdown spectroscopy. Talanta, 2006, 69, 1072-1078.	2.9	114
96	From sample to signal in laser-induced breakdown spectroscopy: a complex route to quantitative analysis. , 0, , 122-170.		3
98	History and fundamentals of LIBS. , 0, , 1-39.		7
99	Design, construction and assessment of a field-deployable laser-induced breakdown spectrometer for remote elemental sensing. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 88-95.	1.5	75
100	Near-IR bromine Laser Induced Breakdown Spectroscopy detection and ambient gas effects on emission line asymmetric Stark broadening and shift. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 1270-1278.	1.5	22
101	Evaluation of self-absorption of manganese emission lines in Laser Induced Breakdown Spectroscopy measurements. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 1294-1303.	1.5	116
105	Remote femtosecond laser induced breakdown spectroscopy (LIBS) in a standoff detection regime. , 2006, , .		11
108	Physics of Plasma in Laser-Induced Breakdown Spectroscopy. , 2007, , 83-111.		15
109	Characterization of near-infrared low energy ultra-short laser pulses for portable applications of laser induced breakdown spectroscopy. Optics Express, 2007, 15, 14044.	1.7	13
110	LIBS Application to Off-Gas Measurement. , 2007, , 199-221.		1
111	Promising Spectroscopic Techniques for the Portable Detection of Condensedâ€Phase Contaminants on Surfaces. Applied Spectroscopy Reviews, 2007, 42, 287-343.	3.4	16
112	Instrumentation for Laser-Induced Breakdown Spectroscopy. , 2007, , 113-133.		4
113	LIBS for the Analysis of Chemical and Biological Hazards. , 2007, , 313-324.		0
114	Laser-induced breakdown spectroscopy at a water/gas interface: A study of bath gas-dependent molecular species. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1348-1360.	1.5	45

#	Article	IF	Citations
115	Hydrogen analysis in solid samples by utilizing He metastable atoms induced by TEA CO2 laser plasma in He gas at 1Âatm. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1379-1389.	1.5	32
116	Time-resolved laser-induced breakdown spectroscopy of aluminum. Optoelectronics Letters, 2008, 4, 369-370.	0.4	2
117	On-line monitoring of composite nanoparticles synthesized in a pre-industrial laser pyrolysis reactor using Laser-Induced Breakdown Spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 1183-1190.	1.5	37
118	Laser-induced breakdown spectroscopy measurement in methane and biodiesel flames using an ungated detector. Applied Optics, 2008, 47, G144.	2.1	36
119	Laser-Induced Breakdown Spectroscopy for Analysis of Chemically Etched Polytetrafluoroethylene. Applied Spectroscopy, 2008, 62, 773-777.	1.2	9
120	New Method of Laser Plasma Spectroscopy for Metal Samples Using Metastable He Atoms Induced by Transversely Excited Atmospheric-Pressure CO2Laser in He Gas at 1 atm. Japanese Journal of Applied Physics, 2008, 47, 1595-1601.	0.8	12
121	Laser-induced breakdown spectroscopy in reactive flows of hydrocarbon-air mixtures. Applied Physics Letters, 2008, 92, .	1.5	53
122	Multi-instrumental Analysis of Tissues of Sunflower Plants Treated with Silver(I) Ions â€“ Plants as Bioindicators of Environmental Pollution. Sensors, 2008, 8, 445-463.	2.1	70
123	On-line determination of nanometric and sub-micrometric particle physicochemical characteristics using spectral imaging-aided Laser-Induced Breakdown Spectroscopy coupled with a Scanning Mobility Particle Sizer. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 1141-1152.	1.5	20
124	Quantitative analysis of multi-elements in steel samples by laser-induced breakdown spectroscopy. Proceedings of SPIE, 2009, , .	0.8	1
125	Stoichiometric analysis of compositionally graded combinatorial amorphous thin film oxides using laser-induced breakdown spectroscopy. Review of Scientific Instruments, 2010, 81, 073103.	0.6	14
