

Jay W Grate

List of Publications by Year in descending order

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163
papers

10,194
citations

31976

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36028

97
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175
all docs

175
docs citations

175
times ranked

8108
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructures for enzyme stabilization. <i>Chemical Engineering Science</i> , 2006, 61, 1017-1026.	3.8	787
2	Solubility interactions and the design of chemically selective sorbent coatings for chemical sensors and arrays. <i>Sensors and Actuators B: Chemical</i> , 1991, 3, 85-111.	7.8	410
3	Nanobiocatalysis and its potential applications. <i>Trends in Biotechnology</i> , 2008, 26, 639-646.	9.3	392
4	Acoustic Wave Microsensor Arrays for Vapor Sensing. <i>Chemical Reviews</i> , 2000, 100, 2627-2648.	47.7	387
5	Influence of Viscous and Capillary Forces on Immiscible Fluid Displacement: Pore-Scale Experimental Study in a Water-Wet Micromodel Demonstrating Viscous and Capillary Fingering. <i>Energy & Fuels</i> , 2011, 25, 3493-3505.	5.1	361
6	Smart sensor system for trace organophosphorus and organosulfur vapor detection employing a temperature-controlled array of surface acoustic wave sensors, automated sample preconcentration, and pattern recognition. <i>Analytical Chemistry</i> , 1993, 65, 1868-1881.	6.5	289
7	Single-Enzyme Nanoparticles Armored by a Nanometer-Scale Organic/Inorganic Network. <i>Nano Letters</i> , 2003, 3, 1219-1222.	9.1	277
8	Determination of partition coefficients from surface acoustic wave vapor sensor responses and correlation with gas-liquid chromatographic partition coefficients. <i>Analytical Chemistry</i> , 1988, 60, 869-875.	6.5	246
9	Acoustic Wave Microsensors. <i>Analytical Chemistry</i> , 1993, 65, 940A-948A.	6.5	215
10	Correlation of surface acoustic wave device coating responses with solubility properties and chemical structure using pattern recognition. <i>Analytical Chemistry</i> , 1986, 58, 3058-3066.	6.5	203
11	Simple Fabrication of a Highly Sensitive and Fast Glucose Biosensor Using Enzymes Immobilized in Mesocellular Carbon Foam. <i>Advanced Materials</i> , 2005, 17, 2828-2833.	21.0	202
12	Hydrogen-Bond Acidic Polymers for Chemical Vapor Sensing. <i>Chemical Reviews</i> , 2008, 108, 726-745.	47.7	198
13	Crosslinked enzyme aggregates in hierarchically-ordered mesoporous silica: A simple and effective method for enzyme stabilization. <i>Biotechnology and Bioengineering</i> , 2007, 96, 210-218.	3.3	187
14	Simple Synthesis of Hierarchically Ordered Mesocellular Mesoporous Silica Materials Hosting Crosslinked Enzyme Aggregates. <i>Small</i> , 2005, 1, 744-753.	10.0	184
15	Preparation of biocatalytic nanofibres with high activity and stability via enzyme aggregate coating on polymer nanofibres. <i>Nanotechnology</i> , 2005, 16, S382-S388.	2.6	175
16	Facile xenon capture and release at room temperature using a metal-organic framework: a comparison with activated charcoal. <i>Chemical Communications</i> , 2012, 48, 347-349.	4.1	172
17	The vapor pressures of explosives. <i>TrAC - Trends in Analytical Chemistry</i> , 2013, 42, 35-48.	11.4	165
18	Detection of hazardous vapors including mixtures using pattern recognition analysis of responses from surface acoustic wave devices. <i>Analytical Chemistry</i> , 1988, 60, 2801-2811.	6.5	158

