

RafaÅ, Sitko

List of Publications by Year in descending order

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29
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59
g-index

103
all docs

103
docs citations

103
times ranked

4618
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption of divalent metal ions from aqueous solutions using graphene oxide. Dalton Transactions, 2013, 42, 5682.	3.3	710
2	Graphene as a new sorbent in analytical chemistry. TrAC - Trends in Analytical Chemistry, 2013, 51, 33-43.	11.4	330
3	Green Approach for Ultratrace Determination of Divalent Metal Ions and Arsenic Species Using Total-Reflection X-ray Fluorescence Spectrometry and Mercapto-Modified Graphene Oxide Nanosheets as a Novel Adsorbent. Analytical Chemistry, 2015, 87, 3535-3542.	6.5	186
4	Determination of rare earth elements by spectroscopic techniques: a review. Journal of Analytical Atomic Spectrometry, 2011, 26, 2373.	3.0	151
5	Modification of carbon nanotubes for preconcentration, separation and determination of trace-metal ions. TrAC - Trends in Analytical Chemistry, 2012, 37, 22-31.	11.4	138
6	Dispersive micro solid-phase extraction using multiwalled carbon nanotubes combined with portable total-reflection X-ray fluorescence spectrometry for the determination of trace amounts of Pb and Cd in water samples. Journal of Analytical Atomic Spectrometry, 2013, 28, 736.	3.0	95
7	Trace and ultratrace analysis of liquid samples by X-ray fluorescence spectrometry. TrAC - Trends in Analytical Chemistry, 2014, 53, 73-83.	11.4	95
8	Graphene oxide/cellulose membranes in adsorption of divalent metal ions. RSC Advances, 2016, 6, 96595-96605.	3.6	95
9	Suspended Aminosilanized Graphene Oxide Nanosheets for Selective Preconcentration of Lead Ions and Ultrasensitive Determination by Electrothermal Atomic Absorption Spectrometry. ACS Applied Materials & Interfaces, 2014, 6, 20144-20153.	8.0	91
10	Quantitative X-ray fluorescence analysis of samples of less than ∞ thickness TM : Difficulties and possibilities. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 1161-1172.	2.9	80
11	Preconcentration of Fe(III), Co(II), Ni(II), Cu(II), Zn(II) and Pb(II) with ethylenediamine-modified graphene oxide. Mikrochimica Acta, 2016, 183, 231-240.	5.0	78
12	Selective adsorption and determination of hexavalent chromium ions using graphene oxide modified with amino silanes. Mikrochimica Acta, 2018, 185, 117.	5.0	78
13	Graphene oxide as a solid sorbent for the preconcentration of cobalt, nickel, copper, zinc and lead prior to determination by energy-dispersive X-ray fluorescence spectrometry. Analytical Methods, 2013, 5, 6425.	2.7	77
14	Spherical silica particles decorated with graphene oxide nanosheets as a new sorbent in inorganic trace analysis. Analytica Chimica Acta, 2014, 834, 22-29.	5.4	74
15	Dispersive liquid-liquid microextraction using diethyldithiocarbamate as a chelating agent and the dried-spot technique for the determination of Fe, Co, Ni, Cu, Zn, Se and Pb by energy-dispersive X-ray fluorescence spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2012, 73, 79-83.	2.9	71
16	Graphene Oxide/Carbon Nanotube Membranes for Highly Efficient Removal of Metal Ions from Water. ACS Applied Materials & Interfaces, 2019, 11, 28582-28590.	8.0	69
17	Method for the determination of Pb, Cd, Zn, Mn and Fe in rice samples using carbon nanotubes and cationic complexes of batophenanthroline. Food Chemistry, 2018, 249, 38-44.	8.2	58
18	Determination and speciation of trace and ultratrace selenium ions by energy-dispersive X-ray fluorescence spectrometry using graphene as solid adsorbent in dispersive micro-solid phase extraction. Talanta, 2015, 134, 360-365.	5.5	57