126	The development of fieldable laser-induced breakdown spectrometer: No limits on the horizon. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2010, 65, 975-990.	1.5	163
127	LIBS in Industry: Sparks Fly. , 2010, , .		2
128	Detection of chlorine with concentration of 018 kg/m^3 in concrete by laser-induced breakdown spectroscopy. Applied Optics, 2010, 49, C181.	2.1	27
129	Quantitative analysis of toxic metals lead and cadmium in water jet by laser-induced breakdown spectroscopy. Applied Optics, 2011, 50, 1227.	2.1	59
130	Characterization of laser induced breakdown plasmas used for measurements of arsenic, antimony and selenium hydrides. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 754-760.	1.5	19
131	Direct Measurements of Sample Heating by a Laser-Induced Air Plasma in Pre-Ablation Spark Dual-Pulse Laser-Induced Breakdown Spectroscopy (LIBS). Applied Spectroscopy, 2012, 66, 869-874.	1.2	12
132	Fast and Environmentally Friendly Quantitative Analysis of Active Agents in Anti-Diabetic Tablets by an Alternative Laser-Induced Breakdown Spectroscopy (LIBS) Method and Comparison to a Validated Reversed-Phase High-Performance Liquid Chromatography (RP-HPLC) Method. Applied Spectroscopy, 2012, 66, 1294-1301.	1.2	5

#	Article	IF	Citations
133	Evolution of Al plasma generated by Ndâ€“YAG laser radiation at the fundamental wavelength. Applied Physics B: Lasers and Optics, 2012, 108, 665-673.	1.1	6
134	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Science Objectives and Mast Unit Description. Space Science Reviews, 2012, 170, 95-166.	3.7	372
135	Exploring laser-induced breakdown spectroscopy for nuclear materials analysis and in-situ applications. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 74-75, 177-183.	1.5	70
136	Generation and expansion of laser-induced plasma as a spectroscopic emission source. Frontiers of Physics, 2012, 7, 649-669.	2.4	53
137	Laser-induced plasma and laser-induced breakdown spectroscopy (LIBS) in China: The challenge and the opportunity. Frontiers of Physics, 2012, 7, 647-648.	2.4	17
139	Laboratory feasibility study of fusion vessel inner wall chemical analysis by Laser Induced Breakdown Spectroscopy. Chemical Physics, 2012, 398, 228-232.	0.9	22
140	Spectral evolution of nano-second laser interaction with Ti target in Air. Applied Physics B: Lasers and Optics, 2013, 110, 509-518.	1.1	12
142	Trace detection of light elements by laser-induced breakdown spectroscopy (LIBS): Applications to non-conducting materials. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2013, 115, 574-590.	0.2	22
143	The use of laser-induced breakdown spectroscopy for the determination of fluorine concentration in glass ionomer cement. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2013, 88, 26-31.	1.5	8
144	Measurement of concentration of chlorine attached to a stainless-steel canister material using laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2013, 87, 74-80.	1.5	32
147	Laser induced breakdown spectroscopy (LIBS). , 2013, , 551-571.		5
148	Ring-Oven Based Preconcentration Technique for Microanalysis: Simultaneous Determination of Na, Fe, and Cu in Fuel Ethanol by Laser Induced Breakdown Spectroscopy. Analytical Chemistry, 2013, 85, 1547-1554.	3.2	56
149	Feasibility of Laser-Induced Breakdown Spectroscopy for the Study of the Temporal Distribution of Trace Elements Trapped in Snow Collected from Greater Himalayan Range. Spectroscopy Letters, 2013, 46, 384-390.	0.5	3
150	Reducing Quantitative Fluctuation of Laser-Induced Breakdown Spectroscopy by Kalman Filtering. Applied Mechanics and Materials, 0, 333-335, 243-247.	0.2	2
151	From Safe Nanomanufacturing to Nanosafe-by-Design processes. Journal of Physics: Conference Series, 2013, 429, 012054.	0.3	6
