

# Eric Bakker

## List of Publications by Year in descending order

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364  
papers

23,831  
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374  
all docs

374  
docs citations

374  
times ranked

9830  
citing authors

#	ARTICLE	IF	CITATIONS
1	Carrier-Based Ion-Selective Electrodes and Bulk Optodes. 1. General Characteristics. Chemical Reviews, 1997, 97, 3083-3132.	47.7	2,191
2	Carrier-Based Ion-Selective Electrodes and Bulk Optodes. 2. Ionophores for Potentiometric and Optical Sensors. Chemical Reviews, 1998, 98, 1593-1688.	47.7	1,812
3	Selectivity of Potentiometric Ion Sensors. Analytical Chemistry, 2000, 72, 1127-1133.	6.5	777
4	Electrochemical Sensors. Analytical Chemistry, 2002, 74, 2781-2800.	6.5	467
5	Ionic additives for ion-selective electrodes based on electrically charged carriers. Analytical Chemistry, 1994, 66, 391-398.	6.5	457
6	Lipophilic and immobilized anionic additives in solvent polymeric membranes of cation-selective chemical sensors. Analytica Chimica Acta, 1993, 280, 197-208.	5.4	418
7	Electrochemical Sensors. Analytical Chemistry, 2006, 78, 3965-3984.	6.5	389
8	Electrochemical Sensors. Analytical Chemistry, 2004, 76, 3285-3298.	6.5	370
9	Determination of Unbiased Selectivity Coefficients of Neutral Carrier-Based Cation-Selective Electrodes. Analytical Chemistry, 1997, 69, 1061-1069.	6.5	350
10	Polymer Membrane Ion-Selective Electrodes-What are the Limits?. Electroanalysis, 1999, 11, 915-933.	2.9	298
11	Modern Potentiometry. Angewandte Chemie - International Edition, 2007, 46, 5660-5668.	13.8	282
12	Potentiometric sensors for trace-level analysis. TrAC - Trends in Analytical Chemistry, 2005, 24, 199-207.	11.4	272
13	Anion-selective membrane electrodes based on metalloporphyrins: The influence of lipophilic anionic and cationic sites on potentiometric selectivity. Talanta, 1994, 41, 881-890.	5.5	260
14	Lowering the Detection Limit of Solvent Polymeric Ion-Selective Membrane Electrodes. 2. Influence of Composition of Sample and Internal Electrolyte Solution. Analytical Chemistry, 1999, 71, 1210-1214.	6.5	247
15	Nucleic acid hybridization on an electrically reconfigurable network of gold-coated magnetic nanoparticles enables microRNA detection in blood. Nature Nanotechnology, 2018, 13, 1066-1071.	31.5	244
16	Selectivity of ion-sensitive bulk optodes. Analytical Chemistry, 1992, 64, 1805-1812.	6.5	221
17	Potentiometric Sensing. Analytical Chemistry, 2019, 91, 2-26.	6.5	219
18	Rational Design of Potentiometric Trace Level Ion Sensors. A Ag <sup>+</sup> -Selective Electrode with a 100 ppt Detection Limit. Analytical Chemistry, 2002, 74, 4027-4036.	6.5	217

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19	Selectivity of liquid membrane ion-selective electrodes. <i>Electroanalysis</i> , 1997, 9, 7-12.	2.9	213
20	Lowering the Detection Limit of Solvent Polymeric Ion-Selective Electrodes. 1. Modeling the Influence of Steady-State Ion Fluxes. <i>Analytical Chemistry</i> , 1999, 71, 1204-1209.	6.5	213
21	Lead-selective bulk optodes based on neutral ionophores with subnanomolar detection limits. <i>Analytical Chemistry</i> , 1992, 64, 1534-1540.	6.5	212
22	Solid-contact polymeric membrane electrodes with detection limits in the subnanomolar range. <i>Analytica Chimica Acta</i> , 2004, 523, 53-59.	5.4	198
23	Solid Contact Potentiometric Sensors for Trace Level Measurements. <i>Analytical Chemistry</i> , 2006, 78, 1318-1322.	6.5	197
24	Effect of Transmembrane Electrolyte Diffusion on the Detection Limit of Carrier-Based Potentiometric Ion Sensors. <i>Analytical Chemistry</i> , 1998, 70, 303-309.	6.5	186
25	Determination of Complex Formation Constants of Lipophilic Neutral Ionophores in Solvent Polymeric Membranes with Segmented Sandwich Membranes. <i>Analytical Chemistry</i> , 1999, 71, 5279-5287.	6.5	182
26	Potentiometric Polymeric Membrane Electrodes for Measurement of Environmental Samples at Trace Levels: A New Requirements for Selectivities and Measuring Protocols, and Comparison with ICPMS. <i>Analytical Chemistry</i> , 2001, 73, 343-351.	6.5	179
27	Determination of Improved Selectivity Coefficients of Polymer Membrane Ion-Selective Electrodes by Conditioning with a Discriminated Ion. <i>Journal of the Electrochemical Society</i> , 1996, 143, L83-L85.	2.9	177
28	Response Mechanism of Polymer Membrane-Based Potentiometric Polyion Sensors. <i>Analytical Chemistry</i> , 1994, 66, 2250-2259.	6.5	174
29	The phase-boundary potential model. <i>Talanta</i> , 2004, 63, 3-20.	5.5	173
30	Selectivity of Polymer Membrane-Based Ion-Selective Electrodes: Self-Consistent Model Describing the Potentiometric Response in Mixed Ion Solutions of Different Charge. <i>Analytical Chemistry</i> , 1994, 66, 3021-3030.	6.5	156
31	Synthesis and characterization of neutral hydrogen ion-selective chromoionophores for use in bulk optodes. <i>Analytica Chimica Acta</i> , 1993, 278, 211-225.	5.4	155
32	Reversible Electrochemical Detection of Nonelectroactive Polyions. <i>Journal of the American Chemical Society</i> , 2003, 125, 11192-11193.	13.7	153
33	Photocurrent generation based on a light-driven proton pump in an artificial liquid membrane. <i>Nature Chemistry</i> , 2014, 6, 202-207.	13.6	153
34	Potentiometric Biosensing of Proteins with Ultrasensitive Ion-Selective Microelectrodes and Nanoparticle Labels. <i>Journal of the American Chemical Society</i> , 2006, 128, 13676-13677.	13.7	151
35	Aptamer-Based Potentiometric Measurements of Proteins Using Ion-Selective Microelectrodes. <i>Analytical Chemistry</i> , 2008, 80, 707-712.	6.5	140
36	Reversible Photodynamic Chloride-Selective Sensor Based on Photochromic Spiropyran. <i>Journal of the American Chemical Society</i> , 2012, 134, 16929-16932.	13.7	136

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37	Elimination of Undesirable Water Layers in Solid-Contact Polymeric Ion-Selective Electrodes. Analytical Chemistry, 2008, 80, 6731-6740.	6.5	134
38	Effect of Lipophilic Ion-Exchanger Leaching on the Detection Limit of Carrier-Based Ion-Selective Electrodes. Analytical Chemistry, 2001, 73, 5582-5589.	6.5	133
39	All-Solid-State Potentiometric Sensors with a Multiwalled Carbon Nanotube Inner Transducing Layer for Anion Detection in Environmental Samples. Analytical Chemistry, 2015, 87, 8640-8645.	6.5	130
40	Miniature Sodium-Selective Ion-Exchange Optode with Fluorescent pH Chromoionophores and Tunable Dynamic Range. Analytical Chemistry, 1996, 68, 2656-2662.	6.5	129
41	Ion selective optodes: from the bulk to the nanoscale. Analytical and Bioanalytical Chemistry, 2015, 407, 3899-3910.	3.7	125
42	Optimum composition of neutral carrier based pH electrodes. Analytica Chimica Acta, 1994, 295, 253-262.	5.4	120
43	Peer Reviewed: The New Wave of Ion-Selective Electrodes. Analytical Chemistry, 2002, 74, 420 A-426 A.	6.5	119
44	Determination of complex formation constants of 18 neutral alkali and alkaline earth metal ionophores in poly(vinyl chloride) sensing membranes plasticized with bis(2-ethylhexyl)sebacate and o-nitrophenyloctylether. Analytica Chimica Acta, 2000, 421, 207-220.	5.4	116
45	Ion sensors: current limits and new trends. Analytica Chimica Acta, 1999, 393, 11-18.	5.4	114
46	Improving the Detection Limit of Anion-Selective Electrodes: An Iodide-Selective Membrane with a Nanomolar Detection Limit. Analytical Chemistry, 2003, 75, 3865-3871.	6.5	113
47	Fiber-Optic Microsensor Array Based on Fluorescent Bulk Optode Microspheres for the Trace Analysis of Silver Ions. Analytical Chemistry, 2005, 77, 4706-4712.	6.5	111
48	Carrier mechanism of acidic ionophores in solvent polymeric membrane ion-selective electrodes. Analytical Chemistry, 1995, 67, 3123-3132.	6.5	109
49	Peer Reviewed: Polyion-Sensitive Membrane Electrodes for Biomedical Analysis. Analytical Chemistry, 1996, 68, 168A-175A.	6.5	108
50	Pulsed Galvanostatic Control of Ionophore-Based Polymeric Ion Sensors. Analytical Chemistry, 2003, 75, 4541-4550.	6.5	108
51	Evidence of a water layer in solid-contact polymeric ion sensors. Physical Chemistry Chemical Physics, 2008, 10, 73-76.	2.8	106
52	Potentiometry at trace levels. TrAC - Trends in Analytical Chemistry, 2001, 20, 11-19.	11.4	103
53	Potentiometric Detection of DNA Hybridization. Journal of the American Chemical Society, 2008, 130, 410-411.	13.7	101
54	Approaches to Improving the Lower Detection Limit of Polymeric Membrane Ion-Selective Electrodes. Electroanalysis, 2006, 18, 1254-1265.	2.9	99

