Gary M Hieftje

List of Publications by Year
in descending order

96 papers	2,954 citations	172386 29 h-index	189801 50 g-index
96 all docs	96 docs citations	96 times ranked	1616 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.	3.2	277
2	Spectroscopic and electrical studies of a solution-cathode glow discharge. Journal of Analytical Atomic Spectrometry, 2005, 20, 1218.	1.6	172
3	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.	1.2	118
4	A new, versatile, direct-current helium atmospheric-pressure glow discharge. Journal of Analytical Atomic Spectrometry, 2006, 21, 1175.	1.6	111
5	Laser Ablation Coupled to a Flowing Atmospheric Pressure Afterglow for Ambient Mass Spectral Imaging. Analytical Chemistry, 2008, 80, 8308-8313.	3.2	106
6	Ultrasensitive Ambient Mass Spectrometric Analysis with a Pin-to-Capillary Flowing Atmospheric-Pressure Afterglow Source. Analytical Chemistry, 2011, 83, 5741-5748.	3.2	106
7	Ionization matrix effects in plasma-based ambient mass spectrometry sources. Journal of Analytical Atomic Spectrometry, 2010, 25, 345.	1.6	74
8	Use of electrolyte cathode glow discharge (ELCAD) for the analysis of complex mixtures. Journal of Analytical Atomic Spectrometry, 2007, 22, 766.	1.6	72
9	Standardless Semiquantitative Analysis of Metals Using Single-Shot Laser Ablation Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2001, 73, 2959-2967.	3.2	67
10	Methods for shot-to-shot normalization in laser ablation with an inductively coupled plasma time-of-flight mass spectrometer. Journal of Analytical Atomic Spectrometry, 2000, 15, 1121-1124.	1.6	62
11	Design and performance of a plasma-source mass spectrograph. Journal of the American Society for Mass Spectrometry, 1997, 8, 307-318.	1.2	61
12	Spectroscopic characterization of ion and electron populations in a solution-cathode glow discharge. Journal of Analytical Atomic Spectrometry, 2006, 21, 525.	1.6	60
13	Rapid simultaneous multielemental speciation by capillary electrophoresis coupled to inductively coupled plasma time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2000, 15, 1063-1067.	1.6	59
14	Gas chromatographyâ€“inductively coupled plasma time-of-flight mass spectrometry for the speciation analysis of organometallic compounds. Journal of Analytical Atomic Spectrometry, 2000, 15, 151-155.	1.6	57
15	Spectroscopic plasma diagnostics on a low-temperature plasma probe for ambient mass spectrometry. Journal of Analytical Atomic Spectrometry, 2011, 26, 1434.	1.6	57
16	Determination of trace sodium, lithium, magnesium, and potassium impurities in colloidal silica by slurry introduction into an atmospheric-pressure solution-cathode glow discharge and atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2013, 28, 234-240.	1.6	57
17	Determination of Halogenated Hydrocarbons by Helium Microwave Plasma Torch Time-of-Flight Mass Spectrometry Coupled to Gas Chromatography. Analytical Chemistry, 1998, 70, 3957-3963.	3.2	53
18	Near-Ultraviolet Evanescent-Wave Absorption Sensor Based on a Multimode Optical Fiber. Analytical Chemistry, 1998, 70, 1639-1645.	3.2	53

