Yixiang Duan

List of Publications by Year
in descending order

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182	5,041	76196	138251
papers	citations	40 h-index	58 g-index

183	183	183	5609
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Breath Analysis: Potential for Clinical Diagnosis and Exposure Assessment. Clinical Chemistry, 2006, 52, 800-811.	1.5	339
2	Chemistry, physics and biology of graphene-based nanomaterials: new horizons for sensing, imaging and medicine. Journal of Materials Chemistry, 2012, 22, 14313.	6.7	116
3	Investigation of potential breath biomarkers for the early diagnosis of breast cancer using gas chromatographyâ€“mass spectrometry. Clinica Chimica Acta, 2014, 436, 59-67.	0.5	96
4	Research progress of DNA walker and its recent applications in biosensor. TrAC - Trends in Analytical Chemistry, 2019, 120, 115626.	5.8	94
5	Amplified fluorescent aptasensor through catalytic recycling for highly sensitive detection of ochratoxin A. Biosensors and Bioelectronics, 2015, 65, 16-22.	5.3	93
6	A novel approach for the quantitative analysis of multiple elements in steel based on laser-induced breakdown spectroscopy (LIBS) and random forest regression (RFR). Journal of Analytical Atomic Spectrometry, 2014, 29, 2323-2329.	1.6	87
7	Label-Free and Enzyme-Free Colorimetric Detection of Pb²⁺ Based on RNA Cleavage and Annealing-Accelerated Hybridization Chain Reaction. Analytical Chemistry, 2019, 91, 4806-4813.	3.2	84
8	A low cost fiber-optic humidity sensor based on silica solâ€“gel film. Sensors and Actuators B: Chemical, 2011, 160, 1340-1345.	4.0	82
9	Classification of iron ores by laser-induced breakdown spectroscopy (LIBS) combined with random forest (RF). Journal of Analytical Atomic Spectrometry, 2015, 30, 453-458.	1.6	81
10	Fiber Optic Surface Plasmon Resonanceâ€“Based Biosensor Technique: Fabrication, Advancement, and Application. Critical Reviews in Analytical Chemistry, 2016, 46, 213-223.	1.8	78
11	The Recent Development of Hybridization Chain Reaction Strategies in Biosensors. ACS Sensors, 2020, 5, 2977-3000.	4.0	76
12	Plasmaâ€based ambient mass spectrometry techniques: The current status and future prospective. Mass Spectrometry Reviews, 2015, 34, 449-473.	2.8	74
13	Microwave-Induced Plasma Desorption/Ionization Source for Ambient Mass Spectrometry. Analytical Chemistry, 2013, 85, 4512-4519.	3.2	71
14	Design strategies of AuNPs-based nucleic acid colorimetric biosensors. TrAC - Trends in Analytical Chemistry, 2020, 124, 115795.	5.8	71
15	A novel surface-enhanced Raman scattering (SERS) strategy for ultrasensitive detection of bacteria based on three-dimensional (3D) DNA walker. Biosensors and Bioelectronics, 2021, 172, 112758.	5.3	69
16	Fluorescent aptasensor for antibiotic detection using magnetic bead composites coated with gold nanoparticles and a nicking enzyme. Analytica Chimica Acta, 2017, 984, 177-184.	2.6	68
17	Technical Development of Raman Spectroscopy: From Instrumental to Advanced Combined Technologies. Applied Spectroscopy Reviews, 2014, 49, 64-82.	3.4	64
18	Development and investigation of microwave plasma techniques in analytical atomic spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1997, 52, 131-161.	1.5	61

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19	A facile one-pot synthesis of starch functionalized graphene as nano-carrier for pH sensitive and starch-mediated drug delivery. Colloids and Surfaces B: Biointerfaces, 2015, 128, 86-93.	2.5	61
20	Breath biomarkers in diagnosis of pulmonary diseases. Clinica Chimica Acta, 2012, 413, 1770-1780.	0.5	57
21	Preparation of Au@Ag coreâ€“shell nanoparticle decorated silicon nanowires for bacterial capture and sensing combined with laser induced breakdown spectroscopy and surface-enhanced Raman spectroscopy. Nanoscale, 2019, 11, 5346-5354.	2.8	56