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19	Trace and ultratrace determination of heavy metal ions by energy-dispersive X-ray fluorescence spectrometry using graphene as solid sorbent in dispersive micro solid-phase extraction. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 94-95, 7-13.	2.9	54
20	Fast and sensitive determination of heavy metal ions as batophenanthroline chelates in food and water samples after dispersive micro-solid phase extraction using graphene oxide as sorbent. <i>Microchemical Journal</i> , 2019, 147, 30-36.	4.5	53
21	Carbon nanotubes as a solid sorbent for the preconcentration of Cr, Mn, Fe, Co, Ni, Cu, Zn and Pb prior to wavelength-dispersive X-ray fluorescence spectrometry. <i>Talanta</i> , 2012, 99, 918-923.	5.5	52
22	Oxide passivated Ni-supported Ru nanoparticles in silica: A new catalyst for low-temperature carbon dioxide methanation. <i>Applied Catalysis B: Environmental</i> , 2017, 206, 16-23.	20.2	49
23	Determination of selenium by X-ray fluorescence spectrometry using dispersive solid-phase microextraction with multiwalled carbon nanotubes as solid sorbent. <i>Journal of Analytical Atomic Spectrometry</i> , 2012, 27, 1688.	3.0	44
24	Energy-dispersive X-ray fluorescence spectrometer for analysis of conventional and micro-samples: Preliminary assessment. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2009, 64, 436-441.	2.9	37
25	SiO ₂ , Cu-, and Ni-supported Au nanoparticles for selective glycerol oxidation in the liquid phase. <i>Journal of Catalysis</i> , 2014, 319, 110-118.	6.2	37
26	Determination and speciation of ultratrace arsenic and chromium species using aluminium oxide supported on graphene oxide. <i>Talanta</i> , 2018, 185, 264-274.	5.5	37
27	Thiosemicarbazide-grafted graphene oxide as superior adsorbent for highly efficient and selective removal of mercury ions from water. <i>Separation and Purification Technology</i> , 2021, 254, 117606.	7.9	35
28	Ceria nanoparticles deposited on graphene nanosheets for adsorption of copper(II) and lead(II) ions and of anionic species of arsenic and selenium. <i>Mikrochimica Acta</i> , 2018, 185, 264.	5.0	33
29	Liquid-phase microextraction as an attractive tool for multielement trace analysis in combination with X-ray fluorescence spectrometry: an example of simultaneous determination of Fe, Co, Zn, Ga, Se and Pb in water samples. <i>Journal of Analytical Atomic Spectrometry</i> , 2011, 26, 1979.	3.0	32
30	Determination of Te, Bi, Ni, Sb and Au by X-ray fluorescence spectrometry following electroenrichment on a copper cathode. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 1147-1152.	2.9	30
31	How to detect metal species preconcentrated by microextraction techniques?. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 82, 412-424.	11.4	29
32	Dispersive Micro Solid-Phase Extraction Using Multiwalled Carbon Nanotubes for Simultaneous Determination of Trace Metal Ions by Energy-Dispersive X-ray Fluorescence Spectrometry. <i>Applied Spectroscopy</i> , 2013, 67, 204-209.	2.2	27
33	Fundamental parameters method for determination of rare earth elements in apatites by wavelength-dispersive X-ray fluorescence spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2005, 20, 741.	3.0	25
34	Analytical possibilities of different X-ray fluorescence systems for determination of trace elements in aqueous samples pre-concentrated with carbon nanotubes. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 88, 192-197.	2.9	25
35	Graphene Oxide Decorated with Cerium(IV) Oxide in Determination of Ultratrace Metal Ions and Speciation of Selenium. <i>Analytical Chemistry</i> , 2018, 90, 4150-4159.	6.5	25
36	A green analytical method for ultratrace determination of hexavalent chromium ions based on micro-solid phase extraction using amino-silanized cellulose membranes. <i>Microchemical Journal</i> , 2019, 149, 104060.	4.5	25

