List of Publications by Year in descending order

63 papers	2,827 citations	81900 39 h-index	175258 52 g-index
63 all docs	63 docs citations	63 times ranked	2027 citing authors

#	Article	IF	Citations
1	Fiber-Enhanced Raman Multigas Spectroscopy: A Versatile Tool for Environmental Gas Sensing and Breath Analysis. Analytical Chemistry, 2014, 86, 5278-5285.	6.5	152
2	Fast and Highly Sensitive Fiber-Enhanced Raman Spectroscopic Monitoring of Molecular H₂ and CH₄ for Point-of-Care Diagnosis of Malabsorption Disorders in Exhaled Human Breath. Analytical Chemistry, 2015, 87, 982-988.	6.5	125
3	Calcite Biomineralization by Bacterial Isolates from the Recently Discovered Pristine Karstic Herrenberg Cave. Applied and Environmental Microbiology, 2012, 78, 1157-1167.	3.1	112
4	Raman acoustic levitation spectroscopy of red blood cells and Plasmodium falciparum trophozoites. Lab on A Chip, 2007, 7, 1125.	6.0	96
5	Highly Sensitive Broadband Raman Sensing of Antibiotics in Step-Index Hollow-Core Photonic Crystal Fibers. ACS Photonics, 2017, 4, 138-145.	6.6	79
6	Ultrasensitive Fiber Enhanced UV Resonance Raman Sensing of Drugs. Analytical Chemistry, 2013, 85, 6264-6271.	6.5	75
7	Fiber enhanced Raman gas spectroscopy. TrAC - Trends in Analytical Chemistry, 2018, 103, 230-238.	11.4	74
8	UV Raman spectroscopyâ€"A technique for biological and mineralogical in situ planetary studies. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2007, 68, 1029-1035.	3.9	70
9	Enhanced Raman multigas sensing â€“ a novel tool for control and analysis of¹³CO₂labeling experiments in environmental research. Analyst, The, 2014, 139, 3879.	3.5	63
10	Double antiresonant hollow core fiber â€“ guidance in the deep ultraviolet by modified tunneling leaky modes. Optics Express, 2014, 22, 19131.	3.4	61
11	Low-loss single-mode guidance in large-core antiresonant hollow-core fibers. Optics Letters, 2015, 40, 3432.	3.3	59
12	In Situ Localization and Structural Analysis of the Malaria Pigment Hemozoin. Journal of Physical Chemistry B, 2007, 111, 11047-11056.	2.6	57
13	Thiosulfate- and hydrogen-driven autotrophic denitrification by a microbial consortium enriched from groundwater of an oligotrophic limestone aquifer. FEMS Microbiology Ecology, 2018, 94, .	2.7	56
14	Investigation of Gas Exchange Processes in Peat Bog Ecosystems by Means of Innovative Raman Gas Spectroscopy. Analytical Chemistry, 2013, 85, 1295-1299.	6.5	55
15	Morphology-sensitive Raman modes of the malaria pigment hemozoin. Analyst, The, 2009, 134, 1126.	3.5	52
16	UV Raman ImagingA Promising Tool for Astrobiology:Â Comparative Raman Studies with Different Excitation Wavelengths on SNC Martian Meteorites. Analytical Chemistry, 2007, 79, 1101-1108.	6.5	50
17	In situUV Resonance Raman Micro-spectroscopic Localization of the Antimalarial Quinine in Cinchona Bark. Journal of Physical Chemistry B, 2007, 111, 4171-4177.	2.6	50
18	Online investigation of respiratory quotients in Pinus sylvestris and Picea abies during drought and shading by means of cavity-enhanced Raman multi-gas spectrometry. Analyst, The, 2015, 140, 4473-4481.	3.5	50

