William R Heineman

List of Publications by Year
in descending order

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224 papers	11,580 citations	34105 52 h-index	33894 99 g-index
231 all docs	231 docs citations	231 times ranked	10769 citing authors

#	Article	IF	Citations
1	Spectroelectrochemistry Using Optically Transparent Electrodes â€“ Ted Kuwana and the Early Years. Electroanalysis, 2022, 34, 1826-1833.	2.9	3
2	Electrochemical Determination of Manganese in Whole Blood with Indium Tin Oxide Electrode. Journal of the Electrochemical Society, 2022, 169, 057508.	2.9	3
3	Effects of Experimental Conditions on the Signaling Fidelity of Impedance-Based Nucleic Acid Sensors. Analytical Chemistry, 2021, 93, 812-819.	6.5	16
4	Parts per trillion detection of heavy metals in as-is tap water using carbon nanotube microelectrodes. Analytica Chimica Acta, 2021, 1155, 338353.	5.4	30
5	Electrochemical Affinity Assays/Sensors: Brief History and Current Status. Annual Review of Analytical Chemistry, 2021, 14, 109-131.	5.4	18
6	A Visual Hydrogen Sensor Prototype for Monitoring Magnesium Implant Biodegradation. Analytical Chemistry, 2021, 93, 10487-10494.	6.5	6
7	Sensitive Electrochemical Detection of Microcystin-LR in Water Samples Via Target-Induced Displacement of Aptamer Associated [Ru(NH₃)₆]³⁺. ACS ES&T Engineering, 2021, 1, 1597-1605.	7.6	7
8	Editorsâ€™ Choiceâ€”Reviewâ€”From Polarography to Electrochemical Biosensors: The 100-Year Quest for Selectivity and Sensitivity. Journal of the Electrochemical Society, 2021, 168, 116504.	2.9	5
9	Indicator Dyes and Catalytic Nanoparticles for Irreversible Visual Hydrogen Sensing. Analytical Chemistry, 2020, 92, 10651-10658.	6.5	8
10	Effect of Lithium and Aluminum on the Mechanical Properties, In Vivo and In Vitro Degradation, and Toxicity of Multiphase Ultrahigh Ductility Mgâ€“Liâ€“Alâ€“Zn Quaternary Alloys for Vascular Stent Application. ACS Biomaterials Science and Engineering, 2020, 6, 1950-1964.	5.2	10
11	Visual Hydrogen Mapping Sensor for Noninvasive Monitoring of Bioresorbable Magnesium Implants In Vivo. Jom, 2020, 72, 1851-1858.	1.9	6
12	Electroosmotic flow driven microfluidic device for bacteria isolation using magnetic microbeads. Scientific Reports, 2019, 9, 14228.	3.3	15
13	A Comprehensive Review: Development of Electrochemical Biosensors for Detection of Cyanotoxins in Freshwater. ACS Sensors, 2019, 4, 1151-1173.	7.8	92
14	Electrochemistry of Controlled Diameter Carbon Nanotube Fibers at the Cross Section and Sidewall. ACS Applied Energy Materials, 2019, 2, 8757-8766.	5.1	8
15	In Vitro and in Vivo Evaluation of Multiphase Ultrahigh Ductility Mgâ€“Liâ€“Zn Alloys for Cardiovascular Stent Application. ACS Biomaterials Science and Engineering, 2018, 4, 919-932.	5.2	22
16	In Situ Quantification of [Re(CO)₃]⁺ by Fluorescence Spectroscopy in Simulated Hanford Tank Waste. Environmental Science & Technology, 2018, 52, 1357-1364.	10.0	5
17	In vivo quantification of hydrogen gas concentration in bone marrow surrounding magnesium fracture fixation hardware using an electrochemical hydrogen gas sensor. Acta Biomaterialia, 2018, 73, 559-566.	8.3	23
18	Spectroelectrochemical Sensor for Spectroscopically Hardâ€toâ€detect Metals by in situ Formation of a Luminescent Complex Using Ru(II) as a Model Compound. Electroanalysis, 2018, 30, 2644-2652.	2.9	4

