Jorg Bettmer

List of Publications by Year
in descending order

84 papers	2,897 citations	159525 30 h-index	182361 51 g-index
84 all docs	84 docs citations	84 times ranked	3063 citing authors

#	Article	IF	Citations
1	Evaluation of copper uptake in individual spores of Streptomyces coelicolor and endogenic nanoparticles formation to modulate the secondary metabolism. Metallomics, 2022, 14, .	1.0	3
2	Evaluation of nanodebris produced by in vitro degradation of titanium-based dental implants in the presence of bacteria using single particle and single cell inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2021, 36, 2007-2016.	1.6	5
3	Ultra-Small Iron Nanoparticles Target Mitochondria Inducing Autophagy, Acting on Mitochondrial DNA and Reducing Respiration. Pharmaceutics, 2021, 13, 90.	2.0	20
4	The use of high performance liquid chromatographyâ€"Inductively coupled plasma-mass spectrometry in the analysis of inorganic nanomaterials. Comprehensive Analytical Chemistry, 2021, , 285-301.	0.7	2
5	Ultrasmall iron oxide nanoparticles cisplatin (IV) prodrug nanoconjugate: ICP-MS based strategies to evaluate the formation and drug delivery capabilities in single cells. Analytica Chimica Acta, 2021, 1159, 338356.	2.6	33
6	Targeting HER2 protein in individual cells using ICP-MS detection and its potential as prognostic and predictive breast cancer biomarker. Talanta, 2021, 235, 122773.	2.9	10
7	Addressing the presence of biogenic selenium nanoparticles in yeast cells: analytical strategies based on ICP-TQ-MS. Analyst, The, 2020, 145, 1457-1465.	1.7	43
8	Mass spectrometric approach for the analysis of the hard protein corona of nanoparticles in living cells. Journal of Proteomics, 2020, 212, 103582.	1.2	11
9	Single cell ICP-MS using on line sample introduction systems: Current developments and remaining challenges. TrAC - Trends in Analytical Chemistry, 2020, 132, 116042.	5.8	55
10	Combined single cell and single particle ICP-TQ-MS analysis to quantitatively evaluate the uptake and biotransformation of tellurium nanoparticles in bacteria. Analytica Chimica Acta, 2020, 1128, 116-128.	2.6	40
11	Relating the composition and interface interactions in the hard corona of gold nanoparticles to the induced response mechanisms in living cells. Nanoscale, 2020, 12, 17450-17461.	2.8	17
12	Fragmentation of Proteins in the Corona of Gold Nanoparticles As Observed in Live Cell Surface-Enhanced Raman Scattering. Analytical Chemistry, 2020, 92, 8553-8560.	3.2	29
13	In vitro and in situ experiments to evaluate the biodistribution and cellular toxicity of ultrasmall iron oxide nanoparticles potentially used as oral iron supplements. Nanotoxicology, 2020, 14, 388-403.	1.6	36
14	Quantitative Analysis of Transferrin Receptor 1 (TfR1) in Individual Breast Cancer Cells by Means of Labeled Antibodies and Elemental (ICP-MS) Detection. Analytical Chemistry, 2019, 91, 15532-15538.	3.2	38
15	Complementary techniques (spICP-MS, TEM, and HPLC-ICP-MS) reveal the degradation of 40â€‰nm citrate-stabilized Au nanoparticles in rat liver after intraperitoneal injection. Journal of Trace Elements in Medicine and Biology, 2019, 55, 1-5.	1.5	19
16	Gold nanoparticles: Distribution, bioaccumulation and toxicity. In vitro and in vivo studies. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 1-12.	1.7	224
17	Single particle analysis of TiO2 in candy products using triple quadrupole ICP-MS. Talanta, 2018, 180, 309-315.	2.9	53
18	Quantitative assessment of the metabolic products of iron oxide nanoparticles to be used as iron supplements in cell cultures. Analytica Chimica Acta, 2018, 1039, 24-30.	2.6	17

