Jay W Grate

List of Publications by Year
in descending order

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163 papers	10,194 citations	31902 53 h-index	35952 97 g-index
175 all docs	175 docs citations	175 times ranked	8108 citing authors

#	Article	IF	Citations
1	Nanostructures for enzyme stabilization. Chemical Engineering Science, 2006, 61, 1017-1026.	1.9	787
2	Solubility interactions and the design of chemically selective sorbent coatings for chemical sensors and arrays. Sensors and Actuators B: Chemical, 1991, 3, 85-111.	4.0	410
3	Nanobiocatalysis and its potential applications. Trends in Biotechnology, 2008, 26, 639-646.	4.9	392
4	Acoustic Wave Microsensor Arrays for Vapor Sensing. Chemical Reviews, 2000, 100, 2627-2648.	23.0	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. Energy & Fuels, 2011, 25, 3493-3505.	2.5	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. Analytical Chemistry, 1993, 65, 1868-1881.	3.2	289
7	Single-Enzyme Nanoparticles Armored by a Nanometer-Scale Organic/Inorganic Network. Nano Letters, 2003, 3, 1219-1222.	4.5	277
8	Determination of partition coefficients from surface acoustic wave vapor sensor responses and correlation with gas-liquid chromatographic partition coefficients. Analytical Chemistry, 1988, 60, 869-875.	3.2	246
9	Acoustic Wave Microsensors. Analytical Chemistry, 1993, 65, 940A-948A.	3.2	215
10	Correlation of surface acoustic wave device coating responses with solubility properties and chemical structure using pattern recognition. Analytical Chemistry, 1986, 58, 3058-3066.	3.2	203
11	Simple Fabrication of a Highly Sensitive and Fast Glucose Biosensor Using Enzymes Immobilized in Mesocellular Carbon Foam. Advanced Materials, 2005, 17, 2828-2833.	11.1	202
12	Hydrogen-Bond Acidic Polymers for Chemical Vapor Sensing. Chemical Reviews, 2008, 108, 726-745.	23.0	198
13	Crosslinked enzyme aggregates in hierarchically-ordered mesoporous silica: A simple and effective method for enzyme stabilization. Biotechnology and Bioengineering, 2007, 96, 210-218.	1.7	187
14	Simple Synthesis of Hierarchically Ordered Mesocellular Mesoporous Silica Materials Hosting Crosslinked Enzyme Aggregates. Small, 2005, 1, 744-753.	5.2	184
15	Preparation of biocatalytic nanofibres with high activity and stability via enzyme aggregate coating on polymer nanofibres. Nanotechnology, 2005, 16, S382-S388.	1.3	175
16	Facile xenon capture and release at room temperature using a metalâ€“organic framework: a comparison with activated charcoal. Chemical Communications, 2012, 48, 347-349.	2.2	172
17	The vapor pressures of explosives. TrAC - Trends in Analytical Chemistry, 2013, 42, 35-48.	5.8	165
18	Detection of hazardous vapors including mixtures using pattern recognition analysis of responses from surface acoustic wave devices. Analytical Chemistry, 1988, 60, 2801-2811.	3.2	158

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19	Correlation of Oilâ€“Water and Airâ€“Water Contact Angles of Diverse Silanized Surfaces and Relationship to Fluid Interfacial Tensions. Langmuir, 2012, 28, 7182-7188.	1.6	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. Analytical Chemistry, 1992, 64, 610-624.	3.2	142
21	Liquid CO₂ Displacement of Water in a Dual-Permeability Pore Network Micromodel. Environmental Science & Technology, 2011, 45, 7581-7588.	4.6	138
22	Method for Estimating Polymer-Coated Acoustic Wave Vapor Sensor Responses. Analytical Chemistry, 1995, 67, 2162-2169.	3.2	113
23	Direct fabrication of enzyme-carrying polymer nanofibers by electrospinning. Journal of Materials Chemistry, 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. Small, 2005, 1, 1203-1207.	5.2	106
25	Surface acoustic wave vapor sensors based on resonator devices. Analytical Chemistry, 1991, 63, 1719-1727.	3.2	102
26	Selective Vapor Sorption by Polymers and Cavitands on Acoustic Wave Sensors:Â Is This Molecular Recognition?. Analytical Chemistry, 1996, 68, 913-917.	3.2	100