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19	Correlation of Oil/Water and Air/Water Contact Angles of Diverse Silanized Surfaces and Relationship to Fluid Interfacial Tensions. <i>Langmuir</i> , 2012, 28, 7182-7188.	3.5	144
20	The predominant role of swelling-induced modulus changes of the sorbent phase in determining the responses of polymer-coated surface acoustic wave vapor sensors. <i>Analytical Chemistry</i> , 1992, 64, 610-624.	6.5	142
21	Liquid CO ₂ Displacement of Water in a Dual-Permeability Pore Network Micromodel. <i>Environmental Science & Technology</i> , 2011, 45, 7581-7588.	10.0	138
22	Method for Estimating Polymer-Coated Acoustic Wave Vapor Sensor Responses. <i>Analytical Chemistry</i> , 1995, 67, 2162-2169.	6.5	113
23	Direct fabrication of enzyme-carrying polymer nanofibers by electrospinning. <i>Journal of Materials Chemistry</i> , 2005, 15, 3241.	6.7	111
24	A Magnetically Separable, Highly Stable Enzyme System Based on Nanocomposites of Enzymes and Magnetic Nanoparticles Shipped in Hierarchically Ordered, Mesocellular, Mesoporous Silica. <i>Small</i> , 2005, 1, 1203-1207.	10.0	106
25	Surface acoustic wave vapor sensors based on resonator devices. <i>Analytical Chemistry</i> , 1991, 63, 1719-1727.	6.5	102
26	Selective Vapor Sorption by Polymers and Cavitands on Acoustic Wave Sensors: Is This Molecular Recognition?. <i>Analytical Chemistry</i> , 1996, 68, 913-917.	6.5	100
27	Sorptive Behavior of Monolayer-Protected Gold Nanoparticle Films: Implications for Chemical Vapor Sensing. <i>Analytical Chemistry</i> , 2003, 75, 1868-1879.	6.5	100
28	Development and Calibration of Field-Effect Transistor-Based Sensor Array for Measurement of Hydrogen and Ammonia Gas Mixtures in Humid Air. <i>Analytical Chemistry</i> , 1998, 70, 473-481.	6.5	95
29	Rational Design of a Nile Red/Polymer Composite Film for Fluorescence Sensing of Organophosphonate Vapors Using Hydrogen Bond Acidic Polymers. <i>Analytical Chemistry</i> , 2001, 73, 3441-3448.	6.5	87
30	Triazine-Based Sequence-Defined Polymers with Side-Chain Diversity and Backbone-Backbone Interaction Motifs. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3925-3930.	13.8	85
31	Automated Analysis of Radionuclides in Nuclear Waste: Rapid Determination of ⁹⁰ Sr by Sequential Injection Analysis. <i>Analytical Chemistry</i> , 1996, 68, 333-340.	6.5	81
32	Hybrid Organic/Inorganic Copolymers with Strongly Hydrogen-Bond Acidic Properties for Acoustic Wave and Optical Sensors. <i>Chemistry of Materials</i> , 1997, 9, 1201-1207.	6.7	81
33	Single-Walled Carbon Nanotube Paper as a Sorbent for Organic Vapor Preconcentration. <i>Analytical Chemistry</i> , 2006, 78, 2442-2446.	6.5	77
34	Dewetting Effects on Polymer-Coated Surface Acoustic Wave Vapor Sensors. <i>Analytical Chemistry</i> , 1995, 67, 4015-4019.	6.5	74
35	Method for Unknown Vapor Characterization and Classification Using a Multivariate Sorption Detector. Initial Derivation and Modeling Based on Polymer-Coated Acoustic Wave Sensor Arrays and Linear Solvation Energy Relationships. <i>Analytical Chemistry</i> , 1999, 71, 4544-4553.	6.5	72
36	Hydrogen Bond Acidic Polymers for Surface Acoustic Wave Vapor Sensors and Arrays. <i>Analytical Chemistry</i> , 1999, 71, 1033-1040.	6.5	71

