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	Electrochemical biosensors. Chemical Society Reviews, 2010, 39, 1747.	38.1	1,463
2	Cyclic voltammetry. Journal of Chemical Education, 1983, 60, 702.	2.3	640
3	Microfluidic immunosensor systems. Biosensors and Bioelectronics, 2005, 20, 2488-2503.	10.1	490
4	The autofluorescence of plastic materials and chips measured under laser irradiation. Lab on A Chip, 2005, 5, 1348.	6.0	354
5	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
6	Revolutionizing biodegradable metals. Materials Today, 2009, 12, 22-32.	14.2	331
7	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
8	Measurement of enzyme E.deg.' values by optically transparent thin layer electrochemical cells. Analytical Chemistry, 1975, 47, 79-84.	6.5	243
9	Fast escape of hydrogen from gas cavities around corroding magnesium implants. Acta Biomaterialia, 2013, 9, 8714-8721.	8.3	237
10	Zeptomole-Detecting Biosensor for Alkaline Phosphatase in an Electrochemical Immunoassay for 2,4-Dichlorophenoxyacetic acid. Analytical Chemistry, 1996, 68, 2453-2458.	6.5	195
11	p-aminophenyl phosphate: an improved substrate for electrochemical enzyme immnoassay. Analytica Chimica Acta, 1988, 214, 187-195.	5.4	186
12	An electrochemical experiment using an optically transparent thin layer electrode. Journal of Chemical Education, 1976, 53, 594.	2.3	178
13	Study of electrogenerated reactants using optically transparent electrodes. Accounts of Chemical Research, 1976, 9, 241-248.	15.6	173
14	Strategies for Electrochemical Immunoassay. Analytical Chemistry, 1985, 57, 1321A-1331A.	6.5	163
15	Carbohydrate-Based Label-Free Detection of Escherichia coli ORN 178 Using Electrochemical Impedance Spectroscopy. Analytical Chemistry, 2012, 84, 241-246.	6.5	128
16	Analytical electrochemistry: methodology and applications of dynamic techniques. Analytical Chemistry, 1978, 50, 166-175.	6.5	121
17	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
18	A nanotube array immunosensor for direct electrochemical detection of antigenâ€“antibody binding. Sensors and Actuators B: Chemical, 2007, 123, 177-182.	7.8	104

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19	Simultaneous Detection of Heavy Metals by Anodic Stripping Voltammetry Using Carbon Nanotube Thread. Electroanalysis, 2014, 26, 488-496.	2.9	103
20	Comparison of methods for following alkaline phosphatase catalysis: Spectrophotometric versus amperometric detection. Analytical Biochemistry, 1991, 192, 90-95.	2.4	95
21	Title is missing!. Biomedical Microdevices, 2001, 3, 191-200.	2.8	95
22	Electrochemical immunoassay moving into the fast lane. TrAC - Trends in Analytical Chemistry, 2002, 21, 213-225.	11.4	95
23	A Comprehensive Review: Development of Electrochemical Biosensors for Detection of Cyanotoxins in Freshwater. ACS Sensors, 2019, 4, 1151-1173.	7.8	92
24	EXAFS spectroelectrochemistry. Chemical Reviews, 1990, 90, 705-722.	47.7	89
25	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
26	Heterogeneous immunoassay for serum proteins by differential pulse anodic stripping voltammetry. Analytical Chemistry, 1982, 54, 2318-2322.	6.5	87
27	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
28	Disposable Copper-Based Electrochemical Sensor for Anodic Stripping Voltammetry. Analytical Chemistry, 2014, 86, 4893-4900.	6.5	84
29	Spatially Addressed Deposition and Imaging of Biochemically Active Bead Microstructures by Scanning Electrochemical Microscopy. Analytical Chemistry, 2000, 72, 333-338.	6.5	81
30	Electrochemical Behavior of Graphite Electrodes Modified by Spin-Coating with Solâ^'Gel-Entrapped Ionomers. Analytical Chemistry, 1997, 69, 703-710.	6.5	79
31	Bead-Based Electrochemical Immunoassay for Bacteriophage MS2. Analytical Chemistry, 2004, 76, 2700-2707.	6.5	79
32	Spectroelectrochemistry: The combination of optical and electrochemical techniques. Journal of Chemical Education, 1983, 60, 305.	2.3	78
33	Determination of Trace Metals by Anodic Stripping Voltammetry Using a Carbon Nanotube Tower Electrode. Electroanalysis, 2011, 23, 1252-1259.	2.9	78
34	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
35	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
36	Electrospun Carbon Nanofiber Modified Electrodes for Stripping Voltammetry. Analytical Chemistry, 2015, 87, 9315-9321.	6.5	70