27	Sorptive Behavior of Monolayer-Protected Gold Nanoparticle Films:â€‰ Implications for Chemical Vapor Sensing. Analytical Chemistry, 2003, 75, 1868-1879.	3.2	100
28	Development and Calibration of Field-Effect Transistor-Based Sensor Array for Measurement of Hydrogen and Ammonia Gas Mixtures in Humid Air. Analytical Chemistry, 1998, 70, 473-481.	3.2	95
29	Rational Design of a Nile Red/Polymer Composite Film for Fluorescence Sensing of Organophosphonate Vapors Using Hydrogen Bond Acidic Polymers. Analytical Chemistry, 2001, 73, 3441-3448.	3.2	87
30	Triazineâ€Based Sequenceâ€Defined Polymers with Sideâ€Chain Diversity and Backboneâ€“Backbone Interaction Motifs. Angewandte Chemie - International Edition, 2016, 55, 3925-3930.	7.2	85
31	Automated Analysis of Radionuclides in Nuclear Waste:â€‰ Rapid Determination of 90Sr by Sequential Injection Analysis. Analytical Chemistry, 1996, 68, 333-340.	3.2	81
32	Hybrid Organic/Inorganic Copolymers with Strongly Hydrogen-Bond Acidic Properties for Acoustic Wave and Optical Sensors. Chemistry of Materials, 1997, 9, 1201-1207.	3.2	81
33	Single-Walled Carbon Nanotube Paper as a Sorbent for Organic Vapor Preconcentration. Analytical Chemistry, 2006, 78, 2442-2446.	3.2	77
34	Dewetting Effects on Polymer-Coated Surface Acoustic Wave Vapor Sensors. Analytical Chemistry, 1995, 67, 4015-4019.	3.2	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. Analytical Chemistry, 1999, 71, 4544-4553.	3.2	72
36	Hydrogen Bond Acidic Polymers for Surface Acoustic Wave Vapor Sensors and Arrays. Analytical Chemistry, 1999, 71, 1033-1040.	3.2	71

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37	Monolayer-Protected Gold Nanoparticles as a Stationary Phase for Open Tubular Gas Chromatography. Analytical Chemistry, 2003, 75, 4558-4564.	3.2	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. Biosensors and Bioelectronics, 2009, 25, 179-184.	5.3	67
39	Examination of Vapor Sorption by Fullerene, Fullerene-Coated Surface Acoustic Wave Sensors, Graphite, and Low-Polarity Polymers Using Linear Solvation Energy Relationships. Langmuir, 1995, 11, 2125-2130.	1.6	66
40	Flexural plate wave devices for chemical analysis. Analytical Chemistry, 1991, 63, 1552-1561.	3.2	64
41	Comparisons of Polymer/Gas Partition Coefficients Calculated from Responses of Thickness Shear Mode and Surface Acoustic Wave Vapor Sensors. Analytical Chemistry, 1998, 70, 199-203.	3.2	64
42	Automated methods for multiplexed pathogen detection. Journal of Microbiological Methods, 2005, 62, 303-316.	0.7	64
43	Steplike Response Behavior of a New Vapochromic Platinum Complex Observed with Simultaneous Acoustic Wave Sensor and Optical Reflectance Measurements. Chemistry of Materials, 2002, 14, 1058-1066.	3.2	63
44	Single enzyme nanoparticles in nanoporous silica: A hierarchical approach to enzyme stabilization and immobilization. Enzyme and Microbial Technology, 2006, 39, 474-480.	1.6	63
45	Smoothed particle hydrodynamics pore-scale simulations of unstable immiscible flow in porous media. Advances in Water Resources, 2013, 62, 356-369.	1.7	63
46	Acoustic wave microsensors. Part II. Analytical Chemistry, 1993, 65, 987A-996A.	3.2	61
47	Radionuclide Sensors Based on Chemically Selective Scintillating Microspheres:â€‰ Renewable Column Sensor for Analysis of 99Tc in Water. Analytical Chemistry, 1999, 71, 5420-5429.	3.2	59
48	Sequential Injection Renewable Separation Column Instrument for Automated Sorbent Extraction Separations of Radionuclides. Analytical Chemistry, 1998, 71, 345-352.	3.2	58
49	Extraction chromatographic separations and analysis of actinides using sequential injection techniques with on-line inductively coupled plasma mass spectrometry (ICP MS) detection. Analyst, The, 2001, 126, 1594-1601.	1.7	58
50	Acoustic Wave Microsensors PART II. Analytical Chemistry, 1993, 65, 987A-996A.	3.2	57
51	Highly stable trypsinâ€aggregate coatings on polymer nanofibers for repeated protein digestion. Proteomics, 2009, 9, 1893-1900.	1.3	56
