Howbeer Muhamadali

List of Publications by Year
in descending order

46 papers	2,149 citations	257101 24 h-index	243296 44 g-index
47 all docs	47 docs citations	47 times ranked	3385 citing authors

#	Article	IF	Citations
1	A tutorial review: Metabolomics and partial least squares-discriminant analysis â€“ a marriage of convenience or a shotgun wedding. Analytica Chimica Acta, 2015, 879, 10-23.	2.6	618
2	Point-and-shoot: rapid quantitative detection methods for on-site food fraud analysis â€“ moving out of the laboratory and into the food supply chain. Analytical Methods, 2015, 7, 9401-9414.	1.3	183
3	Root functional traits explain root exudation rate and composition across a range of grassland species. Journal of Ecology, 2022, 110, 21-33.	1.9	79
4	Combining Raman and FT-IR Spectroscopy with Quantitative Isotopic Labeling for Differentiation of E. coli Cells at Community and Single Cell Levels. Analytical Chemistry, 2015, 87, 4578-4586.	3.2	78
5	Reverse and Multiple Stable Isotope Probing to Study Bacterial Metabolism and Interactions at the Single Cell Level. Analytical Chemistry, 2016, 88, 9443-9450.	3.2	72
6	Quantitative Online Liquid Chromatographyâ€“Surface-Enhanced Raman Scattering (LC-SERS) of Methotrexate and its Major Metabolites. Analytical Chemistry, 2017, 89, 6702-6709.	3.2	63
7	Through-container, extremely low concentration detection of multiple chemical markers of counterfeit alcohol using a handheld SORS device. Scientific Reports, 2017, 7, 12082.	1.6	60
8	A flavour of omics approaches for the detection of food fraud. Current Opinion in Food Science, 2016, 10, 7-15.	4.1	58
9	Surface-Enhanced Raman Scattering (SERS) in Microbiology: Illumination and Enhancement of the Microbial World. Applied Spectroscopy, 2018, 72, 987-1000.	1.2	54
10	Rapid, Accurate, and Quantitative Detection of Propranolol in Multiple Human Biofluids via Surface-Enhanced Raman Scattering. Analytical Chemistry, 2016, 88, 10884-10892.	3.2	52
11	Enhancing Disease Diagnosis: Biomedical Applications of Surface-Enhanced Raman Scattering. Applied Sciences (Switzerland), 2019, 9, 1163.	1.3	50
12	Surface Enhanced Raman Spectroscopy for Quantitative Analysis: Results of a Large-Scale European Multi-Instrument Interlaboratory Study. Analytical Chemistry, 2020, 92, 4053-4064.	3.2	50
13	Comparing root exudate collection techniques: An improved hybrid method. Soil Biology and Biochemistry, 2021, 161, 108391.	4.2	49
14	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. Analytical Chemistry, 2020, 92, 15745-15756.	3.2	46
15	Rapid quantification of the adulteration of fresh coconut water by dilution and sugars using Raman spectroscopy and chemometrics. Food Chemistry, 2019, 272, 157-164.	4.2	45
16	Imaging Isotopically Labeled Bacteria at the Single-Cell Level Using High-Resolution Optical Infrared Photothermal Spectroscopy. Analytical Chemistry, 2021, 93, 3082-3088.	3.2	41
17	Rapid, accurate, and comparative differentiation of clinically and industrially relevant microorganisms via multiple vibrational spectroscopic fingerprinting. Analyst, The, 2016, 141, 5127-5136.	1.7	40
18	Chicken, beams, and Campylobacter: rapid differentiation of foodborne bacteria via vibrational spectroscopy and MALDI-mass spectrometry. Analyst, The, 2016, 141, 111-122.	1.7	39