22	Combined Laser-Induced Breakdown with Raman Spectroscopy: Historical Technology Development and Recent Applications. Applied Spectroscopy Reviews, 2013, 48, 487-508.	3.4	55
23	Untargeted saliva metabonomics study of breast cancer based on ultra performance liquid chromatography coupled to mass spectrometry with HILIC and RPLC separations. Talanta, 2016, 158, 351-360.	2.9	55
24	Î©-Shaped Fiber-Optic Probe-Based Localized Surface Plasmon Resonance Biosensor for Real-Time Detection of Salmonella Typhimurium. Analytical Chemistry, 2018, 90, 13640-13646.	3.2	55
25	Recent developments of protonâ€transfer reaction mass spectrometry (PTRâ€MS) and its applications in medical research. Mass Spectrometry Reviews, 2013, 32, 143-165.	2.8	54
26	Simultaneous and sensitive analysis of Ag(i), Mn(ii), and Cr(iii) in aqueous solution by LIBS combined with dispersive solid phase micro-extraction using nano-graphite as an adsorbent. Journal of Analytical Atomic Spectrometry, 2014, 29, 1098.	1.6	54
27	Simple, Fast Matrix Conversion and Membrane Separation Method for Ultrasensitive Metal Detection in Aqueous Samples by Laser-Induced Breakdown Spectroscopy. Analytical Chemistry, 2015, 87, 5577-5583.	3.2	54
28	One-Step Self-Assembly of Multifunctional DNA Nanohydrogels: An Enhanced and Harmless Strategy for Guiding Combined Antitumor Therapy. ACS Applied Materials & Interfaces, 2019, 11, 46479-46489.	4.0	54
29	Investigation of salivary free amino acid profile for early diagnosis of breast cancer with ultra performance liquid chromatography-mass spectrometry. Clinica Chimica Acta, 2015, 447, 23-31.	0.5	53
30	An aptamer based method for small molecules detection through monitoring salt-induced AuNPs aggregation and surface plasmon resonance (SPR) detection. Sensors and Actuators B: Chemical, 2016, 236, 474-479.	4.0	52
31	Breath Ketone Testing: A New Biomarker for Diagnosis and Therapeutic Monitoring of Diabetic Ketosis. BioMed Research International, 2014, 2014, 1-5.	0.9	51
32	Plasma enhanced label-free immunoassay for alpha-fetoprotein based on a U-bend fiber-optic LSPR biosensor. RSC Advances, 2015, 5, 23990-23998.	1.7	51
33	Quantitative analysis of sedimentary rocks using laser-induced breakdown spectroscopy: comparison of support vector regression and partial least squares regression chemometric methods. Journal of Analytical Atomic Spectrometry, 2015, 30, 2384-2393.	1.6	50
34	Magnified fluorescence detection of silver(I) ion in aqueous solutions by using nano-graphite-DNA hybrid and DNase I. Biosensors and Bioelectronics, 2014, 58, 276-281.	5.3	48
35	A novel strategy for rapid detection of bacteria in water by the combination of three-dimensional surface-enhanced Raman scattering (3D SERS) and laser induced breakdown spectroscopy (LIBS). Analytica Chimica Acta, 2018, 1043, 64-71.	2.6	48
36	Advanced statistical analysis of laser-induced breakdown spectroscopy data to discriminate sedimentary rocks based on Czernyâ€“Turner and Echelle spectrometers. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 93, 8-13.	1.5	46

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37	Multi-element quantitative analysis of soils by laser induced breakdown spectroscopy (LIBS) coupled with univariate and multivariate regression methods. Analytical Methods, 2019, 11, 3006-3013.	1.3	45
38	Capillary-Based Three-Dimensional Immunosensor Assembly for High-Performance Detection of Carcinoembryonic Antigen Using Laser-Induced Fluorescence Spectrometry. Analytical Chemistry, 2014, 86, 1518-1524.	3.2	44
39	Laser-induced breakdown spectroscopy for solution sample analysis using porous electrospun ultrafine fibers as a solid-phase support. RSC Advances, 2014, 4, 14392.	1.7	44