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19	Monitoring of gas composition in a laboratory biogas plant using cavity enhanced Raman spectroscopy. Analyst, The, 2018, 143, 1358-1366.	3.5	49
20	Fiber-Enhanced Raman Gas Spectroscopy for ¹⁸Oâ€“¹³C-Labeling Experiments. Analytical Chemistry, 2019, 91, 7562-7569.	6.5	49
21	All-in-one: a versatile gas sensor based on fiber enhanced Raman spectroscopy for monitoring postharvest fruit conservation and ripening. Analyst, The, 2016, 141, 2023-2029.	3.5	49
22	Raman Spectroscopyâ€”An Innovative and Versatile Tool To Follow the Respirational Activity and Carbonate Biomineralization of Important Cave Bacteria. Analytical Chemistry, 2013, 85, 8708-8714.	6.5	48
23	Microbial respiration and natural attenuation of benzene contaminated soils investigated by cavity enhanced Raman multi-gas spectroscopy. Analyst, The, 2015, 140, 3143-3149.	3.5	48
24	Fiber enhanced Raman spectroscopic analysis as a novel method for diagnosis and monitoring of diseases related to hyperbilirubinemia and hyperbiliverdinemia. Analyst, The, 2016, 141, 6104-6115.	3.5	48
25	Characterization of fuel gases with fiber-enhanced Raman spectroscopy. Analytical and Bioanalytical Chemistry, 2019, 411, 7399-7408.	3.7	48
26	Structural analysis of the antimalarial drug halofantrine by means of Raman spectroscopy and density functional theory calculations. Journal of Biomedical Optics, 2010, 15, 041516.	2.6	47
27	Rapid monitoring of intermediate states and mass balance of nitrogen during denitrification by means of cavity enhanced Raman multi-gas sensing. Analytica Chimica Acta, 2015, 864, 39-47.	5.4	47
28	Fiber array based hyperspectral Raman imaging for chemical selective analysis of malaria-infected red blood cells. Analytica Chimica Acta, 2015, 894, 76-84.	5.4	47
29	Structural Analysis of the Anti-Malaria Active Agent Chloroquine under Physiological Conditions. Journal of Physical Chemistry B, 2007, 111, 1815-1822.	2.6	46
30	Ultrasensitivein situTracing of the Alkaloid Dioncophylline A in the Tropical LianaTriphyophyllum peltatumby Applying Deep-UV Resonance Raman Microscopy. Analytical Chemistry, 2007, 79, 986-993.	6.5	46
31	Fiber-enhanced Raman multi-gas spectroscopy: what is the potential of its application to breath analysis?. Bioanalysis, 2015, 7, 281-284.	1.5	46
32	Analysis of Fiber-Enhanced Raman Gas Sensing Based on Raman Chemical Imaging. Analytical Chemistry, 2017, 89, 12269-12275.	6.5	46
33	Raman Spectroscopy and Imaging in Bioanalytics. Analytical Chemistry, 2022, 94, 86-119.	6.5	46
34	In vivo localization and identification of the antiplasmodial alkaloid dioncophylline A in the tropical lianaTriphyophyllum peltatum by a combination of fluorescence, near infrared Fourier transform Raman microscopy, and density functional theory calculations. Biopolymers, 2006, 82, 295-300.	2.4	45
35	Multigas Leakage Correction in Static Environmental Chambers Using Sulfur Hexafluoride and Raman Spectroscopy. Analytical Chemistry, 2015, 87, 11137-11142.	6.5	45
36	Pinus sylvestris switches respiration substrates under shading but not during drought. New Phytologist, 2015, 207, 542-550.	7.3	44