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55	Selective Distance-Based $K^{\text{sup}}$ Quantification on Paper-Based Microfluidics. <i>Analytical Chemistry</i> , 2018, 90, 4894-4900.	6.5	99
56	Ionophore-based membrane electrodes: new analytical concepts and non-classical response mechanisms. <i>Analytica Chimica Acta</i> , 2000, 416, 121-137.	5.4	96
57	Potentiometry at Trace Levels in Confined Samples: $\mu$ Ion-Selective Electrodes with Subfemtomole Detection Limits. <i>Journal of the American Chemical Society</i> , 2006, 128, 8154-8155.	13.7	93
58	Electroanalysis with Membrane Electrodes and Liquid-Liquid Interfaces. <i>Analytical Chemistry</i> , 2016, 88, 395-413.	6.5	92
59	Potentiometric $\text{Cd}^{2+}$ -selective electrode with a detection limit in the low ppt range. <i>Analytica Chimica Acta</i> , 2001, 440, 71-79.	5.4	91
60	Determination of complex formation constants of neutral cation-selective ionophores in solvent polymeric membranes. <i>Analytical Chemistry</i> , 1994, 66, 516-521.	6.5	90
61	Novel potentiometric and optical silver ion-selective sensors with subnanomolar detection limits. <i>Analytica Chimica Acta</i> , 2006, 572, 1-10.	5.4	90
62	Lipophilicity of tetraphenylborate derivatives as anionic sites in neutral carrier-based solvent polymeric membranes and lifetime of corresponding ion-selective electrochemical and optical sensors. <i>Analytica Chimica Acta</i> , 1995, 309, 7-17.	5.4	88
63	Plasticizer-Free Polymer Membrane Ion-Selective Electrodes Containing a Methacrylic Copolymer Matrix. <i>Electroanalysis</i> , 2002, 14, 1375-1381.	2.9	88
64	Ionophore-Based Optical Sensors. <i>Annual Review of Analytical Chemistry</i> , 2014, 7, 483-512.	5.4	88
65	Potentiometric Sensing. <i>Analytical Chemistry</i> , 2021, 93, 72-102.	6.5	88
66	Potentiometric Immunoassay with Quantum Dot Labels. <i>Analytical Chemistry</i> , 2007, 79, 5107-5110.	6.5	84
67	Plasticizer-Free Polymer Containing a Covalently Immobilized $\text{Ca}^{2+}$ -Selective Ionophore for Potentiometric and Optical Sensors. <i>Analytical Chemistry</i> , 2003, 75, 3038-3045.	6.5	82
68	Pulstrodes: A Triple Pulse Control of Potentiometric Sensors. <i>Journal of the American Chemical Society</i> , 2004, 126, 10548-10549.	13.7	82
69	Paper-Based Thin-Layer Coulometric Sensor for Halide Determination. <i>Analytical Chemistry</i> , 2015, 87, 1981-1990.	6.5	82
70	General Description of the Simultaneous Response of Potentiometric Ionophore-Based Sensors to Ions of Different Charge. <i>Analytical Chemistry</i> , 1999, 71, 1041-1048.	6.5	78
71	Thin Layer Ionophore-Based Membrane for Multianalyte Ion Activity Detection. <i>Analytical Chemistry</i> , 2015, 87, 7729-7737.	6.5	78
72	Nanoscale potentiometry. <i>TrAC - Trends in Analytical Chemistry</i> , 2008, 27, 612-618.	11.4	77

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73	Chemical Kinetics of Gold Nanorod Growth in Aqueous CTAB Solutions. <i>Crystal Growth and Design</i> , 2011, 11, 3375-3380.	3.0	77
74	Selective Imaging of Late Endosomes with a pH-Sensitive Diazaoxatriangulene Fluorescent Probe. <i>Journal of the American Chemical Society</i> , 2016, 138, 1752-1755.	13.7	77
75	pH Independent Nano-Optode Sensors Based on Exhaustive Ion-Selective Nanospheres. <i>Analytical Chemistry</i> , 2014, 86, 2853-2856.	6.5	75
76	Guidelines for Improving the Lower Detection Limit of Ion-Selective Electrodes: A Systematic Approach. <i>Electroanalysis</i> , 2007, 19, 144-154.	2.9	73
77	Electrogenerated Chemiluminescence for Potentiometric Sensors. <i>Journal of the American Chemical Society</i> , 2012, 134, 205-207.	13.7	73
78	Response Characteristics of a Reversible Electrochemical Sensor for the Polyion Protamine. <i>Analytical Chemistry</i> , 2005, 77, 5221-5228.	6.5	72
79	Solid-contact potentiometric polymer membrane microelectrodes for the detection of silver ions at the femtomole level. <i>Sensors and Actuators B: Chemical</i> , 2007, 121, 135-141.	7.8	72
80	Thin Layer Coulometry with Ionophore Based Ion-Selective Membranes. <i>Analytical Chemistry</i> , 2010, 82, 4537-4542.	6.5	70
81	Detection limit of ion-selective bulk optodes and corresponding electrodes. <i>Analytica Chimica Acta</i> , 1993, 282, 265-271.	5.4	68
82	Ultrasmall Fluorescent Ion-Exchanging Nanospheres Containing Selective Ionophores. <i>Analytical Chemistry</i> , 2013, 85, 9932-9938.	6.5	68
83	Quantification of Colorimetric Data for Paper-Based Analytical Devices. <i>ACS Sensors</i> , 2019, 4, 3093-3101.	7.8	68
84	Quantitative binding constants of H <sup>+</sup> -selective chromoionophores and anion ionophores in solvent polymeric sensing membranes. <i>Talanta</i> , 2002, 58, 909-918.	5.5	67
85	Response and Diffusion Behavior of Mobile and Covalently Immobilized H <sup>+</sup> -Ionophores in Polymeric Membrane Ion-Selective Electrodes. <i>Electroanalysis</i> , 2002, 14, 1329-1338.	2.9	65
86	Applicability of the phase boundary potential model to the mechanistic understanding of solvent polymeric membrane-based ion-selective electrodes. <i>Electroanalysis</i> , 1995, 7, 817-822.	2.9	64
87	Reversible Sensing of the Anticoagulant Heparin with Protamine Permselective Membranes. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12575-12578.	13.8	62
88	Enhancing ion-selective polymeric membrane electrodes by instrumental control. <i>TrAC - Trends in Analytical Chemistry</i> , 2014, 53, 98-105.	11.4	62
89	Charged Solvatochromic Dyes as Signal Transducers in pH Independent Fluorescent and Colorimetric Ion Selective Nanosensors. <i>Analytical Chemistry</i> , 2015, 87, 9954-9959.	6.5	62
90	Ion-Selective Electrodes Based on Two Competitive Ionophores for Determining Effective Stability Constants of Ion-Carrier Complexes in Solvent Polymeric Membranes. <i>Analytical Chemistry</i> , 1998, 70, 295-302.	6.5	61