40	Optical diagnostics of a low powerâ€"low gas flow rates atmospheric-pressure argon plasma created by a microwave plasma torch. Plasma Sources Science and Technology, 2009, 18, 025030.	1.3	43
41	Non-Transition-Metal Catalytic System for N₂ Reduction to NH₃: AÂDensity Functional Theory Study of Al-Doped Graphene. Journal of Physical Chemistry Letters, 2018, 9, 570-576.	2.1	43
42	Plasma-Enhanced Antibody Immobilization for the Development of a Capillary-Based Carcinoembryonic Antigen Immunosensor Using Laser-Induced Fluorescence Spectroscopy. Analytical Chemistry, 2013, 85, 4578-4585.	3.2	40
43	Microfabricated Glow Discharge Plasma (MFGDP) for Ambient Desorption/Ionization Mass Spectrometry. Analytical Chemistry, 2013, 85, 9013-9020.	3.2	40
44	Ultrasensitive U-shaped fiber optic LSPR cytosensing for label-free and in situ evaluation of cell surface N-glycan expression. Sensors and Actuators B: Chemical, 2019, 284, 582-588.	4.0	40
45	Microplasma Technology and Its Applications in Analytical Chemistry. Applied Spectroscopy Reviews, 2011, 46, 581-605.	3.4	39
46	Fabrication of porous ionic liquid polymer as solid-phase microextraction coating for analysis of organic acids by gas chromatography â€“ mass spectrometry. Talanta, 2017, 172, 45-52.	2.9	39
47	New findings of silica nanoparticles induced ER autophagy in human colon cancer cell. Scientific Reports, 2017, 7, 42591.	1.6	38
48	A cross-sectional study of breath acetone based on diabetic metabolic disorders. Journal of Breath Research, 2015, 9, 016005.	1.5	37
49	Emission enhancement of laser-induced breakdown spectroscopy for aqueous sample analysis based on Au nanoparticles and solid-phase substrate. Applied Optics, 2016, 55, 6706.	2.1	37
50	Exhaled isopropanol: new potential biomarker in diabetic breathomics and its metabolic correlations with acetone. RSC Advances, 2017, 7, 17480-17488.	1.7	37
51	Poly-adenine regulated DNA density on AuNPs to construct efficient DNA walker for microRNA-21 detection. Talanta, 2020, 217, 121056.	2.9	37
52	Diagnosis of breast cancer based on breath analysis: An emerging method. Critical Reviews in Oncology/Hematology, 2013, 87, 28-40.	2.0	36
53	Ultra-trace metallic element detection in liquid samples using laser induced breakdown spectroscopy based on matrix conversion and crosslinked PVA polymer membrane. Journal of Analytical Atomic Spectrometry, 2016, 31, 1622-1630.	1.6	34
54	GC-Based Techniques for Breath Analysis: Current Status, Challenges, and Prospects. Critical Reviews in Analytical Chemistry, 2016, 46, 291-304.	1.8	33

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55	Technological Development of Antibody Immobilization for Optical Immunoassays: Progress and Prospects. Critical Reviews in Analytical Chemistry, 2015, 45, 62-75.	1.8	32
56	A hydrogel-based solidification method for the direct analysis of liquid samples by laser-induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2017, 32, 1412-1419.	1.6	32
57	Catalytic hairpin assembly as cascade nucleic acid circuits for fluorescent biosensor: Design, evolution and application. TrAC - Trends in Analytical Chemistry, 2022, 151, 116582.	5.8	32
58	Discovery of potential biomarkers in exhaled breath for diagnosis of type 2 diabetes mellitus based on GC-MS with metabolomics. RSC Advances, 2014, 4, 25430-25439.	1.7	31
59	Multi-elemental surface mapping and analysis of carbonaceous shale by laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 115, 31-39.	1.5	30
60	A Facile, Label-Free, and Universal Biosensor Platform Based on Target-Induced Graphene Oxide Constrained DNA Dissociation Coupling with Improved Strand Displacement Amplification. ACS Sensors, 2018, 3, 2423-2431.	4.0	30
