Bernhard Welz

List of Publications by Year
in descending order

100	4,174	109321	138484
papers	citations	35 h-index	58 g-index

107	107	107	1939
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Palladium and magnesium nitrates, a more universal modifier for graphite furnace atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1986, 41, 1157-1165.	2.9	344
2	Sample Preparation for the Determination of Metals in Food Samples Using Spectroanalytical Methodsâ€"A Review. Applied Spectroscopy Reviews, 2008, 43, 67-92.	6.7	208
3	Atomic spectrometric methods for the determination of metals and metalloids in automotive fuels â€“ A review. Talanta, 2007, 73, 1-11.	5.5	152
4	Determination of phosphorus, sulfur and the halogens using high-temperature molecular absorption spectrometry in flames and furnacesâ€"A review. Analytica Chimica Acta, 2009, 647, 137-148.	5.4	134
5	Feasibility of peak volume, side pixel and multiple peak registration in high-resolution continuum source atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1222-1230.	2.9	117
6	Progress in direct solid sampling analysis using line source and high-resolution continuum source electrothermal atomic absorption spectrometry. Analytical and Bioanalytical Chemistry, 2007, 389, 2085-2095.	3.7	98
7	Method development for the determination of nickel in petroleum using line-source and high-resolution continuum-source graphite furnace atomic absorption spectrometry. Microchemical Journal, 2004, 77, 131-140.	4.5	88
8	High-Resolution Continuum Source Atomic and Molecular Absorption Spectrometryâ€"A Review. Applied Spectroscopy Reviews, 2010, 45, 327-354.	6.7	87
9	Solid sampling in graphite furnace atomic-absorption spectrometry using the cup-in-tube technique. Analyst, The, 1985, 110, 573-577.	3.5	85
10	Method development for the determination of manganese, cobalt and copper in green coffee comparing direct solid sampling electrothermal atomic absorption spectrometry and inductively coupled plasma optical emission spectrometry. Talanta, 2007, 73, 862-869.	5.5	85
11	Determination of fluorine in tea using high-resolution molecular absorption spectrometry with electrothermal vaporization of the calcium mono-fluoride CaF. Talanta, 2011, 85, 2681-2685.	5.5	77
12	Optimization of fluorine determination via the molecular absorption of gallium mono-fluoride in a graphite furnace using a high-resolution continuum source spectrometer. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2010, 65, 864-869.	2.9	76
13	High-resolution continuum-source atomic absorption spectrometry: what can we expect?. Journal of the Brazilian Chemical Society, 2003, 14, 220-229.	0.6	69
14	Method development for the determination of thallium in coal using solid sampling graphite furnace atomic absorption spectrometry with continuum source, high-resolution monochromator and CCD array detector. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2004, 59, 841-850.	2.9	68
15	A fast and accurate method for the determination of total and soluble fluorine in toothpaste using high-resolution graphite furnace molecular absorption spectrometry and its comparison with established techniques. Journal of Pharmaceutical and Biomedical Analysis, 2011, 54, 1040-1046.	2.8	61
16	Direct and simultaneous determination of Cr and Fe in crude oil using high-resolution continuum source graphite furnace atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 537-543.	2.9	60
17	High-resolution continuum source electrothermal atomic absorption spectrometry â€" An analytical and diagnostic tool for trace analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 873-883.	2.9	58
18	Noble metals as permanent chemical modifiers for the determination of mercury in environmental reference materials using solid sampling graphite furnace atomic absorption spectrometry and calibration against aqueous standards. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 2031-2045.	2.9	56