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91	Mass-Produced Ionophore-Based Fluorescent Microspheres for Trace Level Determination of Lead Ions. <i>Analytical Chemistry</i> , 2002, 74, 5251-5256.	6.5	61
92	In Situ Detection of Species Relevant to the Carbon Cycle in Seawater with Submersible Potentiometric Probes. <i>Environmental Science and Technology Letters</i> , 2017, 4, 410-415.	8.7	59
93	In Situ Detection of Macronutrients and Chloride in Seawater by Submersible Electrochemical Sensors. <i>Analytical Chemistry</i> , 2018, 90, 4702-4710.	6.5	59
94	Capacitive Model for Coulometric Readout of Ion-Selective Electrodes. <i>Analytical Chemistry</i> , 2018, 90, 8700-8707.	6.5	59
95	Monodisperse Plasticized Poly(vinyl chloride) Fluorescent Microspheres for Selective Ionophore-Based Sensing and Extraction. <i>Analytical Chemistry</i> , 2001, 73, 6083-6087.	6.5	58
96	Selectivity Behavior and Multianalyte Detection Capability of Voltammetric Ionophore-Based Plasticized Polymeric Membrane Sensors. <i>Analytical Chemistry</i> , 2001, 73, 80-90.	6.5	57
97	Molecularly Imprinted Polymer Microspheres Containing Photoswitchable Spiropyran-Based Binding Sites. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 8537-8545.	8.0	57
98	Ionophore-Based Voltammetric Ion Activity Sensing with Thin Layer Membranes. <i>Analytical Chemistry</i> , 2016, 88, 1654-1660.	6.5	57
99	Equipment-Free Detection of $K^{+}$ on Microfluidic Paper-Based Analytical Devices Based on Exhaustive Replacement with Ionic Dye in Ion-selective Capillary Sensors. <i>ACS Sensors</i> , 2019, 4, 670-677.	7.8	57
100	Spectroscopic in Situ Imaging of Acid Coextraction Processes in Solvent Polymeric Ion-Selective Electrode and Optode Membranes. <i>Analytical Chemistry</i> , 1998, 70, 1176-1181.	6.5	56
101	Potassium ion-selective fluorescent and pH independent nanosensors based on functionalized polyether macrocycles. <i>Chemical Science</i> , 2016, 7, 525-533.	7.4	56
102	Extraction Thermodynamics of Polyanions into Plasticized Polymer Membranes Doped with Lipophilic Ion Exchangers: A Potentiometric Study. <i>Macromolecules</i> , 1995, 28, 5834-5840.	4.8	55
103	Optical determination of ionophore diffusion coefficients in plasticized poly(vinyl chloride) sensing films. <i>Analytica Chimica Acta</i> , 2004, 511, 91-95.	5.4	55
104	Spatial and Spectral Imaging of Single Micrometer-Sized Solvent Cast Fluorescent Plasticized Poly(vinyl chloride) Sensing Particles. <i>Analytical Chemistry</i> , 2001, 73, 315-320.	6.5	54
105	Ferrocene Bound Poly(vinyl chloride) as Ion to Electron Transducer in Electrochemical Ion Sensors. <i>Analytical Chemistry</i> , 2010, 82, 6887-6894.	6.5	54
106	Detection limit of polymeric membrane potentiometric ion sensors: how can we go down to trace levels?. <i>Analytica Chimica Acta</i> , 1999, 397, 103-111.	5.4	53
107	A Copolymerized Dodecacarborane Anion as Covalently Attached Cation Exchanger in Ion-Selective Sensors. <i>Analytical Chemistry</i> , 2003, 75, 6002-6010.	6.5	53
108	Ionophore-Based Ion-Selective Optical NanoSensors Operating in Exhaustive Sensing Mode. <i>Analytical Chemistry</i> , 2014, 86, 8770-8775.	6.5	53

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109	<i>In Situ</i> Ammonium Profiling Using Solid-Contact Ion-Selective Electrodes in Eutrophic Lakes. Analytical Chemistry, 2015, 87, 11990-11997.	6.5	53
110	Polyurethane Ionophore-Based Thin Layer Membranes for Voltammetric Ion Activity Sensing. Analytical Chemistry, 2016, 88, 5649-5654.	6.5	53
111	Renewable pH Cross-Sensitive Potentiometric Heparin Sensors with Incorporated Electrically Charged H <sup>+</sup> Ionophores. Analytical Chemistry, 1999, 71, 4614-4621.	6.5	52
112	Multicolor Quantum Dot Encoding for Polymeric Particle-Based Optical Ion Sensors. Analytical Chemistry, 2007, 79, 3716-3723.	6.5	52
113	Cross-linked dodecyl acrylate microspheres: novel matrices for plasticizer-free optical ion sensing. Analytica Chimica Acta, 2001, 442, 25-33.	5.4	51
114	Variable Dimensionality and New Uranium Oxide Topologies in the Alkaline-Earth Metal Uranyl Selenites AE[(UO <sub>2</sub> )(SeO <sub>3</sub> ) <sub>2</sub> ] (AE=Ca, Ba) and Sr[(UO <sub>2</sub> )(SeO <sub>3</sub> ) <sub>2</sub> ] · 2H <sub>2</sub> O. Journal of Solid State Chemistry, 2002, 168, 358-366.	2.9	50
115	Dynamic Diffusion Model for Tracing the Real-Time Potential Response of Polymeric Membrane Ion-Selective Electrodes. Analytical Chemistry, 2004, 76, 6402-6409.	6.5	50
116	Calcium Pulstrodes with 10-Fold Enhanced Sensitivity for Measurements in the Physiological Concentration Range. Analytical Chemistry, 2006, 78, 2744-2751.	6.5	50
117	Potentiometric Sensors with Ion-Exchange Donnan Exclusion Membranes. Analytical Chemistry, 2013, 85, 6208-6212.	6.5	50
118	Mechanistic Insights into the Development of Optical Chloride Sensors Based on the [9]Mercuracarborand-3 Ionophore. Analytical Chemistry, 2003, 75, 133-140.	6.5	49
119	Direct Sensing of Total Acidity by Chronopotentiometric Flash Titrations at Polymer Membrane Ion-Selective Electrodes. Analytical Chemistry, 2008, 80, 3743-3750.	6.5	49
120	Non-Severinghaus Potentiometric Dissolved CO <sub>2</sub> Sensor with Improved Characteristics. Analytical Chemistry, 2013, 85, 1332-1336.	6.5	49
121	Dynamic electrochemistry with ionophore based ion-selective membranes. RSC Advances, 2013, 3, 25461.	3.6	49
122	Voltammetric and Amperometric Transduction for Solvent Polymeric Membrane Ion Sensors. Analytical Chemistry, 1999, 71, 3657-3664.	6.5	48
123	Hydrophobic Membranes as Liquid Junction-Free Reference Electrodes. Electroanalysis, 1999, 11, 788-792.	2.9	47
124	Direct Optical Carbon Dioxide Sensing Based on a Polymeric Film Doped with a Selective Molecular Tweezer-Type Ionophore. Analytical Chemistry, 2012, 84, 3163-3169.	6.5	47
125	Tandem Electrochemical Desalination—Potentiometric Nitrate Sensing for Seawater Analysis. Analytical Chemistry, 2015, 87, 8084-8089.	6.5	47
126	Nitrite-selective microelectrodes. Talanta, 1994, 41, 1001-1005.	5.5	46