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37	Ultrasound-assisted solid-phase extraction using multiwalled carbon nanotubes for determination of cadmium by flame atomic absorption spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2013, 28, 405.	3.0	24
38	Nano silica and molybdenum supported Re, Rh, Ru or Ir nanoparticles for selective solvent-free glycerol conversion to cyclic acetals with propanone and butanone under mild conditions. <i>Applied Catalysis B: Environmental</i> , 2017, 202, 335-345.	20.2	24
39	The absorption- and luminescence spectra of Mn ³⁺ in beryl and vesuvianite. <i>Physics and Chemistry of Minerals</i> , 2018, 45, 475-488.	0.8	22
40	Chemofiltration of mercury water samples through zinc sulfide layer and determination by wavelength-dispersive X-ray fluorescence spectrometry. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 13-18.	3.0	20
41	Highly selective determination of ultratrace inorganic arsenic species using novel functionalized miniaturized membranes. <i>Analytica Chimica Acta</i> , 2018, 1008, 57-65.	5.4	20
42	Ni-Supported Pd Nanoparticles with Ca Promoter: A New Catalyst for Low-Temperature Ammonia Cracking. <i>PLoS ONE</i> , 2015, 10, e0136805.	2.5	20
43	Correction of matrix effects via scattered radiation in X-ray fluorescence analysis of samples collected on membrane filters. <i>Journal of Analytical Atomic Spectrometry</i> , 2006, 21, 1062.	3.0	18
44	Micro-electrodeposition in the presence of ionic liquid for the preconcentration of trace amounts of Fe, Co, Ni and Zn from aqueous samples. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2013, 82, 60-64.	2.9	18
45	Nano-Ru Supported on Ni Nanowires for Low-Temperature Carbon Dioxide Methanation. <i>Catalysts</i> , 2020, 10, 513.	3.5	17
46	Graphene oxide decorated with fullerene nanoparticles for highly efficient removal of Pb(II) ions and ultrasensitive detection by total-reflection X-ray fluorescence spectrometry. <i>Separation and Purification Technology</i> , 2021, 277, 119450.	7.9	17
47	Fast and simple method for determination of fatty acid methyl esters (FAME) in biodiesel blends using X-ray spectrometry. <i>Talanta</i> , 2011, 85, 2000-2006.	5.5	16
48	Alumina/nano-graphite composite as a new nanosorbent for the selective adsorption, preconcentration, and determination of chromium in water samples by EDXRF. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 7793-7802.	3.7	16
49	Multielement XRF Semimicroanalysis of Pb(Zr,Ti)O ₃ Type Ferroelectric Ceramic Materials Doped with Pb(Nb,Mn)O ₃ and Bi ₂ O ₃ by the Thin Layer Method. <i>Mikrochimica Acta</i> , 2004, 144, 9-15.	5.0	15
50	Theoretical influence coefficients for correction of matrix effects in x-ray fluorescence analysis of intermediate-thickness samples. <i>X-Ray Spectrometry</i> , 2006, 35, 93-100.	1.4	15
51	Preconcentration via ion associated complexes combined with inductively coupled plasma optical emission spectrometry for determination of heavy metals. <i>Talanta</i> , 2012, 88, 391-395.	5.5	15
52	Calibration of wavelength-dispersive X-ray spectrometer for standardless analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 95-100.	2.9	14
53	Energy-dispersive X-ray fluorescence spectrometry combined with dispersive liquid-liquid microextraction for simultaneous determination of zinc and copper in water samples. <i>Analytical Methods</i> , 2013, 5, 6192.	2.7	14
54	Cellulose mini-membranes modified with TiO ₂ for separation, determination, and speciation of arsenates and selenites. <i>Mikrochimica Acta</i> , 2020, 187, 430.	5.0	14