#	Article	IF	Citations
19	Determination of lead in biological samples by high-resolution continuum source graphite furnace atomic absorption spectrometry with direct solid sampling. Journal of Analytical Atomic Spectrometry, 2006, 21, 763.	3.0	56
20	Speciation analysis of volatile and non-volatile vanadium compounds in Brazilian crude oils using high-resolution continuum source graphite furnace atomic absorption spectrometry. Analytica Chimica Acta, 2006, 558, 195-200.	5.4	56
21	Investigations of interferences in graphite furnace atomic-absorption spectrometry using a dual cavity platform. Part 1. Influence of nickel chloride on the determination of antimony. Analyst, The, 1985, 110, 459.	3.5	52
22	Investigations of interferences in graphite furnace atomic absorption spectrometry using a dual-cavity platform. Part 2. Influence of sodium chloride and nickel chloride on the atomisation of lead. Journal of Analytical Atomic Spectrometry, 1987, 2, 793.	3.0	52
23	Determination of arsenic in sediments, coal and fly ash slurries after ultrasonic treatment by hydride generation atomic absorption spectrometry and trapping in an iridium-treated graphite tube. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 2057-2067.	2.9	51
24	Determination of cadmium and lead in plastic material from waste electronic equipment using solid sampling graphite furnace atomic absorption spectrometry. Microchemical Journal, 2010, 96, 102-107.	4.5	47
25	Method development for the determination of cadmium in fertilizer samples using high-resolution continuum source graphite furnace atomic absorption spectrometry and slurry sampling. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 529-535.	2.9	47
26	Determination of cobalt in biological samples by line-source and high-resolution continuum source graphite furnace atomic absorption spectrometry using solid sampling or alkaline treatment. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 693-698.	2.9	45
27	Simultaneous determination of Cd and Fe in grain products using direct solid sampling and high-resolution continuum source electrothermal atomic absorption spectrometry. Talanta, 2009, 78, 577-583.	5.5	45
28	Palladium as chemical modifier for the stabilization of volatile nickel and vanadium compounds in crude oil using graphite furnace atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2005, 20, 1332.	3.0	43
29	Method development and optimization for the determination of selenium in bean and soil samples using hydride generation electrothermal atomic absorption spectrometry. Talanta, 2011, 85, 1350-1356.	5.5	42
30	Determination of mercury in biological samples using solid sampling high-resolution continuum source electrothermal atomization atomic absorption spectrometry with calibration against aqueous standards. Journal of Analytical Atomic Spectrometry, 2006, 21, 1321.	3.0	39
31	Simultaneous Determination of Cd and Fe in Beans and Soil of Different Regions of Brazil Using High-Resolution Continuum Source Graphite Furnace Atomic Absorption Spectrometry and Direct Solid Sampling. Journal of Agricultural and Food Chemistry, 2009, 57, 10089-10094.	5.2	39
32	Determination of heavy metals in activated charcoals and carbon black for Lyocell fiber production using direct solid sampling high-resolution continuum source graphite furnace atomic absorption and inductively coupled plasma optical emission spectrometry. Talanta, 2010, 81, 980-987.	5.5	39
33	Determination of sulfur in coal using direct solid sampling and high-resolution continuum source molecular absorption spectrometry of the CS molecule in a graphite furnace. Talanta, 2013, 106, 368-374.	5.5	39
34	Correction of structured molecular background by means of high-resolution continuum source electrothermal atomic absorption spectrometryâ€"Determination of antimony in sediment reference materials using direct solid sampling. Talanta, 2009, 80, 846-852.	5.5	38
35	Simultaneous determination of Cd and Fe in sewage sludge by high-resolution continuum source electrothermal atomic absorption spectrometry with slurry sampling. Microchemical Journal, 2010, 95, 333-336.	4.5	38
36	Method development for the determination of Cd, Cu, Ni and Pb in PM2.5 particles sampled in industrial and urban areas of Greater Cairo, Egypt, using high-resolution continuum source graphite furnace atomic absorption spectrometry. Microchemical Journal, 2014, 113, 4-9.	4.5	37

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37	Determination of arsenic in agricultural soil samples using High-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. Talanta, 2018, 188, 722-728.	5.5	37
38	Investigation of chemical modifiers for phosphorus in a graphite furnace using high-resolution continuum source atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 934-944.	2.9	36
39	Investigation of interferences in the determination of thallium in marine sediment reference materials using high-resolution continuum-source atomic absorption spectrometry and electrothermal atomization. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 1043-1055.	2.9	35
40	Determination of sulfur in biological samples using high-resolution molecular absorption spectrometry in a graphite furnace with direct solid sampling. Journal of Analytical Atomic Spectrometry, 2010, 25, 1039.	3.0	35
41	Simultaneous determination of cobalt and vanadium in undiluted crude oil using high-resolution continuum source graphite furnace atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2010, 25, 590.	3.0	35
42	Determination of cadmium in coal using solid sampling graphite furnace high-resolution continuum source atomic absorption spectrometry. Analytical and Bioanalytical Chemistry, 2005, 382, 1835-1841.	3.7	34
43	Feasibility of using solid sampling graphite furnace atomic absorption spectrometry for speciation analysis of volatile and non-volatile compounds of nickel and vanadium in crude oil. Talanta, 2007, 71, 1877-1885.	5.5	34
44	Sequential determination of Cd and Cr in biomass samples and their ashes using high-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. Talanta, 2013, 115, 55-60.	5.5	34
45	Improvements in graphite-furnace atomic-absoption microanalysis with solid sampling. Mikrochimica Acta, 1982, 77, 115-125.	5.0	33
46	Control of spectral and non-spectral interferences in the determination of thallium in river and marine sediments using solid sampling electrothermal atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 38-45.	3.0	32
47	Determination of Lead in Coal Using Direct Solid Sampling and High-Resolution Continuum Source Graphite Furnace Atomic Absorption Spectrometry. Mikrochimica Acta, 2006, 154, 101-107.	5.0	32
48	Comparison of direct sampling and emulsion analysis using a filter furnace for the determination of lead in crude oil by graphite furnace atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 530-536.	2.9	32
49	Determination of mercury in airborne particulate matter collected on glass fiber filters using high-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sampling. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 378-382.	2.9	32
50	Determination of fluorine in plant materials via calcium mono-fluoride using high-resolution graphite furnace molecular absorption spectrometry with direct solid sample introduction. Journal of Analytical Atomic Spectrometry, 2014, 29, 1564-1569.	3.0	31
51	Comparison of three different sample preparation procedures for the determination of traffic-related elements in airborne particulate matter collected on glass fiber filters. Talanta, 2012, 88, 689-695.	5.5	30
52	Investigation of chemical modifiers for the determination of lead in fertilizers and limestone using graphite furnace atomic absorption spectrometry with Zeeman-effect background correction and slurry sampling. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 92, 1-8.	2.9	28
53	Optimization of analytical performance of a graphite furnace atomic absorption spectrometer with Zeeman-effect background correction using variable magnetic field strength. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2003, 58, 1663-1678.	2.9	27
54	Arsenic containing medium and long chain fatty acids in marine fish oil identified as degradation products using reversed-phase HPLC-ICP-MS/ESI-MS. Journal of Analytical Atomic Spectrometry, 2016, 31, 1836-1845.	3.0	27

