

Bernhard Welz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6169868/publications.pdf>

Version: 2024-02-01

100
papers

4,174
citations

109137

35
h-index

138251

58
g-index

107
all docs

107
docs citations

107
times ranked

1939
citing authors

#	ARTICLE	IF	CITATIONS
1	Palladium and magnesium nitrates, a more universal modifier for graphite furnace atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 1986, 41, 1157-1165.	1.5	344
2	Sample Preparation for the Determination of Metals in Food Samples Using Spectroanalytical Methods—A Review. <i>Applied Spectroscopy Reviews</i> , 2008, 43, 67-92.	3.4	208
3	Atomic spectrometric methods for the determination of metals and metalloids in automotive fuels —A review. <i>Talanta</i> , 2007, 73, 1-11.	2.9	152
4	Determination of phosphorus, sulfur and the halogens using high-temperature molecular absorption spectrometry in flames and furnaces—A review. <i>Analytica Chimica Acta</i> , 2009, 647, 137-148.	2.6	134
5	Feasibility of peak volume, side pixel and multiple peak registration in high-resolution continuum source atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1222-1230.	1.5	117
6	Progress in direct solid sampling analysis using line source and high-resolution continuum source electrothermal atomic absorption spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 389, 2085-2095.	1.9	98
7	Method development for the determination of nickel in petroleum using line-source and high-resolution continuum-source graphite furnace atomic absorption spectrometry. <i>Microchemical Journal</i> , 2004, 77, 131-140.	2.3	88
8	High-Resolution Continuum Source Atomic and Molecular Absorption Spectrometry—A Review. <i>Applied Spectroscopy Reviews</i> , 2010, 45, 327-354.	3.4	87
9	Solid sampling in graphite furnace atomic-absorption spectrometry using the cup-in-tube technique. <i>Analyst</i> , 1985, 110, 573-577.	1.7	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. <i>Talanta</i> , 2007, 73, 862-869.	2.9	85
11	Determination of fluorine in tea using high-resolution molecular absorption spectrometry with electrothermal vaporization of the calcium mono-fluoride CaF. <i>Talanta</i> , 2011, 85, 2681-2685.	2.9	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 864-869.	1.5	76
13	High-resolution continuum-source atomic absorption spectrometry: what can we expect?. <i>Journal of the Brazilian Chemical Society</i> , 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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2004, 59, 841-850.	1.5	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. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2011, 54, 1040-1046.	1.4	61
16	Direct and simultaneous determination of Cr and Fe in crude oil using high-resolution continuum source graphite furnace atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009, 64, 537-543.	1.5	60
17	High-resolution continuum source electrothermal atomic absorption spectrometry — An analytical and diagnostic tool for trace analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 873-883.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 2031-2045.	1.5	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. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 763.	1.6	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. <i>Analytica Chimica Acta</i> , 2006, 558, 195-200.	2.6	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. <i>Analyst</i> , The, 1985, 110, 459.	1.7	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. <i>Journal of Analytical Atomic Spectrometry</i> , 1987, 2, 793.	1.6	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 2057-2067.	1.5	51
24	Determination of cadmium and lead in plastic material from waste electronic equipment using solid sampling graphite furnace atomic absorption spectrometry. <i>Microchemical Journal</i> , 2010, 96, 102-107.	2.3	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2011, 66, 529-535.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 693-698.	1.5	45
27	Simultaneous determination of Cd and Fe in grain products using direct solid sampling and high-resolution continuum source electrothermal atomic absorption spectrometry. <i>Talanta</i> , 2009, 78, 577-583.	2.9	45
28	Palladium as chemical modifier for the stabilization of volatile nickel and vanadium compounds in crude oil using graphite furnace atomic absorption spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2005, 20, 1332.	1.6	43
29	Method development and optimization for the determination of selenium in bean and soil samples using hydride generation electrothermal atomic absorption spectrometry. <i>Talanta</i> , 2011, 85, 1350-1356.	2.9	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. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 1321.	1.6	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. <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 10089-10094.	2.4	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. <i>Talanta</i> , 2010, 81, 980-987.	2.9	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. <i>Talanta</i> , 2013, 106, 368-374.	2.9	39
34	Correction of structured molecular background by means of high-resolution continuum source electrothermal atomic absorption spectrometry – Determination of antimony in sediment reference materials using direct solid sampling. <i>Talanta</i> , 2009, 80, 846-852.	2.9	38
35	Simultaneous determination of Cd and Fe in sewage sludge by high-resolution continuum source electrothermal atomic absorption spectrometry with slurry sampling. <i>Microchemical Journal</i> , 2010, 95, 333-336.	2.3	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. <i>Microchemical Journal</i> , 2014, 113, 4-9.	2.3	37

