Zongyu Hou

List of Publications by Year
in descending order

48 papers	1,775 citations	279798 23 h-index	276875 41 g-index
48 all docs	48 docs citations	48 times ranked	596 citing authors

#	Article	IF	Citations
1	Laser-induced breakdown spectroscopy in China. Frontiers of Physics, 2014, 9, 419-438.	5.0	185
2	Coal analysis by laser-induced breakdown spectroscopy: a tutorial review. Journal of Analytical Atomic Spectrometry, 2019, 34, 1047-1082.	3.0	135
3	Recent advances in laser-induced breakdown spectroscopy quantification: From fundamental understanding to data processing. TrAC - Trends in Analytical Chemistry, 2021, 143, 116385.	11.4	112
4	A hybrid quantification model and its application for coal analysis using laser induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2016, 31, 722-736.	3.0	87
5	A simplified spectrum standardization method for laser-induced breakdown spectroscopy measurements. Journal of Analytical Atomic Spectrometry, 2011, 26, 2274.	3.0	86
6	Utilization of moderate cylindrical confinement for precision improvement of laser-induced breakdown spectroscopy signal. Optics Express, 2012, 20, A1011.	3.4	77
7	Major elements analysis in bituminous coals under different ambient gases by laser-induced breakdown spectroscopy with PLS modeling. Frontiers of Physics, 2012, 7, 708-713.	5.0	71
8	Signal quality improvement using cylindrical confinement for laser induced breakdown spectroscopy. Optics Express, 2013, 21, 15974.	3.4	71
9	Combination of cylindrical confinement and spark discharge for signal improvement using laser induced breakdown spectroscopy. Optics Express, 2014, 22, 12909.	3.4	64
10	A Rising Force for the World-Wide Development of Laser-Induced Breakdown Spectroscopy. Plasma Science and Technology, 2015, 17, 617-620.	1.5	59
11	Quantitative analysis of common elements in steel using a handheld Î¼-LIBS instrument. Journal of Analytical Atomic Spectrometry, 2017, 32, 1905-1915.	3.0	58
12	Correction of self-absorption effect in calibration-free laser-induced breakdown spectroscopy (CF-LIBS) with blackbody radiation reference. Analytica Chimica Acta, 2019, 1058, 39-47.	5.4	58
13	Physical insights of cavity confinement enhancing effect in laser-induced breakdown spectroscopy. Optics Express, 2016, 24, 3055.	3.4	52
14	Quantitative carbon measurement in anthracite using laser-induced breakdown spectroscopy with binder. Applied Optics, 2012, 51, B22.	1.8	49
15	Effects of moisture content on coal analysis using laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 112, 23-33.	2.9	48
16	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.	3.0	45
17	Investigation of intrinsic origins of the signal uncertainty for laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 155, 67-78.	2.9	44
18	Quantitative carbon analysis in coal by combining data processing and spatial confinement in laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 111, 102-107.	2.9	37

#	Article	IF	Citations
19	Improving data stability and prediction accuracy in laser-induced breakdown spectroscopy by utilizing a combined atomic and ionic line algorithm. Journal of Analytical Atomic Spectrometry, 2013, 28, 107-113.	3.0	33
20	Provenance classification of nephrite jades using multivariate LIBS: a comparative study. Analytical Methods, 2018, 10, 281-289.	2.7	27
21	Industrial at-line analysis of coal properties using laser-induced breakdown spectroscopy combined with machine learning. Fuel, 2021, 306, 121667.	6.4	27
22	Plasma modulation using beam shaping to improve signal quality for laser induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2020, 35, 1671-1677.	3.0	25
23	Way-out for laser-induced breakdown spectroscopy. Plasma Science and Technology, 2020, 22, 070101.	1.5	25
24	Calibration-free analysis of immersed metal alloys using long-pulse-duration laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 157, 84-90.	2.9	24
25	Cement raw material quality analysis using laser-induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2016, 31, 2384-2390.	3.0	23
26	Improvement of laser induced breakdown spectroscopy signal using gas mixture. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 174, 105992.	2.9	19
27	Smartphone detection of minced beef adulteration. Microchemical Journal, 2021, 164, 106088.	4.5	19
28	Impacts of a collection system on laser-induced breakdown spectroscopy signal detection. Applied Optics, 2018, 57, 6120.	1.8	18
29	Classification of ginseng according to plant species, geographical origin, and age using laser-induced breakdown spectroscopy and hyperspectral imaging. Journal of Analytical Atomic Spectrometry, 2021, 36, 1704-1711.	3.0	18
30	A comparative study of nanoparticle-enhanced laser-induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2020, 35, 2274-2281.	3.0	16
31	Quantitative Analysis of Carbon Content in Bituminous Coal by Laser-Induced Breakdown Spectroscopy Using UV Laser Radiation. Plasma Science and Technology, 2015, 17, 928-932.	1.5	14
32	Compensation for the variation of total number density to improve signal repeatability for laser-induced breakdown spectroscopy. Analytica Chimica Acta, 2022, 1205, 339752.	5.4	14
33	Fast measurement of coking properties of coal using laser induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 191, 106406.	2.9	14
34	From big to strong: growth of the Asian laser-induced breakdown spectroscopy community. Plasma Science and Technology, 2019, 21, 030101.	1.5	13
35	Effect of laser beam shaping on the determination of manganese and chromium elements in steel samples using laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 163, 105747.	2.9	12
36	Validated ensemble variable selection of laser-induced breakdown spectroscopy data for coal property analysis. Journal of Analytical Atomic Spectrometry, 2021, 36, 111-119.	3.0	12

#	Article	IF	Citations
37	Spectral knowledge-based regression for laser-induced breakdown spectroscopy quantitative analysis. Expert Systems With Applications, 2022, 205, 117756.	7.6	12
38	Analysis of element content in cement by Gaussian and flattop laser-induced breakdown spectroscopy. Journal Physics D: Applied Physics, 2019, 52, 405102.	2.8	11
39	Understanding the laser-induced aerosol ablation of sub-micron liquid particles via size-resolved spectral and image analyses. Journal of Analytical Atomic Spectrometry, 2019, 34, 2385-2393.	3.0	11
40	Incorporating domain knowledge into machine learning for laser-induced breakdown spectroscopy quantification. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 195, 106490.	2.9	10
41	Application of laser-induced breakdown spectroscopy and chemometrics for rapid identification of fire-retardant/resistant coatings from fire residues. Construction and Building Materials, 2022, 325, 126773.	7.2	9
42	Calibration curve and support vector regression methods applied for quantification of cement raw meal using laser-induced breakdown spectroscopy. Plasma Science and Technology, 2019, 21, 034003.	1.5	8
43	A data preprocessing method based on matrix matching for coal analysis by laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 180, 106212.	2.9	7
44	Improvement of sample discrimination using laser-induced breakdown spectroscopy with multiple-setting spectra. Analytica Chimica Acta, 2021, 1184, 339053.	5.4	5
45	Insights into Enhanced Repeatability of Femtosecond Laser-Induced Plasmas. ACS Omega, 2020, 5, 30425-30435.	3.5	5
46	Evaluation of femtosecond laser-induced breakdown spectroscopy system as an offline coal analyzer. Scientific Reports, 2021, 11, 15968.	3.3	4
47	Homogeneous-material-based calibration method for correcting laser-induced breakdown spectroscopy measurement-error bias in the case of dust pollution. Applied Optics, 2017, 56, 9644.	1.8	1
48	Coal analysis. , 2020, , 473-498.		1