#	Article	IF	Citations
19	Preliminary Investigation of Electrothermal Vaporization Sample Introduction for Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. Analytical Chemistry, 1999, 71, 1378-1383.	3.2	53
20	Nanopipettes: probes for local sample analysis. Chemical Science, 2015, 6, 3334-3341.	3.7	50
21	Space-charge effects and ion distribution in plasma source mass spectrometry. Journal of Mass Spectrometry, 1995, 30, 841-848.	0.7	47
22	A New Fluorescence Sensor for Quantification of Atmospheric Humidity. Journal of the Electrochemical Society, 1989, 136, 567-570.	1.3	46
23	Gas Sampling Glow Discharge:Â A Versatile Ionization Source for Gas Chromatography Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2000, 72, 3812-3820.	3.2	42
24	Atmospheric-pressure solution-cathode glow discharge: A versatile ion source for atomic and molecular mass spectrometry. Analytica Chimica Acta, 2017, 950, 119-128.	2.6	38
25	New inductively coupled plasma for atomic spectrometry: the microwave-sustained, inductively coupled, atmospheric-pressure plasma (MICAP). Journal of Analytical Atomic Spectrometry, 2016, 31, 440-449.	1.6	35
26	Mass analyzers for inductively coupled plasma time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2001, 16, 1206-1216.	1.6	34
27	Identification of alloys using single shot laser ablation inductively coupled plasma time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 852-857.	1.6	30
28	Ambient mass spectrometry: Approaching the chemical analysis of things as they are. Journal of Analytical Atomic Spectrometry, 2011, 26, 2153.	1.6	30
29	Optical Time-of-Flight Chemical Detection:Â Absorption-Modulated Fluorescence for Spatially Resolved Analyte Mapping in a Bidirectional Distributed Fiber-Optic Sensor. Analytical Chemistry, 1998, 70, 3407-3412.	3.2	29
30	Evaluation of a fourth-generation focal plane camera for use in plasma-source mass spectrometry. Journal of Analytical Atomic Spectrometry, 2011, 26, 300-304.	1.6	29
31	Characteristics of a rf-only hexapole ion-guide interface for plasma-source time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2001, 16, 781-792.	1.6	28
32	Warning indicators for the presence of plasma-related matrix effects in inductively coupled plasma-atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2008, 23, 181-192.	1.6	28
33	An introduction to ion optics for the mass spectrograph. , 1996, 15, 241-259.		27
34	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.	3.2	26
35	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.	1.6	25
36	Characterization of switched direct current gas sampling glow discharge ionization source for the time-of-flight mass spectrometer. Journal of Analytical Atomic Spectrometry, 2000, 15, 27-36.	1.6	24

#	Article	IF	Citations
37	Use of vertically resolved plasma emission as an indicator for flagging matrix effects and system drift in inductively coupled plasma-atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2008, 23, 193-204.	1.6	24
38	An electrospray/inductively coupled plasma dual-source time-of-flight mass spectrometer for rapid metallomic and speciation analysis: instrument design. Metallomics, 2009, 1, 67-77.	1.0	24
39	Visualization of mass transport and heat transfer in the FAPA ambient ionization source. Journal of Analytical Atomic Spectrometry, 2013, 28, 379.	1.6	24
40	Determination of psychostimulants and their metabolites by electrochemistry linked on-line to flowing atmospheric pressure afterglow mass spectrometry. Analyst, The, 2014, 139, 4350-4355.	1.7	24
41	Atmospheric-pressure ionization and fragmentation of peptides by solution-cathode glow discharge. Chemical Science, 2016, 7, 6440-6449.	3.7	24
42	Novel flow injection strategies for study and control of matrix interferences by inductively coupled plasma time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2001, 16, 987-990.	1.6	23
43	The annular glow discharge: a small-scale plasma for solution analysis. Journal of Analytical Atomic Spectrometry, 2007, 22, 775.	1.6	23
44	Optical Time-of-Flight Chemical Detection:Â Spatially Resolved Analyte Mapping with Extended-Length Continuous Chemically Modified Optical Fibers. Analytical Chemistry, 1998, 70, 1453-1461.	3.2	22
45	Atomic Emission Spectroscopyâ€"It Lasts and Lasts and Lasts. Journal of Chemical Education, 2000, 77, 577.	1.1	21
46	Evaluation of interference filters for spectral discrimination in solution-cathode glow discharge optical emission spectrometry. Journal of Analytical Atomic Spectrometry, 2016, 31, 1278-1286.	1.6	21
47	Continuum background reduction in orthogonal-acceleration time-of-flight mass spectrometry with continuous ion sources. Journal of the American Society for Mass Spectrometry, 1997, 8, 125-131.	1.2	20
48	Laser-scattering instrument for fundamental studies on a glow discharge. Journal of Analytical Atomic Spectrometry, 2003, 18, 680.	1.6	20
49	Evolution and revolution in instrumentation for plasma-source mass spectrometry. Pure and Applied Chemistry, 2001, 73, 1579-1588.	0.9	19
50	Coupling of a gas chromatograph to a simultaneous-detection inductively coupled plasma mass spectrograph for speciation of organohalide and organometallic compounds. Journal of Analytical Atomic Spectrometry, 2004, 19, 751.	1.6	19
51	Temporal and spatially resolved laser-scattering plasma diagnostics for the characterization of a ms-pulsed glow discharge. Journal of Analytical Atomic Spectrometry, 2006, 21, 350.	1.6	19
52	Development of a direct current He atmospheric-pressure glow discharge as an ionization source for elemental mass spectrometry via hydride generation. Journal of Analytical Atomic Spectrometry, 2006, 21, 750.	1.6	19
53	Characterization of an argon microwave plasma torch coupled to a Mattauchâ€"Herzog geometry mass spectrometer. Journal of Analytical Atomic Spectrometry, 2002, 17, 1132-1136.	1.6	18
54	Toward a Fuller Understanding of Analytical Atomic Spectrometry. Analytical Sciences, 2002, 18, 1185-1189.	0.8	17