61	Multichannel-Structured Three-Dimensional Chip for Highly Sensitive Pathogenic Bacteria Detection Based on Fast DNA-Programmed Signal Polymerization. Analytical Chemistry, 2018, 90, 12019-12026.	3.2	28
62	A dielectric-barrier discharge enhanced plasma brush array at atmospheric pressure. Applied Physics Letters, 2013, 103, .	1.5	27
63	An effective analytical system based on a pulsed direct current microplasma source for ultra-trace mercury determination using gold amalgamation cold vapor atomic emission spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 93, 1-7.	1.5	26
64	Breath analysis: technical developments and challenges in the monitoring of human exposure to volatile organic compounds. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2015, 1002, 285-299.	1.2	26
65	An efficient localized catalytic hairpin assembly-based DNA nanomachine for miRNA-21 imaging in living cells. Analyst, The, 2021, 146, 3041-3051.	1.7	26
66	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
67	Laser-induced fluorescence: Progress and prospective for in vivo cancer diagnosis. Science Bulletin, 2013, 58, 2003-2016.	1.7	24
68	Method development for directly screening pesticide residues in foodstuffs using ambient microfabricated glow discharge plasma (MFGDP) desorption/ionization mass spectrometry. International Journal of Mass Spectrometry, 2015, 377, 507-514.	0.7	24
69	Cationic Polystyrene Resolves Nonalcoholic Steatohepatitis, Obesity, and Metabolic Disorders by Promoting Eubiosis of Gut Microbiota and Decreasing Endotoxemia. Diabetes, 2017, 66, 2137-2143.	0.3	24
70	Rapid identification and desorption mechanisms of nitrogen-based explosives by ambient micro-fabricated glow discharge plasma desorption/ionization (MFGDP) mass spectrometry. Talanta, 2017, 167, 75-85.	2.9	24
71	Optical Imaging Paves the Way for Autophagy Research. Trends in Biotechnology, 2017, 35, 1181-1193.	4.9	24
72	Exploratory study on classification of lung cancer subtypes through a combined K-nearest neighbor classifier in breathomics. Scientific Reports, 2020, 10, 5880.	1.6	24

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73	An enzyme-mediated universal fluorescent biosensor template for pathogen detection based on a three-dimensional DNA walker and catalyzed hairpin assembly. Nanoscale, 2021, 13, 2492-2501.	2.8	24
74	A rapid, adaptative DNA biosensor based on molecular beacon-concatenated dual signal amplification strategies for ultrasensitive detection of p53 gene and cancer cells. Talanta, 2020, 210, 120638.	2.9	23
75	A Highly Costâ€Efficient Largeâ€Scale Uniform Laminar Plasma Jet Array Enhanced by Vâ€“I Characteristic Modulation in a Nonâ€Selfâ€Sustained Atmospheric Discharge. Advanced Science, 2020, 7, 1902616.	5.6	23
76	Optical and electrical analysis of multi-electrode cylindrical dielectric barrier discharge (DBD) plasma reactor. Vacuum, 2018, 157, 465-474.	1.6	22
77	Effect of H ₂ O ₂ induced oxidative stress (OS) on volatile organic compounds (VOCs) and intracellular metabolism in MCF-7 breast cancer cells. Journal of Breath Research, 2019, 13, 036005.	1.5	22
78	Investigation of CO2 Splitting Process Under Atmospheric Pressure Using Multi-electrode Cylindrical DBD Plasma Reactor. Plasma Chemistry and Plasma Processing, 2019, 39, 809-824.	1.1	22
79	Crosstalk between Autophagy and Nanomaterials: Internalization, Activation, Termination. Advanced Biology, 2019, 3, e1800259.	3.0	22
80	Direct Oxidative Nitrogen Fixation from Air and H₂O by a Water Falling Film Dielectric Barrier Discharge Reactor at Ambient Pressure and Temperature. ChemSusChem, 2021, 14, 1507-1511.	3.6	22
81	Laser Induced Breakdown Spectroscopy Based on Single Beam Splitting and Geometric Configuration for Effective Signal Enhancement. Scientific Reports, 2015, 5, 7625.	1.6	21
