Xiaojiang Xie

List of Publications by Year in descending order

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83 papers	2,206 citations	201385 27 h-index	253896 43 g-index
84 all docs	84 docs citations	84 times ranked	1752 citing authors

#	Article	IF	Citations
1	Photocurrent generation based on a light-driven proton pump in an artificial liquid membrane. Nature Chemistry, 2014, 6, 202-207.	6.6	153
2	Reversible Photodynamic Chloride-Selective Sensor Based on Photochromic Spiropyran. Journal of the American Chemical Society, 2012, 134, 16929-16932.	6.6	136
3	Ion selective optodes: from the bulk to the nanoscale. Analytical and Bioanalytical Chemistry, 2015, 407, 3899-3910.	1.9	125
4	A dual functional near infrared fluorescent probe based on the bodipy fluorophores for selective detection of copper and aluminum ions. Sensors and Actuators B: Chemical, 2011, 156, 213-217.	4.0	103
5	pH Independent Nano-Optode Sensors Based on Exhaustive Ion-Selective Nanospheres. Analytical Chemistry, 2014, 86, 2853-2856.	3.2	75
6	Ultrasmall Fluorescent Ion-Exchanging Nanospheres Containing Selective Ionophores. Analytical Chemistry, 2013, 85, 9932-9938.	3.2	68
7	Charged Solvatochromic Dyes as Signal Transducers in pH Independent Fluorescent and Colorimetric Ion Selective Nanosensors. Analytical Chemistry, 2015, 87, 9954-9959.	3.2	62
8	Ionophore-Based Ion-Selective Optical NanoSensors Operating in Exhaustive Sensing Mode. Analytical Chemistry, 2014, 86, 8770-8775.	3.2	53
9	Naphthocage: A Flexible yet Extremely Strong Binder for Singly Charged Organic Cations. Journal of the American Chemical Society, 2019, 141, 4468-4473.	6.6	53
10	Non-Severinghaus Potentiometric Dissolved CO₂ Sensor with Improved Characteristics. Analytical Chemistry, 2013, 85, 1332-1336.	3.2	49
11	Direct Optical Carbon Dioxide Sensing Based on a Polymeric Film Doped with a Selective Molecular Tweezer-Type Ionophore. Analytical Chemistry, 2012, 84, 3163-3169.	3.2	47
12	Hydrogel-Based Optical Ion Sensors: Principles and Challenges for Point-of-Care Testing and Environmental Monitoring. ACS Sensors, 2021, 6, 1990-2001.	4.0	47
13	Ion-Selective Optical Nanosensors Based on Solvatochromic Dyes of Different Lipophilicity: From Bulk Partitioning to Interfacial Accumulation. ACS Sensors, 2016, 1, 516-520.	4.0	46
14	Non-Equilibrium Diffusion Controlled Ion-Selective Optical Sensor for Blood Potassium Determination. ACS Sensors, 2017, 2, 1410-1414.	4.0	43
15	Resonant out-of-phase fluorescence microscopy and remote imaging overcome spectral limitations. Nature Communications, 2017, 8, 969.	5.8	41
16	A Plasticizer-Free Miniaturized Optical Ion Sensing Platform with Ionophores and Silicon-Based Particles. Analytical Chemistry, 2018, 90, 5818-5824.	3.2	38
17	Graphene Quantum Dots Integrated in Ionophore-Based Fluorescent Nanosensors for Na⁺ and K⁺. ACS Sensors, 2018, 3, 2408-2414.	4.0	38
18	Potentiometric Response from Ion-Selective Nanospheres with Voltage-Sensitive Dyes. Journal of the American Chemical Society, 2014, 136, 16465-16468.	6.6	36