152	Laser-induced breakdown spectroscopy: technique, new features, and detection limits of trace elements in Al base alloy. Applied Physics B: Lasers and Optics, 2014, 115, 173-183.	1.1	15
153	Characterization of laser induced tantalum plasma by spatio-temporal resolved optical emission spectroscopy. Optik, 2014, 125, 2327-2331.	1.4	8
154	Spectral evolution of nano-second laser interaction with Ti target in nitrogen ambient gas. Applied Physics B: Lasers and Optics, 2014, 117, 343-352.	1.1	4

#	Article	IF	Citations
155	Sensitive detection of chlorine in iron oxide by single pulse and dual pulse laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 101, 183-190.	1.5	25
156	Laser Induced Breakdown Spectroscopy in archeometry: A review of its application and future perspectives. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 99, 201-209.	1.5	67
157	Exploration of a 3D nano-channel porous membrane material combined with laser-induced breakdown spectrometry for fast and sensitive heavy metal detection of solution samples. Journal of Analytical Atomic Spectrometry, 2014, 29, 2302-2308.	1.6	25
158	Quantification of fluorite mass-content in powdered ores using a Laser-Induced Breakdown Spectroscopy method based on the detection of minor elements and CaF molecular bands. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 100, 123-128.	1.5	42
159	Spectroscopic Evolution of Plasma Produced by Nd-YAG Laser. IEEE Transactions on Plasma Science, 2014, 42, 1674-1684.	0.6	2
160	Sensitive detection of iodine by low pressure and short pulse laser-induced breakdown spectroscopy (LIBS). Journal of Analytical Atomic Spectrometry, 2014, 29, 1082-1089.	1.6	14
161	Fluorine analysis using Laser Induced Breakdown Spectroscopy (LIBS). Journal of Analytical Atomic Spectrometry, 2014, 29, 1238.	1.6	51
162	Elemental analysis of halogens using molecular emission by laser-induced breakdown spectroscopy in air. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 98, 39-47.	1.5	87
163	Chemical variations in Yellowknife Bay formation sedimentary rocks analyzed by ChemCam on board the Curiosity rover on Mars. Journal of Geophysical Research E: Planets, 2015, 120, 452-482.	1.5	51
164	Application of spatial confinement for gas analysis using laser-induced breakdown spectroscopy to improve signal stability. Journal of Analytical Atomic Spectrometry, 2015, 30, 922-928.	1.6	45
165	First detection of fluorine on Mars: Implications for Gale Crater's geochemistry. Geophysical Research Letters, 2015, 42, 1020-1028.	1.5	107
166	Quantitative mixture fraction measurements in combustion system via laser induced breakdown spectroscopy. Optics and Laser Technology, 2015, 65, 43-49.	2.2	15
167	Composition of conglomerates analyzed by the Curiosity rover: Implications for Gale Crater crust and sediment sources. Journal of Geophysical Research E: Planets, 2016, 121, 353-387.	1.5	53
168	Quantification of fluorine traces in solid samples using CaF molecular emission bands in atmospheric air Laser-Induced Breakdown Spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 123, 157-162.	1.5	36
169	Laser-induced breakdown emission in hydrocarbon fuel mixtures. Journal Physics D: Applied Physics, 2016, 49, 155201.	1.3	11
170	ChemCam activities and discoveries during the nominal mission of the Mars Science Laboratory in Gale crater, Mars. Journal of Analytical Atomic Spectrometry, 2016, 31, 863-889.	1.6	134
171	Laser-induced breakdown spectroscopy system for remote measurement of salt in a narrow gap. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 116, 51-57.	1.5	17
172	Recalibration of the Mars Science Laboratory ChemCam instrument with an expanded geochemical database. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 129, 64-85.	1.5	137