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127	Modern directions for potentiometric sensors. Journal of the Brazilian Chemical Society, 2008, 19, 621-629.	0.6	46
128	Evidence for a Surface Confined Ion-to-Electron Transduction Reaction in Solid-Contact Ion-Selective Electrodes Based on Poly(3-octylthiophene). Analytical Chemistry, 2013, 85, 10495-10502.	6.5	46
129	Ion-Selective Optical Nanosensors Based on Solvatochromic Dyes of Different Lipophilicity: From Bulk Partitioning to Interfacial Accumulation. ACS Sensors, 2016, 1, 516-520.	7.8	46
130	Robust Solid-Contact Ion Selective Electrodes for High-Resolution <i>In Situ</i> Measurements in Fresh Water Systems. Environmental Science and Technology Letters, 2017, 4, 286-291.	8.7	46
131	A Label-Free Potentiometric Sensor Principle for the Detection of Antibody–Antigen Interactions. Analytical Chemistry, 2013, 85, 4770-4776.	6.5	45
132	Can Calibration-Free Sensors Be Realized?. ACS Sensors, 2016, 1, 838-841.	7.8	45
133	Thin layer electrochemical extraction of non-redoxactive cations with an anion-exchanging conducting polymer overlaid with a selective membrane. Chemical Communications, 2009, , 5260.	4.1	44
134	Influence of Nonionic Surfactants on the Potentiometric Response of Hydrogen Ion-Selective Polymeric Membrane Electrodes. Analytical Chemistry, 1996, 68, 1623-1631.	6.5	43
135	Beyond potentiometry: Robust electrochemical ion sensor concepts in view of remote chemical sensing. Talanta, 2008, 75, 629-635.	5.5	43
136	Influence of Lipophilic Inert Electrolytes on the Selectivity of Polymer Membrane Electrodes. Analytical Chemistry, 1998, 70, 1686-1691.	6.5	42
137	Imaging fiber microarray fluorescent ion sensors based on bulk optode microspheres. Analytica Chimica Acta, 2005, 532, 61-69.	5.4	41
138	Phosphate-selective fluorescent sensing microspheres based on uranyl salophene ionophores. Analytica Chimica Acta, 2008, 614, 77-84.	5.4	41
139	Membrane Response Model for Ion-Selective Electrodes Operated by Controlled-Potential Thin-Layer Coulometry. Analytical Chemistry, 2011, 83, 486-493.	6.5	41
140	Colorimetric Readout for Potentiometric Sensors with Closed Bipolar Electrodes. Analytical Chemistry, 2018, 90, 6376-6379.	6.5	41
141	Improved Detection Limits and Sensitivities of Potentiometric Titrations. Analytical Chemistry, 2001, 73, 3768-3775.	6.5	40
142	Selective coulometric release of ions from ion selective polymeric membranes for calibration-free titrations. Analyst, The, 2006, 131, 895.	3.5	40
143	Electrochemical Sample Matrix Elimination for Trace-Level Potentiometric Detection with Polymeric Membrane Ion-Selective Electrodes. Analytical Chemistry, 2008, 80, 6114-6118.	6.5	40
144	In-Line Acidification for Potentiometric Sensing of Nitrite in Natural Waters. Analytical Chemistry, 2017, 89, 571-575.	6.5	39

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145	Voltammetric Thin-Layer Ionophore-Based Films: Part 1. Experimental Evidence and Numerical Simulations. <i>Analytical Chemistry</i> , 2017, 89, 586-594.	6.5	39
146	Colorimetric absorbance mapping and quantitation on paper-based analytical devices. <i>Lab on A Chip</i> , 2020, 20, 1441-1448.	6.0	39
147	Coulometric Sodium Chloride Removal System with Nafion Membrane for Seawater Sample Treatment. <i>Analytical Chemistry</i> , 2012, 84, 6158-6165.	6.5	38
148	Ion-Pairing Ability, Chemical Stability, and Selectivity Behavior of Halogenated Dodecacarborane Cation Exchangers in Neutral Carrier-Based Ion-Selective Electrodes. <i>Analytical Chemistry</i> , 2003, 75, 2131-2139.	6.5	37
149	Direct Ion Speciation Analysis with Ion-Selective Membranes Operated in a Sequential Potentiometric/Time Resolved Chronopotentiometric Sensing Mode. <i>Analytical Chemistry</i> , 2012, 84, 8813-8821.	6.5	37
150	Elimination of Dimer Formation in InIII Porphyrin-Based Anion-Selective Membranes by Covalent Attachment of the Ionophore. <i>Analytical Chemistry</i> , 2004, 76, 4379-4386.	6.5	36
151	Ion Channel Mimetic Chronopotentiometric Polymeric Membrane Ion Sensor for Surface-Confined Protein Detection. <i>Langmuir</i> , 2009, 25, 568-573.	3.5	36
152	Amplified potentiometric transduction of DNA hybridization using ion-loaded liposomes. <i>Analyst</i> , The, 2010, 135, 1618.	3.5	36
153	Thin layer coulometric determination of nitrate in fresh waters. <i>Analytica Chimica Acta</i> , 2012, 744, 39-44.	5.4	36
154	Potentiometric Response from Ion-Selective Nanospheres with Voltage-Sensitive Dyes. <i>Journal of the American Chemical Society</i> , 2014, 136, 16465-16468.	13.7	36
155	Electrochemical Mechanism of Ferrocene-Based Redox Molecules in Thin Film Membrane Electrodes. <i>Electrochimica Acta</i> , 2017, 238, 357-367.	5.2	36
156	Environmental water analysis with membrane electrodes. <i>Current Opinion in Electrochemistry</i> , 2017, 3, 97-105.	4.8	36
157	Ultrasensitive Seawater pH Measurement by Capacitive Readout of Potentiometric Sensors. <i>ACS Sensors</i> , 2020, 5, 650-654.	7.8	36
158	Perbrominatedcloso-Dodecacarborane Anion, 1-HCB11Br11-, as an Ion Exchanger in Cation-Selective Chemical Sensors. <i>Analytical Chemistry</i> , 2002, 74, 1327-1332.	6.5	35
159	Plasticizer-free microspheres for ionophore-based sensing and extraction based on a methyl methacrylate-decyl methacrylate copolymer matrix. <i>Analytica Chimica Acta</i> , 2003, 500, 127-136.	5.4	34
160	Direct Detection of Acidity, Alkalinity, and pH with Membrane Electrodes. <i>Analytical Chemistry</i> , 2012, 84, 10165-10169.	6.5	34
161	PVC-Based Ion-Selective Electrodes with Enhanced Biocompatibility by Surface Modification with "Click" Chemistry. <i>Electroanalysis</i> , 2013, 25, 1840-1846.	2.9	34
162	Photoresponsive Ion Extraction/Release Systems: Dynamic Ion Optodes for Calcium and Sodium Based on Photochromic Spiropyran. <i>Analytical Chemistry</i> , 2013, 85, 2983-2990.	6.5	34

#	ARTICLE	IF	CITATIONS
163	Direct arsenic( $\text{As}^{3+}$ ) sensing by a renewable gold plated Ir-based microelectrode. <i>Analyst</i> , The, 2015, 140, 3526-3534.	3.5	34
164	Normal Pulse Voltammetry as Improved Quantitative Detection Mode for Amperometric Solvent Polymeric Membrane Ion Sensors. <i>Electroanalysis</i> , 2000, 12, 1251-1257.	2.9	33
165	Direct Potentiometric Information on Total Ionic Concentrations. <i>Analytical Chemistry</i> , 2000, 72, 2050-2054.	6.5	33
166	Polymerized Nile Blue derivatives for plasticizer-free fluorescent ion optode microsphere sensors. <i>Analytica Chimica Acta</i> , 2007, 599, 124-133.	5.4	33
167	Evidence of double layer/capacitive charging in carbon nanomaterial-based solid contact polymeric ion-selective electrodes. <i>Chemical Communications</i> , 2016, 52, 9703-9706.	4.1	33
168	Flow Cytometric Ion Detection with Plasticized Poly(Vinyl Chloride) Microspheres Containing Selective Ionophores. <i>Analytical Chemistry</i> , 2002, 74, 5420-5425.	6.5	32
169	Rotating Disk Potentiometry for Inner Solution Optimization of Low-Detection-Limit Ion-Selective Electrodes. <i>Analytical Chemistry</i> , 2003, 75, 6922-6931.	6.5	32
170	Selectivity enhancement of anion-responsive electrodes by pulsed chronopotentiometry. <i>Analytica Chimica Acta</i> , 2007, 583, 190-196.	5.4	32
171	Limitations of Current Polarization for Lowering the Detection Limit of Potentiometric Polymeric Membrane Sensors. <i>Analytical Chemistry</i> , 2009, 81, 3592-3599.	6.5	32
172	Water uptake in the hydrophilic poly(3,4-ethylenedioxythiophene):poly(styrene sulfonate) solid-contact of all-solid-state polymeric ion-selective electrodes. <i>Analyst</i> , The, 2011, 136, 3252.	3.5	32
173	Potassium-selective optical microsensors based on surface modified polystyrene microspheres. <i>Chemical Communications</i> , 2014, 50, 4592-4595.	4.1	32
174	Electrogenerated Chemiluminescence for Chronopotentiometric Sensors. <i>Analytical Chemistry</i> , 2019, 91, 4889-4895.	6.5	32
175	Evaluation of the Separate Equilibrium Processes That Dictate the Upper Detection Limit of Neutral Ionophore-Based Potentiometric Sensors. <i>Analytical Chemistry</i> , 2002, 74, 3134-3141.	6.5	31
176	Photodynamic ion sensor systems with spiropyran: photoactivated acidity changes in plasticized poly(vinyl chloride). <i>Chemical Communications</i> , 2012, 48, 5662.	4.1	31
177	Exhaustive Thin-Layer Cyclic Voltammetry for Absolute Multianalyte Halide Detection. <i>Analytical Chemistry</i> , 2014, 86, 11387-11395.	6.5	31
178	Light-Addressable Ion Sensing for Real-Time Monitoring of Extracellular Potassium. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16801-16805.	13.8	31
179	Phosphate-Binding Characteristics and Selectivity Studies of Bifunctional Organotin Carriers. <i>Helvetica Chimica Acta</i> , 2001, 84, 1952-1961.	1.6	30
180	Background current elimination in thin layer ion-selective membrane coulometry. <i>Electrochemistry Communications</i> , 2010, 12, 1195-1198.	4.7	30