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37	Ultrasensitive Detection of Antiseptic Antibiotics in Aqueous Media and Human Urine Using Deep UV Resonance Raman Spectroscopy. Analytical Chemistry, 2017, 89, 9997-10003.	6.5	44
38	Recent advances in nano-photonic techniques for pharmaceutical drug monitoring with emphasis on Raman spectroscopy. Nanophotonics, 2020, 9, 19-37.	6.0	43
39	Relationship between molecular structure and Raman spectra of quinolines. Journal of Molecular Structure, 2009, 924-926, 301-308.	3.6	42
40	Device for Raman Difference Spectroscopy. Analytical Chemistry, 2007, 79, 6159-6166.	6.5	41
41	Raman spectroscopic investigation of the antimalarial agent mefloquine. Analytical and Bioanalytical Chemistry, 2007, 387, 1749-1757.	3.7	41
42	Direct Raman Spectroscopic Measurements of Biological Nitrogen Fixation under Natural Conditions: An Analytical Approach for Studying Nitrogenase Activity. Analytical Chemistry, 2017, 89, 1117-1122.	6.5	41
43	Onsite cavity enhanced Raman spectrometry for the investigation of gas exchange processes in the Earth's critical zone. Analyst, The, 2017, 142, 3360-3369.	3.5	41
44	Raman spectroscopic investigation of 13CO2 labeling and leaf dark respiration of Fagus sylvatica L. (European beech). Analytical and Bioanalytical Chemistry, 2015, 407, 1813-1817.	3.7	39
45	Fiber-Enhanced Raman Sensing of Cefuroxime in Human Urine. Analytical Chemistry, 2018, 90, 13243-13248.	6.5	38
46	Nondestructive Three-Dimensional Analysis of Layered Polymer Structures with Chemical Imaging. Langmuir, 2010, 26, 19027-19032.	3.5	37
47	Fiber enhanced Raman sensing of levofloxacin by PCF bandgap-shifting into the visible range. Analytical Methods, 2018, 10, 586-592.	2.7	36
48	Hydrogen and C2â€“C6 Alkane Sensing in Complex Fuel Gas Mixtures with Fiber-Enhanced Raman Spectroscopy. Analytical Chemistry, 2021, 93, 10546-10552.	6.5	34
49	Liquid-Core Microstructured Polymer Optical Fiber as Fiber-Enhanced Raman Spectroscopy Probe for Glucose Sensing. Journal of Lightwave Technology, 2019, 37, 2981-2988.	4.6	22
50	Fiber-Array-Based Raman Hyperspectral Imaging for Simultaneous, Chemically-Selective Monitoring of Particle Size and Shape of Active Ingredients in Analgesic Tablets. Molecules, 2019, 24, 4381.	3.8	22
51	Counterfeit and Substandard Test of the Antimalarial Tablet RiametÂ® by Means of Raman Hyperspectral Multicomponent Analysis. Molecules, 2019, 24, 3229.	3.8	21
52	Fiber-Enhanced Raman Gas Spectroscopy for the Study of Microbial Methanogenesis. Analytical Chemistry, 2020, 92, 12564-12571.	6.5	21
53	Highly Sensitive Detection of the Antibiotic Ciprofloxacin by Means of Fiber Enhanced Raman Spectroscopy. Molecules, 2019, 24, 4512.	3.8	20
54	Vibrational spectroscopic characterization of arylisoquinolines by means of Raman spectroscopy and density functional theory calculations. Physical Chemistry Chemical Physics, 2017, 19, 29918-29926.	2.8	17

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55	Origins of modal loss of antiresonant hollow-core optical fibers in the ultraviolet. Optics Express, 2015, 23, 2557.	3.4	13
56	Multiscale spectroscopy using a monolithic liquid core waveguide with laterally attached fiber ports. Analytica Chimica Acta, 2015, 875, 1-6.	5.4	9
57	Parallelized Raman Difference Spectroscopy for the Investigation of Chemical Interactions. Analytical Chemistry, 2022, 94, 10346-10354.	6.5	8
58	Rapid Raman Spectroscopic Analysis of Stress Induced Degradation of the Pharmaceutical Drug Tetracycline. Molecules, 2020, 25, 1866.	3.8	6
59	Grasshopper herbivory immediately affects element cycling but not export rates in an Nâ€limited grassland system. Ecosphere, 2021, 12, e03449.	2.2	6
60	Activity and electron donor preference of two denitrifying bacterial strains identified by Raman gas spectroscopy. Analytical and Bioanalytical Chemistry, 2022, 414, 601-611.	3.7	3
61	Detection of gas molecules by means of spectrometric and spectroscopic methods. , 2020, , 251-294.		1
62	Response to Comment on Hydrogen and C2â€“C6 Alkane Sensing in Complex Fuel Gas Mixtures with Fiber-Enhanced Raman Spectroscopy. Analytical Chemistry, 2021, 93, 16285-16287.	6.5	1
63	OH diffusion effects at preparation of antiresonant hollow core fibers. , 2019, , .		0