#	Article	IF	Citations
173	A novel approach for quantitative LIBS fluorine analysis using CaF emission in calcium-free samples. Journal of Analytical Atomic Spectrometry, 2017, 32, 162-166.	1.6	41
174	ST-LIBS for heavy element detection in complex matrices. , 2017, , .		1
175	Detection of fluorine using laser-induced breakdown spectroscopy and Raman spectroscopy. Journal of Analytical Atomic Spectrometry, 2017, 32, 1966-1974.	1.6	35
176	Spatially resolved laser-induced breakdown spectroscopy in laminar premixed methaneâ€“air flames. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 136, 8-15.	1.5	20
177	New developed burner towards stable lean turbulent partially premixed flames. Fuel, 2018, 220, 942-957.	3.4	5
178	Laser-Induced Breakdown Spectroscopy (LIBS): Fast, Effective, and Agile Leading Edge Analytical Technology. Applied Spectroscopy, 2018, 72, 35-50.	1.2	39
179	Optical tweezers assisted controllable formation and precise manipulation of microdroplet. Applied Physics Express, 2019, 12, 117001.	1.1	2
180	Optimisation of fast quantification of fluorine content using handheld laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 158, 105628.	1.5	30
181	Theory and numerical model of the properties of plasma plume isothermal expansion during nanosecond laser ablation of a bronze-bonded diamond grinding wheel. Applied Surface Science, 2019, 475, 410-420.	3.1	6
182	In-situ K-Ar dating on Mars based on UV-Laser ablation coupled with a LIBS-QMS system: Development, calibration and application of the KArMars instrument. Chemical Geology, 2019, 506, 1-16.	1.4	11
183	Lean partially premixed turbulent flame equivalence ratio measurements using laser-induced breakdown spectroscopy. Fuel, 2019, 237, 320-334.	3.4	11
184	Expansion property of plasma plume for laser ablation of materials. Journal of Alloys and Compounds, 2019, 773, 1075-1088.	2.8	13
185	Review on recent advances in analytical applications of molecular emission and modelling. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 173, 105989.	1.5	22
186	Physics and dynamics of plasma in laser-induced breakdown spectroscopy. , 2020, , 71-106.		7
187	Instrumentation for LIBS and recent advances. , 2020, , 107-136.		8
188	Breaking the boundaries in spectrometry. Molecular analysis with atomic spectrometric techniques. TrAC - Trends in Analytical Chemistry, 2020, 129, 115955.	5.8	23
189	Amelioration in the Detection of Chlorine Using Electric Field Assisted LIBS. Plasma Chemistry and Plasma Processing, 2020, 40, 809-818.	1.1	3
190	Investigation into the Effect of Increasing Target Temperature and the Size of Cavity Confinements on Laser-Induced Plasmas. Metals, 2020, 10, 393.	1.0	5

#	Article	IF	Citations
191	Green synthesized silver NPs: fluorescence sensor for Clâ˜ ions in aqueous solution in biological pH and cell viability study. SN Applied Sciences, 2020, 2, 1.	1.5	3
192	Influence of cavity and magnetic confinements on the signal enhancement and plasma parameters of laser-induced Mg and Ti plasmas. Laser and Particle Beams, 2020, 38, 61-72.	0.4	3
193	Determination of fluorine in copper ore using laser-induced breakdown spectroscopy assisted by the SrF molecular emission band. Journal of Analytical Atomic Spectrometry, 2020, 35, 754-761.	1.6	19
194	Spatio-temporal distribution of atomic and molecular excited species in Laser-Induced Breakdown Spectroscopy: Potential implications on the determination of halogens. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 168, 105848.	1.5	13
195	Sensitive analysis of fluorine and chlorine elements in water solution using laser-induced breakdown spectroscopy assisted with molecular synthesis. Talanta, 2021, 224, 121784.	2.9	23
196	Determination of fluorine in copper concentrate via CaF molecules using laser-induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2021, 36, 1735-1741.	1.6	2