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37	Monolayer-Protected Gold Nanoparticles as a Stationary Phase for Open Tubular Gas Chromatography. <i>Analytical Chemistry</i> , 2003, 75, 4558-4564.	6.5	71
38	Quantum dot immunoassays in renewable surface column and 96-well plate formats for the fluorescence detection of botulinum neurotoxin using high-affinity antibodies. <i>Biosensors and Bioelectronics</i> , 2009, 25, 179-184.	10.1	67
39	Examination of Vapor Sorption by Fullerene, Fullerene-Coated Surface Acoustic Wave Sensors, Graphite, and Low-Polarity Polymers Using Linear Solvation Energy Relationships. <i>Langmuir</i> , 1995, 11, 2125-2130.	3.5	66
40	Flexural plate wave devices for chemical analysis. <i>Analytical Chemistry</i> , 1991, 63, 1552-1561.	6.5	64
41	Comparisons of Polymer/Gas Partition Coefficients Calculated from Responses of Thickness Shear Mode and Surface Acoustic Wave Vapor Sensors. <i>Analytical Chemistry</i> , 1998, 70, 199-203.	6.5	64
42	Automated methods for multiplexed pathogen detection. <i>Journal of Microbiological Methods</i> , 2005, 62, 303-316.	1.6	64
43	Stairlike Response Behavior of a New Vapochromic Platinum Complex Observed with Simultaneous Acoustic Wave Sensor and Optical Reflectance Measurements. <i>Chemistry of Materials</i> , 2002, 14, 1058-1066.	6.7	63
44	Single enzyme nanoparticles in nanoporous silica: A hierarchical approach to enzyme stabilization and immobilization. <i>Enzyme and Microbial Technology</i> , 2006, 39, 474-480.	3.2	63
45	Smoothed particle hydrodynamics pore-scale simulations of unstable immiscible flow in porous media. <i>Advances in Water Resources</i> , 2013, 62, 356-369.	3.8	63
46	Acoustic wave microsensors. Part II. <i>Analytical Chemistry</i> , 1993, 65, 987A-996A.	6.5	61
47	Radionuclide Sensors Based on Chemically Selective Scintillating Microspheres: A Renewable Column Sensor for Analysis of ⁹⁹ Tc in Water. <i>Analytical Chemistry</i> , 1999, 71, 5420-5429.	6.5	59
48	Sequential Injection Renewable Separation Column Instrument for Automated Sorbent Extraction Separations of Radionuclides. <i>Analytical Chemistry</i> , 1998, 71, 345-352.	6.5	58
49	Extraction chromatographic separations and analysis of actinides using sequential injection techniques with on-line inductively coupled plasma mass spectrometry (ICP MS) detection. <i>Analyst</i> , 2001, 126, 1594-1601.	3.5	58
50	Acoustic Wave Microsensors PART II. <i>Analytical Chemistry</i> , 1993, 65, 987A-996A.	6.5	57
51	Highly stable trypsin aggregate coatings on polymer nanofibers for repeated protein digestion. <i>Proteomics</i> , 2009, 9, 1893-1900.	2.2	56
52	Sequential Injection Separation System with Stopped-Flow Radiometric Detection for Automated Analysis of ⁹⁹ Tc in Nuclear Waste. <i>Analytical Chemistry</i> , 1998, 70, 977-984.	6.5	55
53	The formation of cerium(III) hydroxide nanoparticles by a radiation mediated increase in local pH. <i>RSC Advances</i> , 2017, 7, 3831-3837.	3.6	55
54	Monolayer-protected gold nanoparticles as an efficient stationary phase for open tubular gas chromatography using a square capillary. <i>Journal of Chromatography A</i> , 2004, 1029, 185-192.	3.7	54