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19	In Situ Spectroscopic Analysis and Quantification of [Tc(CO)3]+ in Hanford Tank Waste. Environmental Science & Technology, 2018, 52, 7796-7804.	10.0	6
20	Cathodic Stripping Voltammetric Determination of Cerium Using Indium Tin Oxide (ITO). Electroanalysis, 2017, 29, 1124-1130.	2.9	11
21	In vivo characterization of magnesium alloy biodegradation using electrochemical H2 monitoring, ICP-MS, and XPS. Acta Biomaterialia, 2017, 50, 556-565.	8.3	47
22	Electrochemical Sensors Continuously Monitor Magnesium Biodegradation under Cell Culture Conditions. Electroanalysis, 2017, 29, 1341-1349.	2.9	0
23	Determination of Manganese by Cathodic Stripping Voltammetry on a Microfabricated Platinum Thinâ€“film Electrode. Electroanalysis, 2017, 29, 686-695.	2.9	21
24	Determination of Manganese in Whole Blood by Cathodic Stripping Voltammetry with Indium Tin Oxide. Electroanalysis, 2017, 29, 1850-1853.	2.9	14
25	Optically Transparent Thin-Film Electrode Chip for Spectroelectrochemical Sensing. Analytical Chemistry, 2017, 89, 7324-7332.	6.5	28
26	Electrochemical Studies of Three Dimensional Graphene Foam as an Electrode Material. Electroanalysis, 2017, 29, 1506-1512.	2.9	9
27	Electrochemistry of Europium(III) Chloride in 3 LiCl â€“ NaCl, 3 LiCl â€“ 2 KCl, LiCl â€“ RbCl, and 3 LiCl â€“ 2 CsCl Eutectics at Various Temperatures. Journal of the Electrochemical Society, 2017, 164, H5345-H5352.	2.9	10
28	Carbon Nanotube Thread Electrochemical Cell: Detection of Heavy Metals. Analytical Chemistry, 2017, 89, 9654-9663.	6.5	41
29	Conductivity Sensor for Realâ€time Monitoring of Magnesium Corrosion under Cell Culture Conditions. Electroanalysis, 2016, 28, 2522-2532.	2.9	2
30	Spectroelectrochemistry of EuCl₃ in Four Molten Salt Eutectics; 3â€…LiClâˆ’NaCl, 3â€…LiClâˆ’2â€…KCl, LiClâˆ’RbCl, and 3â€…LiClâˆ’2â€…CsCl; at 873â€…K. Electroanalysis, 2016, 28, 2158-2165.	2.9	16
31	Polymerâ€coated Boron Doped Diamond Optically Transparent Electrodes for Spectroelectrochemical Sensors. Electroanalysis, 2016, 28, 2228-2236.	2.9	6
32	Bare and Polymer-Coated Indium Tin Oxide as Working Electrodes for Manganese Cathodic Stripping Voltammetry. Analytical Chemistry, 2016, 88, 4221-4228.	6.5	33
33	In vivo monitoring the biodegradation of magnesium alloys with an electrochemical H2 sensor. Acta Biomaterialia, 2016, 36, 361-368.	8.3	46
34	Visual H2 sensor for monitoring biodegradation of magnesium implants in vivo. Acta Biomaterialia, 2016, 45, 399-409.	8.3	24
35	Electrochemical Characterization of Vertically Aligned Carbon Nanofiber Arrays Prepared by Holeâ€mask Colloidal Lithography. Electroanalysis, 2016, 28, 3039-3047.	2.9	5
36	Conductivity as a Sensor for Monitoring Relative Magnesium Corrosion Rates in Realâ€time, in Serumâ€containing Media under Cell Culture Conditions. Electroanalysis, 2016, 28, 3000-3008.	2.9	0

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37	Absorption spectroscopy for the quantitative prediction of lanthanide concentrations in the 3LiClâ€“2CsCl eutectic at 723 K. Analytical Methods, 2016, 8, 7731-7738.	2.7	38
38	Carbon nanofiber electrode array for the detection of lead. Electrochemistry Communications, 2016, 73, 89-93.	4.7	21
39	Advances in H2 sensors for bioanalytical applications. TrAC - Trends in Analytical Chemistry, 2016, 79, 269-275.	11.4	17
40	Monitoring Biodegradation of Magnesium Implants with Sensors. Jom, 2016, 68, 1204-1208.	1.9	22
41	Gold-coated carbon nanotube electrode arrays: Immunosensors for impedimetric detection of bone biomarkers. Biosensors and Bioelectronics, 2016, 77, 580-588.	10.1	52
42	Beyond graphene foam, a new form of three-dimensional graphene for supercapacitor electrodes. Journal of Materials Chemistry A, 2016, 4, 1876-1886.	10.3	55
43	Cloud Point Extraction for Electroanalysis: Anodic Stripping Voltammetry of Cadmium. Analytical Chemistry, 2015, 87, 6133-6140.	6.5	47
44	Electrospun Carbon Nanofiber Modified Electrodes for Stripping Voltammetry. Analytical Chemistry, 2015, 87, 9315-9321.	6.5	70
45	Optically Transparent Carbon Nanotube Film Electrode for Thin Layer Spectroelectrochemistry. Analytical Chemistry, 2015, 87, 9687-9695.	6.5	21
46	Copper-Based Electrochemical Sensor with Palladium Electrode for Cathodic Stripping Voltammetry of Manganese. Analytical Chemistry, 2014, 86, 12070-12077.	6.5	32
47	Improving Reproducibility of Lab-on-a-Chip Sensor with Bismuth Working Electrode for Determining Zn in Serum by Anodic Stripping Voltammetry. Journal of the Electrochemical Society, 2014, 161, B3160-B3166.	2.9	14
48	Simultaneous Detection of Heavy Metals by Anodic Stripping Voltammetry Using Carbon Nanotube Thread. Electroanalysis, 2014, 26, 488-496.	2.9	103
49	Disposable Copper-Based Electrochemical Sensor for Anodic Stripping Voltammetry. Analytical Chemistry, 2014, 86, 4893-4900.	6.5	84
50	Carbon Nanotube-Loaded Nafion Film Electrochemical Sensor for Metal Ions: Europium. Analytical Chemistry, 2014, 86, 4354-4361.	6.5	56
51	Effects of elevated magnesium and substrate on neuronal numbers and neurite outgrowth of neural stem/progenitor cells in vitro. Neuroscience Research, 2014, 84, 72-78.	1.9	22
52	Amperometric homogeneous competitive immunoassay in a perfluorocarbon emulsion oxygen therapeutic (PEOT). Analytical and Bioanalytical Chemistry, 2013, 405, 3541-3547.	3.7	3
53	A system for characterizing Mg corrosion in aqueous solutions using electrochemical sensors and impedance spectroscopy. Acta Biomaterialia, 2013, 9, 9211-9219.	8.3	27
54	Detection of Trace Zinc by an Electrochemical Microsensor based on Carbon Nanotube Threads. Electroanalysis, 2013, 25, 1599-1604.	2.9	17