82	A novel specimen-preparing method using epoxy resin as binding material for LIBS analysis of powder samples. Talanta, 2015, 144, 1370-1376.	2.9	21
83	Quantitative Analysis of Salmonella typhimurium Based on Elemental-Tags Laser-Induced Breakdown Spectroscopy. Analytical Chemistry, 2020, 92, 8090-8096.	3.2	21
84	Development of a rapid and ultra-sensitive cytosensor: Î©-shaped fiber optic LSPR integrated with suitable AuNPs coverage. Sensors and Actuators B: Chemical, 2021, 336, 129706.	4.0	21
85	Temporal-resolved characterization of laser-induced plasma for spectrochemical analysis of gas shales. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2016, 121, 28-37.	1.5	20
86	VOC biomarkers identification and predictive model construction for lung cancer based on exhaled breath analysis: research protocol for an exploratory study. BMJ Open, 2019, 9, e028448.	0.8	20
87	Toehold-mediated strand displacement reaction formation of three-way junction DNA structure combined with nicking enzyme signal amplification for highly sensitive colorimetric detection of Salmonella Typhimurium. Analytica Chimica Acta, 2020, 1139, 138-145.	2.6	20
88	Ultrasensitive and Simultaneous Detection of Multielements in Aqueous Samples Based on Biomimetic Array Combined with Laser-Induced Breakdown Spectroscopy. Analytical Chemistry, 2021, 93, 10196-10203.	3.2	20
89	Performance evaluation of a newly designed DC microplasma for direct organic compound detection through molecular emission spectrometry. Journal of Analytical Atomic Spectrometry, 2012, 27, 2094.	1.6	19
90	Laser-induced breakdown spectroscopy technique for quantitative analysis of aqueous solution using matrix conversion based on plant fiber spunlaced nonwovens. Applied Optics, 2015, 54, 8318.	2.1	19

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91	Combining autophagy-inducing peptides and brefeldin A delivered by perinuclear-localized mesoporous silica nanoparticles: a manipulation strategy for ER-phagy. Nanoscale, 2018, 10, 8796-8805.	2.8	19
92	Plasmaâ€based ambient mass spectrometry: Recent progress and applications. Mass Spectrometry Reviews, 2023, 42, 95-130.	2.8	18
93	Sandwich method-based sensitivity enhancement of Î©-shaped fiber optic LSPR for time-flexible bacterial detection. Biosensors and Bioelectronics, 2022, 201, 113911.	5.3	18
94	Synchronous detection of heavy metal ions in aqueous solution by gold nanoparticle surface-enhanced laser-induced breakdown spectroscopy. Journal of Analytical Atomic Spectrometry, 2021, 36, 2639-2648.	1.6	17
95	Investigation of biomarkers for discriminating breast cancer cell lines from normal mammary cell lines based on VOCs analysis and metabolomics. RSC Advances, 2016, 6, 41816-41824.	1.7	16
96	A double-functionalized polymeric ionic liquid used as solid-phase microextraction coating for efficient aromatic amine extraction and detection with gas chromatographyâ€“mass spectrometry. Analytical and Bioanalytical Chemistry, 2019, 411, 2209-2221.	1.9	16
97	Breath volatile organic compound analysis: an emerging method for gastric cancer detection. Journal of Breath Research, 2021, 15, 044002.	1.5	16
98	A systematic study of the distinctive character of microwave induced plasma desorption/ionization (MIPDI) mass spectrometry: Is it a soft or a hard ion source?. International Journal of Mass Spectrometry, 2015, 376, 65-74.	0.7	15
99	Accuracy improvement of quantitative LIBS analysis using wavelet threshold de-noising. Journal of Analytical Atomic Spectrometry, 2017, 32, 629-637.	1.6	15
100	Study on the Molecular Mechanisms Against Human Breast Cancer from Insight of Elemental Distribution in Tissue Based on Laser-Induced Breakdown Spectroscopy (LIBS). Biological Trace Element Research, 2021, 199, 1686-1692.	1.9	15
