Jacob T Shelley

List of Publications by Year
in descending order

45	2,157	257450 24	265206 42
papers	citations	h-index	g-index

48	48	48	1509
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Atmospheric Pressure Chemical Ionization Source. 1. Ionization of Compounds in the Gas Phase. Analytical Chemistry, 2008, 80, 2646-2653.	6.5	277
2	Atmospheric Pressure Chemical Ionization Source. 2. Desorptionâ^'Ionization for the Direct Analysis of Solid Compounds. Analytical Chemistry, 2008, 80, 2654-2663.	6.5	183
3	Autonomous in Situ Analysis and Real-Time Chemical Detection Using a Backpack Miniature Mass Spectrometer: Concept, Instrumentation Development, and Performance. Analytical Chemistry, 2014, 86, 2900-2908.	6.5	145
4	Mechanisms of Real-Time, Proximal Sample Processing during Ambient Ionization Mass Spectrometry. Analytical Chemistry, 2014, 86, 233-249.	6.5	132
5	Characterization of direct-current atmospheric-pressure discharges useful for ambient desorption/ionization mass spectrometry. Journal of the American Society for Mass Spectrometry, 2009, 20, 837-844.	2.8	118
6	Elucidation of Reaction Mechanisms Responsible for Afterglow and Reagent-Ion Formation in the Low-Temperature Plasma Probe Ambient Ionization Source. Analytical Chemistry, 2011, 83, 3675-3686.	6.5	118
7	Laser Ablation Coupled to a Flowing Atmospheric Pressure Afterglow for Ambient Mass Spectral Imaging. Analytical Chemistry, 2008, 80, 8308-8313.	6.5	106
8	Ultrasensitive Ambient Mass Spectrometric Analysis with a Pin-to-Capillary Flowing Atmospheric-Pressure Afterglow Source. Analytical Chemistry, 2011, 83, 5741-5748.	6.5	106
9	Handheld Low-Temperature Plasma Probe for Portable â€œPoint-and-Shootâ€•Ambient Ionization Mass Spectrometry. Analytical Chemistry, 2013, 85, 6545-6552.	6.5	95
10	Petrobactin is the Primary Siderophore Synthesized by Bacillus anthracis Str. Sterne under Conditions of Iron Starvation. BioMetals, 2005, 18, 577-585.	4.1	91
11	Plasma-based ambient desorption/ionization mass spectrometry: state-of-the-art in qualitative and quantitative analysis. Analytical and Bioanalytical Chemistry, 2014, 406, 6111-6127.	3.7	86
12	Ionization matrix effects in plasma-based ambient mass spectrometry sources. Journal of Analytical Atomic Spectrometry, 2010, 25, 345.	3.0	74
13	Ambient desorption/ionization mass spectrometry: evolution from rapid qualitative screening to accurate quantification tool. Analytical and Bioanalytical Chemistry, 2018, 410, 4061-4076.	3.7	58
14	Spectroscopic plasma diagnostics on a low-temperature plasma probe for ambient mass spectrometry. Journal of Analytical Atomic Spectrometry, 2011, 26, 1434.	3.0	57
15	Understanding the Flowing Atmospheric-Pressure Afterglow (FAPA) Ambient Ionization Source through Optical Means. Journal of the American Society for Mass Spectrometry, 2012, 23, 407-417.	2.8	51
16	Tunable Ionization Modes of a Flowing Atmospheric-Pressure Afterglow (FAPA) Ambient Ionization Source. Analytical Chemistry, 2016, 88, 3494-3503.	6.5	39
17	Atmospheric-pressure solution-cathode glow discharge: A versatile ion source for atomic and molecular mass spectrometry. Analytica Chimica Acta, 2017, 950, 119-128.	5.4	38
18	Arrays of lowâ€temperature plasma probes for ambient ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2013, 27, 135-142.	1.5	35

