

Karl J Jobst

List of Publications by Year in descending order

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79
papers

1,909
citations

257450

24
h-index

289244

40
g-index

82
all docs

82
docs citations

82
times ranked

2132
citing authors

#	ARTICLE	IF	CITATIONS
1	Evenâ€electron ions: a systematic study of the neutral species lost in the dissociation of quasiâ€molecular ions. <i>Journal of Mass Spectrometry</i> , 2007, 42, 1024-1044.	1.6	150
2	Identification of Potential Novel Bioaccumulative and Persistent Chemicals in Sediments from Ontario (Canada) Using Scripting Approaches with GCâ€GC-TOF MS Analysis. <i>Environmental Science & Technology</i> , 2014, 48, 9591-9599.	10.0	111
3	The strength in numbers: comprehensive characterization of house dust using complementary mass spectrometric techniques. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 1957-1977.	3.7	84
4	Using mass defect plots as a discovery tool to identify novel fluoropolymer thermal decomposition products. <i>Journal of Mass Spectrometry</i> , 2014, 49, 291-296.	1.6	80
5	The use of mass defect plots for the identification of (novel) halogenated contaminants in the environment. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 3289-3297.	3.7	72
6	Toward Comprehensive Per- and Polyfluoroalkyl Substances Annotation Using FluoroMatch Software and Intelligent High-Resolution Tandem Mass Spectrometry Acquisition. <i>Analytical Chemistry</i> , 2020, 92, 11186-11194.	6.5	63
7	A review of the determination of persistent organic pollutants for environmental forensics investigations. <i>Analytica Chimica Acta</i> , 2016, 941, 10-25.	5.4	57
8	Identification of the Halogenated Compounds Resulting from the 1997 Plastimet Inc. Fire in Hamilton, Ontario, using Comprehensive Two-Dimensional Gas Chromatography and (Ultra)High Resolution Mass Spectrometry. <i>Environmental Science & Technology</i> , 2014, 48, 10656-10663.	10.0	56
9	Non-targeted analysis of electronics waste by comprehensive two-dimensional gas chromatography combined with high-resolution mass spectrometry: Using accurate mass information and mass defect analysis to explore the data. <i>Journal of Chromatography A</i> , 2015, 1395, 152-159.	3.7	55
10	A high throughput targeted and non-targeted method for the analysis of microcystins and anatoxin-A using on-line solid phase extraction coupled to liquid chromatographyâ€quadrupole time-of-flight high resolution mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 4959-4969.	3.7	53
11	Is Nontargeted Screening Reproducible?. <i>Environmental Science & Technology</i> , 2018, 52, 11975-11976.	10.0	53
12	Complementary Nontargeted and Targeted Mass Spectrometry Techniques to Determine Bioaccumulation of Halogenated Contaminants in Freshwater Species. <i>Environmental Science & Technology</i> , 2014, 48, 13844-13854.	10.0	50
13	Characterization of Naphthenic Acids by Gas Chromatography-Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 7666-7673.	6.5	40
14	Determination of Diphenylamine Antioxidants in Wastewater/Biosolids and Sediment. <i>Environmental Science and Technology Letters</i> , 2020, 7, 102-110.	8.7	39
15	Comparison of Atmospheric Pressure Ionization Gas Chromatography-Triple Quadrupole Mass Spectrometry to Traditional High-Resolution Mass Spectrometry for the Identification and Quantification of Halogenated Dioxins and Furans. <i>Analytical Chemistry</i> , 2015, 87, 7902-7908.	6.5	38
16	Determination of Halogenated Flame Retardants Using Gas Chromatography with Atmospheric Pressure Chemical Ionization (APCI) and a High-Resolution Quadrupole Time-of-Flight Mass Spectrometer (HRqTOFMS). <i>Analytical Chemistry</i> , 2016, 88, 11406-11411.	6.5	38
17	Identification and determination of the dechlorination products of Dechlorane 602 in Great Lakes fish and Arctic beluga whales by gas chromatographyâ€high resolution mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 2737-2748.	3.7	35
18	Identification and Occurrence of Analogues of Dechlorane 604 in Lake Ontario Sediment and their Accumulation in Fish. <i>Environmental Science & Technology</i> , 2014, 48, 11170-11177.	10.0	34