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37	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
38	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
39	On-Line Sample Preconcentration Using Field-amplified Stacking Injection in Microchip Capillary Electrophoresis. Analytical Chemistry, 2006, 78, 3730-3737.	6.5	61
40	Electrochemical Immunoassay with Microscopic Immunomagnetic Bead Domains and Scanning Electrochemical Microscopy. Electroanalysis, 2000, 12, 640-644.	2.9	60
41	Analytical electrochemistry: methodology and applications of dynamic techniques. Analytical Chemistry, 1980, 52, 138-151.	6.5	58
42	High sensitivity carbon nanotube tower electrodes. Sensors and Actuators B: Chemical, 2006, 120, 298-304.	7.8	57
43	Thin-layer spectroelectrochemical studies of cobalt and copper Schiff base complexes. Inorganic Chemistry, 1979, 18, 2536-2542.	4.0	56
44	Long optical path electrochemical cell for absorption or fluorescence spectrometers. Analytical Chemistry, 1982, 54, 2382-2384.	6.5	56
45	Carbon Nanotube-Loaded Nafion Film Electrochemical Sensor for Metal Ions: Europium. Analytical Chemistry, 2014, 86, 4354-4361.	6.5	56
46	Oscillating mirror rapid scanning ultraviolet-visible spectrometer as a detector for liquid chromatography. Analytical Chemistry, 1976, 48, 20-24.	6.5	55
47	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
48	Micro volume rotating disk electrode (RDE) amperometric detection for a bead-based immunoassay. Analytica Chimica Acta, 1999, 399, 3-11.	5.4	54
49	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
50	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
51	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
52	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
53	Amperometric determination of live Escherichia coli using antibody-coated paramagnetic beads. Analytical and Bioanalytical Chemistry, 2005, 382, 1234-1241.	3.7	53
54	Gold-coated carbon nanotube electrode arrays: Immunosensors for impedimetric detection of bone biomarkers. Biosensors and Bioelectronics, 2016, 77, 580-588.	10.1	52

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55	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
56	Thin-layer differential pulse voltammetry. Analytical Chemistry, 1977, 49, 1792-1797.	6.5	49
57	Electrochemical behavior of methyl viologen at graphite electrodes modified with Nafion solâ€“gel composite. Analytica Chimica Acta, 1998, 370, 221-230.	5.4	49
58	Carbon and mercury-carbon optically transparent electrodes. Analytical Chemistry, 1977, 49, 1395-1398.	6.5	48
59	Electrodes with polymer network films formed by .gamma.-irradiation cross-linking. Analytical Chemistry, 1987, 59, 134-139.	6.5	48
60	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
61	Cloud Point Extraction for Electroanalysis: Anodic Stripping Voltammetry of Cadmium. Analytical Chemistry, 2015, 87, 6133-6140.	6.5	47
62	In vivo characterization of magnesium alloy biodegradation using electrochemical H2 monitoring, ICP-MS, and XPS. Acta Biomaterialia, 2017, 50, 556-565.	8.3	47
63	In vivo monitoring the biodegradation of magnesium alloys with an electrochemical H2 sensor. Acta Biomaterialia, 2016, 36, 361-368.	8.3	46
64	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
65	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
66	Peer Reviewed: Pushing Down the Limits of Detection: Molecular Needles in a Haystack. Analytical Chemistry, 1997, 69, 544A-549A.	6.5	43
67	Rotating disk electrode amperometric detection for a bead-based immunoassay. Journal of Electroanalytical Chemistry, 1999, 468, 2-8.	3.8	42
68	Unlimited-Volume Electrokinetic Stacking Injection in Sweeping Capillary Electrophoresis Using a Cationic Surfactant. Analytical Chemistry, 2006, 78, 6035-6042.	6.5	42
69	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
70	Fluorescence Spectroelectrochemical Sensor for 1-Hydroxypyrene. Analytical Chemistry, 2010, 82, 9743-9748.	6.5	41
71	Carbon Nanotube Thread Electrochemical Cell: Detection of Heavy Metals. Analytical Chemistry, 2017, 89, 9654-9663.	6.5	41
72	Bead-based immunoassays with microelectrode detection. Analytical and Bioanalytical Chemistry, 2004, 379, 358-367.	3.7	39