#	Article	IF	Citations
55	Correcting distortion in a monochromatic imaging spectrometer for application to elemental imaging by glow discharge-optical emission spectrometry. Journal of Analytical Atomic Spectrometry, 2010, 25, 1874.	1.6	16
56	Advancing the capabilities of a glow-discharge sector-field mass spectrometer. Journal of Analytical Atomic Spectrometry, 2002, 17, 329-333.	1.6	15
57	Emergence and impact of alternative sources and mass analyzers in plasma source mass spectrometry. Journal of Analytical Atomic Spectrometry, 2008, 23, 661.	1.6	15
58	Characterization of a third-generation Faraday-strip array detector coupled to a Mattauch-Herzog geometry mass spectrograph with a dc-glow discharge ionization source. Journal of Analytical Atomic Spectrometry, 2010, 25, 735.	1.6	15
59	Effect of the plasma operating frequency on the figures of merit of an inductively coupled plasma time-of-flight mass spectrometer. Journal of Analytical Atomic Spectrometry, 2006, 21, 160-167.	1.6	14
60	Fundamental characteristics of plasma-related matrix-effect cross-over points in inductively coupled plasma-atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2009, 24, 439.	1.6	14
61	A new frequencyâ€domain fluorometer for the rapid determination of picosecond rotationalâ€correlation times. Journal of Applied Physics, 1987, 61, 8-11.	1.1	13
62	Laser-ablation sampling for inductively coupled plasma distance-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2015, 30, 139-147.	1.6	13
63	Microplasma-based flowing atmospheric-pressure afterglow (FAPA) source for ambient desorption-ionization mass spectrometry. Analytica Chimica Acta, 2017, 952, 1-8.	2.6	13
64	Ã‡erenkov Radiation as a UV and Visible Light Source for Time-Resolved Fluorescence. Analytical Chemistry, 1998, 70, 3426-3433.	3.2	12
65	Absolute methods of quantitation in glow discharge mass spectrometry with a time-of-flight mass analyzer. Journal of Analytical Atomic Spectrometry, 2005, 20, 1326.	1.6	12
66	Algorithm to determine matrix-effect crossover points for overcoming interferences in inductively coupled plasma-atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2010, 25, 282.	1.6	12
67	Optimization of Ag isotope-ratio precision with a 128-Channel array detector coupled to a Mattauch-Herzog mass spectrograph. Journal of Analytical Atomic Spectrometry, 2010, 25, 322-327.	1.6	11
68	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
69	Flagging matrix effects and system drift in organic-solvent-based analysis by axial-viewing inductively coupled plasma-atomic emission spectrometry. Journal of Analytical Atomic Spectrometry, 2013, 28, 241-250.	1.6	11
70	Selection of solvent load and first-stage pressure to reduce interference effects in inductively coupled plasma-mass spectrometry. Journal of the American Society for Mass Spectrometry, 1992, 3, 128-138.	1.2	10
71	Fluorescence Lifetime Measurement via a Radionuclide-Scintillation Light Source and Analog Cross Correlation. Analytical Chemistry, 1997, 69, 1936-1941.	3.2	10
72	Use of rapid gas-flow modulation for improved performance in inductively coupled plasma time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2005, 20, 1318.	1.6	10