#	ARTICLE	IF	CITATIONS
181	Chronopotentiometric Carbonate Detection with All-Solid-State Ionophore-Based Electrodes. <i>Analytical Chemistry</i> , 2014, 86, 6307-6314.	6.5	30
182	Potentiometric sensing array for monitoring aquatic systems. <i>Environmental Sciences: Processes and Impacts</i> , 2015, 17, 906-914.	3.5	30
183	Determination of $pK_a$ Values of Hydrophobic Colorimetric pH Sensitive Probes in Nanospheres. <i>Analytical Chemistry</i> , 2016, 88, 3015-3018.	6.5	30
184	Polymer membrane-based polyion sensors: Development, response mechanism, and bioanalytical applications. <i>Electroanalysis</i> , 1995, 7, 823-829.	2.9	29
185	Chemical Modification of Polymer Ion-Selective Membrane Electrode Surfaces. <i>Electroanalysis</i> , 2014, 26, 1121-1131.	2.9	29
186	Fluorinated tripodal receptors for potentiometric chloride detection in biological fluids. <i>Biosensors and Bioelectronics</i> , 2018, 99, 70-76.	10.1	29
187	Quantification of the Concentration of Ionic Impurities in Polymeric Sensing Membranes with the Segmented Sandwich Technique. <i>Analytical Chemistry</i> , 2001, 73, 4262-4267.	6.5	28
188	Backside Calibration Potentiometry: Ion Activity Measurements with Selective Supported Liquid Membranes by Calibrating from the Inner Side of the Membrane. <i>Analytical Chemistry</i> , 2007, 79, 632-638.	6.5	28
189	Generalized selectivity description for polymeric ion-selective electrodes based on the phase boundary potential model. <i>Journal of Electroanalytical Chemistry</i> , 2010, 639, 1-7.	3.8	28
190	Photoelectric Conversion Based on Proton-Coupled Electron Transfer Reactions. <i>Journal of the American Chemical Society</i> , 2014, 136, 7857-7860.	13.7	28
191	Light-Controlled Reversible Release and Uptake of Potassium Ions from Ion-Exchanging Nanospheres. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2666-2670.	8.0	28
192	Optical Sensing with a Potentiometric Sensing Array by Prussian Blue Film Integrated Closed Bipolar Electrodes. <i>Analytical Chemistry</i> , 2020, 92, 9138-9145.	6.5	28
193	Optical sensors based on neutral carriers. <i>Sensors and Actuators B: Chemical</i> , 1993, 11, 1-8.	7.8	27
194	Distinguishing free and total calcium with a single pulsed galvanostatic ion-selective electrode. <i>Talanta</i> , 2004, 63, 195-200.	5.5	27
195	Synchrotron Radiation/Fourier Transform-Infrared Microspectroscopy Study of Undesirable Water Inclusions in Solid-Contact Polymeric Ion-Selective Electrodes. <i>Analytical Chemistry</i> , 2010, 82, 6203-6207.	6.5	27
196	Electrochemical Ion Transfer with Thin Films of Poly(3-octylthiophene). <i>Analytical Chemistry</i> , 2016, 88, 6939-6946.	6.5	27
197	Selectivity of carrier-based ion-selective electrodes: is the problem solved?. <i>TrAC - Trends in Analytical Chemistry</i> , 1997, 16, 252-260.	11.4	26
198	Selectivity of Liquid Membrane Cadmium Microelectrodes Based on the Ionophore N,N,N',N'-Tetrabutyl-3,6-dioxaoctanedithioamide. <i>Electroanalysis</i> , 1998, 10, 937-941.	2.9	26

#	ARTICLE	IF	CITATIONS
199	Measurement of total calcium by flash chronopotentiometry at polymer membrane ion-selective electrodes. <i>Analytica Chimica Acta</i> , 2009, 648, 240-245.	5.4	26
200	In situ surface functionalization of plasticized poly(vinyl chloride) membranes by "click chemistry"™. <i>Journal of Materials Chemistry</i> , 2012, 22, 12796.	6.7	26
201	Oxazinoindolines as Fluorescent H <sup>+</sup> Turn-On Chromoionophores For Optical and Electrochemical Ion Sensors. <i>Analytical Chemistry</i> , 2013, 85, 7434-7440.	6.5	26
202	Local Acidification of Membrane Surfaces for Potentiometric Sensing of Anions in Environmental Samples. <i>ACS Sensors</i> , 2016, 1, 48-54.	7.8	26
203	Electrochemically Switchable Polymeric Membrane Ion-Selective Electrodes. <i>Analytical Chemistry</i> , 2018, 90, 7591-7599.	6.5	26
204	Optical chloride sensor based on [9]mercuracarborand-3 with massively expanded measuring range. <i>Talanta</i> , 2004, 63, 180-184.	5.5	25
205	Fluorescent microsphere fiber optic microsensor array for direct iodide detection at low picomolar concentrations. <i>Analyst</i> , 2007, 132, 268.	3.5	25
206	Detection Limits of Thin Layer Coulometry with Ionophore Based Ion-Selective Membranes. <i>Analytical Chemistry</i> , 2012, 84, 8038-8044.	6.5	25
207	Creating electrochemical gradients by light: from bio-inspired concepts to photoelectric conversion. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 19781-19789.	2.8	25
208	Thin-Layer Chemical Modulations by a Combined Selective Proton Pump and pH Probe for Direct Alkalinity Detection. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8110-8113.	13.8	25
209	Reversible pH-independent optical potassium sensor with lipophilic solvatochromic dye transducer on surface modified microporous nylon. <i>Chemical Communications</i> , 2016, 52, 14254-14257.	4.1	25
210	Ionophore-Based Titrimetric Detection of Alkali Metal Ions in Serum. <i>ACS Sensors</i> , 2017, 2, 606-612.	7.8	25
211	Multiplexed Flow Cytometric Sensing of Blood Electrolytes in Physiological Samples Using Fluorescent Bulk Optode Microspheres. <i>Analytical Chemistry</i> , 2007, 79, 9505-9512.	6.5	24
212	Direct Alkalinity Detection with Ion-Selective Chronopotentiometry. <i>Analytical Chemistry</i> , 2014, 86, 6461-6470.	6.5	24
213	Determination of Effective Stability Constants of Ion-Carrier Complexes in Ion Selective Nanospheres with Charged Solvatochromic Dyes. <i>Analytical Chemistry</i> , 2015, 87, 11587-11591.	6.5	24
214	A Solid-State Reference Electrode Based on a Self-Referencing Pulstrode. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 2294-2298.	13.8	24
215	Ion-Selective Supported Liquid Membranes Placed under Steady-State Diffusion Control. <i>Analytical Chemistry</i> , 2005, 77, 7801-7809.	6.5	23
216	Complexometric titrations: new reagents and concepts to overcome old limitations. <i>Analyst</i> , 2016, 141, 4252-4261.	3.5	23