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19	The Role of Raman Spectroscopy Within Quantitative Metabolomics. Annual Review of Analytical Chemistry, 2021, 14, 323-345.	2.8	36
20	Discrimination of bacteria using whole organism fingerprinting: the utility of modern physicochemical techniques for bacterial typing. Analyst, The, 2021, 146, 770-788.	1.7	33
21	Rapid Detection and Quantification of Novel Psychoactive Substances (NPS) Using Raman Spectroscopy and Surface-Enhanced Raman Scattering. Frontiers in Chemistry, 2019, 7, 412.	1.8	32
22	Quantitative detection of codeine in human plasma using surface-enhanced Raman scattering via adaptation of the isotopic labelling principle. Analyst, The, 2017, 142, 1099-1105.	1.7	29
23	Rapid, high-throughput, and quantitative determination of orange juice adulteration by Fourier-transform infrared spectroscopy. Analytical Methods, 2016, 8, 5581-5586.	1.3	28
24	Metabolic Profiling of Geobacter sulfurreducens during Industrial Bioprocess Scale-Up. Applied and Environmental Microbiology, 2015, 81, 3288-3298.	1.4	26
25	A microbiome and metabolomic signature of phases of cutaneous healing identified by profiling sequential acute wounds of human skin: An exploratory study. PLoS ONE, 2020, 15, e0229545.	1.1	24
26	Simultaneous Raman and infrared spectroscopy: a novel combination for studying bacterial infections at the single cell level. Chemical Science, 2022, 13, 8171-8179.	3.7	22
27	Quantitative detection of isotopically enrichedE. colicells by SERS. Faraday Discussions, 2017, 205, 331-343.	1.6	21
28	Translation Stress Positively Regulates MscL-Dependent Excretion of Cytoplasmic Proteins. MBio, 2018, 9, .	1.8	19
29	Rapid differentiation of Campylobacter jejuni cell wall mutants using Raman spectroscopy, SERS and mass spectrometry combined with chemometrics. Analyst, The, 2020, 145, 1236-1249.	1.7	19
30	Metabolomics investigation of recombinant mTNFÎ± production in Streptomyces lividans. Microbial Cell Factories, 2015, 14, 157.	1.9	18
31	Towards improved quantitative analysis using surface-enhanced Raman scattering incorporating internal isotope labelling. Analytical Methods, 2017, 9, 6636-6644.	1.3	18
32	A systematic analysis of TCA Escherichia coli mutants reveals suitable genetic backgrounds for enhanced hydrogen and ethanol production using glycerol as main carbon source. Biotechnology Journal, 2015, 10, 1750-1761.	1.8	16
33	Metabolomic analysis of riboswitch containing E. coli recombinant expression system. Molecular BioSystems, 2016, 12, 350-361.	2.9	16
34	Detection of the adulteration of fresh coconut water via NMR spectroscopy and chemometrics. Analyst, The, 2019, 144, 1401-1408.	1.7	14
35	Targeting Methionine Synthase in a Fungal Pathogen Causes a Metabolic Imbalance That Impacts Cell Energetics, Growth, and Virulence. MBio, 2020, 11, .	1.8	14
36	Radiation Tolerance of Pseudanabaena catenata, a Cyanobacterium Relevant to the First Generation Magnox Storage Pond. Frontiers in Microbiology, 2020, 11, 515.	1.5	13

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37	Simultaneous Raman and Infrared Spectroscopy of Stable Isotope Labelled Escherichia coli. Sensors, 2022, 22, 3928.	2.1	12
38	Ultrasensitive and towards single molecule SERS: general discussion. Faraday Discussions, 2017, 205, 291-330.	1.6	11
39	Portable through Bottle SORS for the Authentication of Extra Virgin Olive Oil. Applied Sciences (Switzerland), 2021, 11, 8347.	1.3	11
40	Partial Least Squares with Structured Output for Modelling the Metabolomics Data Obtained from Complex Experimental Designs: A Study into the Y-Block Coding. Metabolites, 2016, 6, 38.	1.3	9
41	Metabolic analysis of the response of Pseudomonas putida DOT-T1E strains to toluene using Fourier transform infrared spectroscopy and gas chromatography mass spectrometry. Metabolomics, 2016, 12, 112.	1.4	9
42	Metabolism in action: stable isotope probing using vibrational spectroscopy and SIMS reveals kinetic and metabolic flux of key substrates. Analyst, The, 2021, 146, 1734-1746.	1.7	9
43	Omics Methods For the Detection of Foodborne Pathogens. , 2019, , 364-370.		7
44	Evaluation of Sample Preparation Methods for Inter-Laboratory Metabolomics Investigation of Streptomyces lividans TK24. Metabolites, 2020, 10, 379.	1.3	3
45	Assessment of Transdermal Delivery of Topical Compounds in Skin Scarring Using a Novel Combined Approach of Raman Spectroscopy and High-Performance Liquid Chromatography. Advances in Wound Care, 2021, 10, 1-12.	2.6	3
46	Metabolic Fingerprint Analysis of Cytochrome b5-producing E. coli N4830-1 Using FT-IR Spectroscopy. Frontiers in Microbiology, 0, 13, .	1.5	0