#	Article	IF	Citations
73	Scintillator Light Source for Chemical Sensing in the Near-Ultraviolet. Analytical Chemistry, 1997, 69, 3375-3379.	3.2	9
74	Development and characterization of an electrostatic quadrupole extraction lens for mass spectrometry. Journal of Analytical Atomic Spectrometry, 2003, 18, 1015-1018.	1.6	8
75	Determination of Ca+and K+by pulsed glow discharge sector-field mass spectrometry. Journal of Analytical Atomic Spectrometry, 2004, 19, 1564-1566.	1.6	8
76	Investigation of wavelength calibration for an echelle cross-dispersion spectrometer. Journal of Analytical Atomic Spectrometry, 2003, 18, 1177.	1.6	7
77	A contribution to the study of cooling a vertical-rotary spray chamber in inductively coupled plasma time-of-flight mass spectrometry. Journal of Analytical Atomic Spectrometry, 2005, 20, 621.	1.6	7
78	Use of a nano-electrospray/inductively coupled plasma dual-source time-of-flight mass spectrometer for chromium speciation. Journal of Analytical Atomic Spectrometry, 2010, 25, 62-73.	1.6	7
79	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
80	A Standardized Approach to Collecting and Calculating Noise Amplitude Spectra. Journal of Chemical Education, 1998, 75, 788.	1.1	6
81	Overcoming interferences in inductively coupled plasma mass spectrometry via gas-flow modulation : Part 2. Correlation methods. Journal of Analytical Atomic Spectrometry, 2006, 21, 1377.	1.6	6
82	Overcoming interferences in inductively coupled plasma mass spectrometry via gas-flow modulation : Part 1. Fourier transform methods. Journal of Analytical Atomic Spectrometry, 2006, 21, 1367.	1.6	6
83	Helium conservation by discontinuous introduction in the flowing atmospheric-pressure afterglow source for ambient desorption-ionization mass spectrometry. Journal of Analytical Atomic Spectrometry, 2015, 30, 2017-2023.	1.6	6
84	Use of Interrupted Helium Flow in the Analysis of Vapor Samples with Flowing Atmospheric-Pressure Afterglow-Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 263-269.	1.2	5
85	Wavelength Scanning with a Tilting Interference Filter for Glow-Discharge Elemental Imaging. Applied Spectroscopy, 2017, 71, 1280-1288.	1.2	5
86	Digital cross-correlation technique for fluorescence-lifetime measurement using a radionuclide-scintillation excitation source. Review of Scientific Instruments, 1998, 69, 1595-1604.	0.6	3
87	Detection and correction of matrix interference in inductively coupled plasma â€“ time of flight mass spectrometry by means of aerosol dispersion. Journal of Analytical Atomic Spectrometry, 2016, 31, 1542-1548.	1.6	3
88	Distance-of-Flight Mass Spectrometry: What, Why, and How?. Journal of the American Society for Mass Spectrometry, 2016, 27, 1772-1786.	1.2	3
89	Inductively Coupled Plasma Zoomâ€“Time-of-Flight Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2016, 27, 380-387.	1.2	3
90	Weighing up the future of scientific tools. Nature Chemistry, 2009, 1, 10-11.	6.6	2

#	Article	IF	Citations
91	Comparison of digital correlation techniques in time-resolved fluorometry using a radionuclide-scintillation excitation source. Review of Scientific Instruments, 1999, 70, 50-57.	0.6	1
92	Comment on â€œMatrix effect of aluminium, calcium and magnesium in axially viewing inductively coupled plasma atomic emission spectrometryâ€•by M. T. Larrea, B. ZaldÃvar, J. C. FariÃ±as, L. G. Firgaira and M. Pomares, J. Anal. At. Spectrom., 2008, 23, 145â€“151. Journal of Analytical Atomic Spectrometry, 2008, 23, 1401.	1.6	1
93	12th Asilomar Conference on Mass Spectrometry (ACMS). Journal of the American Society for Mass Spectrometry, 1997, 8, 673-674.	1.2	0
94	Multidimensional Ionization Sources for Plasma-Source Mass Spectrometry. , 0, , 435-468.		0
95	The Academic Tree of Howard V. Malmstadt: From Early Scientific Exploration to Modern Analytical Chemistry. Applied Spectroscopy, 2016, 70, 1952-1964.	1.2	0
96	Professor Joseph Anthony Caruso: in memoriam. Journal of Analytical Atomic Spectrometry, 2017, 32, 1446-1447.	1.6	0