#	ARTICLE	IF	CITATIONS
217	Rapid Constant Potential Capacitive Measurements with Solid-Contact Ion-Selective Electrodes Coupled to Electronic Capacitor. <i>Analytical Chemistry</i> , 2020, 92, 14174-14180.	6.5	23
218	Flash chronopotentiometric sensing of the polyions protamine and heparin at ion-selective membranes. <i>Analytical Biochemistry</i> , 2009, 386, 276-281.	2.4	22
219	All solid state chronopotentiometric ion-selective electrodes based on ferrocene functionalized PVC. <i>Journal of Electroanalytical Chemistry</i> , 2013, 709, 118-125.	3.8	22
220	Ionophore-based ion-exchange emulsions as novel class of complexometric titration reagents. <i>Chemical Communications</i> , 2014, 50, 12659-12661.	4.1	22
221	Simplified Fabrication for Ion-Selective Optical Emulsion Sensor with Hydrophobic Solvatochromic Dye Transducer: A Cautionary Tale. <i>Analytical Chemistry</i> , 2019, 91, 8973-8978.	6.5	22
222	Tunable Optical Sensing with PVC-Membrane-Based Ion-Selective Bipolar Electrodes. <i>ACS Sensors</i> , 2019, 4, 1008-1016.	7.8	22
223	Origin of anion response of solvent polymeric membrane based silver ion-selective electrodes. <i>Sensors and Actuators B: Chemical</i> , 1996, 35, 20-25.	7.8	21
224	An Acyclic Trialkylamine Virtually Planar at Nitrogen. Some Chemical Consequences of Nitrogen Planarity. <i>Journal of Organic Chemistry</i> , 2010, 75, 4472-4479.	3.2	21
225	Thin Layer Coulometry Based on Ion-Exchanger Membranes for Heparin Detection in Undiluted Human Blood. <i>Analytical Chemistry</i> , 2014, 86, 1357-1360.	6.5	21
226	Ion Transfer Voltammetry at Thin Films Based on Functionalized Cationic [6]Helicenes. <i>Electroanalysis</i> , 2018, 30, 650-657.	2.9	21
227	Selectivity comparison of neutral carrier-based ion-selective optical and potentiometric sensing schemes. <i>Analytica Chimica Acta</i> , 1997, 350, 329-340.	5.4	20
228	Concanavalin A electrochemical sensor based on the surface blocking principle at an ion-selective polymeric membrane. <i>Mikrochimica Acta</i> , 2015, 182, 129-137.	5.0	20
229	Solvatochromic Dyes as pH-Independent Indicators for Ionophore Nanosphere-Based Complexometric Titrations. <i>Analytical Chemistry</i> , 2015, 87, 12318-12323.	6.5	20
230	Thin Layer Membrane Systems as Rapid Development Tool for Potentiometric Solid Contact Ion-Selective Electrodes. <i>Electroanalysis</i> , 2020, 32, 799-804.	2.9	20
231	Microsphere optical ion sensors based on doped silica gel templates. <i>Analytica Chimica Acta</i> , 2005, 537, 135-143.	5.4	19
232	Nitrite-Selective Electrode Based On Cobalt(II) <i>tert</i> -Butylsalophen Ionophore. <i>Electroanalysis</i> , 2014, 26, 473-480.	2.9	19
233	Voltammetric Thin-Layer Ionophore-Based Films: Part 2. Semi-Empirical Treatment. <i>Analytical Chemistry</i> , 2017, 89, 595-602.	6.5	19
234	Electrochemical ion transfer mediated by a lipophilic Os( <i>sc</i> p <i>ii</i> )/Os( <i>sc</i> p <i>iii</i> ) dinonyl bipyridyl probe incorporated in thin film membranes. <i>Chemical Communications</i> , 2017, 53, 10757-10760.	4.1	19

#	ARTICLE	IF	CITATIONS
235	Fast Potentiometric CO <sub>2</sub> Sensor for High-Resolution in Situ Measurements in Fresh Water Systems. <i>Environmental Science &amp; Technology</i> , 2018, 52, 11259-11266.	10.0	19
236	Potentiometric Sensor Array with Multi-Nernstian Slope. <i>Analytical Chemistry</i> , 2020, 92, 2926-2930.	6.5	19
237	High-Temperature Potentiometry: Modulated Response of Ion-Selective Electrodes During Heat Pulses. <i>Analytical Chemistry</i> , 2009, 81, 10290-10294.	6.5	18
238	Interference Compensation for Thin Layer Coulometric Ion-Selective Membrane Electrodes by the Double Pulse Technique. <i>Analytical Chemistry</i> , 2012, 84, 1327-1335.	6.5	18
239	Evaluation of Egorov's Improved Separate Solution Method for Determination of Low Selectivity Coefficients by Numerical Simulation. <i>Analytical Chemistry</i> , 2014, 86, 8021-8024.	6.5	18
240	Thin Layer Samples Controlled by Dynamic Electrochemistry. <i>Chimia</i> , 2015, 69, 203.	0.6	18
241	Ion-Selective Optode Nanospheres as Heterogeneous Indicator Reagents in Complexometric Titrations. <i>Analytical Chemistry</i> , 2015, 87, 2827-2831.	6.5	18
242	Ion Transfer Voltammetry in Polyurethane Thin Films Based on Functionalised Cationic [6]Helicenes for Carbonate Detection. <i>Electroanalysis</i> , 2018, 30, 1378-1385.	2.9	18
243	Newly designed gel-integrated nanostructured gold-based interconnected microelectrode arrays for continuous in situ arsenite monitoring in aquatic systems. <i>Sensors and Actuators B: Chemical</i> , 2021, 328, 128996.	7.8	18
244	In Situ Voltammetric Sensor of Potentially Bioavailable Inorganic Mercury in Marine Aquatic Systems Based on Gel-Integrated Nanostructured Gold-Based Microelectrode Arrays. <i>ACS Sensors</i> , 2021, 6, 925-937.	7.8	18
245	Self-Powered Electrochromic Readout of Potentiometric pH Electrodes. <i>Analytical Chemistry</i> , 2021, 93, 4263-4269.	6.5	18
246	Potentiometric Determination of Effective Complex Formation Constants of Lipophilic Ion Carriers within Ion-Selective Electrode Membranes. <i>Journal of the Electrochemical Society</i> , 1997, 144, L125-L127.	2.9	17
247	Improving measurement stability and reproducibility of potentiometric sensors for polyions such as heparin. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 1999, 19, 163-173.	2.8	17
248	A low-cost thin layer coulometric microfluidic device based on an ion-selective membrane for calcium determination. <i>Analyst</i> , 2014, 139, 48-51.	3.5	17
249	Overcoming Pitfalls in Boundary Elements Calculations with Computer Simulations of Ion Selective Membrane Electrodes. <i>Analytical Chemistry</i> , 2017, 89, 7828-7831.	6.5	17
250	In-Line Seawater Phosphate Detection with Ion-Exchange Membrane Reagent Delivery. <i>ACS Sensors</i> , 2018, 3, 2455-2462.	7.8	17
251	Spectral Imaging and Electrochemical Study on the Response Mechanism of Ionophore-Based Polymeric Membrane Amperometric pH Sensors. <i>Electroanalysis</i> , 2003, 15, 1261-1269.	2.9	16
252	Absorbance characterization of microsphere-based ion-selective optodes. <i>Analytica Chimica Acta</i> , 2007, 596, 195-200.	5.4	16



#	ARTICLE	IF	CITATIONS
253	Advancing Membrane Electrodes and Optical Ion Sensors. <i>Chimia</i> , 2011, 65, 141.	0.6	16
254	Thin-layer Chemical Modulations by a Combined Selective Proton Pump and pH Probe for Direct Alkalinity Detection. <i>Angewandte Chemie</i> , 2015, 127, 8228-8231.	2.0	16
255	A tunable detection range of ion-selective nano-optodes by controlling solvatochromic dye transducer lipophilicity. <i>Chemical Communications</i> , 2019, 55, 12539-12542.	4.1	16
256	Self-Powered Potentiometric Sensor Transduction to a Capacitive Electronic Component for Later Readout. <i>ACS Sensors</i> , 2020, 5, 2909-2914.	7.8	16
257	Reversible detection of proteases and their inhibitors by a pulsed chronopotentiometric polyion-sensitive electrode. <i>Analytical Biochemistry</i> , 2008, 374, 366-370.	2.4	15
258	Phenytoin speciation with potentiometric and chronopotentiometric ion-selective membrane electrodes. <i>Biosensors and Bioelectronics</i> , 2016, 79, 114-120.	10.1	15
259	Surface-Deposited Polystyrene Microsensors Containing Lipophilic Solvatochromic Dye Transducers. <i>Chemistry - A European Journal</i> , 2018, 24, 7921-7925.	3.3	15
260	Kinetic Modulation of Pulsed Chronopotentiometric Polymeric Membrane Ion Sensors by Polyelectrolyte Multilayers. <i>Analytical Chemistry</i> , 2007, 79, 7154-7160.	6.5	14
261	From Molecular and Emulsified Ion Sensors to Membrane Electrodes: Molecular and Mechanistic Sensor Design. <i>Accounts of Chemical Research</i> , 2019, 52, 1400-1408.	15.6	14
262	Paper-supported thin-layer ion transfer voltammetry for ion detection. <i>Sensors and Actuators B: Chemical</i> , 2019, 280, 69-76.	7.8	14
263	Separating boundary potential changes at thin solid contact ion transfer voltammetric membrane electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2021, 880, 114800.	3.8	14
264	Electronic control of constant potential capacitive readout of ion-selective electrodes for high precision sensing. <i>Sensors and Actuators B: Chemical</i> , 2021, 344, 130282.	7.8	14
265	Polymeric Membrane pH Electrodes Based on Electrically Charged Ionophores. <i>Analytical Chemistry</i> , 1998, 70, 5252-5258.	6.5	13
266	How Do Pulsed Amperometric Ion Sensors Work? A Simple PDE Model. <i>SIAM Review</i> , 2003, 45, 327-344.	9.5	13
267	Sensitivity and Working Range of Backside Calibration Potentiometry. <i>Analytical Chemistry</i> , 2007, 79, 8705-8711.	6.5	13
268	Backside Calibration Chronopotentiometry: Using Current to Perform Ion Measurements by Zeroing the Transmembrane Ion Flux. <i>Analytical Chemistry</i> , 2008, 80, 7516-7523.	6.5	13
269	Real-time probing of the growth dynamics of nanoparticles using potentiometric ion-selective electrodes. <i>Electrochemistry Communications</i> , 2009, 11, 1964-1967.	4.7	13
270	Ionophore-based ion optodes without a reference ion: electrogenerated chemiluminescence for potentiometric sensors. <i>Analyst</i> , 2012, 137, 4988.	3.5	13