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55	Empirical coefficients models for x-ray fluorescence analysis of intermediate-thickness samples. <i>X-Ray Spectrometry</i> , 2005, 34, 11-18.	1.4	13
56	Specific heat and magnetic susceptibility of single-crystalline ZnCr ₂ Se ₄ spinels doped with Ga, In and Ce. <i>Materials Chemistry and Physics</i> , 2011, 131, 142-150.	4.0	13
57	XRF Analysis of Microsamples of Semiconductor Type Multielement Materials by the Thin Layer Method. Determination of Cr, Co, Ni, Cu, Zn, Ga, Se, Sb, Yb. <i>Mikrochimica Acta</i> , 1999, 132, 41-47.	5.0	12
58	Study on the influence of X-ray tube spectral distribution on the analysis of bulk samples and thin films: Fundamental parameters method and theoretical coefficient algorithms. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 1297-1302.	2.9	12
59	Spin-glass-like behavior in Zn _x Cr _{1-x} Al ₂ Se ₄ . <i>Journal of Physics and Chemistry of Solids</i> , 2009, 70, 1175-1180.	4.0	12
60	The Mössbauer spectra of prasiolite and amethyst crystals from Poland. <i>Physics and Chemistry of Minerals</i> , 2017, 44, 365-375.	0.8	12
61	Mono- and bimetallic nano-Re systems doped Os, Mo, Ru, Ir as nanocatalytic platforms for the acetalization of polyalcohols into cyclic acetals and their applications as fuel additives. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 154-167.	20.2	12
62	Determination of trace elements in suspensions and filtrates of drinking and surface water by wavelength-dispersive X-ray fluorescence spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 384, 1600-1604.	3.7	11
63	Influence of X-ray tube spectral distribution on uncertainty of calculated fluorescent radiation intensity. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2007, 62, 777-786.	2.9	11
64	Determination of Lithium in Mineral Water Samples by X-Ray Fluorescence Spectrometry. <i>Applied Spectroscopy</i> , 2011, 65, 1218-1221.	2.2	11
65	Directly suspended droplet microextraction combined with energy-dispersive X-ray fluorescence spectrometry to determine nano levels of phosphate in surface water. <i>Journal of Analytical Atomic Spectrometry</i> , 2012, 27, 460.	3.0	11
66	Magnetic and specific heat properties of a new Gd-doped ZnCr ₂ Se ₄ . <i>Materials Chemistry and Physics</i> , 2015, 168, 187-192.	4.0	11
67	A study on adsorption of metals by activated carbon in a large-scale (municipal) process of surface water purification. <i>Open Chemistry</i> , 2013, 11, 742-753.	1.9	10
68	Toward a viable ecological method for regenerating a commercial SCR catalyst – Selectively leaching surface deposits and reconstructing a pore landscape. <i>Journal of Cleaner Production</i> , 2021, 316, 128291.	9.3	10
69	Sensitive determination of uranium using β -cyclodextrin modified graphene oxide and X-ray fluorescence techniques: EDXRF and TXRF. <i>Talanta</i> , 2022, 246, 123501.	5.5	10
70	Structural and magnetic properties of Zn _{1-x} Sb _x Cr _{2-x/3} Se ₄ (x=0.11, 0.16 and 0.20) single crystals. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1970-1976.	2.9	9
71	Determination of thickness and composition of thin films by x-ray fluorescence spectrometry using theoretical influence coefficient algorithms. <i>X-Ray Spectrometry</i> , 2008, 37, 265-272.	1.4	9
72	Standardless energy-dispersive X-ray fluorescence analysis using primary radiation monochromatized with LiF(200) crystal. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 1303-1308.	2.9	9