#	ARTICLE	IF	CITATIONS
37	Determination of arsenic in agricultural soil samples using High-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. <i>Talanta</i> , 2018, 188, 722-728.	2.9	37
38	Investigation of chemical modifiers for phosphorus in a graphite furnace using high-resolution continuum source atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2006, 61, 934-944.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 1043-1055.	1.5	35
40	Determination of sulfur in biological samples using high-resolution molecular absorption spectrometry in a graphite furnace with direct solid sampling. <i>Journal of Analytical Atomic Spectrometry</i> , 2010, 25, 1039.	1.6	35
41	Simultaneous determination of cobalt and vanadium in undiluted crude oil using high-resolution continuum source graphite furnace atomic absorption spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2010, 25, 590.	1.6	35
42	Determination of cadmium in coal using solid sampling graphite furnace high-resolution continuum source atomic absorption spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2005, 382, 1835-1841.	1.9	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. <i>Talanta</i> , 2007, 71, 1877-1885.	2.9	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. <i>Talanta</i> , 2013, 115, 55-60.	2.9	34
45	Improvements in graphite-furnace atomic-absorption microanalysis with solid sampling. <i>Mikrochimica Acta</i> , 1982, 77, 115-125.	2.5	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. <i>Journal of Analytical Atomic Spectrometry</i> , 2002, 17, 38-45.	1.6	32
47	Determination of Lead in Coal Using Direct Solid Sampling and High-Resolution Continuum Source Graphite Furnace Atomic Absorption Spectrometry. <i>Mikrochimica Acta</i> , 2006, 154, 101-107.	2.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009, 64, 530-536.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2011, 66, 378-382.	1.5	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. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 1564-1569.	1.6	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. <i>Talanta</i> , 2012, 88, 689-695.	2.9	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 92, 1-8.	1.5	28
53	Optimization of analytical performance of a graphite furnace atomic absorption spectrometer with Zeeman-effect background correction using variable magnetic field strength. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2003, 58, 1663-1678.	1.5	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. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 1836-1845.	1.6	27

#	ARTICLE	IF	CITATIONS
55	Feasibility of employing permanent chemical modifiers for the determination of cadmium in coal using slurry sampling electrothermal atomic absorption spectrometry. <i>Microchemical Journal</i> , 2006, 82, 174-182.	2.3	26
56	Strontium mono-chloride SrCl A new molecule for the determination of chlorine using high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 102, 1-6.	1.5	26
57	Direct solid sample analysis with graphite furnace atomic absorption spectrometry "A fast and reliable screening procedure for the determination of inorganic arsenic in fish and seafood. <i>Talanta</i> , 2015, 134, 224-231.	2.9	26
58	Simultaneous determination of bromine and chlorine in coal using electrothermal vaporization inductively coupled plasma mass spectrometry and direct solid sample analysis. <i>Analytica Chimica Acta</i> , 2014, 852, 82-87.	2.6	25
59	Determination of silver in geological samples using high-resolution continuum source electrothermal atomic absorption spectrometry and direct solid sampling. <i>Mikrochimica Acta</i> , 2009, 167, 21-26.	2.5	24
60	Application of direct solid sample analysis for the determination of chlorine in biological materials using electrothermal vaporization inductively coupled plasma mass spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 105, 12-17.	1.5	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. <i>Talanta</i> , 2016, 150, 142-147.	2.9	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. <i>Microchemical Journal</i> , 2016, 124, 410-415.	2.3	24
63	Determination of sulfur in crude oil using high-resolution continuum source molecular absorption spectrometry of the SnS molecule in a graphite furnace. <i>Talanta</i> , 2016, 146, 203-208.	2.9	24
64	Feasibility of using direct determination of cadmium and lead in fresh meat by electrothermal atomic absorption spectrometry for screening purposes. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1037-1045.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 96, 33-39.	1.5	23
66	Fluorine determination in coal using high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 105, 18-24.	1.5	22
67	Determination of chlorine in coal via the SrCl molecule using high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 114, 46-50.	1.5	22
68	Phytoremediation potential of <i>Ulva ohnoi</i> (Chlorophyta): Influence of temperature and salinity on the uptake efficiency and toxicity of cadmium. <i>Ecotoxicology and Environmental Safety</i> , 2019, 174, 334-343.	2.9	22
69	Spectral and non-spectral interferences in the determination of thallium in environmental materials using electrothermal atomization and vaporization techniques "a case study. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 1821-1834.	1.5	21
70	Investigation of phosphorus atomization using high-resolution continuum source electrothermal atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 429-434.	1.5	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. <i>Journal of Analytical Atomic Spectrometry</i> , 2010, 25, 580-584.	1.6	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. <i>Microchemical Journal</i> , 2016, 125, 50-55.	2.3	21