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19	Distinguishing the C ₃ vs SH ₄ Mass Split by Comprehensive Two-Dimensional Gas Chromatography-High Resolution Time-of-Flight Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 6101-6104.	6.5	33
20	Maternal Exposure to Polystyrene Micro- and Nanoplastics Causes Fetal Growth Restriction in Mice. <i>Environmental Science and Technology Letters</i> , 2022, 9, 426-430.	8.7	33
21	Comprehensive characterization of the halogenated dibenzo-p-dioxin and dibenzofuran contents of residential fire debris using comprehensive two-dimensional gas chromatography coupled to time of flight mass spectrometry. <i>Journal of Chromatography A</i> , 2014, 1369, 138-146.	3.7	29
22	Differentiation of (Mixed) Halogenated Dibenzo- <i>p</i> -Dioxins by Negative Ion Atmospheric Pressure Chemical Ionization. <i>Analytical Chemistry</i> , 2016, 88, 5205-5211.	6.5	27
23	Rapid fingerprinting of source and environmental microplastics using direct analysis in real time-high resolution mass spectrometry. <i>Analytica Chimica Acta</i> , 2020, 1100, 107-117.	5.4	27
24	A semi-quantitative approach for the rapid screening and mass profiling of naphthenic acids directly in contaminated aqueous samples. <i>Journal of Mass Spectrometry</i> , 2016, 51, 44-52.	1.6	26
25	Identification of Novel Brominated Compounds in Flame Retarded Plastics Containing TBBPA by Combining Isotope Pattern and Mass Defect Cluster Analysis. <i>Environmental Science & Technology</i> , 2017, 51, 1518-1526.	10.0	26
26	Liquid chromatography-ion mobility-high resolution mass spectrometry for analysis of pollutants in indoor dust: Identification and predictive capabilities. <i>Analytica Chimica Acta</i> , 2020, 1125, 29-40.	5.4	25
27	Fast gas chromatography-atmospheric pressure (photo)ionization mass spectrometry of polybrominated diphenylether flame retardants. <i>Analytica Chimica Acta</i> , 2019, 1056, 70-78.	5.4	23
28	Compositional space: A guide for environmental chemists on the identification of persistent and bioaccumulative organics using mass spectrometry. <i>Environment International</i> , 2019, 132, 104808.	10.0	23
29	Background levels of dioxin-like polychlorinated biphenyls (dlPCBs), polychlorinated, polybrominated and mixed halogenated dibenzo-p-dioxins and dibenzofurans (PCDD/Fs, PBDD/Fs & PXDD/Fs) in sera of pregnant women in Accra, Ghana. <i>Science of the Total Environment</i> , 2019, 673, 631-642.	8.0	23
30	Temporal trends of halogenated and organophosphate contaminants in striped dolphins from the Mediterranean Sea. <i>Science of the Total Environment</i> , 2021, 753, 142205.	8.0	23
31	The acrylonitrile dimer ion: A study of its dissociation via self-catalysis, self-protonation and cyclization into the pyrimidine radical cation. <i>International Journal of Mass Spectrometry</i> , 2007, 262, 88-100.	1.5	22
32	Halogenated organic contaminants of concern in urban-influenced waters of Lake Ontario, Canada: Passive sampling with targeted and non-targeted screening. <i>Environmental Pollution</i> , 2020, 264, 114733.	7.5	22
33	Quantitative Analysis of Mixed Halogen Dioxins and Furans in Fire Debris Utilizing Atmospheric Pressure Ionization Gas Chromatography-Triple Quadrupole Mass Spectrometry. <i>Analytical Chemistry</i> , 2015, 87, 10368-10377.	6.5	21
34	A comparison of fresh and used aircraft oil for the identification of toxic substances linked to aerotoxic syndrome. <i>Chemosphere</i> , 2016, 158, 116-123.	8.2	21
35	Isotopic labelling in mass spectrometry as a tool for studying reaction mechanisms of ion dissociations. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2007, 50, 1115-1123.	1.0	20
36	The covalently bound HNC dimer ion HN C C NH ⁺ has a kinetically stable neutral counterpart. <i>Chemical Physics Letters</i> , 2008, 462, 152-157.	2.6	20