#	ARTICLE	IF	CITATIONS
271	Transport and accumulation of ferrocene tagged poly(vinyl chloride) at the buried interfaces of plasticized membrane electrodes. <i>Analyst</i> , 2013, 138, 4266.	3.5	13
272	Coulometric Calcium Pump for Thin Layer Sample Titrations. <i>Analytical Chemistry</i> , 2015, 87, 10125-10130.	6.5	13
273	Transportation and Accumulation of Redox Active Species at the Buried Interfaces of Plasticized Membrane Electrodes. <i>Langmuir</i> , 2015, 31, 10599-10609.	3.5	13
274	So, You Have a Great New Sensor. How Will You Validate It?. <i>ACS Sensors</i> , 2018, 3, 1431-1431.	7.8	13
275	Reversible electrochemical monitoring of surface confined reactions at liquid-liquid interfaces by modulation of ion transfer fluxes. <i>Chemical Communications</i> , 2005, , 3074.	4.1	12
276	Synthesis and characterization of high-integrity solid-contact polymeric ion sensors. <i>Journal of Solid State Electrochemistry</i> , 2009, 13, 137-148.	2.5	12
277	Alkalinization of Thin Layer Samples with a Selective Proton Sink Membrane Electrode for Detecting Carbonate by Carbonate-Selective Electrodes. <i>Analytical Chemistry</i> , 2016, 88, 3444-3448.	6.5	12
278	Lipophilic Ionic Sites for Solvent Polymeric Membrane pH Electrodes Based on 4,5-Dibromofluorescein Octadecylester as Electrically Charged Carrier. <i>Journal of the Electrochemical Society</i> , 1997, 144, L27-L28.	2.9	11
279	Operational Limits of Controlled Current Coulometry with Ion-Selective Polymeric Membranes. <i>Electroanalysis</i> , 2008, 20, 225-232.	2.9	11
280	Camping Burner-Based Flame Emission Spectrometer for Classroom Demonstrations. <i>Journal of Chemical Education</i> , 2014, 91, 1655-1660.	2.3	11
281	Self-Powered Potentiometric Sensors with Memory. <i>ACS Sensors</i> , 2021, 6, 3650-3656.	7.8	11
282	Advanced multichannel submersible probe for autonomous high-resolution in situ monitoring of the cycling of the potentially bioavailable fraction of a range of trace metals. <i>Chemosphere</i> , 2021, 282, 131014.	8.2	11
283	Protamine/heparin optical nanosensors based on solvatochromism. <i>Chemical Science</i> , 2021, 12, 15596-15602.	7.4	11
284	Thin layer coulometry ion sensing protocol with potassium-selective membrane electrodes. <i>Electrochimica Acta</i> , 2011, 56, 10359-10363.	5.2	10
285	GalvaPot, a custom-made combination galvanostat/potentiostat and high impedance potentiometer for decentralized measurements of ionophore-based electrodes. <i>Sensors and Actuators B: Chemical</i> , 2015, 207, 631-639.	7.8	10
286	Thin Layer Coulometry of Nitrite with Ion-Selective Membranes. <i>Electroanalysis</i> , 2015, 27, 609-615.	2.9	10
287	Antifouling membrane integrated renewable gold microelectrode for in situ detection of As( <sup>III</sup> ). <i>Analytical Methods</i> , 2015, 7, 7503-7510.	2.7	10
288	Direct Potentiometric Sensing of Anion Concentration (Not Activity). <i>ACS Sensors</i> , 2020, 5, 313-318.	7.8	10

#	ARTICLE	IF	CITATIONS
289	Ion-to-electron capacitance of single-walled carbon nanotube layers before and after ion-selective membrane deposition. <i>Mikrochimica Acta</i> , 2021, 188, 149.	5.0	10
290	Fluorescent Ion-Sensing Microspheres for Multiplexed Chemical Analysis of Clinical and Biological Samples. <i>Sensors Update</i> , 2003, 13, 83-104.	0.5	9
291	Electrogenerated chemiluminescence triggered by electroseparation of Ru(bpy) <sub>3</sub> <sup>2+</sup> across a supported liquid membrane. <i>Chemical Communications</i> , 2011, 47, 11644.	4.1	9
292	Pulsed chronopotentiometric membrane electrodes based on plasticized poly(vinyl chloride) with covalently bound ferrocene functionalities as solid contact transducer. <i>Pure and Applied Chemistry</i> , 2012, 84, 2045-2054.	1.9	9
293	Anion-Exchange Nanospheres as Titration Reagents for Anionic Analytes. <i>Analytical Chemistry</i> , 2015, 87, 8347-8352.	6.5	9
294	Ionic strength-independent potentiometric cation concentration sensing on paper using a tetrabutylammonium-based reference electrode. <i>Sensors and Actuators B: Chemical</i> , 2021, 346, 130527.	7.8	9
295	Solid-Contact Potentiometric Cell with Symmetry. <i>Analytical Chemistry</i> , 2022, 94, 612-617.	6.5	9
296	Characterization of Salophen Co(III) Acetate Ionophore for Nitrite Recognition. <i>Electrochimica Acta</i> , 2015, 179, 16-23.	5.2	8
297	Flow Chronopotentiometry with Ion-Selective Membranes for Cation, Anion, and Polyion Detection. <i>Analytical Chemistry</i> , 2016, 88, 3945-3952.	6.5	8
298	Spatial variability of arsenic speciation in the Gironde Estuary: Emphasis on dynamic (potentially) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 3	2.3	8
299	Colorimetric ratiometry with ion optodes for spatially resolved concentration analysis. <i>Analytica Chimica Acta</i> , 2021, 1154, 338225.	5.4	8
300	Surfactants for Optode Emulsion Stabilization without Sacrificing Selectivity or Binding Constants. <i>Analytical Chemistry</i> , 2021, 93, 15941-15948.	6.5	8
301	New trends in ion-selective electrodes. , 2008, , 71-114.		7
302	Potentiometric Sensors. <i>Nanostructure Science and Technology</i> , 2014, , 193-238.	0.1	7
303	Chronopotentiometry of pure electrolytes with anion-exchange donnan exclusion membranes. <i>Journal of Electroanalytical Chemistry</i> , 2014, 731, 100-106.	3.8	7
304	Counter electrode based on an ion-exchanger Donnan exclusion membrane for bioelectroanalysis. <i>Biosensors and Bioelectronics</i> , 2014, 61, 64-69.	10.1	7
305	Describing Ion Exchange at Membrane Electrodes for Ions of Different Charge. <i>Electroanalysis</i> , 2018, 30, 633-640.	2.9	7
306	Colorimetric ionophore-based coextraction titrimetry of potassium ions. <i>Analytica Chimica Acta</i> , 2018, 1029, 37-43.	5.4	7