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55	Feasibility of employing permanent chemical modifiers for the determination of cadmium in coal using slurry sampling electrothermal atomic absorption spectrometry. Microchemical Journal, 2006, 82, 174-182.	4.5	26
56	Strontium mono-chloride â€" A new molecule for the determination of chlorine using high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 102, 1-6.	2.9	26
57	Direct solid sample analysis with graphite furnace atomic absorption spectrometryâ€"A fast and reliable screening procedure for the determination of inorganic arsenic in fish and seafood. Talanta, 2015, 134, 224-231.	5.5	26
58	Simultaneous determination of bromine and chlorine in coal using electrothermal vaporization inductively coupled plasma mass spectrometry and direct solid sample analysis. Analytica Chimica Acta, 2014, 852, 82-87.	5.4	25
59	Determination of silver in geological samples using high-resolution continuum source electrothermal atomic absorption spectrometry and direct solid sampling. Mikrochimica Acta, 2009, 167, 21-26.	5.0	24
60	Application of direct solid sample analysis for the determination of chlorine in biological materials using electrothermal vaporization inductively coupled plasma mass spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 105, 12-17.	2.9	24
61	Investigation of chemical modifiers for the direct determination of arsenic in fish oil using high-resolution continuum source graphite furnace atomic absorption spectrometry. Talanta, 2016, 150, 142-147.	5.5	24
62	Fluorine in eye shadow: Development of method using high-resolution continuum source graphite furnace molecular absorption spectrometry via calcium mono-fluoride with direct solid sample introduction. Microchemical Journal, 2016, 124, 410-415.	4.5	24
63	Determination of sulfur in crude oil using high-resolution continuum source molecular absorption spectrometry of the SnS molecule in a graphite furnace. Talanta, 2016, 146, 203-208.	5.5	24
64	Feasibility of using direct determination of cadmium and lead in fresh meat by electrothermal atomic absorption spectrometry for screening purposes. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1037-1045.	2.9	23
65	Method development for the determination of bromine in coal using high-resolution continuum source graphite furnace molecular absorption spectrometry and direct solid sample analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 96, 33-39.	2.9	23
66	Fluorine determination in coal using high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 105, 18-24.	2.9	22
67	Determination of chlorine in coal via the SrCl molecule using high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 114, 46-50.	2.9	22
68	Phytoremediation potential of Ulva ohnoi (Chlorophyta): Influence of temperature and salinity on the uptake efficiency and toxicity of cadmium. Ecotoxicology and Environmental Safety, 2019, 174, 334-343.	6.0	22
69	Spectral and non-spectral interferences in the determination of thallium in environmental materials using electrothermal atomization and vaporization techniquesâ€"a case study. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2002, 57, 1821-1834.	2.9	21
70	Investigation of phosphorus atomization using high-resolution continuum source electrothermal atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 429-434.	2.9	21
71	Determination of antimony in airborne particulate matter collected on filters using direct solid sampling and high-resolution continuum source graphite furnace atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2010, 25, 580-584.	3.0	21
72	A simple sample preparation procedure for the fast screening of selenium species in soil samples using alkaline extraction and hydride-generation graphite furnace atomic absorption spectrometry. Microchemical Journal, 2016, 125, 50-55.	4.5	21