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37	Differentiation of the pyridine radical cation from its distonic isomers by ion-molecule reactions with dioxygen. <i>International Journal of Mass Spectrometry</i> , 2009, 286, 83-88.	1.5	19
38	Evidence for High Concentrations and Maternal Transfer of Substituted Diphenylamines in European Eels Analyzed by Two-Dimensional Gas Chromatography-Time-of-Flight Mass Spectrometry and Gas Chromatography-Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Environmental Science & Technology</i> , 2016, 50, 12678-12685.	10.0	19
39	Improved coverage of naphthenic acid fraction compounds by comprehensive two-dimensional gas chromatography coupled with high resolution mass spectrometry. <i>Journal of Chromatography A</i> , 2018, 1536, 88-95.	3.7	19
40	Characterization of Polycyclic Aromatic Compounds in Commercial Pavement Sealcoat Products for Enhanced Source Apportionment. <i>Environmental Science & Technology</i> , 2019, 53, 3157-3165.	10.0	19
41	Which of the (Mixed) Halogenated n-Alkanes Are Likely To Be Persistent Organic Pollutants?. <i>Environmental Science & Technology</i> , 2021, 55, 15912-15920.	10.0	16
42	The reaction of the acrylonitrile ion $\text{CH}_2\text{CH}^+\text{CN}$ with HCN: Proton-transport catalysis vs formation of ionized pyrimidine. <i>Chemical Physics Letters</i> , 2009, 482, 211-216.	2.6	14
43	$\text{C}_{12}\text{H}_{10}\text{BrCl}$ -Bromo-Chloro Alkenes: Characterization of a Poorly Identified Flame Retardant and Potential Environmental Implications. <i>Environmental Science & Technology</i> , 2019, 53, 10835-10844.	10.0	14
44	Wave reflections in the umbilical artery measured by Doppler ultrasound as a novel predictor of placental pathology. <i>EBioMedicine</i> , 2021, 67, 103326.	6.1	14
45	A modified QuEChERS approach for the screening of dioxins and furans in sediments. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 4043-4054.	3.7	13
46	Rapid Screening of Urinary 1-Hydroxypyrene Glucuronide by Multisegment Injection-Capillary Electrophoresis-Tandem Mass Spectrometry: A High-Throughput Method for Biomonitoring of Recent Smoke Exposures. <i>Analytical Chemistry</i> , 2020, 92, 13558-13564.	6.5	13
47	Nontargeted Screening Using Gas Chromatography-Atmospheric Pressure Ionization Mass Spectrometry: Recent Trends and Emerging Potential. <i>Molecules</i> , 2021, 26, 6911.	3.8	13
48	Urinary hydroxypyrene determination for biomonitoring of firefighters deployed at the Fort McMurray wildfire: an inter-laboratory method comparison. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 1397-1407.	3.7	12
49	The loss of NH_2O from the N-hydroxyacetamide radical cation $\text{CH}_3\text{C}(\text{O})\text{NHOH}^+$: An ion-catalysed rearrangement. <i>International Journal of Mass Spectrometry</i> , 2006, 254, 127-135.	1.5	10
50	Does the ion-molecule reaction between HCCH^+ and HCN lead to $\text{CH}_2\text{CH}^+\text{CN}$? A computational and experimental study of the reverse process. <i>Chemical Physics Letters</i> , 2008, 450, 243-247.	2.6	9
51	Metabolomics Reveals That Bisphenol Pollutants Impair Protein Synthesis-Related Pathways in <i>Daphnia magna</i> . <i>Metabolites</i> , 2021, 11, 666.	2.9	9
52	Small (Poly)Unsaturated Oxygen Containing Ions and Molecules: A Brief Assessment of Their Thermochemistry Based on Computational Chemistry. <i>European Journal of Mass Spectrometry</i> , 2009, 15, 261-273.	1.0	8
53	Interaction of Metal Cations with Alkyl nitriles in the Gas Phase: Solvation of Metal Ions by the Hydrocarbon Chain. <i>European Journal of Mass Spectrometry</i> , 2015, 21, 579-587.	1.0	8
54	Data-Independent Identification of Suspected Organic Pollutants Using Gas Chromatography-Atmospheric Pressure Chemical Ionization-Mass Spectrometry. <i>Analytical Chemistry</i> , 2021, 93, 1498-1506.	6.5	8