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55	Hydrogen bonding. Part 29. Characterization of 14 sorbent coatings for chemical microsensors using a new solvation equation. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1995, , 369.	0.9	53
56	The Fractional Free Volume of the Sorbed Vapor in Modeling the Viscoelastic Contribution to Polymer-Coated Surface Acoustic Wave Vapor Sensor Responses. <i>Analytical Chemistry</i> , 2000, 72, 2861-2868.	6.5	53
57	Automated immunomagnetic separation and microarray detection of <i>E. coli</i> O157:H7 from poultry carcass rinse. <i>International Journal of Food Microbiology</i> , 2001, 70, 143-154.	4.7	52
58	Alexa Fluor-Labeled Fluorescent Cellulose Nanocrystals for Bioimaging Solid Cellulose in Spatially Structured Microenvironments. <i>Bioconjugate Chemistry</i> , 2015, 26, 593-601.	3.6	52
59	Investigation and Optimization of On-Column Redox Reactions in the Sorbent Extraction Separation of Americium and Plutonium Using Flow Injection Analysis. <i>Analytical Chemistry</i> , 1998, 70, 3920-3929.	6.5	51
60	Radionuclide Sensors for Environmental Monitoring: From Flow Injection Solid-Phase Absorptiometry to Equilibration-Based Preconcentrating Minicolumn Sensors with Radiometric Detection. <i>Chemical Reviews</i> , 2008, 108, 543-562.	47.7	51
61	Silane modification of glass and silica surfaces to obtain equally wet surfaces in glass-covered silicon micromodel applications. <i>Water Resources Research</i> , 2013, 49, 4724-4729.	4.2	50
62	Hydrogen bonding. Part 18. Gas-liquid chromatographic measurements for the design and selection of some hydrogen bond acidic phases suitable for use as coatings on piezoelectric sorption detectors. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1991, , 1417-1423.	0.9	49
63	Examination of mass and modulus contributions to thickness shear mode and surface acoustic wave vapour sensor responses using partition coefficients. <i>Faraday Discussions</i> , 1997, 107, 259-283.	3.2	49
64	Inverse Least-Squares Modeling of Vapor Descriptors Using Polymer-Coated Surface Acoustic Wave Sensor Array Responses. <i>Analytical Chemistry</i> , 2001, 73, 5247-5259.	6.5	48
65	Role of selective sorption in chemiresistor sensors for organophosphorus detection. <i>Analytical Chemistry</i> , 1990, 62, 1927-1934.	6.5	45
66	Highly Sorbent Films Derived from Ni(SCN) ₂ (4-picoline) ₄ for the Detection of Chlorinated and Aromatic Hydrocarbons with Quartz Crystal Microbalance Sensors. <i>Analytical Chemistry</i> , 1998, 70, 1268-1276.	6.5	45
67	Peer Reviewed: Automating Analytical Separations in Radiochemistry.. <i>Analytical Chemistry</i> , 1998, 70, 779A-788A.	6.5	44
68	Magnetically-separable and highly-stable enzyme system based on crosslinked enzyme aggregates shipped in magnetite-coated mesoporous silica. <i>Journal of Materials Chemistry</i> , 2009, 19, 7864.	6.7	44
69	Vapor-generation methods for explosives-detection research. <i>TrAC - Trends in Analytical Chemistry</i> , 2012, 41, 1-14.	11.4	44
70	Automated extraction chromatographic separations of actinides using separation-optimized sequential injection techniques. <i>Analyst</i> , The, 1999, 124, 1143-1150.	3.5	42
71	Enzyme-amplified protein microarray and a fluidic renewable surface fluorescence immunoassay for botulinum neurotoxin detection using high-affinity recombinant antibodies. <i>Analytica Chimica Acta</i> , 2006, 570, 137-143.	5.4	42
72	Hydrogen bonding. <i>Journal of Chromatography A</i> , 1991, 588, 361-0364.	3.7	41