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73	Simultaneous Detection of Two Analytes Using a Spectroelectrochemical Sensor. Analytical Chemistry, 2010, 82, 1720-1726.	6.5	38
74	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
75	Spectroelectrochemical studies of stoichiometry, energetics, and kinetics of heme proteins: cytochrome c and cytochrome c oxidase. Bioelectrochemistry, 1974, 1, 389-406.	1.0	37
76	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
77	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
78	Fluorogenic assay for Î²-glucuronidase using microchip-based capillary electrophoresis. Biomedical Applications, 2001, 762, 33-41.	1.7	36
79	Semi-Infinite Linear Diffusion Spectroelectrochemistry on an Aqueous Micro-Drop. Analytical Chemistry, 2011, 83, 4214-4219.	6.5	36
80	Highly Oxidizing Excited States of Re and Tc Complexes. Journal of the American Chemical Society, 2006, 128, 16494-16495.	13.7	35
81	Anodic Stripping Voltammetry of Heavy Metals on a Metal Catalyst Free Carbon Nanotube Electrode. Electroanalysis, 2012, 24, 1039-1046.	2.9	35
82	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
83	Electrochemistry and Spectroelectrochemistry of Europium(III) Chloride in 3LiClâ€“2KCl from 643 to 1123 K. Analytical Chemistry, 2013, 85, 9924-9931.	6.5	33
84	Bare and Polymer-Coated Indium Tin Oxide as Working Electrodes for Manganese Cathodic Stripping Voltammetry. Analytical Chemistry, 2016, 88, 4221-4228.	6.5	33
85	Tailoring Perfluorosulfonated Ionomer-Entrapped Solâ^'Gel-Derived Silica Nanocomposite for Spectroelectrochemical Sensing of Re(DMPE)3+. Langmuir, 1999, 15, 767-773.	3.5	32
86	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
87	Copper-Based Electrochemical Sensor with Palladium Electrode for Cathodic Stripping Voltammetry of Manganese. Analytical Chemistry, 2014, 86, 12070-12077.	6.5	32
88	Mercury-platinum optically transparent electrode. Analytical Chemistry, 1971, 43, 1075-1078.	6.5	30
89	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
90	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

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91	Evaluation of the electrochemical characteristics of a poly(vinyl alcohol)/poly(acrylic acid) polymer blend. Electrochimica Acta, 1998, 43, 3497-3502.	5.2	28
92	Voltammetry of [Re(DMPE)3]+ at Ionomer-Entrapped Composite-Modified Electrodes. Analytical Chemistry, 1998, 70, 5230-5236.	6.5	28
93	Proteinâ€aptamer binding studies using microchip affinity capillary electrophoresis. Electrophoresis, 2008, 29, 1415-1422.	2.4	28
94	Optically Transparent Thin-Film Electrode Chip for Spectroelectrochemical Sensing. Analytical Chemistry, 2017, 89, 7324-7332.	6.5	28
95	Blocking behavior of self-assembled monolayers on gold electrodes. Journal of Solid State Electrochemistry, 1997, 1, 148-154.	2.5	27
96	Small volume bead assay for ovalbumin with electrochemical detection. Analyst, The, 2001, 126, 337-341.	3.5	27
97	Microdrop analysis of a bead-based immunoassay. Microchemical Journal, 2003, 74, 267-276.	4.5	27
98	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
99	A system for characterizing Mg corrosion in aqueous solutions using electrochemical sensors and impedance spectroscopy. Acta Biomaterialia, 2013, 9, 9211-9219.	8.3	27
100	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
101	Optically transparent thin-layer electrochemical flow cell for liquid chromatography. Analytical Chemistry, 1980, 52, 1542-1544.	6.5	26
102	Thinâ€Layer Spectroelectrochemistry on an Aqueous Microdrop. Electroanalysis, 2012, 24, 1065-1070.	2.9	26
103	Characterization and performance of injection molded poly(methylmethacrylate) microchips for capillary electrophoresis. Journal of Chromatography A, 2007, 1154, 444-453.	3.7	25
104	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
105	Electron transfer through an immunoglobulin layer via an immobilized redox mediator. Electroanalysis, 1996, 8, 143-146.	2.9	24
106	Visual H2 sensor for monitoring biodegradation of magnesium implants in vivo. Acta Biomaterialia, 2016, 45, 399-409.	8.3	24
107	Separation and Comparison of Fountain Pen Inks by Capillary Zone Electrophoresis. Journal of Forensic Sciences, 1997, 42, 1004-1011.	1.6	24
108	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

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109	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
110	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
111	Luminescence from thetrans-Dioxotechnetium(V) Chromophore. Journal of the American Chemical Society, 2005, 127, 14978-14979.	13.7	22
112	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
113	Monitoring Biodegradation of Magnesium Implants with Sensors. Jom, 2016, 68, 1204-1208.	1.9	22
114	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
115	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
116	Study of injection bias in a simple hydrodynamic injection in microchip CE. Electrophoresis, 2007, 28, 1564-1571.	2.4	21
117	Recent developments in electrochemical immunoassays and immunosensors. , 2008, , 115-143.		21
118	Comparison of the Effects of Biofouling on Voltammetric and Potentiometric Measurements. Electroanalysis, 2012, 24, 1732-1738.	2.9	21
119	Labâ€onâ€aâ€Chip Sensor with Evaporated Bismuth Film Electrode for Anodic Stripping Voltammetry of Zinc. Electroanalysis, 2013, 25, 2586-2594.	2.9	21
120	Optically Transparent Carbon Nanotube Film Electrode for Thin Layer Spectroelectrochemistry. Analytical Chemistry, 2015, 87, 9687-9695.	6.5	21
121	Carbon nanofiber electrode array for the detection of lead. Electrochemistry Communications, 2016, 73, 89-93.	4.7	21
122	Determination of Manganese by Cathodic Stripping Voltammetry on a Microfabricated Platinum Thinâ€“film Electrode. Electroanalysis, 2017, 29, 686-695.	2.9	21
123	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
124	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
125	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
126	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