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55	Electrochemistry and Spectroelectrochemistry of Europium(III) Chloride in 3LiClâ€“2KCl from 643 to 1123 K. Analytical Chemistry, 2013, 85, 9924-9931.	6.5	33
56	Photophysics and Luminescence Spectroelectrochemistry of [Tc(dmpe)₃]^{+/2+} (dmpe = 1,2-bis(dimethylphosphino)ethane). Journal of Physical Chemistry A, 2013, 117, 12749-12758.	2.5	15
57	Labâ€onâ€aâ€Chip Sensor with Evaporated Bismuth Film Electrode for Anodic Stripping Voltammetry of Zinc. Electroanalysis, 2013, 25, 2586-2594.	2.9	21
58	The Application of Nafion Metal Catalyst Free Carbon Nanotube Modified Gold Electrode: Voltammetric Zinc Detection in Serum. Electroanalysis, 2013, 25, 2259-2267.	2.9	12
59	Cyclic voltammetric, fluorescence and biological analysis of purified aeruginosin A, a secreted red pigment of Pseudomonas aeruginosa PAO1. Microbiology (United Kingdom), 2013, 159, 1736-1747.	1.8	27
60	Simplified Nitrate-Reductase-Based Nitrate Detection by a Hybrid Thin-Layer Controlled Potential Coulometry/Spectroscopy Technique. Analytical Chemistry, 2013, 85, 9486-9492.	6.5	13
61	Fast escape of hydrogen from gas cavities around corroding magnesium implants. Acta Biomaterialia, 2013, 9, 8714-8721.	8.3	237
62	Electrochemical Studies of Catalyst Free Carbon Nanotube Electrodes. Electroanalysis, 2013, 25, 983-990.	2.9	13
63	Electrochemical Sensing of Dissolved Hydrogen in Aqueous Solutions as a Tool to Monitor Magnesium Alloy Corrosion. Electroanalysis, 2013, 25, 1105-1110.	2.9	13
64	Three-component spectroelectrochemical sensor module for the detection of pertechnetate (TcO4-). Reviews in Analytical Chemistry, 2013, 32, .	3.2	13
65	Palladium-based sensor for electrochemical detection of manganese in the environment. , 2013, , .		1
66	A Multiwalledâ€Carbonâ€Nanotubeâ€Based Biosensor for Monitoring Microcystinâ€LR in Sources of Drinking Water Supplies. Advanced Functional Materials, 2013, 23, 1807-1816.	14.9	87
67	Material Science Chemistry of Electrochemical Microsensors and Applications for Biofilm Research. Key Engineering Materials, 2012, 521, 113-139.	0.4	4
68	Micro Solidâ€Contact Ionâ€Selective Electrode Using a Carbon Nanotube Tower as Ionâ€toâ€Electron Transducer and Conductive Substrate. Electroanalysis, 2012, 24, 2045-2048.	2.9	9
69	Carbohydrate-Based Label-Free Detection of Escherichia coli ORN 178 Using Electrochemical Impedance Spectroscopy. Analytical Chemistry, 2012, 84, 241-246.	6.5	128
70	(Invited) Electrochemical Biosensors for Detecting Pathogens. ECS Meeting Abstracts, 2012, , .	0.0	0
71	Magnetic microbead-based enzyme immunoassay for ovalbumin using hydrodynamic voltammetry and fluorometric detection. Analytical Methods, 2012, 4, 1783.	2.7	15
72	Thinâ€Layer Spectroelectrochemistry on an Aqueous Microdrop. Electroanalysis, 2012, 24, 1065-1070.	2.9	26