101	The development of a wash-free homogeneous immunoassay method for the detection of tetracycline in environmental samples. Analyst, The, 2021, 146, 4918-4926.	1.7	15
102	Simultaneous determination of lithology and major elements in rocks using laser-induced breakdown spectroscopy (LIBS) coupled with a deep convolutional neural network. Journal of Analytical Atomic Spectrometry, 2022, 37, 508-516.	1.6	15
103	Ambient ionization and direct identification of volatile organic compounds with microwaveâ€induced plasma mass spectrometry. Journal of Mass Spectrometry, 2015, 50, 388-395.	0.7	14
104	A single-beam-splitting technique combined with a calibration-free method for field-deployable applications using laser-induced breakdown spectroscopy. RSC Advances, 2015, 5, 4537-4546.	1.7	14
105	Metal-chelate induced nanoparticle aggregation enhanced laser-induced breakdown spectroscopy for ultra-sensitive detection of trace metal ions in liquid samples. Journal of Analytical Atomic Spectrometry, 2020, 35, 188-197.	1.6	14
106	A dual-functional fluorescent biosensor based on enzyme-involved catalytic hairpin assembly for the detection of APE1 and miRNA-21. Analyst, The, 2022, 147, 2834-2842.	1.7	14
107	Dehydrated Carbon Coupled with Laser-Induced Breakdown Spectrometry (LIBS) for the Determination of Heavy Metals in Solutions. Applied Spectroscopy, 2015, 69, 1190-1198.	1.2	13
108	A highly efficient magnetically confined ion source for real time on-line monitoring of trace compounds in ambient air. Chemical Communications, 2018, 54, 12962-12965.	2.2	13

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109	A Filamentary Plasma Jet Generated by Argon Dielectric-Barrier Discharge in Ambient Air. IEEE Transactions on Plasma Science, 2019, 47, 3134-3140.	0.6	13
110	Kinetics of optical clearing of human skin studiedin vivousing portable Raman spectroscopy. Laser Physics Letters, 2020, 17, 105601.	0.6	13
111	Low-Triggering-Potential Electrochemiluminescence from a Luminol Analogue Functionalized Semiconducting Polymer Dots for Imaging Detection of Blood Glucose. Analytical Chemistry, 2022, 94, 5615-5623.	3.2	13
112	Development of solid-phase microextraction fibers based on multi-walled carbon nanotubes for pre-concentration and analysis of alkanes in human breath. Journal of Chromatography A, 2015, 1425, 34-41.	1.8	12
113	Microwave induced plasma desorption ionization (MIPDI) mass spectrometry for qualitative and quantitative analysis of preservatives in cosmetics. RSC Advances, 2015, 5, 40636-40646.	1.7	12
114	A novel method for metallic element analysis in particle samples using a laser-induced breakdown spectroscopy technique. Journal of Analytical Atomic Spectrometry, 2016, 31, 1527-1533.	1.6	12
115	Ex vivo <scp>threeâ€dimensional</scp> elemental imaging of mouse brain tissue block by laserâ€induced breakdown spectroscopy. Journal of Biophotonics, 2021, 14, e202000479.	1.1	12
116	Hybridized nanolayer modified Î©-shaped fiber-optic synergistically enhances localized surface plasma resonance for ultrasensitive cytosensor and efficient photothermal therapy. Biosensors and Bioelectronics, 2021, 194, 113599.	5.3	12
117	Quantitative multiple-element simultaneous analysis of seaweed fertilizer by laser-induced breakdown spectroscopy. Optics Express, 2020, 28, 14198.	1.7	12
118	The M6A methyltransferase METTL3 regulates proliferation in esophageal squamous cell carcinoma. Biochemical and Biophysical Research Communications, 2021, 580, 48-55.	1.0	12
119	High performance exhaled breath biomarkers for diagnosis of lung cancer and potential biomarkers for classification of lung cancer. Journal of Breath Research, 2021, 15, 016017.	1.5	12
120	Recent advances of catalytic hairpin assembly and its application in bioimaging and biomedicine. Journal of Materials Chemistry B, 2022, 10, 5303-5322.	2.9	12