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73	Determination of aluminum in highly concentrated iron samples: Study of interferences using high-resolution continuum source atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 1012-1018.	2.9	20
74	Investigation of artifacts caused by deuterium background correction in the determination of phosphorus by electrothermal atomization using high-resolution continuum source atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 337-348.	2.9	20
75	Investigation of spectral interferences in the determination of lead in fertilizers and limestone samples using high-resolution continuum source graphite furnace atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 101, 213-219.	2.9	19
76	Investigation of chemical modifiers for the determination of cadmium and chromium in fish oil and lipoid matrices using HR-CS GF AAS and a simple â€˜dilute-and-shootâ€™ approach. Microchemical Journal, 2017, 133, 175-181.	4.5	19
77	Determination of fluorine in copper concentrate via high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis â€“ Comparison of three target molecules. Talanta, 2018, 176, 178-186.	5.5	19
78	Effective and High-Throughput Analytical Methodology for the Determination of Lead and Cadmium in Water Samples by Disposable Pipette Extraction Coupled with High-Resolution Continuum Source Graphite Furnace Atomic Absorption Spectrometry (HR-CS GF AAS). Analytical Letters, 2019, 52, 2133-2149.	1.8	19
79	Determination of selenium in soil samples using high-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. Analytical Methods, 2014, 6, 2870-2875.	2.7	18
80	Simultaneous determination of Mo and Ni in wine and soil amendments by HR-CS GF AAS. Analytical Methods, 2014, 6, 4247-4256.	2.7	17
81	Development of analytical methods for the determination of copper and manganese in infant formula using high resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. Analytical Methods, 2017, 9, 2321-2327.	2.7	17
82	Determination of cadmium, chromium and copper in vegetables of the Solanaceae family using high-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. Analytical Methods, 2017, 9, 329-337.	2.7	17
83	Direct determination of arsenic in petroleum derivatives by graphite furnace atomic absorption spectrometry: A comparison between filter and platform atomizers. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 345-351.	2.9	16
84	Investigation of chemical modifiers for sulfur determination in diesel fuel samples by high-resolution continuum source graphite furnace molecular absorption spectrometry using direct analysis. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 108, 68-74.	2.9	16
85	A comparison of laser ablation-inductively coupled plasma-mass spectrometry and high-resolution continuum source graphite furnace molecular absorption spectrometry for the direct determination of bromine in polymers. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 132, 50-55.	2.9	13
86	Determination of chromium and antimony in polymers from electrical and electronic equipment using high-resolution continuum source graphite furnace atomic absorption spectrometry. Analytical Methods, 2013, 5, 6941.	2.7	11
87	Development of a fast screening method for the direct determination of chlorinated persistent organic pollutants in fish oil by high-resolution continuum source graphite furnace molecular absorption spectrometry. Food Control, 2017, 78, 456-462.	5.5	11
88	Investigation of spectral interference in the determination of Pb in road dust using high-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. Journal of Analytical Atomic Spectrometry, 2018, 33, 593-602.	3.0	11
89	A systematic look at the carbon monosulfide molecule and chemical modifiers for the determination of sulfur by HR-CS GF MAS. Journal of Analytical Atomic Spectrometry, 2018, 33, 1394-1401.	3.0	11
90	Unusual calibration curves observed for iron using high-resolution continuum source graphite furnace atomic absorption spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2010, 65, 258-262.	2.9	9

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91	Application of disposable starch-based platforms for sample introduction and determination of refractory elements using graphite furnace atomic absorption spectrometry and direct solid sample analysis. Journal of Analytical Atomic Spectrometry, 2015, 30, 381-388.	3.0	9
92	Investigations on the determination of chloride and bromide by furnace atomic non-thermal excitation spectrometry and furnace ionic non-thermal excitation spectrometry. Journal of Analytical Atomic Spectrometry, 1991, 6, 465.	3.0	7
93	Determination of Cr, Cu and Pb in industrial waste of oil shale using high-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. Analytical Methods, 2018, 10, 3645-3653.	2.7	7
94	The use of Ca + Pd + Zr as modifiers in the determination of sulfur by HR-CS GF MAS with solid sampling. Journal of Analytical Atomic Spectrometry, 2019, 34, 498-503.	3.0	5
95	Effect of magnesium acetylacetonate on the signal of organic forms of vanadium in graphite furnace atomic absorption spectrometry. Talanta, 2013, 103, 66-74.	5.5	4
96	Iodine determination by high-resolution continuum source molecular absorption spectrometry â€“ A comparison between potential molecules. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 153, 42-49.	2.9	4
97	Trace element status of activated charcoals and carbon black: Influence on thermal stability of modified lyocell solutions. Journal of Applied Polymer Science, 2010, 116, 3408-3418.	2.6	3
98	A novel extraction-based procedure for the determination of cadmium in marine macro-algae using HR-CS GF AAS. Analytical Methods, 2017, 9, 5400-5406.	2.7	3
99	High-Resolution Continuum Source AAS and its Application to Food Analysis. , 0, , 81-114.		0
100	Prof. Reinaldo Calixto de Campos. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 69, 1.	2.9	0