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73	Anodic Stripping Voltammetry of Heavy Metals on a Metal Catalyst Free Carbon Nanotube Electrode. Electroanalysis, 2012, 24, 1039-1046.	2.9	35
74	Analysis of the Electrochemical Oxidation of Multiwalled Carbon Nanotube Tower Electrodes in Sodium Hydroxide. Electroanalysis, 2012, 24, 1501-1508.	2.9	15
75	Assessing a Spectroelectrochemical Sensorâ€™s Performance for Detecting [Ru(bpy)3]2+ in Natural and Treated Water. Electroanalysis, 2012, 24, 1517-1523.	2.9	10
76	Comparison of the Effects of Biofouling on Voltammetric and Potentiometric Measurements. Electroanalysis, 2012, 24, 1732-1738.	2.9	21
77	Corrosion of organosilane coated Mg4Y alloy in sodium chloride solution evaluated by impedance spectroscopy and pH changes. Electrochimica Acta, 2012, 70, 165-170.	5.2	14
78	Electronic and Molecular Structures oftrans-Dioxotechnetium(V) Polypyridyl Complexes in the Solid State. Inorganic Chemistry, 2011, 50, 5815-5823.	4.0	19
79	Semi-Infinite Linear Diffusion Spectroelectrochemistry on an Aqueous Micro-Drop. Analytical Chemistry, 2011, 83, 4214-4219.	6.5	36
80	Spectroelectrochemical Sensing of Pyrene Metabolites 1-Hydroxypyrene and 1-Hydroxypyrene-glucuronide. Analytical Chemistry, 2011, 83, 3725-3729.	6.5	18
81	Luminescence-Based Spectroelectrochemical Sensor for [Tc(dmpe)₃]^{2+/+} (dmpe = 1,2-bis(dimethylphosphino)ethane) within a Charge-Selective Polymer Film. Analytical Chemistry, 2011, 83, 1766-1772.	6.5	33
82	Lab-on-a-chip sensor for detection of highly electronegative heavy metals by anodic stripping voltammetry. Biomedical Microdevices, 2011, 13, 695-703.	2.8	72
83	Effect of the Concentration of Supporting Electrolyte on Spectroelectrochemical Detection of [Ru(bpy)₃]²⁺. Electroanalysis, 2011, 23, 939-946.	2.9	8
84	Determination of Trace Metals by Anodic Stripping Voltammetry Using a Carbon Nanotube Tower Electrode. Electroanalysis, 2011, 23, 1252-1259.	2.9	78
85	Immunoassay detection in a perfluorocarbon emulsion oxygen therapeutic. Analytical and Bioanalytical Chemistry, 2010, 396, 675-680.	3.7	1
86	Effect of some physico-chemical conditions on an immunoassay for viable Escherichia coli. Analytical and Bioanalytical Chemistry, 2010, 397, 3133-3136.	3.7	3
87	Rapid Prototyped Optically Transparent Thinâ€Layer Electrode Holder for Spectroelectrochemistry in Benchâ€Top Spectrophotometers. Electroanalysis, 2010, 22, 2162-2166.	2.9	19
88	Parallel separations using capillary electrophoresis on a multilane microchip with multiplexed laserâ€induced fluorescence detection. Electrophoresis, 2010, 31, 2796-2803.	2.4	6
89	Fluorescence Spectroelectrochemical Sensor for 1-Hydroxypyrene. Analytical Chemistry, 2010, 82, 9743-9748.	6.5	41
90	Simultaneous Detection of Two Analytes Using a Spectroelectrochemical Sensor. Analytical Chemistry, 2010, 82, 1720-1726.	6.5	38

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91	Electrochemical biosensors. Chemical Society Reviews, 2010, 39, 1747.	38.1	1,463
92	Comparing polyelectrolyte multilayerâ€coated PMMA microfluidic devices and glass microchips for electrophoretic separations. Electrophoresis, 2009, 30, 4245-4250.	2.4	14
93	Determination of viable Escherichia coli using antibody-coated paramagnetic beads with fluorescence detection. Analytical and Bioanalytical Chemistry, 2009, 393, 949-956.	3.7	14
94	Revolutionizing biodegradable metals. Materials Today, 2009, 12, 22-32.	14.2	331
95	Characterization of Partially Sulfonated Polystyrene-block-poly(ethylene-ran-butylene)-block-polystyrene Thin Films for Spectroelectrochemical Sensing. Analytical Chemistry, 2009, 81, 6756-6764.	6.5	18
96	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 21. Selective Chemical Sensing Using Sulfonated Polystyrene-block-poly(ethylene-ran-butylene)block-polystyrene Thin Films. Analytical Chemistry, 2009, 81, 9599-9606.	6.5	17
97	Spectroelectrochemical Sensor: Development and Applications. ECS Transactions, 2009, 19, 129-134.	0.5	6
98	Proteinâ€aptamer binding studies using microchip affinity capillary electrophoresis. Electrophoresis, 2008, 29, 1415-1422.	2.4	28
99	Simultaneous Multiselective Spectroelectrochemical Sensing of the Interaction between Protein and Its Ligand Using the Redox Dye Nile Blue as a Label. Analytical Chemistry, 2008, 80, 9642-9648.	6.5	18
100	Recent developments in electrochemical immunoassays and immunosensors. , 2008, , 115-143.		21
101	Collaborative Research: The Good, the Bad, and the Beautiful. ACS Symposium Series, 2007, , 259-270.	0.5	0
102	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 20. Detection of Metal Ions in Different Oxidation States. Analytical Chemistry, 2007, 79, 5594-5600.	6.5	20
103	Frontal analysis in microchip CE: A simple and accurate method for determination of proteinâ€“DNA dissociation constant. Electrophoresis, 2007, 28, 837-842.	2.4	20
104	Study of injection bias in a simple hydrodynamic injection in microchip CE. Electrophoresis, 2007, 28, 1564-1571.	2.4	21
105	Characterization and performance of injection molded poly(methylmethacrylate) microchips for capillary electrophoresis. Journal of Chromatography A, 2007, 1154, 444-453.	3.7	25
106	Flow manipulation for sweeping with a cationic surfactant in microchip capillary electrophoresis. Journal of Chromatography A, 2007, 1167, 217-224.	3.7	10
107	A nanotube array immunosensor for direct electrochemical detection of antigenâ€“antibody binding. Sensors and Actuators B: Chemical, 2007, 123, 177-182.	7.8	104
108	On-Line Sample Preconcentration Using Field-amplified Stacking Injection in Microchip Capillary Electrophoresis. Analytical Chemistry, 2006, 78, 3730-3737.	6.5	61