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19	Photoresponsive Ion Extraction/Release Systems: Dynamic Ion Optodes for Calcium and Sodium Based on Photochromic Spiropyran. Analytical Chemistry, 2013, 85, 2983-2990.	3.2	34
20	Potassium-selective optical microsensors based on surface modified polystyrene microspheres. Chemical Communications, 2014, 50, 4592-4595.	2.2	32
21	Electrogenerated Chemiluminescence for Chronopotentiometric Sensors. Analytical Chemistry, 2019, 91, 4889-4895.	3.2	32
22	Photodynamic ion sensor systems with spiropyran: photoactivated acidity changes in plasticized poly(vinyl chloride). Chemical Communications, 2012, 48, 5662.	2.2	31
23	A rapid point-of-care optical ion sensing platform based on target-induced dye release from smart hydrogels. Chemical Communications, 2019, 55, 1774-1777.	2.2	31
24	Ion-Selective optodes: Alternative approaches for simplified fabrication and signaling. Sensors and Actuators B: Chemical, 2021, 335, 129368.	4.0	31
25	Chronopotentiometric Carbonate Detection with All-Solid-State Ionophore-Based Electrodes. Analytical Chemistry, 2014, 86, 6307-6314.	3.2	30
26	Determination of pK_a Values of Hydrophobic Colorimetric pH Sensitive Probes in Nanospheres. Analytical Chemistry, 2016, 88, 3015-3018.	3.2	30
27	Photoelectric Conversion Based on Proton-Coupled Electron Transfer Reactions. Journal of the American Chemical Society, 2014, 136, 7857-7860.	6.6	28
28	Light-Controlled Reversible Release and Uptake of Potassium Ions from Ion-Exchanging Nanospheres. ACS Applied Materials & Interfaces, 2014, 6, 2666-2670.	4.0	28
29	Rapid Equilibrated Colorimetric Detection of Protamine and Heparin: Recognition at the Nanoscale Liquidâ€“Liquid Interface. Analytical Chemistry, 2019, 91, 10390-10394.	3.2	28
30	Oxazinoindolines as Fluorescent H⁺ Turn-On Chromoionophores For Optical and Electrochemical Ion Sensors. Analytical Chemistry, 2013, 85, 7434-7440.	3.2	26
31	Creating electrochemical gradients by light: from bio-inspired concepts to photoelectric conversion. Physical Chemistry Chemical Physics, 2014, 16, 19781-19789.	1.3	25
32	Reversible pH-independent optical potassium sensor with lipophilic solvatochromic dye transducer on surface modified microporous nylon. Chemical Communications, 2016, 52, 14254-14257.	2.2	25
33	Ionophore-Based Titrimetric Detection of Alkali Metal Ions in Serum. ACS Sensors, 2017, 2, 606-612.	4.0	25
34	Direct Alkalinity Detection with Ion-Selective Chronopotentiometry. Analytical Chemistry, 2014, 86, 6461-6470.	3.2	24
35	Determination of Effective Stability Constants of Ion-Carrier Complexes in Ion Selective Nanospheres with Charged Solvatochromic Dyes. Analytical Chemistry, 2015, 87, 11587-11591.	3.2	24
36	A Solidâ€State Reference Electrode Based on a Selfâ€Referencing Pulstrode. Angewandte Chemie - International Edition, 2020, 59, 2294-2298.	7.2	24

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37	Distance-based detection of calcium ions with hydrogels entrapping exhaustive ion-selective nanoparticles. Sensors and Actuators B: Chemical, 2020, 319, 128300.	4.0	24
38	Rhodamine-based ratiometric fluorescent ion-selective bulk optodes. Sensors and Actuators B: Chemical, 2010, 151, 71-76.	4.0	22
39	Ionophore-based ion-exchange emulsions as novel class of complexometric titration reagents. Chemical Communications, 2014, 50, 12659-12661.	2.2	22
40	Simplified Fabrication for Ion-Selective Optical Emulsion Sensor with Hydrophobic Solvatochromic Dye Transducer: A Cautionary Tale. Analytical Chemistry, 2019, 91, 8973-8978.	3.2	22
41	Distance and Color Change Based Hydrogel Sensor for Visual Quantitative Determination of Buffer Concentrations. ACS Sensors, 2019, 4, 1017-1022.	4.0	22
42	Electrochemical-to-Optical Signal Transduction for Ion-Selective Electrodes with Light-Emitting Diodes. Analytical Chemistry, 2018, 90, 12791-12795.	3.2	21
43	Solvatochromic Dyes as pH-Independent Indicators for Ionophore Nanosphere-Based Complexometric Titrations. Analytical Chemistry, 2015, 87, 12318-12323.	3.2	20
44	Potentiometric determination of the neurotransmitter acetylcholine with ion-selective electrodes containing oxatub[4]arenes as the ionophore. Sensors and Actuators B: Chemical, 2021, 326, 128836.	4.0	20
45	Ionophore-Based Ion-Selective Nanosensors from Brush Block Copolymer Nanodots. ACS Applied Nano Materials, 2020, 3, 782-788.	2.4	19
46	Ion-Selective Optode Nanospheres as Heterogeneous Indicator Reagents in Complexometric Titrations. Analytical Chemistry, 2015, 87, 2827-2831.	3.2	18
47	Chemiluminescent Ion Sensing Platform Based on Ionophores. Analytical Chemistry, 2019, 91, 8638-8643.	3.2	18
48	Advancing Membrane Electrodes and Optical Ion Sensors. Chimia, 2011, 65, 141.	0.3	16
49	Ionophore-based pH independent detection of ions utilizing aggregation-induced effects. Analyst, The, 2020, 145, 3846-3850.	1.7	16
50	Surfaceâ€Doped Polystyrene Microsensors Containing Lipophilic Solvatochromic Dye Transducers. Chemistry - A European Journal, 2018, 24, 7921-7925.	1.7	15
51	Ionophore-Based Ion-Selective Nanospheres Based on Monomerâ€“Dimer Conversion in the Near-Infrared Region. ACS Sensors, 2021, 6, 1279-1285.	4.0	15
52	Ionophore-based ion-selective electrodes: signal transduction and amplification from potentiometry. Sensors & Diagnostics, 2022, 1, 213-221.	1.9	15
53	Rhodamine dye transfer from hydrogel to nanospheres for the chemical detection of potassium ions. Analyst, The, 2019, 144, 5617-5623.	1.7	14
54	Thermochromic Ion-Exchange Micelles Containing H+ Chromoionophores. Langmuir, 2017, 33, 5910-5914.	1.6	12