#	ARTICLE	IF	CITATIONS
73	Determination of aluminum in highly concentrated iron samples: Study of interferences using high-resolution continuum source atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1012-1018.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 337-348.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 101, 213-219.	1.5	19
76	Investigation of chemical modifiers for the determination of cadmium and chromium in fish oil and lipid matrices using HR-CS GF AAS and a simple "dilute-and-shoot" approach. <i>Microchemical Journal</i> , 2017, 133, 175-181.	2.3	19
77	Determination of fluorine in copper concentrate via high-resolution graphite furnace molecular absorption spectrometry and direct solid sample analysis "Comparison of three target molecules. <i>Talanta</i> , 2018, 176, 178-186.	2.9	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). <i>Analytical Letters</i> , 2019, 52, 2133-2149.	1.0	19
79	Determination of selenium in soil samples using high-resolution continuum source graphite furnace atomic absorption spectrometry and direct solid sample analysis. <i>Analytical Methods</i> , 2014, 6, 2870-2875.	1.3	18
80	Simultaneous determination of Mo and Ni in wine and soil amendments by HR-CS GF AAS. <i>Analytical Methods</i> , 2014, 6, 4247-4256.	1.3	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. <i>Analytical Methods</i> , 2017, 9, 2321-2327.	1.3	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. <i>Analytical Methods</i> , 2017, 9, 329-337.	1.3	17
83	Direct determination of arsenic in petroleum derivatives by graphite furnace atomic absorption spectrometry: A comparison between filter and platform atomizers. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2011, 66, 345-351.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 108, 68-74.	1.5	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. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 132, 50-55.	1.5	13
86	Determination of chromium and antimony in polymers from electrical and electronic equipment using high-resolution continuum source graphite furnace atomic absorption spectrometry. <i>Analytical Methods</i> , 2013, 5, 6941.	1.3	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. <i>Food Control</i> , 2017, 78, 456-462.	2.8	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. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 593-602.	1.6	11
89	A systematic look at the carbon monosulfide molecule and chemical modifiers for the determination of sulfur by HR-CS GF MAS. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 1394-1401.	1.6	11
90	Unusual calibration curves observed for iron using high-resolution continuum source graphite furnace atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 258-262.	1.5	9

#	ARTICLE	IF	CITATIONS
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. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 381-388.	1.6	9
92	Investigations on the determination of chloride and bromide by furnace atomic non-thermal excitation spectrometry and furnace ionic non-thermal excitation spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 1991, 6, 465.	1.6	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. <i>Analytical Methods</i> , 2018, 10, 3645-3653.	1.3	7
94	The use of Ca + Pd + Zr as modifiers in the determination of sulfur by HR-CS GF MAS with solid sampling. <i>Journal of Analytical Atomic Spectrometry</i> , 2019, 34, 498-503.	1.6	5
95	Effect of magnesium acetylacetonate on the signal of organic forms of vanadium in graphite furnace atomic absorption spectrometry. <i>Talanta</i> , 2013, 103, 66-74.	2.9	4
96	Iodine determination by high-resolution continuum source molecular absorption spectrometry – A comparison between potential molecules. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2019, 153, 42-49.	1.5	4
97	Trace element status of activated charcoals and carbon black: Influence on thermal stability of modified lyocell solutions. <i>Journal of Applied Polymer Science</i> , 2010, 116, 3408-3418.	1.3	3
98	A novel extraction-based procedure for the determination of cadmium in marine macro-algae using HR-CS GF AAS. <i>Analytical Methods</i> , 2017, 9, 5400-5406.	1.3	3
99	High-Resolution Continuum Source AAS and its Application to Food Analysis. , 0, , 81-114.		0
100	Prof. Reinaldo Calixto de Campos. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012, 69, 1.	1.5	0