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109	Highly Oxidizing Excited States of Re and Tc Complexes. Journal of the American Chemical Society, 2006, 128, 16494-16495.	13.7	35
110	Unlimited-Volume Electrokinetic Stacking Injection in Sweeping Capillary Electrophoresis Using a Cationic Surfactant. Analytical Chemistry, 2006, 78, 6035-6042.	6.5	42
111	On-line sample preconcentration by sweeping with dodecyltrimethylammonium bromide in capillary zone electrophoresis. Journal of Chromatography A, 2006, 1125, 263-269.	3.7	17
112	High sensitivity carbon nanotube tower electrodes. Sensors and Actuators B: Chemical, 2006, 120, 298-304.	7.8	57
113	Estimation of logPow values for neutral and basic compounds by microchip microemulsion electrokinetic chromatography with indirect fluorimetric detection (Ì¼MEEKC-IFD). Journal of Pharmaceutical and Biomedical Analysis, 2005, 38, 1-7.	2.8	16
114	Estimation of pKa values using microchip capillary electrophoresis and indirect fluorescence detection. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2005, 824, 201-205.	2.3	19
115	Microfluidic immunosensor systems. Biosensors and Bioelectronics, 2005, 20, 2488-2503.	10.1	490
116	Spectroelectrochemical sensing based on multimode selectivity simultaneously achievable in a single device. Electrochimica Acta, 2005, 50, 3191-3199.	5.2	9
117	Amperometric determination of live Escherichia coli using antibody-coated paramagnetic beads. Analytical and Bioanalytical Chemistry, 2005, 382, 1234-1241.	3.7	53
118	Luminescence from thetrans-Dioxotechnetium(V) Chromophore. Journal of the American Chemical Society, 2005, 127, 14978-14979.	13.7	22
119	The autofluorescence of plastic materials and chips measured under laser irradiation. Lab on A Chip, 2005, 5, 1348.	6.0	354
120	Spectroelectrochemical Sensor for Technetium: Preconcentration and Quantification of Pertechnetate in Polymer-Modified Electrodes. ACS Symposium Series, 2005, , 306-321.	0.5	4
121	Making and Using a Sensing Polymeric Material for Cu2+: An Introduction to Polymers and Chemical Sensing. Journal of Chemical Education, 2005, 82, 1370.	2.3	10
122	Bead-based immunoassays with microelectrode detection. Analytical and Bioanalytical Chemistry, 2004, 379, 358-367.	3.7	39
123	Electrochemical and optical evaluation of noble metalâ€“ and carbonâ€“ITO hybrid optically transparent electrodes. Journal of Electroanalytical Chemistry, 2004, 565, 311-320.	3.8	53
124	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 17. Improvement in Detection Limits Using Ultrathin Perfluorosulfonated Ionomer Films in Conjunction with Continuous Sample Flow. Analytical Chemistry, 2004, 76, 3139-3144.	6.5	27
125	Bead-Based Electrochemical Immunoassay for Bacteriophage MS2. Analytical Chemistry, 2004, 76, 2700-2707.	6.5	79
126	In Situ Measurements of Chemical Sensor Film Dynamics by Spectroscopic Ellipsometry. Partitioning of a Chromophore. Journal of Physical Chemistry B, 2004, 108, 11521-11528.	2.6	13

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127	Spectroelectrochemical Sensing Based on Attenuated Total Internal Reflectance Stripping Voltammetry. 3. Determination of Cadmium and Copper. Analytical Chemistry, 2004, 76, 1466-1473.	6.5	63
128	In Situ Dynamic Measurements of Solâ˜'Gel Processed Thin Chemically Selective PDMDAACâ˜'Silica Films by Spectroscopic Ellipsometry. Chemistry of Materials, 2004, 16, 3339-3347.	6.7	11
129	An Attenuated Total Reflectance Sensor for Copper: An Experiment for Analytical or Physical Chemistry. Journal of Chemical Education, 2004, 81, 1617.	2.3	17
130	Further Investigations on a Poly(Vinyl Alcohol)â€" Polyelectrolyte Chemically Selective Optical Film. Applied Spectroscopy, 2004, 58, 608-612.	2.2	6
131	Optical and electrochemical evaluation of colloidal Au nanoparticle-ITO hybrid optically transparent electrodes and their application to attenuated total reflectance spectroelectrochemistry. Electrochimica Acta, 2003, 48, 4291-4299.	5.2	20
132	Spectroelectrochemical sensing: planar waveguides. Electrochimica Acta, 2003, 48, 3313-3323.	5.2	18
133	Microdrop analysis of a bead-based immunoassay. Microchemical Journal, 2003, 74, 267-276.	4.5	27
134	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 11. Design and Evaluation of a Small Portable Sensor for the Determination of Ferrocyanide in Hanford Waste Samples. Environmental Science & Technology, 2003, 37, 123-130.	10.0	50
135	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 16. Sensing by Fluorescence. Analytical Chemistry, 2003, 75, 6334-6340.	6.5	54
136	An integrated microfluidic biochemical detection system for protein analysis with magnetic bead-based sampling capabilities. Lab on A Chip, 2002, 2, 27.	6.0	349
137	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 13. Detection of Aqueous Iron by in Situ Complexation with 2,2â€˜-Bipyridine. Analytical Chemistry, 2002, 74, 3330-3335.	6.5	53
138	Electrochemical immunoassay moving into the fast lane. TrAC - Trends in Analytical Chemistry, 2002, 21, 213-225.	11.4	95
139	Small volume bead assay for ovalbumin with electrochemical detection. Analyst, The, 2001, 126, 337-341.	3.5	27
140	Fluorogenic assay for Î²-glucuronidase using microchip-based capillary electrophoresis. Biomedical Applications, 2001, 762, 33-41.	1.7	36
141	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 8. Selectivity at Poly(vinyl alcohol)-Polyelectrolyte Blend Modified Optically Transparent Electrodes. Electroanalysis, 2001, 13, 613-620.	2.9	16
142	â€œBugbeadâ€• an artificial microorganism model used as a harmless simulant for pathogenic microorganisms. Analytica Chimica Acta, 2001, 444, 13-26.	5.4	16
143	Title is missing!. Biomedical Microdevices, 2001, 3, 191-200.	2.8	95
144	Graphite Electrodes Coated with Poly(dimethyldiallylammonium)chloride Network Films Cross-Linked by Gamma-Irradiation. Electroanalysis, 2000, 12, 241-247.	2.9	6