121	Highly fluorescent CdTe nanocrystals: Synthesis, characterization, property, mechanism, and application as a sensor for biomolecule analysis. Journal of Materials Research, 2014, 29, 633-640.	1.2	11
122	Preparation and tumor cell model based biobehavioral evaluation of the nanocarrier system using partially reduced graphene oxide functionalized by surfactant. International Journal of Nanomedicine, 2015, 10, 4605.	3.3	11
123	Novel laser induced breakdown spectroscopy â€“ Raman instrumentation using a single pulsed laser and an echelle spectrometer. Instrumentation Science and Technology, 2018, 46, 163-174.	0.9	11
124	Efficient degradation of Fipronil in water by microwave-induced argon plasma: Mechanism and degradation pathways. Science of the Total Environment, 2020, 725, 138487.	3.9	11
125	A universal array platform for ultrasensitive, high-throughput and microvolume detection of heavy metal, nucleic acid and bacteria based on photonic crystals combined with DNA nanomachine. Biosensors and Bioelectronics, 2022, 197, 113731.	5.3	11
126	Direct Amination of Benzene with Molecular Nitrogen Enabled by Plasmaâ€Liquid Interactions. Angewandte Chemie - International Edition, 2022, 61, .	7.2	11

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127	In situ targeting TEM8 via immune response and polypeptide recognition by wavelength-modulated surface plasmon resonance biosensor. Scientific Reports, 2016, 6, 20006.	1.6	10
128	Exploration of Microplasma Probe Desorption/Ionization Mass Spectrometry (MPPDI-MS) for Biologically Related Analysis. Analytical Chemistry, 2016, 88, 1667-1673.	3.2	10
129	Influence of humidity on the characteristics of laser-induced air plasma. Japanese Journal of Applied Physics, 2018, 57, 106001.	0.8	10
130	Applications of Raman spectroscopy in two-dimensional materials. Journal of Innovative Optical Health Sciences, 2020, 13, .	0.5	10
131	Signal enhancement of laser-induced breakdown spectroscopy on non-flat samples by single beam splitting. Optics Express, 2019, 27, 20541.	1.7	10
132	High-Throughput Recognition of Tumor Cells Using Label-Free Elemental Characteristics Based on Interpretable Deep Learning. Analytical Chemistry, 2022, 94, 3158-3164.	3.2	10
133	Development of microwave plasma proton transfer reaction mass spectrometry (MWP-PTR-MS) for on-line monitoring of volatile organic compounds: Design, characterization and performance evaluation. Talanta, 2020, 208, 120468.	2.9	9
134	A highly sensitive fluorescence biosensor for detection of Staphylococcus aureus based on HCR-mediated three-way DNA junction nicking enzyme assisted signal amplification. Analyst, The, 2021, 146, 6528-6536.	1.7	9
135	A Compact Spectrophotometer Using Liquid Core Waveguide and Handheld Charge Coupled Device: For Green Method and Ultrasensitive Speciation Analysis of Cr(III) and Cr(VI). Spectroscopy Letters, 2009, 42, 351-355.	0.5	8
136	Preliminary construction of integral analysis for characteristic components in complex matrices by in-house fabricated solid-phase microextraction fibers combined with gas chromatographyâ€“mass spectrometry. Journal of Chromatography A, 2016, 1461, 18-26.	1.8	8
137	Quantitative analysis of steel samples by laser-induced-breakdown spectroscopy with wavelet-packet-based relevance vector machines. Journal of Analytical Atomic Spectrometry, 2018, 33, 975-985.	1.6	8
138	Combination of support vector regression (SVR) and microwave plasma atomic emission spectrometry (MWP-AES) for quantitative elemental analysis in solid samples using the continuous direct solid sampling (CDSS) technique. Journal of Analytical Atomic Spectrometry, 2018, 33, 1954-1961.	1.6	8
139	Design and Electrical Analysis of Multi-Electrode Cylindrical Dielectric Barrier Discharge Plasma Reactor. IEEE Transactions on Plasma Science, 2019, 47, 419-426.	0.6	8