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73	Synthesis and evaluation of hexafluorodimethylcarbinol functionalized polymers as microsensor coatings. <i>Journal of Applied Polymer Science</i> , 1991, 43, 1659-1671.	2.6	40
74	Separation-optimized sequential injection method for rapid automated analytical separation of ⁹⁰ Sr in nuclear waste. <i>Analyst, The</i> , 1999, 124, 203-210.	3.5	40
75	Fullerene as an adsorbent for gases and vapours. <i>Journal of the Chemical Society Chemical Communications</i> , 1993, , 1863.	2.0	38
76	Analysis of solvent effects on the decarboxylation of benzisoxazole-3-carboxylate ions using linear solvation energy relationships: relevance to catalysis in an antibody binding site. <i>Journal of the American Chemical Society</i> , 1993, 115, 8577-8584.	13.7	38
77	Equilibration-Based Preconcentrating Minicolumn Sensors for Trace Level Monitoring of Radionuclides and Metal Ions in Water without Consumable Reagents. <i>Analytical Chemistry</i> , 2006, 78, 5480-5490.	6.5	37
78	Automated Radioanalytical System for the Determination of ⁹⁰ Sr in Environmental Water Samples by ⁹⁰ Y Cherenkov Radiation Counting. <i>Analytical Chemistry</i> , 2009, 81, 1228-1237.	6.5	37
79	Renewable surface fluorescence sandwich immunoassay biosensor for rapid sensitive botulinum toxin detection in an automated fluidic format. <i>Analyst, The</i> , 2009, 134, 987.	3.5	36
80	Renewable microcolumns for solid-phase nucleic acid separations and analysis from environmental samples. <i>TrAC - Trends in Analytical Chemistry</i> , 2000, 19, 314-321.	11.4	34
81	High-Speed Gas Chromatography Using Synchronized Dual-Valve Injection. <i>Analytical Chemistry</i> , 2004, 76, 3517-3524.	6.5	34
82	Thin fluoropolymer films and nanoparticle coatings from the rapid expansion of supercritical carbon dioxide solutions with electrostatic collection. <i>Polymer</i> , 2003, 44, 3627-3632.	3.8	33
83	Decomposition of diverse solid inorganic matrices with molten ammonium bifluoride salt for constituent elemental analysis. <i>Chemical Geology</i> , 2017, 466, 341-351.	3.3	33
84	Extractive scintillating resin for ⁹⁹ Tc quantification in aqueous solutions. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2001, 249, 181-189.	1.5	32
85	High-speed gas chromatographic separations with diaphragm valve-based injection and chemometric analysis as a gas chromatographic "sensor". <i>Analytica Chimica Acta</i> , 2003, 490, 223-230.	5.4	32
86	Langmuir-Blodgett films of a nickel dithiolene complex on chemical microsensors for the detection of hydrazine. <i>Langmuir</i> , 1988, 4, 1293-1301.	3.5	31
87	Rotating Rod Renewable Microcolumns for Automated, Solid-Phase DNA Hybridization Studies. <i>Analytical Chemistry</i> , 2000, 72, 4135-4141.	6.5	31
88	Automated sample preparation method for suspension arrays using renewable surface separations with multiplexed flow cytometry fluorescence detection. <i>Analytica Chimica Acta</i> , 2003, 478, 85-98.	5.4	31
89	Advances in assays and analytical approaches for botulinum-toxin detection. <i>TrAC - Trends in Analytical Chemistry</i> , 2010, 29, 1137-1156.	11.4	30
90	A note on the visualization of wetting film structures and a nonwetting immiscible fluid in a pore network micromodel using a solvatochromic dye. <i>Water Resources Research</i> , 2010, 46, .	4.2	30

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91	Extraction Chromatographic Methods in the Sample Preparation Sequence for Thermal Ionization Mass Spectrometric Analysis of Plutonium Isotopes. <i>Analytical Chemistry</i> , 2011, 83, 9086-9091.	6.5	30
92	A review of flow analysis methods for determination of radionuclides in nuclear wastes and nuclear reactor coolants. <i>Talanta</i> , 2018, 183, 70-82.	5.5	30
93	Rapid Multiplexed Flow Cytometric Assay for Botulinum Neurotoxin Detection Using an Automated Fluidic Microbead-Trapping Flow Cell for Enhanced Sensitivity. <i>Analytical Chemistry</i> , 2009, 81, 5783-5793.	6.5	29
94	Frequency-independent and frequency-dependent polymer transitions observed on flexural plate wave ultrasonic sensors. <i>Analytical Chemistry</i> , 1992, 64, 413-423.	6.5	28
95	Silicon-on-glass pore network micromodels with oxygen-sensing fluorophore films for chemical imaging and defined spatial structure. <i>Lab on A Chip</i> , 2012, 12, 4796.	6.0	24
96	A Method for Chemometric Classification of Unknown Vapors from the Responses of an Array of Volume-Transducing Sensors. <i>Analytical Chemistry</i> , 2001, 73, 2239-2244.	6.5	23
97	Selective stationary phase for solid-phase microextraction analysis of sarin (GB). <i>Journal of Chromatography A</i> , 2002, 954, 217-225.	3.7	23
98	Hydrogen-bond acidic functionalized carbon nanotubes (CNTs) with covalently-bound hexafluoroisopropanol groups. <i>Carbon</i> , 2010, 48, 2085-2088.	10.3	23
99	Triazine-Based Sequence-Defined Polymers with Side-Chain Diversity and Backbone-Backbone Interaction Motifs. <i>Angewandte Chemie</i> , 2016, 128, 3993-3998.	2.0	22
100	Quantification of Technetium-99 in Complex Groundwater Matrixes Using a Radiometric Preconcentrating Minicolumn Sensor in an Equilibration-Based Sensing Approach. <i>Analytical Chemistry</i> , 2009, 81, 1068-1078.	6.5	21
101	Solvent immersion imprint lithography. <i>Lab on A Chip</i> , 2014, 14, 2072.	6.0	21
102	Microwave-Assisted Sample Treatment in a Fully Automated Flow-Based Instrument: Oxidation of Reduced Technetium Species in the Analysis of Total Technetium-99 in Caustic Aged Nuclear Waste Samples. <i>Analytical Chemistry</i> , 2004, 76, 3869-3877.	6.5	20
103	Signal Amplification in Multichromophore Luminescence-Based Sensors. <i>Journal of Physical Chemistry B</i> , 2001, 105, 8468-8473.	2.6	18
104	Single enzyme nanoparticles armored by a thin silicate network: Single enzyme caged nanoparticles. <i>Chemical Engineering Journal</i> , 2017, 322, 510-515.	12.7	18
105	Direct Visualization of Aggregate Morphology and Dynamics in a Model Soil Organic-Mineral System. <i>Environmental Science and Technology Letters</i> , 2017, 4, 186-191.	8.7	18
106	Development and evaluation of gold-centered monolayer protected nanoparticle stationary phases for gas chromatography. <i>Journal of Chromatography A</i> , 2004, 1060, 225-236.	3.7	18
107	An automated vapor-generation and data collection instrument for the evaluation of chemical microsensors. <i>Sensors and Actuators</i> , 1987, 11, 173-188.	1.7	16
108	Sequential injection method with on-line soil extraction for determination of Cr(VI). <i>Field Analytical Chemistry and Technology</i> , 1996, 1, 39-48.	0.8	15