52	Sequential Injection Separation System with Stopped-Flow Radiometric Detection for Automated Analysis of99Tc in Nuclear Waste. Analytical Chemistry, 1998, 70, 977-984.	3.2	55
53	The formation of cerium(<scp>iii</scp>) hydroxide nanoparticles by a radiation mediated increase in local pH. RSC Advances, 2017, 7, 3831-3837.	1.7	55
54	Monolayer-protected gold nanoparticles as an efficient stationary phase for open tubular gas chromatography using a square capillary. Journal of Chromatography A, 2004, 1029, 185-192.	1.8	54

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55	Hydrogen bonding. Part 29. Characterization of 14 sorbent coatings for chemical microsensors using a new solvation equation. Journal of the Chemical Society Perkin Transactions II, 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. Analytical Chemistry, 2000, 72, 2861-2868.	3.2	53
57	Automated immunomagnetic separation and microarray detection of E. coli O157:H7 from poultry carcass rinse. International Journal of Food Microbiology, 2001, 70, 143-154.	2.1	52
58	Alexa Fluor-Labeled Fluorescent Cellulose Nanocrystals for Bioimaging Solid Cellulose in Spatially Structured Microenvironments. Bioconjugate Chemistry, 2015, 26, 593-601.	1.8	52
59	Investigation and Optimization of On-Column Redox Reactions in the Sorbent Extraction Separation of Americium and Plutonium Using Flow Injection Analysis. Analytical Chemistry, 1998, 70, 3920-3929.	3.2	51
60	Radionuclide Sensors for Environmental Monitoring:â€‰ From Flow Injection Solid-Phase Absorptiometry to Equilibration-Based Preconcentrating Minicolumn Sensors with Radiometric Detection. Chemical Reviews, 2008, 108, 543-562.	23.0	51
61	Silane modification of glass and silica surfaces to obtain equally oilâ€wet surfaces in glassâ€covered silicon micromodel applications. Water Resources Research, 2013, 49, 4724-4729.	1.7	50
62	Hydrogen bonding. Part 18. Gasâ€“liquid chromatographic measurements for the design and selection of some hydrogen bond acidic phases suitable for use as coatings on piezoelectric sorption detectors. Journal of the Chemical Society Perkin Transactions II, 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. Faraday Discussions, 1997, 107, 259-283.	1.6	49
64	Inverse Least-Squares Modeling of Vapor Descriptors Using Polymer-Coated Surface Acoustic Wave Sensor Array Responses. Analytical Chemistry, 2001, 73, 5247-5259.	3.2	48
65	Role of selective sorption in chemiresistor sensors for organophosphorus detection. Analytical Chemistry, 1990, 62, 1927-1934.	3.2	45
66	Highly Sorbent Films Derived from Ni(SCN)2(4-picoline)4for the Detection of Chlorinated and Aromatic Hydrocarbons with Quartz Crystal Microbalance Sensors. Analytical Chemistry, 1998, 70, 1268-1276.	3.2	45
67	Peer Reviewed: Automating Analytical Separations in Radiochemistry.. Analytical Chemistry, 1998, 70, 779A-788A.	3.2	44
68	Magnetically-separable and highly-stable enzyme system based on crosslinked enzyme aggregates shipped in magnetite-coated mesoporous silica. Journal of Materials Chemistry, 2009, 19, 7864.	6.7	44
69	Vapor-generation methods for explosives-detection research. TrAC - Trends in Analytical Chemistry, 2012, 41, 1-14.	5.8	44
70	Automated extraction chromatographic separations of actinides using separation-optimized sequential injection techniques. Analyst, The, 1999, 124, 1143-1150.	1.7	42
71	Enzyme-amplified protein microarray and a fluidic renewable surface fluorescence immunoassay for botulinum neurotoxin detection using high-affinity recombinant antibodies. Analytica Chimica Acta, 2006, 570, 137-143.	2.6	42
72	Hydrogen bonding. Journal of Chromatography A, 1991, 588, 361-0364.	1.8	41

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73	Synthesis and evaluation of hexafluorodimethylcarbinol functionalized polymers as microsensor coatings. Journal of Applied Polymer Science, 1991, 43, 1659-1671.	1.3	40