#	Article	IF	Citations
19	Ambient mass spectrometry: Approaching the chemical analysis of things as they are. Journal of Analytical Atomic Spectrometry, 2011, 26, 2153.	3.0	30
20	Detection of positive and negative ions from a flowing atmospheric pressure afterglow using a mattauch-herzog mass spectrograph equipped with a faraday-strip array detector. Journal of the American Society for Mass Spectrometry, 2010, 21, 97-103.	2.8	29
21	Halo-Shaped Flowing Atmospheric Pressure Afterglow: A Heavenly Design for Simplified Sample Introduction and Improved Ionization in Ambient Mass Spectrometry. Analytical Chemistry, 2013, 85, 7512-7518.	6.5	26
22	Use of an ambient ionization flowing atmospheric-pressure afterglow source for elemental analysis through hydride generation. Journal of Analytical Atomic Spectrometry, 2009, 24, 34-40.	3.0	25
23	Nanoparticles of metalâ€“organic cages designed to encapsulate platinum-based anticancer agents. Dalton Transactions, 2018, 47, 670-674.	3.3	25
24	Visualization of mass transport and heat transfer in the FAPA ambient ionization source. Journal of Analytical Atomic Spectrometry, 2013, 28, 379.	3.0	24
25	Atmospheric-pressure ionization and fragmentation of peptides by solution-cathode glow discharge. Chemical Science, 2016, 7, 6440-6449.	7.4	24
26	Drop-on-Demand Sample Introduction System Coupled with the Flowing Atmospheric-Pressure Afterglow for Direct Molecular Analysis of Complex Liquid Microvolume Samples. Analytical Chemistry, 2012, 84, 9246-9252.	6.5	23
27	Fast transient analysis and first-stage collision-induced dissociation with the flowing atmospheric-pressure afterglow ionization source to improve analyte detection and identification. Analyst, The, 2010, 135, 682.	3.5	22
28	Detection of counterfeit electronic components through ambient mass spectrometry and chemometrics. Analyst, The, 2014, 139, 4505.	3.5	20
29	Antiferromagnetically Coupled Dimeric Dodecacopper Supramolecular Architectures of Macrocyclic Ligands with a Symmetrical Î¼₆-BO₃^{3â€“} Central Moiety. Inorganic Chemistry, 2015, 54, 6873-6884.	4.0	14
30	Time-resolved mass-spectral characterization of ion formation from a low-frequency, low-temperature plasma probe ambient ionization source. Journal of Analytical Atomic Spectrometry, 2014, 29, 359.	3.0	13
31	Formation of Pyrylium from Aromatic Systems with a Helium:Oxygen Flowing Atmospheric Pressure Afterglow (FAPA) Plasma Source. Journal of the American Society for Mass Spectrometry, 2017, 28, 1013-1020.	2.8	13
32	Kinetic studies on the reaction of cob(II)alamin with hypochlorous acid: Evidence for one electron oxidation of the metal center and corrin ring destruction. Journal of Inorganic Biochemistry, 2016, 163, 81-87.	3.5	12
33	Pulse Radiolysis and Ultraâ€Highâ€Performance Liquid Chromatography/Highâ€Resolution Mass Spectrometry Studies on the Reactions of the Carbonate Radical with Vitamin B₁₂ Derivatives. Chemistry - A European Journal, 2015, 21, 6409-6419.	3.3	10
34	Surface assisted laser desorptionâ€“ionization mass spectrometry on patterned nanoporous silica thin films. Microporous and Mesoporous Materials, 2008, 114, 193-200.	4.4	9
35	Automatic Analyte-Ion Recognition and Background Removal for Ambient Mass-Spectrometric Data Based on Cross-Correlation. Journal of the American Society for Mass Spectrometry, 2019, 30, 1720-1732.	2.8	6
36	Cooperative Heteroligand Interaction with G-Quadruplexes Shows Evidence of Allosteric Binding. Biochemistry, 2020, 59, 3438-3446.	2.5	5

#	Article	IF	Citations
37	Plasma-Based Ambient Desorption/Ionization Mass Spectrometry for the Analysis of Liquid Crystals Employed in Display Devices. Journal of the American Society for Mass Spectrometry, 2019, 30, 2101-2113.	2.8	4
38	Coupling Flowing Atmospheric Pressure Afterglow (FAPA) with Differential Mobility Spectrometry-Mass Spectrometry (DMS-MS) for rapid analysis of solid metal complexes. International Journal of Mass Spectrometry, 2019, 438, 157-165.	1.5	4
39	Optical and mass-spectral characterization of mixed-gas flowing atmospheric-pressure afterglow sources. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 176, 106043.	2.9	4
40	MODERN PLASMAâ€BASED DESORPTION/IONIZATION: FROM ATOMS AND MOLECULES TO CHEMICAL SYNTHESIS. Mass Spectrometry Reviews, 2021, 40, 609-627.	5.4	2
41	Unsupervised Reconstruction of Analyte-Specific Mass Spectra Based on Time-Domain Morphology with a Modified Cross-Correlation Approach. Analytical Chemistry, 2021, 93, 5009-5014.	6.5	2
42	Effects of solvent composition on ionization and fragmentation within the solution-cathode glow discharge. Journal of Applied Physics, 2021, 130, 043305.	2.5	2
43	Progress toward a VUV Raman spectrometer to detect pathogens. , 2021, , .		0
44	Progress toward a VUV Raman spectrometer to detect pathogens with the samples in air. , 2020, , .		0
45	Differential mobility spectrometry improves uranium isotope ratio measurements on an ion trap mass spectrometer. International Journal of Mass Spectrometry, 2022, 472, 116758.	1.5	0