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145	Electrochemical Immunoassay with Microscopic Immunomagnetic Bead Domains and Scanning Electrochemical Microscopy. Electroanalysis, 2000, 12, 640-644.	2.9	60
146	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 7. Sensing of Fe(CN)64-. Electroanalysis, 2000, 12, 1356-1362.	2.9	21
147	Novel Spectroelectrochemical Sensor for Ferrocyanide in Hanford Waste Simulant. ACS Symposium Series, 2000, , 364-378.	0.5	8
148	Oxidation-State Speciation of [ReI(DMPE)3]+/[ReII(DMPE)3]2+by Voltammetry with a Chemically Modified Microelectrode. Analytical Chemistry, 2000, 72, 2395-2400.	6.5	10
149	Spatially Addressed Deposition and Imaging of Biochemically Active Bead Microstructures by Scanning Electrochemical Microscopy. Analytical Chemistry, 2000, 72, 333-338.	6.5	81
150	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 6. Sensing with a Mediator. Analytical Chemistry, 2000, 72, 3461-3467.	6.5	36
151	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 5. Simulation of Sensor Response for Different Excitation Potential Waveforms. Analytical Chemistry, 2000, 72, 5567-5575.	6.5	22
152	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 9. Incorporation of Planar Waveguide Technology. Analytical Chemistry, 2000, 72, 5549-5555.	6.5	32
153	Rotating disk electrode amperometric detection for a bead-based immunoassay. Journal of Electroanalytical Chemistry, 1999, 468, 2-8.	3.8	42
154	Micro volume rotating disk electrode (RDE) amperometric detection for a bead-based immunoassay. Analytica Chimica Acta, 1999, 399, 3-11.	5.4	54
155	Capillary enzyme immunoassay with electrochemical detection for determining indole-3-acetic acid in tomato embryos. Fresenius' Journal of Analytical Chemistry, 1999, 364, 170-174.	1.5	16
156	Electrochemistry of [ReIII(DIARS)2Cl2]Cl, Where DIARS=o-Phenylenebis(dimethylarsine), in Aqueous and Aqueous/Ethanol Solvents at Bare and Nafion-Modified Electrodes. Electroanalysis, 1999, 11, 320-326.	2.9	9
157	Tailoring Perfluorosulfonated Ionomer-Entrapped Solâ^'Gel-Derived Silica Nanocomposite for Spectroelectrochemical Sensing of Re(DMPE)3+. Langmuir, 1999, 15, 767-773.	3.5	32
158	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 4. Sensing with Poly(vinyl alcohol)â^'Polyelectrolyte Blend Modified Optically Transparent Electrodes. Analytical Chemistry, 1999, 71, 4061-4068.	6.5	41
159	Hydrophobic Interaction of Analytes with Permselective Poly(N-vinyl amide) Films on Electrodes. Analytical Chemistry, 1999, 71, 399-406.	6.5	9
160	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 3. Effect of Signal Averaging on Limit of Detection. Analytical Chemistry, 1999, 71, 1196-1203.	6.5	53
161	<title>Spectro-electrochemical sensors: materials, incorporation of planar waveguide technologies, and instrumentation</title>. , 1999, 3537, 268.		3
162	Electrochemical behavior of methyl viologen at graphite electrodes modified with Nafion solâ€“gel composite. Analytica Chimica Acta, 1998, 370, 221-230.	5.4	49