74	Separation-optimized sequential injection method for rapid automated analytical separation of 90Sr in nuclear waste. Analyst, The, 1999, 124, 203-210.	1.7	40
75	Fullerene as an adsorbent for gases and vapours. Journal of the Chemical Society Chemical Communications, 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. Journal of the American Chemical Society, 1993, 115, 8577-8584.	6.6	38
77	Equilibration-Based Preconcentrating Minicolumn Sensors for Trace Level Monitoring of Radionuclides and Metal Ions in Water without Consumable Reagents. Analytical Chemistry, 2006, 78, 5480-5490.	3.2	37
78	Automated Radioanalytical System for the Determination of ⁹⁰Sr in Environmental Water Samples by ⁹⁰Y Cherenkov Radiation Counting. Analytical Chemistry, 2009, 81, 1228-1237.	3.2	37
79	Renewable surface fluorescence sandwich immunoassay biosensor for rapid sensitive botulinum toxin detection in an automated fluidic format. Analyst, The, 2009, 134, 987.	1.7	36
80	Renewable microcolumns for solid-phase nucleic acid separations and analysis from environmental samples. TrAC - Trends in Analytical Chemistry, 2000, 19, 314-321.	5.8	34
81	High-Speed Gas Chromatography Using Synchronized Dual-Valve Injection. Analytical Chemistry, 2004, 76, 3517-3524.	3.2	34
82	Thin fluoropolymer films and nanoparticle coatings from the rapid expansion of supercritical carbon dioxide solutions with electrostatic collection. Polymer, 2003, 44, 3627-3632.	1.8	33
83	Decomposition of diverse solid inorganic matrices with molten ammonium bifluoride salt for constituent elemental analysis. Chemical Geology, 2017, 466, 341-351.	1.4	33
84	Extractive scintillating resin for 99Tc quantification in aqueous solutions. Journal of Radioanalytical and Nuclear Chemistry, 2001, 249, 181-189.	0.7	32
85	High-speed gas chromatographic separations with diaphragm valve-based injection and chemometric analysis as a gas chromatographic â€œsensorâ€• Analytica Chimica Acta, 2003, 490, 223-230.	2.6	32
86	Langmuir-Blodgett films of a nickel dithiolene complex on chemical microsensors for the detection of hydrazine. Langmuir, 1988, 4, 1293-1301.	1.6	31
87	Rotating Rod Renewable Microcolumns for Automated, Solid-Phase DNA Hybridization Studies. Analytical Chemistry, 2000, 72, 4135-4141.	3.2	31
88	Automated sample preparation method for suspension arrays using renewable surface separations with multiplexed flow cytometry fluorescence detection. Analytica Chimica Acta, 2003, 478, 85-98.	2.6	31
89	Advances in assays and analytical approaches for botulinum-toxin detection. TrAC - Trends in Analytical Chemistry, 2010, 29, 1137-1156.	5.8	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. Water Resources Research, 2010, 46, .	1.7	30

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91	Extraction Chromatographic Methods in the Sample Preparation Sequence for Thermal Ionization Mass Spectrometric Analysis of Plutonium Isotopes. Analytical Chemistry, 2011, 83, 9086-9091.	3.2	30
92	A review of flow analysis methods for determination of radionuclides in nuclear wastes and nuclear reactor coolants. Talanta, 2018, 183, 70-82.	2.9	30
93	Rapid Multiplexed Flow Cytometric Assay for Botulinum Neurotoxin Detection Using an Automated Fluidic Microbead-Trapping Flow Cell for Enhanced Sensitivity. Analytical Chemistry, 2009, 81, 5783-5793.	3.2	29
94	Frequency-independent and frequency-dependent polymer transitions observed on flexural plate wave ultrasonic sensors. Analytical Chemistry, 1992, 64, 413-423.	3.2	28
95	Silicon-on-glass pore network micromodels with oxygen-sensing fluorophore films for chemical imaging and defined spatial structure. Lab on A Chip, 2012, 12, 4796.	3.1	24
96	A Method for Chemometric Classification of Unknown Vapors from the Responses of an Array of Volume-Transducing Sensors. Analytical Chemistry, 2001, 73, 2239-2244.	3.2	23