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127	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
128	Rapid Prototyped Optically Transparent Thinâ€Layer Electrode Holder for Spectroelectrochemistry in Benchâ€Top Spectrophotometers. Electroanalysis, 2010, 22, 2162-2166.	2.9	19
129	Electronic and Molecular Structures oftrans-Dioxotechnetium(V) Polypyridyl Complexes in the Solid State. Inorganic Chemistry, 2011, 50, 5815-5823.	4.0	19
130	Application of an oscillating-mirror rapid-scanning spectrometer to simultaneous multi-element microwave plasma emission spectrometry. Analyst, The, 1976, 101, 753.	3.5	18
131	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
132	Spectroelectrochemical sensing: planar waveguides. Electrochimica Acta, 2003, 48, 3313-3323.	5.2	18
133	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
134	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
135	Spectroelectrochemical Sensing of Pyrene Metabolites 1-Hydroxypyrene and 1-Hydroxypyrene-glucuronide. Analytical Chemistry, 2011, 83, 3725-3729.	6.5	18
136	Electrochemical Affinity Assays/Sensors: Brief History and Current Status. Annual Review of Analytical Chemistry, 2021, 14, 109-131.	5.4	18
137	spectro-electro-chemistry. Analytical Chemistry, 1978, 50, 390A-402A.	6.5	17
138	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
139	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
140	An Attenuated Total Reflectance Sensor for Copper: An Experiment for Analytical or Physical Chemistry. Journal of Chemical Education, 2004, 81, 1617.	2.3	17
141	On-line sample preconcentration by sweeping with dodecyltrimethylammonium bromide in capillary zone electrophoresis. Journal of Chromatography A, 2006, 1125, 263-269.	3.7	17
142	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
143	Detection of Trace Zinc by an Electrochemical Microsensor based on Carbon Nanotube Threads. Electroanalysis, 2013, 25, 1599-1604.	2.9	17
144	Advances in H2 sensors for bioanalytical applications. TrAC - Trends in Analytical Chemistry, 2016, 79, 269-275.	11.4	17

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145	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
146	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
147	â€œBugbeadâ€• an artificial microorganism model used as a harmless simulant for pathogenic microorganisms. Analytica Chimica Acta, 2001, 444, 13-26.	5.4	16
148	Estimation of logPow values for neutral and basic compounds by microchip microemulsion electrokinetic chromatography with indirect fluorimetric detection (Î¼MEEKC-IFD). Journal of Pharmaceutical and Biomedical Analysis, 2005, 38, 1-7.	2.8	16
149	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
150	Effects of Experimental Conditions on the Signaling Fidelity of Impedance-Based Nucleic Acid Sensors. Analytical Chemistry, 2021, 93, 812-819.	6.5	16
151	Spectro-electrochemical methods in the study of short-lived intermediates. Faraday Discussions of the Chemical Society, 1973, 56, 16.	2.2	15
152	Magnetic microbead-based enzyme immunoassay for ovalbumin using hydrodynamic voltammetry and fluorometric detection. Analytical Methods, 2012, 4, 1783.	2.7	15
153	Analysis of the Electrochemical Oxidation of Multiwalled Carbon Nanotube Tower Electrodes in Sodium Hydroxide. Electroanalysis, 2012, 24, 1501-1508.	2.9	15
154	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
155	Electroosmotic flow driven microfluidic device for bacteria isolation using magnetic microbeads. Scientific Reports, 2019, 9, 14228.	3.3	15
156	Comparing polyelectrolyte multilayerâ€coated PMMA microfluidic devices and glass microchips for electrophoretic separations. Electrophoresis, 2009, 30, 4245-4250.	2.4	14
157	Determination of viable Escherichia coli using antibody-coated paramagnetic beads with fluorescence detection. Analytical and Bioanalytical Chemistry, 2009, 393, 949-956.	3.7	14
158	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
159	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
160	Determination of Manganese in Whole Blood by Cathodic Stripping Voltammetry with Indium Tin Oxide. Electroanalysis, 2017, 29, 1850-1853.	2.9	14
161	Spectroelectrochemistry Using Transparent Electrodes. ACS Symposium Series, 1989, , 442-457.	0.5	13
162	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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163	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
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