#	Article	IF	Citations
163	Evaluation of the electrochemical characteristics of a poly(vinyl alcohol)/poly(acrylic acid) polymer blend. Electrochimica Acta, 1998, 43, 3497-3502.	5.2	28
164	The analysis of fountain pen inks by capillary electrophoresis with ultraviolet/visible absorbance and laser-induced fluorescence detection. Electrophoresis, 1998, 19, 31-41.	2.4	17
165	Spectroscopic and Electrochemical Evaluation of a Perfluorosulfonated Ionomer and Its Gel as Preconcentrating Media for [ReI(DMPE)3]+, Where DMPE = 1,2-Bis(dimethylphosphino)ethane. Analytical Chemistry, 1998, 70, 4326-4332.	6.5	17
166	Voltammetry of [Re(DMPE)3]+ at Ionomer-Entrapped Composite-Modified Electrodes. Analytical Chemistry, 1998, 70, 5230-5236.	6.5	28
167	Liquid Chromatography with Electrochemical Detection (LC-EC): An Experiment Using 4-Aminophenol. Journal of Chemical Education, 1998, 75, 1035.	2.3	5
168	Separation of Aromatic Acids, DOPA, and Methyl-DOPA by Capillary Electrophoresis with Dendrimers as Buffer Additives. Journal of Chromatographic Science, 1998, 36, 146-154.	1.4	19
169	<title>New spectroelectrochemical sensor</title>. , 1998, 3258, 56.		9
170	<title>New chemically selective optical materials for waveguide sensors</title>. , 1998, , .		4
171	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 1. Demonstration of Concept with Ferricyanide. Analytical Chemistry, 1997, 69, 3679-3686.	6.5	118
172	Microelectrode Sensors forinVivoDetection of Radiopharmaceuticals. Journal of the American Chemical Society, 1997, 119, 6434-6435.	13.7	7
173	Peer Reviewed: Pushing Down the Limits of Detection: Molecular Needles in a Haystack. Analytical Chemistry, 1997, 69, 544A-549A.	6.5	43
174	Electrochemical Behavior of [ReI(DMPE)3]+, Where DMPE = 1,2-Bis(dimethylphosphino)ethane, at Perfluorosulfonated Ionomer-Modified Electrodes. Analytical Chemistry, 1997, 69, 4045-4050.	6.5	18
175	Spectroelectrochemical Sensing Based on Multimode Selectivity Simultaneously Achievable in a Single Device. 2. Demonstration of Selectivity in the Presence of Direct Interferences. Analytical Chemistry, 1997, 69, 4819-4827.	6.5	74
176	Electrochemical Behavior of Graphite Electrodes Modified by Spin-Coating with Solâ˜Gel-Entrapped Ionomers. Analytical Chemistry, 1997, 69, 703-710.	6.5	79
177	Blocking behavior of self-assembled monolayers on gold electrodes. Journal of Solid State Electrochemistry, 1997, 1, 148-154.	2.5	27
178	Stripping voltammetry of copper and lead using gold electrodes modified with self-assembled monolayers. Journal of Solid State Electrochemistry, 1997, 1, 241-247.	2.5	47
179	An Analytical Study of the Redox Behavior of 1,10â€Phenanthrolineâ€5,6â€dione, its Transitionâ€Metal Complexes, and its Nâ€Monomethylated Derivative with regard to their Efficiency as Mediators of NAD(P)⁺ Regeneration. Chemistry - A European Journal, 1997, 3, 79-88.	3.3	68
180	Separation and Comparison of Fountain Pen Inks by Capillary Zone Electrophoresis. Journal of Forensic Sciences, 1997, 42, 1004-1011.	1.6	24

#	Article	IF	Citations
181	Zeptomole-Detecting Biosensor for Alkaline Phosphatase in an Electrochemical Immunoassay for 2,4-Dichlorophenoxyacetic acid. Analytical Chemistry, 1996, 68, 2453-2458.	6.5	195
182	Electron transfer through an immunoglobulin layer via an immobilized redox mediator. Electroanalysis, 1996, 8, 143-146.	2.9	24
183	Electrochemical enzyme immunoassay using sequential saturation technique in a 20-Î¼l capillary: digoxin as a model analyte. Analytica Chimica Acta, 1994, 287, 253-258.	5.4	88
184	Electrochemical determination of oxygen permeability of isolated stratum corneum membranes. Electroanalysis, 1993, 5, 641-645.	2.9	0
185	Small-volume voltammetric detection of 4-aminophenol with interdigitated array electrodes and its application to electrochemical enzyme immunoassay. Analytical Chemistry, 1993, 65, 1559-1563.	6.5	293
186	Chemical Sensors for Radiopharmaceuticals. Radiochimica Acta, 1993, 63, 199-204.	1.2	9
187	Solid-State Electrochemical Oxygen Sensor. Analytical Letters, 1992, 25, 807-819.	1.8	6
188	Oxygen sensors based on the ionically conductive polymer poly(dimethyldiallylammonium chloride). Sensors and Actuators B: Chemical, 1992, 8, 199-204.	7.8	12
189	Blank response at glassy carbon electrodes in a flow injection system. Electroanalysis, 1992, 4, 33-40.	2.9	5
190	Comparison of methods for following alkaline phosphatase catalysis: Spectrophotometric versus amperometric detection. Analytical Biochemistry, 1991, 192, 90-95.	2.4	95
191	Flow-injection analysis with electrochemical detection of reduced nicotinamide adenine dinucleotide using 2,6-dichloroindophenol as a redox coupling agent. Analytical Biochemistry, 1991, 192, 243-250.	2.4	24
192	Chemical Cross-Linking of a Redox Mediator Thionin for Electrocatalytic Oxidation of Reduced Î²-Nicotinamide Adenine Dinucleotide. Analytical Letters, 1991, 24, 1453-1469.	1.8	44
193	EXAFS spectroelectrochemistry. Chemical Reviews, 1990, 90, 705-722.	47.7	89
194	Spectroelectrochemistry Using Transparent Electrodes. ACS Symposium Series, 1989, , 442-457.	0.5	13
195	The polymerization of dimethyldiallylammonium chloride by gamma irradiation as followed by 1H NMR. Journal of Polymer Science, Polymer Letters Edition, 1988, 26, 333-339.	0.4	9
196	p-aminophenyl phosphate: an improved substrate for electrochemical enzyme immnoassay. Analytica Chimica Acta, 1988, 214, 187-195.	5.4	186
197	Electrodes with polymer network films formed by .gamma.-irradiation cross-linking. Analytical Chemistry, 1987, 59, 134-139.	6.5	48
198	Immunoassay with Electrochemical Detection. Methods of Biochemical Analysis, 1987, 32, 345-393.	0.2	12