97	Selective stationary phase for solid-phase microextraction analysis of sarin (GB). Journal of Chromatography A, 2002, 954, 217-225.	1.8	23
98	Hydrogen-bond acidic functionalized carbon nanotubes (CNTs) with covalently-bound hexafluoroisopropanol groups. Carbon, 2010, 48, 2085-2088.	5.4	23
99	Triazineâ€Based Sequenceâ€Defined Polymers with Sideâ€Chain Diversity and Backboneâ€“Backbone Interaction Motifs. Angewandte Chemie, 2016, 128, 3993-3998.	1.6	22
100	Quantification of Technetium-99 in Complex Groundwater Matrixes Using a Radiometric Preconcentrating Minicolumn Sensor in an Equilibration-Based Sensing Approach. Analytical Chemistry, 2009, 81, 1068-1078.	3.2	21
101	Solvent immersion imprint lithography. Lab on A Chip, 2014, 14, 2072.	3.1	21
102	Microwave-Assisted Sample Treatment in a Fully Automated Flow-Based Instrument:â€‰ Oxidation of Reduced Technetium Species in the Analysis of Total Technetium-99 in Caustic Aged Nuclear Waste Samples. Analytical Chemistry, 2004, 76, 3869-3877.	3.2	20
103	Signal Amplification in Multichromophore Luminescence-Based Sensors. Journal of Physical Chemistry B, 2001, 105, 8468-8473.	1.2	18
104	Single enzyme nanoparticles armored by a thin silicate network: Single enzyme caged nanoparticles. Chemical Engineering Journal, 2017, 322, 510-515.	6.6	18
105	Direct Visualization of Aggregate Morphology and Dynamics in a Model Soil Organicâ€“Mineral System. Environmental Science and Technology Letters, 2017, 4, 186-191.	3.9	18
106	Development and evaluation of gold-centered monolayer protected nanoparticle stationary phases for gas chromatography. Journal of Chromatography A, 2004, 1060, 225-236.	1.8	18
107	An automated vapor-generation and data collection instrument for the evaluation of chemical microsensors. Sensors and Actuators, 1987, 11, 173-188.	1.8	16
108	Sequential injection method with on-line soil extraction for determination of Cr(VI). Field Analytical Chemistry and Technology, 1996, 1, 39-48.	0.9	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. Analytical Chemistry, 2008, 80, 4070-4077.	3.2	15
110	A Sorptive Behavior of Monolayer-Protected Gold Nanoparticle Films Containing Alkanethiols and Alkanedithiols. Analytical Chemistry, 2003, 75, 6759-6759.	3.2	14
111	Progressive Thermal Desorption of Vapor Mixtures from a Preconcentrator with a Porous Metal Foam Internal Architecture and Variable Thermal Ramp Rates. Analytical Chemistry, 2005, 77, 1867-1875.	3.2	14
112	Characterization and application of SuperLigÂ® 620 solid phase extraction resin for automated process monitoring of 90Sr. Journal of Radioanalytical and Nuclear Chemistry, 2009, 282, 623-628.	0.7	14
113	Analysis of combined mass- and volume-transducing sensor arrays. Journal of Chemometrics, 2003, 17, 463-469.	0.7	13
114	Automated radiochemical analysis of total 99Tc in aged nuclear waste processing streams. Journal of Radioanalytical and Nuclear Chemistry, 2005, 263, 629-633.	0.7	13
115	Radiochemical sensor system for the analysis of 99Tc(VII) in groundwater. Journal of Radioanalytical and Nuclear Chemistry, 2005, 264, 495-500.	0.7	13
116	Classical least squares transformations of sensor array pattern vectors into vapor descriptors. Analytica Chimica Acta, 2003, 490, 169-184.	2.6	11
117	Automated Radioanalytical System Incorporating Microwave-Assisted Sample Preparation, Chemical Separation, and Online Radiometric Detection for the Monitoring of Total ⁹⁹Tc in Nuclear Waste Processing Streams. Analytical Chemistry, 2012, 84, 3090-3098.	3.2	11
118	Mass Spectrometric Determination of Uranium and Thorium in High Radiopurity Polymers Using Ultra Low Background Electroformed Copper Crucibles for Dry Ashing. Analytical Chemistry, 2017, 89, 3101-3107.	3.2	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. Analyst, The, 2017, 142, 3333-3340.	1.7	10
120	Foldamer Architectures of Triazine-Based Sequence-Defined Polymers Investigated with Molecular Dynamics Simulations and Enhanced Sampling Methods. Journal of Physical Chemistry B, 2019, 123, 9364-9377.	1.2	10