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109	Accelerated Analyte Uptake on Single Beads in Microliter-Scale Batch Separations Using Acoustic Streaming: Plutonium Uptake by Anion Exchange for Analysis by Mass Spectrometry. <i>Analytical Chemistry</i> , 2008, 80, 4070-4077.	6.5	15
110	A Sorptive Behavior of Monolayer-Protected Gold Nanoparticle Films Containing Alkanethiols and Alkanedithiols. <i>Analytical Chemistry</i> , 2003, 75, 6759-6759.	6.5	14
111	Progressive Thermal Desorption of Vapor Mixtures from a Preconcentrator with a Porous Metal Foam Internal Architecture and Variable Thermal Ramp Rates. <i>Analytical Chemistry</i> , 2005, 77, 1867-1875.	6.5	14
112	Characterization and application of SuperLig [®] 620 solid phase extraction resin for automated process monitoring of ⁹⁰ Sr. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2009, 282, 623-628.	1.5	14
113	Analysis of combined mass- and volume-transducing sensor arrays. <i>Journal of Chemometrics</i> , 2003, 17, 463-469.	1.3	13
114	Automated radiochemical analysis of total ⁹⁹ Tc in aged nuclear waste processing streams. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2005, 263, 629-633.	1.5	13
115	Radiochemical sensor system for the analysis of ⁹⁹ Tc(VII) in groundwater. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2005, 264, 495-500.	1.5	13
116	Classical least squares transformations of sensor array pattern vectors into vapor descriptors. <i>Analytica Chimica Acta</i> , 2003, 490, 169-184.	5.4	11
117	Automated Radioanalytical System Incorporating Microwave-Assisted Sample Preparation, Chemical Separation, and Online Radiometric Detection for the Monitoring of Total ⁹⁹ Tc in Nuclear Waste Processing Streams. <i>Analytical Chemistry</i> , 2012, 84, 3090-3098.	6.5	11
118	Mass Spectrometric Determination of Uranium and Thorium in High Radiopurity Polymers Using Ultra Low Background Electroformed Copper Crucibles for Dry Ashing. <i>Analytical Chemistry</i> , 2017, 89, 3101-3107.	6.5	11
119	Solid matrix transformation and tracer addition using molten ammonium bifluoride salt as a sample preparation method for laser ablation inductively coupled plasma mass spectrometry. <i>Analyst</i> , The, 2017, 142, 3333-3340.	3.5	10
120	Foldamer Architectures of Triazine-Based Sequence-Defined Polymers Investigated with Molecular Dynamics Simulations and Enhanced Sampling Methods. <i>Journal of Physical Chemistry B</i> , 2019, 123, 9364-9377.	2.6	10
121	A flow injection analysis technique for the determination of chloride using reflectance detection. <i>Talanta</i> , 1995, 42, 257-261.	5.5	9
122	Chemically enhanced alpha-energy spectroscopy in liquids. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2005, 263, 291-294.	1.5	9
123	A dry ashing assay method for the trace determination of Th and U in polymers using inductively coupled plasma mass spectrometry. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2016, 307, 1883-1890.	1.5	9
124	Automation of Radiochemical Analysis: From Groundwater Monitoring to Nuclear Waste Analysis. <i>ACS Symposium Series</i> , 2003, , 246-270.	0.5	8
125	Modular polymer biosensors by solvent immersion imprint lithography. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 98-103.	2.1	8
126	Mass spectrometric assay of high radiopurity solid polymer materials for parts in radiation and rare event physics detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 943, 162443.	1.6	8