140	Low-cost smartphone-based LIBS combined with deep learning image processing for accurate lithology recognition. Chemical Communications, 2021, 57, 7156-7159.	2.2	8
141	Sensitive detection of mercury (II) ion using wave length-tunable visible-emitting gold nanoclusters based on protein-templated synthesis. Journal of Materials Research, 2014, 29, 2416-2424.	1.2	7
142	A Multifunctional Sampling Chamber for Laser-Induced Breakdown Spectroscopy for On-Site Elemental Analysis. Instrumentation Science and Technology, 2015, 43, 485-495.	0.9	7
143	Matrix-Assisted Plasma Atomization Emission Spectrometry for Surface Sampling Elemental Analysis. Scientific Reports, 2016, 6, 19417.	1.6	7
144	Exploration and performance evaluation of microwaveâ€induced plasma with different discharge gases for ambient desorption/ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2017, 31, 919-927.	0.7	7

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145	A Novel Microwave-Induced Plasma Ionization Source for Ion Mobility Spectrometry. Scientific Reports, 2017, 7, 44051.	1.6	7
146	A mechanism study of positive ionization processes in flowing atmospheric-pressure afterglow (FAPA) ambient ion source with controlled plasma and ambient conditions. Talanta, 2019, 205, 120090.	2.9	7
147	Integrated instrumentation for combined laser-induced breakdown and Raman spectroscopy. Instrumentation Science and Technology, 2019, 47, 355-373.	0.9	7
148	Solâ€“gel fabrication and performance evaluation of graphene-based hydrophobic solid-phase microextraction fibers for multi-residue analysis of pesticides in water samples. Analytical Methods, 2020, 12, 3954-3963.	1.3	7
149	Effective N₂ capture by aryl cations at ambient temperature and pressure. Physical Chemistry Chemical Physics, 2021, 23, 10763-10767.	1.3	7
150	Direct and sensitive determination of Cu, Pb, Cr and Ag in soil by laser ablation microwave plasma torch optical emission spectrometry. Talanta, 2022, 246, 123516.	2.9	7
151	Highly concentrated, ring-shaped phase conversion laser-induced breakdown spectroscopy technology for liquid sample analysis. Applied Optics, 2017, 56, 5092.	2.1	6
152	Methylation in combination with temperature programming enables rapid identification of polysaccharides by ambient micro-fabrication glow discharge plasma (MFGDP) desorption ionization mass spectrometry. Talanta, 2020, 218, 121156.	2.9	6
153	Interpretation of Ionization Mechanism Responsible for Reagent Ion and Analyte Formation in Microwave-Induced Plasma Desorption Ionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2020, 31, 752-762.	1.2	6
154	Imaging of Tumor Boundary Based on Multielements and Molecular Fragments Heterogeneity in Lung Cancer. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-7.	2.4	6
155	Discrimination of elemental responsiveness to tumor chemotherapy by laser-induced breakdown spectroscopy coupled with chemometric methods. Laser Physics, 2020, 30, 105701.	0.6	6
156	Self-extending DNA-Mediated Isothermal Amplification System and Its Biosensing Applications. Analytical Chemistry, 2021, 93, 14334-14342.	3.2	6
157	Induction of autophagy and endoplasmic reticulum autophagy caused by cadmium telluride quantum dots are protective mechanisms of yeast cell. Journal of Applied Toxicology, 2022, 42, 1146-1158.	1.4	6
158	A hybrid method combining discharge-assisted laser induced breakdown spectroscopy with wavelet transform for trace elemental analysis in liquid targets. Journal of Analytical Atomic Spectrometry, 2022, 37, 1350-1359.	1.6	6
159	Selective detection of organophosphate nerve agents using microplasma device. Analytical Methods, 2014, 6, 1848-1854.	1.3	5
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