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19	Evaluation of the uptake, storage and cell effects of nano-iron in enterocyte-like cell models. Journal of Trace Elements in Medicine and Biology, 2018, 49, 98-104.	1.5	7
20	The Use of Stable Isotopic Tracers in Metallomics Studies. Advances in Experimental Medicine and Biology, 2018, 1055, 111-137.	0.8	5
21	Determination and speciation of cadmium in microcosms with Bunodosoma caissarum and Perna perna using isotopically enriched 116 Cd. Marine Pollution Bulletin, 2017, 115, 362-368.	2.3	2
22	Quantitative Evaluation of Cisplatin Uptake in Sensitive and Resistant Individual Cells by Single-Cell ICP-MS (SC-ICP-MS). Analytical Chemistry, 2017, 89, 11491-11497.	3.2	105
23	The fate of iron nanoparticles used for treatment of iron deficiency in blood using mass-spectrometry based strategies. Mikrochimica Acta, 2017, 184, 3673-3680.	2.5	11
24	Speciation of gold nanoparticles and low-molecular gold species in Wistar rat tissues by HPLC coupled to ICP-MS. Journal of Analytical Atomic Spectrometry, 2017, 32, 193-199.	1.6	28
25	Separation and quantification of silver nanoparticles and silver ions using reversed phase high performance liquid chromatography coupled to inductively coupled plasma mass spectrometry in combination with isotope dilution analysis. Journal of Chromatography A, 2016, 1468, 102-108.	1.8	43
26	Combination of single particle ICP-QMS and isotope dilution analysis for the determination of size, particle number and number size distribution of silver nanoparticles. Journal of Analytical Atomic Spectrometry, 2016, 31, 2045-2052.	1.6	29
27	In honor of Professor Klaus G. Heumann. Analytical and Bioanalytical Chemistry, 2016, 408, 7885-7887.	1.9	0
28	Initial results on the coupling of sedimentation field-flow fractionation (SdFFF) to inductively coupled plasma-tandem mass spectrometry (ICP-MS/MS) for the detection and characterization of TiO₂ nanoparticles. Journal of Analytical Atomic Spectrometry, 2016, 31, 1549-1555.	1.6	19
29	Elemental and molecular mass spectrometric strategies for probing interactions between DNA and new Ru(<scp>ii</scp>) complexes containing phosphane ligands and either a tris(pyrazol-1-yl)borate or a pyridine bis(oxazoline) ligand. Journal of Analytical Atomic Spectrometry, 2015, 30, 172-179.	1.6	2
30	Complementary mass spectrometric techniques for the quantification of the protein corona: a case study on gold nanoparticles and human serum proteins. Nanoscale, 2015, 7, 14324-14331.	2.8	57
31	Enhanced Detection of DNA Sequences Using End-Point PCR Amplification and Online Gel Electrophoresis (GE)-ICP-MS: Determination of Gene Copy Number Variations. Analytical Chemistry, 2014, 86, 11028-11032.	3.2	13
32	Synthesis, purification and mass spectrometric characterisation of a fluorescent Au₉@BSA nanocluster and its enzymatic digestion by trypsin. Nanoscale, 2014, 6, 716-721.	2.8	27
33	Evaluation of the biological effect of Ti generated debris from metal implants: ions and nanoparticles. Metallomics, 2014, 6, 1702-1708.	1.0	72
34	Determination of specific DNA sequences and their hybridisation processes by elemental labelling followed by SEC-ICP-MS detection. Analyst, The, 2014, 139, 3423.	1.7	8
35	Speciation of Silver Nanoparticles and Silver(I) by Reversed-Phase Liquid Chromatography Coupled to ICPMS. Analytical Chemistry, 2013, 85, 1316-1321.	3.2	133
36	Metallomics investigations on potential binding partners of methylmercury in tuna fish muscle tissue using complementary mass spectrometric techniques. Metallomics, 2012, 4, 807.	1.0	24