#	ARTICLE	IF	CITATIONS
307	Recent improvements to the selectivity of extraction-based optical ion sensors. Chemical Communications, 2022, 58, 4279-4287.	4.1	7
308	Detecting Heparin in Whole Blood for Point of Care Anticoagulation Control During Surgery. Chimia, 2022, 67, 350.	0.6	6
309	Time-Dependent Determination of Unbiased Selectivity Coefficients of Ion-Selective Electrodes for Multivalent Ions. Analytical Chemistry, 2017, 89, 13441-13448.	6.5	6
310	A Solid-State Reference Electrode Based on a Self-Referencing Pulstrode. Angewandte Chemie, 2020, 132, 2314-2318.	2.0	6
311	Emulsion Doping of Ionophores and Ion-Exchangers into Ion-Selective Electrode Membranes. Analytical Chemistry, 2020, 92, 14319-14324.	6.5	6
312	Ion-ionophore interactions in polymeric membranes studied by thin layer voltammetry. Sensors and Actuators B: Chemical, 2022, 358, 131428.	7.8	6
313	Speciation of Cu, Cd, Pb and Zn in a contaminated harbor and comparison to environmental quality standards. Journal of Environmental Management, 2022, 317, 115375.	7.8	6
314	Direct Energy Transfer from a pH Glass Electrode to a Liquid Crystal Display. Analytical Chemistry, 2022, 94, 10408-10414.	6.5	6
315	Potassium Sensitive Optical Nanosensors Containing Voltage Sensitive Dyes. Chimia, 2015, 69, 196.	0.6	5
316	Ion-exchange Microemulsions for Eliminating Dilute Interferences in Potentiometric Determinations. Electroanalysis, 2018, 30, 2462-2466.	2.9	5
317	Advances in Potentiometry. Electroanalytical Chemistry, A Series of Advances, 2011, , 1-74.	1.7	5
318	Visible light induced photoacid generation within plasticized PVC membranes for copper (II) ion extraction. Sensors and Actuators B: Chemical, 2014, 204, 807-810.	7.8	4
319	A Miniature Wastewater Cleaning Plant to Demonstrate Primary Treatment in the Classroom. Journal of Chemical Education, 2015, 92, 1889-1891.	2.3	4
320	<title>Chemically selective optode membranes and optical detection modes</title>. , 1993, 1796, 371.		3
321	Palm-Based Data Acquisition Solutions for the Undergraduate Chemistry Laboratory. Journal of Chemical Education, 2003, 80, 1303.	2.3	3
322	Assessing ion-exchange properties and purity of lipophilic electrolytes by potentiometry and spectrophotometry. Electrochemistry Communications, 2010, 12, 110-113.	4.7	3
323	Potentiometric determination of coextraction constants of potassium salts in ion-selective electrodes utilizing a nitrobenzene liquid membrane phase. Analytica Chimica Acta, 2010, 683, 92-95.	5.4	3
324	Towards Ion-Selective Membranes with Electrogenated Chemiluminescence Detection: Visualizing Selective Ru(bpy) <sub>3</sub> <sup>2+</sup> Transport Across a Plasticized Poly(vinyl chloride) Membrane. Electroanalysis, 2012, 24, 61-68.	2.9	3

#	ARTICLE	IF	CITATIONS
325	Wearable Sensors – An Exciting Area of Research for Sensor Scientists. ACS Sensors, 2016, 1, 834-834.	7.8	3
326	Should There Be Minimum Information Reporting Standards for Sensors?. ACS Sensors, 2017, 2, 1377-1379.	7.8	3
327	Light-Addressable Ion Sensing for Real-Time Monitoring of Extracellular Potassium. Angewandte Chemie, 2018, 130, 17043-17047.	2.0	3
328	Ion-Selective Electrodes. , 2018, , 231-231.		3
329	Renewable magnetic ion-selective colorimetric microsensors based on surface modified polystyrene beads. Analytica Chimica Acta, 2020, 1094, 136-141.	5.4	3
330	Phosphate-Binding Characteristics and Selectivity Studies of Bifunctional Organotin Carriers. Helvetica Chimica Acta, 2001, 84, 1952.	1.6	3
331	Molecular recognition and chemical sensors. Talanta, 2004, 63, 1.	5.5	2
332	Recentes avanços e novas perspectivas dos eletrodos Ânion-seletivos. Quimica Nova, 2006, 29, 1094-1100.	0.3	2
333	Should ACS Sensors Publish Papers on Fluorescent Sensors for Metal Ions at All?. ACS Sensors, 2016, 1, 324-325.	7.8	2
334	Electron Hopping between Fe 3d States in Ethynylferrocene-doped Poly(Methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50,382 Td (M	2.9	2
335	Agarose hydrogel containing immobilized pH buffer microemulsion without increasing permselectivity. Talanta, 2018, 177, 191-196.	5.5	2
336	Hydrophobic Membranes as Liquid Junction-Free Reference Electrodes. Electroanalysis, 1999, 11, 788-792.	2.9	2
337	Dialysis membranes as liquid junction materials: Simplified model based on the phase boundary potential. Journal of Electroanalytical Chemistry, 2021, , 115886.	3.8	2
338	Ernst Pretsch, 65 Years. Electroanalysis, 2008, 20, 223-224.	2.9	1
339	Environmental Sensing of Aquatic Systems at the University of Geneva. Chimia, 2014, 68, 772-777.	0.6	1
340	An Exciting Year Ahead for ACS Sensors. ACS Sensors, 2018, 3, 1-2.	7.8	1
341	A Scientific Journey with Ionophore-based Sensors. Chimia, 2020, 74, 569-576.	0.6	1
342	Perspectives and Future Directions of the Division of Analytical Sciences of the Swiss Chemical Society. Chimia, 2021, 75, 455-456.	0.6	1

#	ARTICLE	IF	CITATIONS
343	Unbiased Selectivity Coefficients of Potentiometric Sensors Using Thin Membrane Layers. <i>Electroanalysis</i> , 2021, 33, 1225-1232.	2.9	1
344	Normal Pulse Voltammetry as Improved Quantitative Detection Mode for Amperometric Solvent Polymeric Membrane Ion Sensors. , 2000, 12, 1251.		1
345	Ion-selective Electrodes for Measurements in Biological Fluids. <i>ChemInform</i> , 2004, 35, no.	0.0	0
346	Advancing Schwarzenbach's Complexometry: Nano-scale Titration Reagents Based on Heterogeneous Reactions. <i>Chimia</i> , 2014, 68, 899.	0.6	0
347	Welcome to <i>ACS Sensors</i>. <i>ACS Sensors</i> , 2016, 1, 1-2.	7.8	0
348	What Should an <i>ACS Sensors</i> Paper Look Like?. <i>ACS Sensors</i> , 2016, 1, 102-103.	7.8	0
349	Welcome to the First Anniversary Issue of <i>ACS Sensors</i>. <i>ACS Sensors</i> , 2017, 2, 1-2.	7.8	0
350	Reflecting on How <i>ACS Sensors</i> Can Help Advance the Field of Sensing. <i>ACS Sensors</i> , 2017, 2, 455-456.	7.8	0
351	August 2017: Two Years of Submissions. <i>ACS Sensors</i> , 2017, 2, 1068-1069.	7.8	0
352	Celebrating Electrochemical Sensors at the 2017 Matrafured Meeting. <i>ACS Sensors</i> , 2017, 2, 854-854.	7.8	0
353	First Impact Factor for ACS Sensors “ 5.711. <i>ACS Sensors</i> , 2018, 3, 1218-1219.	7.8	0
354	An Ode to You”Reviewer for ACS Sensors. <i>ACS Sensors</i> , 2019, 4, 1964-1964.	7.8	0
355	Equipment-free Detection of K <sup>+</sup> on Paper. <i>Chimia</i> , 2019, 73, 944-944.	0.6	0
356	Triumph and Misery of Measurement Science. <i>ACS Sensors</i> , 2020, 5, 2264-2265.	7.8	0
357	Giants in Sensing: A Virtual Issue to Celebrate Five Years of ACS Sensors. <i>ACS Sensors</i> , 2020, 5, 1249-1250.	7.8	0
358	Happy 5th Anniversary for ACS Sensors. <i>ACS Sensors</i> , 2020, 5, 1-2.	7.8	0
359	Remembering NJ. <i>ACS Sensors</i> , 2020, 5, 887-888.	7.8	0
360	2021: A Year Starting Full of Hope. <i>ACS Sensors</i> , 2021, 6, 1-2.	7.8	0

#	ARTICLE	IF	CITATIONS
361	Let Us Aim to Develop Sensors, Not Electroanalytical Techniques: The Direct Detection of Dissolved Inorganic Carbon. ACS Sensors, 2021, 6, 2785-2786.	7.8	0
362	Ultra-Sensitive Measurement of Ocean pH. Chimia, 2022, 74, 1021.	0.6	0
363	Shifting the Measuring Range of Chloride Selective Electrodes and Optodes Based on the Anticrown Ionophore [9]Mercuracarborand-3 by the Addition of 1-Decanethiol. Chemia Analityczna, 2005, 50, 71-83.	0.0	0
364	Taking Earth's Pulse with Low-Cost Sensors. ACS Sensors, 2022, 7, 1613-1613.	7.8	0