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73	The effects of doping ferromagnetic spinel CdCr ₂ Se ₄ with Sb ³⁺ ions. Journal of Solid State Chemistry, 2009, 182, 3149-3154.	2.9	9
74	Influence of temperature on the critical fields in ZnCr _{2-2x} Al _x Se ₄ antiferromagnets. Journal of Alloys and Compounds, 2009, 480, 67-69.	5.5	9
75	Electrochemically assisted sorption on oxidized multiwalled carbon nanotubes for preconcentration of Cr, Mn, Co, Ni, Cu and Zn from water samples. Analyst, The, 2013, 138, 2470.	3.5	9
76	Determination of ultra-trace gold in cosmetics using aluminum-magnesium layered double hydroxide/graphene oxide nanocomposite. Talanta, 2022, 245, 123460.	5.5	9
77	Determination of absorption correction by the "two masses" method for XRF analysis of intermediate samples. X-Ray Spectrometry, 2003, 32, 113-118.	1.4	8
78	Stoichiometry determination of (Pb,Lu)(Zr,Ti)O ₃ -type nano-crystalline ferroelectric ceramics by wavelength-dispersive X-ray fluorescence spectrometry. Analytical and Bioanalytical Chemistry, 2006, 385, 971-974.	3.7	8
79	Influence of Nb ⁵⁺ ions on phase transitions and polar disorder above <i>T_C</i> in PbZrO ₃ studied by Raman spectroscopy. Journal of the American Ceramic Society, 2020, 103, 3657-3666.	3.8	8
80	Ultrasensitive determination of metal ions using graphene oxide/carbon nanotubes loaded cellulose membranes and total-reflection X-ray fluorescence spectrometry: A green chemistry approach. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 177, 106069.	2.9	8
81	Ultrasensitive and selective determination of mercury in water, beverages and food samples by EDXRF and TXRF using graphene oxide modified with thiosemicarbazide. Food Chemistry, 2022, 390, 133136.	8.2	8
82	X-ray fluorescence solution semi-microanalysis of the luminophore type materials using scattered radiation and attenuation coefficients. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2003, 58, 1917-1925.	2.9	7
83	Determination of chemical composition of siderite in concretions by wavelength-dispersive X-ray spectrometry following selective dissolution. Talanta, 2009, 77, 1105-1110.	5.5	7
84	Determination of trace elements in ZnS:Ag and ZnS:Cu type luminophore materials by X-ray fluorescence spectrometry following trace-matrix separation and co-precipitation. Journal of Analytical Atomic Spectrometry, 2004, 19, 995-999.	3.0	6
85	Structural and magnetic properties of CuCr ₂ Se ₄ single crystals diluted with Sb(III). Journal of Alloys and Compounds, 2012, 513, 353-358.	5.5	6
86	Defect induced lattice instabilities and competing interactions in niobium doped lead zirconate single crystals. Journal of Alloys and Compounds, 2018, 739, 499-503.	5.5	6
87	Indirect determination of beryllium by X-ray fluorescence spectrometry via a complex with cobalt. Journal of Analytical Atomic Spectrometry, 2008, 23, 1628.	3.0	5
88	Preconcentration of trace lead via formation of the bis(2,2-bipyridyl) complex and its adsorption on oxidized multiwalled carbon nanotubes. Mikrochimica Acta, 2014, 181, 1035-1040.	5.0	5
89	Highly selective and sensitive determination of mercury ions by total-reflection X-ray fluorescence spectrometry. Journal of Analytical Atomic Spectrometry, 2021, 36, 1533-1543.	3.0	5
90	Pre-Concentration Procedure Based on Chitosan Combined with Ionic Liquid for the Determination of Cobalt, Nickel, and Copper in Water Samples. Applied Spectroscopy, 2013, 67, 536-541.	2.2	4

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91	Catalytic Gas-Phase Glycerol Processing over SiO ₂ -, Cu-, Ni- and Fe- Supported Au Nanoparticles. PLoS ONE, 2015, 10, e0142668.	2.5	4
92	Electrolytic copper as cheap and effective catalyst for one-pot triazole synthesis. Scientific Reports, 2018, 8, 4496.	3.3	4
93	Complete reconstruction of the process and conditions during gold smelting in the 15th–17th centuries in Żary, Stok based on metallurgical slags. Archaeometry, 2022, 64, 916-934.	1.3	4
94	Catalytic Removal of NO _x on Ceramic Foam-Supported ZnO and TiO ₂ Nanorods Ornamented with W and V Oxides. Energies, 2022, 15, 1798.	3.1	4
95	Preconcentration of Trace Amounts of Zinc and Copper from Water Samples onto Polystyrene Foils Prior to Determination by Wavelength-Dispersive X-ray Fluorescence Spectrometry. Applied Spectroscopy, 2012, 66, 1082-1086.	2.2	3
96	Indirect determination of dissolved silicate in surface water using energy-dispersive X-ray fluorescence spectrometry. Analyst, The, 2014, 139, 3911.	3.5	3
97	On the n–p phase transition in CdCr _{2–x} Sb _x Se ₄ . Journal of Alloys and Compounds, 2007, 442, 186-188.	5.5	2
98	Critical behavior of the 3D-Ising ferromagnets Cd[Cr _x Ti _y]Se ₄ . Journal of Physics and Chemistry of Solids, 2013, 74, 1419-1425.	4.0	2
99	Graphene and Derivatives: Sample Handling. , 2018, , 340-340.		2
100	Long-Term Isothermal Phase Transformation in Lead Zirconate. Materials, 2022, 15, 4077.	2.9	2
101	X-Ray Analysis of the New Ferrites CuCr _{2–x} Fe _x Se ₄ . Solid State Phenomena, 0, 163, 217-220.	0.3	1
102	A Study of Catalytic Oxidation of a Library of C ₂ to C ₄ Alcohols in the Presence of Nanogold. Nanomaterials, 2019, 9, 442.	4.1	1
103	Nondestructive analysis of single crystals of selenide spinels by X-ray spectrometry techniques. Analytical and Bioanalytical Chemistry, 2011, 399, 3285-3292.	3.7	0