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37	ICP-MS for absolute quantification of proteins for heteroatom-tagged, targeted proteomics. TrAC - Trends in Analytical Chemistry, 2012, 40, 52-63.	5.8	80
38	Direct Î¼-flow injection isotope dilution ICP-MS for the determination of heavy metals in oil samples. Analytical and Bioanalytical Chemistry, 2012, 402, 269-275.	1.9	16
39	Analysis of hepcidin, a key peptide for Fe homeostasis, viasulfur detection by capillary liquid chromatography-inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2011, 26, 334-340.	1.6	13
40	Initial studies on quantitative DNA induced oxidation by gel electrophoresis (GE)-ICP-MS. Journal of Analytical Atomic Spectrometry, 2011, 26, 195-200.	1.6	12
41	High spatial resolution trace element analysis by LA-ICP-MS using a novel ablation cell for multiple or large samples. International Journal of Mass Spectrometry, 2011, 307, 39-45.	0.7	73
42	Analysis of gold nanoparticles using ICP-MS-based hyphenated and complementary ESI-MS techniques. International Journal of Mass Spectrometry, 2011, 307, 92-98.	0.7	56
43	Systematic studies on the determination of Hg-labelled proteins using laser ablation-ICPMS and isotope dilution analysis. Analytical and Bioanalytical Chemistry, 2011, 401, 2691-2698.	1.9	23
44	Application of isotope dilution ICPâ€“MS techniques to quantitative proteomics. Analytical and Bioanalytical Chemistry, 2010, 397, 3495-3502.	1.9	56
45	Labelling of biopolymers: current status and future trends. Analytical and Bioanalytical Chemistry, 2010, 397, 3431-3432.	1.9	1
46	The emerging role of ICP-MS in proteomic analysis. Journal of Proteomics, 2009, 72, 989-1005.	1.2	149
47	Absolute and Relative Protein Quantification with the Use of Isotopically Labeled p-Hydroxymercuribenzoic Acid and Complementary MALDI-MS and ICPMS Detection. Analytical Chemistry, 2009, 81, 9172-9177.	3.2	44
48	Elemental mass spectrometry for quantitative proteomics. Analytical and Bioanalytical Chemistry, 2008, 390, 3-16.	1.9	124
49	Î¼LC coupled to ICPâ€“SFMS with post-column isotope dilution analysis of sulfur for absolute protein quantification. Analytical and Bioanalytical Chemistry, 2008, 391, 537-543.	1.9	47
50	A novel approach for analysis of oligonucleotideâ€“cisplatin interactions by continuous elution gel electrophoresis coupled to isotope dilution inductively coupled plasma mass spectrometry and matrixâ€assisted laser desorption/ionization mass spectrometry. Electrophoresis, 2008, 29, 1451-1459.	1.3	26
51	Stable isotope labelling and FPLCâ€“ICP-SFMS for the accurate determination of clinical iron status parameters in human serum. Analyst, The, 2008, 133, 379.	1.7	39
52	Protein labelling with mercury tags: fundamental studies on ovalbumin derivatised with p-hydroxymercuribenzoic acid (pHMB). Journal of Analytical Atomic Spectrometry, 2008, 23, 1359.	1.6	53
53	Plant protein phosphorylation monitored by capillary liquid chromatographyâ€“element mass spectrometry. Biochemical and Biophysical Research Communications, 2007, 355, 89-96.	1.0	29
54	Determination of phosphorylation degrees in caseins by on-line gel electrophoresis coupled to ICP-SFMS. Journal of Analytical Atomic Spectrometry, 2007, 22, 1296.	1.6	18

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55	Gel Electrophoresis Coupled to Inductively Coupled Plasmaâ^'Mass Spectrometry Using Species-Specific Isotope Dilution for Iodide and Iodate Determination in Aerosols. Analytical Chemistry, 2007, 79, 1714-1719.	3.2	27
56	DNA quantification approach by GE-ICP-SFMS and complementary total phosphorus determination by ICP-SFMS. Journal of Analytical Atomic Spectrometry, 2006, 21, 1271-1276.	1.6	25
57	Size characterisation of Au nanoparticles by ICP-MS coupling techniques. Journal of Analytical Atomic Spectrometry, 2006, 21, 431.	1.6	93
58	Elemental tagging in inorganic mass spectrometric bioanalysis. Analytical and Bioanalytical Chemistry, 2006, 386, 7-11.	1.9	66
59	Biosynthesis of Cd-bound phytochelatins by Phaeodactylum tricornutum and their speciation by size-exclusion chromatography and ion-pair chromatography coupled to ICPâ€“MS. Analytical and Bioanalytical Chemistry, 2005, 383, 398-403.	1.9	21
60	Metalloproteomics: a challenge for analytical chemists. Analytical and Bioanalytical Chemistry, 2005, 383, 370-371.	1.9	17
61	On-Line Coupling of Gel Electrophoresis and Inductively Coupled Plasma-Sector Field-Mass Spectrometry for the Determination of dsDNA Fragments. Analytical Chemistry, 2005, 77, 5072-5075.	3.2	36
62	Development of a new method for the separation of vanadium species and chloride interference removal using modified silica capillaries-DIN-ICP-MS. Microchemical Journal, 2004, 76, 161-171.	2.3	20
63	Application of SEC-ICP-MS for comparative analyses of metal-containing species in cancerous and healthy human thyroid samples. Analytical and Bioanalytical Chemistry, 2004, 380, 198-203.	1.9	25
64	Determination of the MRI contrast agent Gd-DTPA by SEC?ICP?MS. Analytical and Bioanalytical Chemistry, 2004, 379, 1050-4.	1.9	42
65	Determination of phytic acid and its degradation products by ion-pair chromatography (IPC) coupled to inductively coupled plasma-sector field-mass spectrometry (ICP-SF-MS). Journal of Analytical Atomic Spectrometry, 2004, 19, 1330.	1.6	30
66	ElaC Encodes a Novel Binuclear Zinc Phosphodiesterase. Journal of Biological Chemistry, 2002, 277, 29078-29085.	1.6	70
67	On-line Chloride Interference Removal for Arsenic Determination in Waste Water and Urine by ICP-MS Using a Modified Capillary. International Journal of Environmental Analytical Chemistry, 2002, 82, 795-804.	1.8	11
68	Elemental speciation. Analytical and Bioanalytical Chemistry, 2002, 372, 33-34.	1.9	9
69	Rapid separation of elemental species by multicapillary GC. Analytical and Bioanalytical Chemistry, 2002, 373, 461-465.	1.9	15
70	Lead speciation in rainwater samples by modified fused silica capillaries coupled to a direct injection nebulizer (DIN) for sample introduction in ICP-MS. Journal of Analytical Atomic Spectrometry, 2001, 16, 1028-1034.	1.6	27
71	On-line removal of mass interferences in palladium determination by ICP-MS using modified capillaries coupled to micro-flow nebulizers. Journal of Analytical Atomic Spectrometry, 2001, 16, 481-486.	1.6	31
72	Removal of interfering elements in ICP-QMS for the determination of Pt, Rh, and Pd by chemically modified sample introduction capillaries. Fresenius' Journal of Analytical Chemistry, 2001, 370, 488-491.	1.5	9