121	A flow injection analysis technique for the determination of chloride using reflectance detection. Talanta, 1995, 42, 257-261.	2.9	9
122	Chemically enhanced alpha-energy spectroscopy in liquids. Journal of Radioanalytical and Nuclear Chemistry, 2005, 263, 291-294.	0.7	9
123	A dry ashing assay method for the trace determination of Th and U in polymers using inductively coupled plasma mass spectrometry. Journal of Radioanalytical and Nuclear Chemistry, 2016, 307, 1883-1890.	0.7	9
124	Automation of Radiochemical Analysis: From Groundwater Monitoring to Nuclear Waste Analysis. ACS Symposium Series, 2003, , 246-270.	0.5	8
125	Modular polymer biosensors by solvent immersion imprint lithography. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 98-103.	2.4	8
126	Mass spectrometric assay of high radiopurity solid polymer materials for parts in radiation and rare event physics detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 943, 162443.	0.7	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.	0.3	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.	1.2	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.	1.2	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.	0.7	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.	0.3	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.	0.3	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.	4.0	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.	0.3	4
138	Development and evaluation of gold-centered monolayer protected nanoparticle stationary phases for gas chromatography. Journal of Chromatography A, 2004, 1060, 225-36.	1.8	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.	0.3	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.	0.7	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 (Î¼ChemLab) for Selective and Sensitive Gas Phase Detection. , 0, , .		1
149	<title>Sequential injection separation and sensing</title>. , 1999, 3857, 70.		1
150	Direct actinide assay with surface passivated silicon diodes. Journal of Radioanalytical and Nuclear Chemistry, 2005, 263, 295-300.	0.7	1
151	Sorptive Properties of Monolayer-Protected Gold Nanoparticle Films for Chemical Vapor Sensors and Arrays. ACS Symposium Series, 2004, , 157-162.	0.5	0
152	Bead-based assays for biodetection: from flow-cytometry to microfluidics. , 2009, , .		0
153	Combined, solid-state molecular property and gamma spectrometers for CBRNE detection. Proceedings of SPIE, 2013, , .	0.8	0
154	Comment on â€œTunable Generation and Adsorption of Energetic Compounds in the Vapor Phase at Trace Levels: A Tool for Testing and Developing Sensitive and Selective Substrates for Explosive Detectionâ€• Analytical Chemistry, 2013, 85, 3013-3015.	3.2	0
155	Chemical sensing and imaging in microfluidic pore network structures relevant to natural carbon cycling and industrial carbon sequestration. , 2013, , .		0
156	Controlled Radiolytic Synthesis in the Fluid Stage. Towards Understanding the Effect of the Electron Beam in Liquids. Microscopy and Microanalysis, 2015, 21, 2125-2126.	0.2	0
157	Innentitelbild: Triazineâ€Based Sequenceâ€Defined Polymers with Sideâ€Chain Diversity and Backboneâ€“Backbone Interaction Motifs (Angew. Chem. 12/2016). Angewandte Chemie, 2016, 128, 3896-3896.	1.6	0
158	Manipulation of mass transport rates using bead-in-a-tube method. Journal of Chromatography A, 2019, 1586, 139-144.	1.8	0
159	Biocatalytic Single-Enzyme Nanoparticles. , 2008, , 307-311.		0
160	Monolayer-Protected Metal Nanoparticles. , 2008, , 2460-2468.		0
161	Monolayer-Protected Metal Nanoparticles: Chemical Sensing and Gas Chromatography. , 2014, , 2770-2778.		0
162	Biocatalytic Single-Enzyme Nanoparticles. , 0, , 295-299.		0

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163	Dissolved oxygen sensor in an automated hyporheic sampling system reveals biogeochemical dynamics. , 2022, 1, e0000014.		0