Alexander W Gundlach-Graham

List of Publications by Year
in descending order

36	1,023	471061 17	414034 32
papers	citations	h-index	g-index

36	36	36	742
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Single-particle multi-element fingerprinting (spMEF) using inductively-coupled plasma time-of-flight mass spectrometry (ICP-TOFMS) to identify engineered nanoparticles against the elevated natural background in soils. Environmental Science: Nano, 2017, 4, 307-314.	2.2	128
2	Characterization of a new ICP-TOFMS instrument with continuous and discrete introduction of solutions. Journal of Analytical Atomic Spectrometry, 2017, 32, 548-561.	1.6	117
3	High-Speed, High-Resolution, Multielemental Laser Ablation-Inductively Coupled Plasma-Time-of-Flight Mass Spectrometry Imaging: Part I. Instrumentation and Two-Dimensional Imaging of Geological Samples. Analytical Chemistry, 2015, 87, 8250-8258.	3.2	76
4	Toward faster and higher resolution LAâ€“ICPMS imaging: on the co-evolution of LA cell design and ICPMS instrumentation. Analytical and Bioanalytical Chemistry, 2016, 408, 2687-2695.	1.9	72
5	High-Speed, High-Resolution, Multielemental LA-ICP-TOFMS Imaging: Part II. Critical Evaluation of Quantitative Three-Dimensional Imaging of Major, Minor, and Trace Elements in Geological Samples. Analytical Chemistry, 2015, 87, 8259-8267.	3.2	70
6	Monte Carlo Simulation of Low-Count Signals in Time-of-Flight Mass Spectrometry and Its Application to Single-Particle Detection. Analytical Chemistry, 2018, 90, 11847-11855.	3.2	53
7	Capabilities of laser ablation inductively coupled plasma time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2017, 32, 1946-1959.	1.6	49
8	Single-particle ICP-MS with online microdroplet calibration: toward matrix independent nanoparticle sizing. Journal of Analytical Atomic Spectrometry, 2019, 34, 716-728.	1.6	48
9	Performance of sp-ICP-TOFMS with signal distributions fitted to a compound Poisson model. Journal of Analytical Atomic Spectrometry, 2019, 34, 1900-1909.	1.6	38
10	Monodisperse microdroplets: a tool that advances single-particle ICP-MS measurements. Journal of Analytical Atomic Spectrometry, 2020, 35, 1727-1739.	1.6	33
11	Analysis of Inorganic Nanoparticles by Single-particle Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. Chimia, 2018, 72, 221.	0.3	32
12	Highâ€resolution, Quantitative Element Imaging of an Upper Crust, Lowâ€angle Cataclasite (Zuccale Fault,) Tj ETQq0 0 0 rgBT /Overloc and Geoanalytical Research, 2018, 42, 559-574.	1.7	29
13	Single-particle ICP-TOFMS with online microdroplet calibration for the simultaneous quantification of diverse nanoparticles in complex matrices. Environmental Science: Nano, 2019, 6, 3349-3358.	2.2	26
14	First Distance-of-Flight Instrument: Opening a New Paradigm in Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2011, 22, 110-117.	1.2	22
15	Resolution and Mass Range Performance in Distance-of-Flight Mass Spectrometry with a Multichannel Focal-Plane Camera Detector. Analytical Chemistry, 2011, 83, 8552-8559.	3.2	19
16	Replacing the Argon ICP: Nitrogen Microwave Inductively Coupled Atmospheric-Pressure Plasma (MICAP) for Mass Spectrometry. Analytical Chemistry, 2018, 90, 13443-13450.	3.2	19
17	Emerging investigator series: automated single-nanoparticle quantification and classification: a holistic study of particles into and out of wastewater treatment plants in Switzerland. Environmental Science: Nano, 2021, 8, 1211-1225.	2.2	19
18	Characterization of inductively coupled plasma time-of-flight mass spectrometry in combination with collision/reaction cell technology â€“ insights from highly time-resolved measurements. Journal of Analytical Atomic Spectrometry, 2019, 34, 135-146.	1.6	18

#	Article	IF	Citations
19	Distance-of-Flight Mass Spectrometry: A New Paradigm for Mass Separation and Detection. Annual Review of Analytical Chemistry, 2012, 5, 487-504.	2.8	16
20	Online microdroplet calibration for accurate nanoparticle quantification in organic matrices. Analytical and Bioanalytical Chemistry, 2022, 414, 7543-7551.	1.9	15
21	How Constant Momentum Acceleration Decouples Energy and Space Focusing in Distanceâ€“ofâ€“Flight and Timeâ€“ofâ€“Flight Mass Spectrometries. Journal of the American Society for Mass Spectrometry, 2013, 24, 690-700.	1.2	13
22	Laser-ablation sampling for inductively coupled plasma distance-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2015, 30, 139-147.	1.6	13
23	Multiplexed and multi-metal single-particle characterization with ICP-TOFMS. Comprehensive Analytical Chemistry, 2021, 93, 69-101.	0.7	12
24	First inductively coupled plasma-distance-of-flight mass spectrometer: instrument performance with a microchannel plate/phosphor imaging detector. Journal of Analytical Atomic Spectrometry, 2013, 28, 1385.	1.6	11
25	Extension of the focusable mass range in distanceâ€ofâ€flight mass spectrometry with multiple detectors. Rapid Communications in Mass Spectrometry, 2012, 26, 2526-2534.	0.7	10
26	Quantification and classification of engineered, incidental, and natural cerium-containing particles by spICP-TOFMS. Environmental Science: Nano, 2022, 9, 1627-1638.	2.2	10
27	Demonstrating Rapid Qualitative Elemental Analyses of Participant-Supplied Objects at a Public Outreach Event. Journal of Chemical Education, 2016, 93, 1749-1753.	1.1	9
28	Constant-Momentum Acceleration Time-of-Flight Mass Spectrometry with Energy Focusing. Journal of the American Society for Mass Spectrometry, 2013, 24, 1853-1861.	1.2	8
29	Incorporating a Student-Centered Approach with Collaborative Learning into Methods in Quantitative Element Analysis. Journal of Chemical Education, 2020, 97, 3617-3623.	1.1	8
30	Distance-of-Flight Mass Spectrometry with IonCCD Detection and an Inductively Coupled Plasma Source. Journal of the American Society for Mass Spectrometry, 2016, 27, 371-379.	1.2	7
31	Interleaved Distance-of-Flight Mass Spectrometry: A Simple Method to Improve the Instrument Duty Factor. Journal of the American Society for Mass Spectrometry, 2013, 24, 1736-1744.	1.2	6
32	Effect of Response Factor Variations on the Response Distribution of Complex Mixtures. European Journal of Mass Spectrometry, 2015, 21, 471-479.	0.5	6
33	Zoom-TOFMS: addition of a constant-momentum-acceleration â€œzoomâ€•mode to time-of-flight mass spectrometry. Analytical and Bioanalytical Chemistry, 2014, 406, 7419-7430.	1.9	5
34	Distance-of-Flight Mass Spectrometry: What, Why, and How?. Journal of the American Society for Mass Spectrometry, 2016, 27, 1772-1786.	1.2	3
35	Evolution of structure and transport properties of the Ba8Cu16P30 clathrate-I framework with the introduction of Ga. Applied Physics Letters, 2022, 120, .	1.5	2
36	Quantification and Clustering of Inorganic Nanoparticles in Wastewater Treatment Plants across Switzerland. Chimia, 2021, 75, 642.	0.3	1