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73	Modification of capillaries coupled to micro-flow nebulizers: a new strategy for on-line interference removal in inductively coupled plasma mass spectrometry. Journal of Mass Spectrometry, 2000, 35, 891-896.	0.7	13
74	Microwave-induced plasmaâ€“optical emission spectrometry â€“ fundamental aspects and applications in metal speciation analysis. TrAC - Trends in Analytical Chemistry, 2000, 19, 138-156.	5.8	36
75	Feasibility studies on the suppression of HfO+ mass interferences on platinum determination by inductively coupled plasma mass spectrometry (ICP-MS) by modification of the sample introduction system. Journal of Analytical Atomic Spectrometry, 2000, 15, 507-512.	1.6	17
76	The Plasma Emission Detectorâ€”A Suitable Detector for Speciation and Sum Parameter Analysis. Journal of Analytical Atomic Spectrometry, 1997, 12, 993-996.	1.6	12
77	Validation of the determination of copper and zinc in blood plasma and urine by ICP MS with cross-flow and direct injection nebulization. Talanta, 1997, 44, 1389-1396.	2.9	57
78	Screening-method for organotins by elimination of the inorganic tin matrix using a coupling of hydride generation (HG) and transversely heated graphite atomizer-atomic absorption spectrometry (THGA-AAS). Fresenius' Journal of Analytical Chemistry, 1997, 359, 239-243.	1.5	9
79	The behaviour of different organometallic compounds in the presence of inorganic mercury(II): transalkylation of mercury species and their analysis by the GC-MIP-PED system. Applied Organometallic Chemistry, 1997, 11, 721-725.	1.7	17
80	GC-MIP-PED as an element-specific system for the determination of organomercury compounds. Applied Organometallic Chemistry, 1995, 9, 541-545.	1.7	10
81	Transversely heated graphite atomizer-atomic absorption spectrometry (thga aas) in combination with flow injection analysis system-hydride generation (fias hg) as a reliable screening method for organolead compounds. Applied Organometallic Chemistry, 1994, 8, 615-620.	1.7	6
82	Sensitive detection of ionic organolead compounds by coupling hydride generation (HG) with transversely heated graphite atomizer-atomic absorption spectrometry (THGA-AAS). Fresenius' Journal of Analytical Chemistry, 1994, 349, 738-742.	1.5	13
83	Simultaneous determination of organic ionic lead and mercury species using HPLC. Fresenius' Journal of Analytical Chemistry, 1994, 350, 30-33.	1.5	15
84	Determination of organic ionic lead and mercury species with high-performance liquid chromatography using sulphur reagents. Journal of Chromatography A, 1993, 654, 177-182.	1.8	19