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127	Studies on Vitamin B12 and Related Compounds, 54 Synthesis of 2-Hydroxyethylcobalamin from Ethylene and Vitamin B12r under "Oxidizing-Reducing" Conditions. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1981, 36, 1338-1339.	0.7	7
128	AUTOMATED RADIOCHEMICAL SEPARATION, ANALYSIS, AND SENSING. , 2003, , 1129-1164.		7
129	Efficiently sampling conformations and pathways using the concurrent adaptive sampling (CAS) algorithm. Journal of Chemical Physics, 2017, 147, 074115.	3.0	7
130	Investigating the role of non-covalent interactions in conformation and assembly of triazine-based sequence-defined polymers. Journal of Chemical Physics, 2018, 149, 072330.	3.0	7
131	LA-ICP-MS analysis of plastics as a method to support polymer assay in the assessment of materials for low-background detectors. Journal of Radioanalytical and Nuclear Chemistry, 2016, 307, 2201-2207.	1.5	6
132	Design and Information Content of Arrays of Sorption-Based Vapor Sensors Using Solubility Interactions and Linear Solvation Energy Relationships. , 2009, , 193-218.		6
133	Amino Acids as Substrates in the Synthesis of Substituted Organocobalamins. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1983, 38, 643-647.	0.7	5
134	Organocobalamin Reactions Relevant to the Mechanism of the Î±-Methyleneglutarate Mutase Enzyme [1]. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1984, 39, 821-823.	0.7	5
135	Sensors and Automated Analyzers for Radionuclides. ACS Symposium Series, 2005, , 322-341.	0.5	5
136	Microfluidic Sensors with Impregnated Fluorophores for Simultaneous Imaging of Spatial Structure and Chemical Oxygen Gradients. ACS Sensors, 2019, 4, 317-325.	7.8	5
137	The Chemical Evolution of a Nitrogenase Model, XIX Simulation of the Enzymatic Reduction of Cyclopropene. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 1980, 35, 1439-1443.	0.7	4
138	Development and evaluation of gold-centered monolayer protected nanoparticle stationary phases for gas chromatography. Journal of Chromatography A, 2004, 1060, 225-36.	3.7	4
139	<title>Integrated systems for DNA sample preparation and detection in environmental samples</title>. , 2000, 4200, 74.		3
140	Lateral Ordering of Microfabricated SiO[sub 2] Nanotips. Electrochemical and Solid-State Letters, 2004, 7, C7.	2.2	3
141	Radionuclide Sensors and Systems for Environmental Monitoring. ECS Transactions, 2009, 19, 301-304.	0.5	3
142	Mass spectrometric analyses of high performance polymers to assess their radiopurity as ultra low background materials for rare event physics detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 985, 164685.	1.6	3
143	<title>Surface acoustic wave sensor array system for trace organic vapor detection using pattern recognition analysis</title>. , 1993, 1716, 299.		2
144	Preconcentrating Minicolumn Sensors for Trace Environmental Monitoring. , 2007, , .		2

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145	Automated Radiochemical Separation, Analysis, and Sensing. , 2012, , 1179-1207.		2
146	Automated radiochemical separation, analysis, and sensing. , 2020, , 821-872.		2
147	<title>Solubility properties of siloxane polymers for chemical sensors</title>. , 1995, , .		1
148	Miniaturized Chemical Analysis Systems (¼ChemLab) for Selective and Sensitive Gas Phase Detection. , 0, , .		1
149	<title>Sequential injection separation and sensing</title>. , 1999, 3857, 70.		1
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