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55	On the interaction of peptides with calcium ions as studied by matrix-assisted laser desorption/ionization Fourier transform mass spectrometry: Towards peptide fishing using metal ion baits. <i>Analytica Chimica Acta</i> , 2008, 627, 136-147.	5.4	7
56	The remarkable dissociation chemistry of 2-aminoxyethanol ions $\text{NH}_2\text{OCH}_2\text{CH}_2\text{OH}^+$ studied by experiment and theory. <i>International Journal of Mass Spectrometry</i> , 2008, 269, 165-176.	1.5	7
57	The covalently bound HCN dimer ions HCN^+NCH^+ and $\text{HCN}^+\text{C}(\text{N})\text{H}^+$ are stable species in the gas-phase, but the neutral counterparts are not. <i>Chemical Physics Letters</i> , 2009, 473, 257-262.	2.6	7
58	The quest for the elusive carbodiimide ion HNCNH^+ and its generation from ionized cyanamide by proton-transport catalysis. <i>Chemical Physics Letters</i> , 2009, 478, 144-149.	2.6	7
59	The covalently bound dimer ion HC N C NH^+ and its neutral counterpart. <i>Chemical Physics Letters</i> , 2010, 497, 7-11.	2.6	7
60	Predicting the Mass Spectra of Environmental Pollutants Using Computational Chemistry: A Case Study and Critical Evaluation. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 1508-1518.	2.8	7
61	Evaluation of multiple alternative instrument platforms for targeted and non-targeted dioxin and furan analysis. <i>Journal of Mass Spectrometry</i> , 2018, 53, 504-510.	1.6	6
62	Dried blood spots for the identification of bioaccumulating organic compounds: Current challenges and future perspectives. <i>Current Opinion in Environmental Science and Health</i> , 2020, 15, 66-73.	4.1	6
63	The impact of perfluoroalkyl substances on pregnancy, birth outcomes, and offspring development: a review of data from mouse models. <i>Biology of Reproduction</i> , 2022, 106, 397-407.	2.7	6
64	Catalysis in Hydrogen-Bridged Radical Cations. <i>European Journal of Mass Spectrometry</i> , 2012, 18, 183-194.	1.0	5
65	The hydrogen-bridged radical cation $[\text{NH}_2\text{C}^+\text{O}^-\text{CH}_2\text{CH}_3]^+$ and its dissociation by proton-transport catalysis. <i>Chemical Physics Letters</i> , 2012, 523, 20-24.	2.6	5
66	Generation and Dissociation of RCOOCaCl_2^+ and other Carboxylate-Substituted Superhalogens: CO_2 Capture and Implications for Structure Analysis. <i>ChemPlusChem</i> , 2013, 78, 1184-1189.	2.8	5
67	Analytical Methodology of POPs. , 2014, , 59-139.		5
68	Interaction of Metal Cations with Functionalised Hydrocarbons in the Gas Phase: Further Experimental Evidence for Solvation of Metal Ions by the Hydrocarbon Chain. <i>European Journal of Mass Spectrometry</i> , 2016, 22, 61-70.	1.0	5
69	Loss of DNC from ionized 4-hydroxypyridine-OD: An intriguing reaction unravelled by theory and experiment. <i>International Journal of Mass Spectrometry</i> , 2007, 264, 146-156.	1.5	4
70	The dissociation chemistry of low-energy N-formylethanolamine ions: Hydrogen-bridged radical cations as key intermediates. <i>International Journal of Mass Spectrometry</i> , 2011, 306, 9-26.	1.5	4
71	A mechanistic study of the prominent loss of H_2O from ionized 2-hydroxyaminoethanol. <i>International Journal of Mass Spectrometry</i> , 2011, 306, 138-149.	1.5	3
72	Nontargeted Analysis of Persistent Organic Pollutants by Mass Spectrometry and GC-MS. <i>Comprehensive Analytical Chemistry</i> , 2016, 71, 405-431.	1.3	3

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73	Identification of Halohydrins as Potential Disinfection By-Products in Treated Drinking Water. International Journal of Spectroscopy, 2011, 2011, 1-7.	1.6	1
74	The Dissociation Chemistry of Ionized Methyl Carbamate and its Isomers Revisited: Theory and Experiment in Concert. European Journal of Mass Spectrometry, 2012, 18, 149-159.	1.0	1
75	Dissociation of CuH ⁺ and ZnH ⁺ complexes of ethylenediamine and their N-methylated homologues: Family and neighbours, but not the same. International Journal of Mass Spectrometry, 2013, 354-355, 144-151.	1.5	1
76	The double hydrogen transfer in the 1-methoxy-2-propanol molecular ion: Loss of CH ₃ CO by proton-transport catalysis. International Journal of Mass Spectrometry, 2012, 316-318, 18-22.	1.5	0
77	The reaction of the hydrogen-bridged radical cation [NH ₂ COHOCH ₂] ^{•+} with dioxygen. International Journal of Mass Spectrometry, 2013, 354-355, 99-104.	1.5	0
78	Response to the Comment on Comparison of Atmospheric Pressure Ionization Gas Chromatography-Triple Quadrupole Mass Spectrometry to Traditional High-Resolution Mass Spectrometry for the Identification and Quantification of Halogenated Dioxins and Furans. Analytical Chemistry, 2015, 87, 11166-11166.	6.5	0
79	Editorial overview: Exposomics, emerging exposures and analytical challenges. Current Opinion in Environmental Science and Health, 2020, 15, A1-A3.	4.1	0