#	Article	IF	Citations
199	Strategies for Electrochemical Immunoassay. Analytical Chemistry, 1985, 57, 1321A-1331A.	6.5	163
200	The effects of Copperî—¸Zinc and Copperî—¸Cadmium intermetallic compounds in different systems used for anodic stripping voltammetry. Analytica Chimica Acta, 1983, 154, 95-104.	5.4	36
201	Cyclic voltammetry. Journal of Chemical Education, 1983, 60, 702.	2.3	640
202	Spectroelectrochemistry: The combination of optical and electrochemical techniques. Journal of Chemical Education, 1983, 60, 305.	2.3	78
203	Liquid Chromatography with Electrochemical Detection of Phenol and NADH for Enzyme Immunoassay. Journal of Liquid Chromatography and Related Technologies, 1983, 6, 2141-2156.	1.0	30
204	Heterogeneous immunoassay for serum proteins by differential pulse anodic stripping voltammetry. Analytical Chemistry, 1982, 54, 2318-2322.	6.5	87
205	Long optical path electrochemical cell for absorption or fluorescence spectrometers. Analytical Chemistry, 1982, 54, 2382-2384.	6.5	56
206	Preliminary spectrofluoroelectrochemical studies indicate a possible conformational change in horse heart cytochrome c upon reduction. Journal of Colloid and Interface Science, 1982, 86, 295-298.	9.4	22
207	The Effect of Bulk Solvent Structure and Specific Ion Binding on the Temperature Dependence of the Reduction Potential of Horse Heart Cytochrome c. Advances in Chemistry Series, 1980, , 169-185.	0.6	7
208	Analytical electrochemistry: methodology and applications of dynamic techniques. Analytical Chemistry, 1980, 52, 138-151.	6.5	58
209	Optically transparent thin-layer electrochemical flow cell for liquid chromatography. Analytical Chemistry, 1980, 52, 1542-1544.	6.5	26
210	Thin-layer spectroelectrochemical studies of cobalt and copper Schiff base complexes. Inorganic Chemistry, 1979, 18, 2536-2542.	4.0	56
211	spectro-electro-chemistry. Analytical Chemistry, 1978, 50, 390A-402A.	6.5	17
212	Analytical electrochemistry: methodology and applications of dynamic techniques. Analytical Chemistry, 1978, 50, 166-175.	6.5	121
213	Carbon and mercury-carbon optically transparent electrodes. Analytical Chemistry, 1977, 49, 1395-1398.	6.5	48
214	Thin-layer differential pulse voltammetry. Analytical Chemistry, 1977, 49, 1792-1797.	6.5	49
215	Application of an oscillating-mirror rapid-scanning spectrometer to simultaneous multi-element microwave plasma emission spectrometry. Analyst, The, 1976, 101, 753.	3.5	18
216	Oscillating mirror rapid scanning ultraviolet-visible spectrometer as a detector for liquid chromatography. Analytical Chemistry, 1976, 48, 20-24.	6.5	55

#	Article	IF	Citations
217	Study of electrogenerated reactants using optically transparent electrodes. Accounts of Chemical Research, 1976, 9, 241-248.	15.6	173
218	An electrochemical experiment using an optically transparent thin layer electrode. Journal of Chemical Education, 1976, 53, 594.	2.3	178
219	The creeping-film phenomenon of potassium chloride solution. Nature, 1976, 264, 383-384.	27.8	1
220	Measurement of enzyme E.deg.' values by optically transparent thin layer electrochemical cells. Analytical Chemistry, 1975, 47, 79-84.	6.5	243
221	Spectroelectrochemical studies of stoichiometry, energetics, and kinetics of heme proteins: cytochrome c and cytochrome c oxidase. Bioelectrochemistry, 1974, 1, 389-406.	1.0	37
222	Spectro-electrochemical methods in the study of short-lived intermediates. Faraday Discussions of the Chemical Society, 1973, 56, 16.	2.2	15
223	Spectroelectrochemical studies of metal deposition and stripping and of specific adsorption on mercury-platinum optically transparent electrodes. Analytical Chemistry, 1972, 44, 1972-1978.	6.5	44
224	Mercury-platinum optically transparent electrode. Analytical Chemistry, 1971, 43, 1075-1078.	6.5	30