198	Laser-Based Detection of Atmospheric Halocarbons. , 2006, , 421-443.		1
199	Laser-induced breakdown spectrometry. Advances in Atomic Spectroscopy, 1999, , 235-288.	0.8	5
200	New Data on Activity Coefficients of Potassium, Nitrate, and Chloride Ions in Aqueous Solutions of KNO₃ and KCl by Ion Selective Electrodes. ISRN Chemical Engineering, 2012, 2012, 1-5.	1.2	12
201	Chemical Characterization Using Laser-Induced Breakdown Spectroscopy of Products Released from Lithium-Ion Battery Cells at Thermal Runaway Conditions. Applied Spectroscopy, 2022, 76, 967-977.	1.2	4
202	Low-Cost Real-Time Gas Monitoring Using a Laser Plasma Induced by a Third Harmonic Q-Switched Nd-YAG Laser. ITB Journal of Engineering Science, 2005, 37, 91-106.	0.1	0
203	Automated Analysis of Persistent Organic Pollutants in the Gas Phase by Laser Ionization Mass Spectrometry. Journal of the Mass Spectrometry Society of Japan, 2010, 58, 35-46.	0.0	0
204	The ChemCam Instrument Suite on the Mars Science Laboratory (MSL) Rover: Science Objectives and Mast Unit Description. , 2012, , 95-166.		2
205	Application of Laser-Induced Breakdown Spectroscopy for Diagnosis of Degradation of Concrete Structure. The Review of Laser Engineering, 2014, 42, 887.	0.0	0
206	Applications of Laser-Induced Breakdown Spectroscopy and Laser Breakdown Time-of-Flight Mass Spectrometry to Thermal Power Plants. The Review of Laser Engineering, 2014, 42, 903.	0.0	0
207	Detection of Fluorine with a Shock Wave Plasma Induced by a TEA CO2 Laser.. The Review of Laser Engineering, 1992, 20, 31-37.	0.0	1
208	Laserverfahren in der Umweltanalytik. Analytiker-Taschenbuch, 1997, , 157-272.	0.2	1
209	Direct and near real-time determination of metals in air by impaction-graphite furnace atomic absorption spectrometry. Advances in Atomic Spectroscopy, 1997, , 203-224.	0.8	1

#	Article	IF	Citations
210	Spectroscopic study on the laser-induced breakdown flame plasma. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 045202.	0.2	2
211	Investigation of zirconium oxide growth in nuclear fuel element claddings by micro-Raman, ellipsometry, and Laser-Induced Breakdown Spectroscopy. Vibrational Spectroscopy, 2020, 111, 103134.	1.2	2
212	Halides formation dynamics in nanosecond and femtosecond laser-induced breakdown spectroscopy. Plasma Physics and Controlled Fusion, 2022, 64, 054010.	0.9	4
213	A critical evaluation of the chlorine quantification method based on molecular emission detection in LIBS. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 190, 106390.	1.5	9
214	Approach to using 3D laser-induced breakdown spectroscopy (LIBS) data to explore the interaction of FLiNaK and FLiBe molten salts with nuclear-grade graphite. Journal of Analytical Atomic Spectrometry, 2022, 37, 1629-1641.	1.6	7
215	Enhancement of Laser-Induced Breakdown Spectral Signal by Auxiliary Laser Heating Samples. Instrumentation and Equipments, 2022, 10, 73-77.	0.1	0
216	Determination of fluorine distribution in shark teeth by laser-induced breakdown spectroscopy. Metallomics, 2022, 14, .	1.0	6
217	Nebulization assisted molecular LIBS for sensitive and fast fluorine determination in aqueous solutions. Journal of Analytical Atomic Spectrometry, 2023, 38, 80-89.	1.6	4
218	Improving Cl determination in cements by molecular LIBS using noble gas-enriched atmospheres and new approaches for interference removal. Journal of Analytical Atomic Spectrometry, 2023, 38, 325-332.	1.6	2
219	Application of laser induced plasma spectroscopy for air pollution monitoring. , 2022, , .		0
220	Laser Induced Breakdown Spectroscopy (LIBS) for Real-Time Detection of Halon Alternative Agents. , 1996, , .		0
221	Spectroscopic Studies of Laser-Generated Microplasmas. , 1992, , .		0
222	Applications of Laser-Induced Breakdown Spectroscopy. , 1985, , .		0