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55	Exploring ratiometric endolysosomal pH nanosensors with hydrophobic indicators responding at the nanoscale interface and multiple fluorescence resonance energy transfers. Nano Research, 2022, 15, 3471-3478.	5.8	11
56	Photoswitch-Based Fluorescence Encoding of Microspheres in a Limited Spectral Window for Multiplexed Detection. Analytical Chemistry, 2022, 94, 1531-1536.	3.2	11
57	Renovating the chromoionophores and detection modes in carrier-based ion-selective optical sensors. Analytical and Bioanalytical Chemistry, 2016, 408, 2717-2725.	1.9	10
58	Direct Potentiometric Sensing of Anion Concentration (Not Activity). ACS Sensors, 2020, 5, 313-318.	4.0	10
59	Anion-Exchange Nanospheres as Titration Reagents for Anionic Analytes. Analytical Chemistry, 2015, 87, 8347-8352.	3.2	9
60	Ionophoreâ€based Heterogeneous Calcium Optical Titration. Electroanalysis, 2018, 30, 705-709.	1.5	9
61	Wash-Free Detection of Nucleic Acids with Photoswitch-Mediated Fluorescence Resonance Energy Transfer against Optical Background Interference. Analytical Chemistry, 2021, 93, 8128-8133.	3.2	9
62	The Hofmeister Anion Effect on Ionophoreâ€based Ionâ€selective Nanospheres Containing Solvatochromic Dyes. Electroanalysis, 2020, 32, 749-754.	1.5	8
63	Enhanced Sulfite-Selective Sensing and Cell Imaging with Fluorescent Nanoreactors Containing a Ratiometric Lipid Peroxidation Sensor. Analytical Chemistry, 2021, 93, 11758-11764.	3.2	8
64	Effects of Warm Laser Peening on Thermal Stability and High Temperature Mechanical Properties of A356 Alloy. Metals, 2016, 6, 126.	1.0	6
65	Colorimetric Calcium Probe with Comparison to an Ion-Selective Optode. ACS Omega, 2018, 3, 12476-12481.	1.6	6
66	A Solidâ€State Reference Electrode Based on a Selfâ€Referencing Pulstrode. Angewandte Chemie, 2020, 132, 2314-2318.	1.6	6
67	Fluorescence Anisotropy as a Self-Referencing Readout for Ion-Selective Sensing and Imaging Using Homo-FRET between Chromoionophores. Analytical Chemistry, 2022, 94, 9793-9800.	3.2	6
68	Potassium Sensitive Optical Nanosensors Containing Voltage Sensitive Dyes. Chimia, 2015, 69, 196.	0.3	5
69	Dual functional luminescent nanoprobes for monitoring oxygen and chloride concentration changes in cells. Chemical Communications, 2020, 56, 14980-14983.	2.2	5
70	Colorimetric and fluorescent turn-on detection of chloride ions with ionophore and BODIPY: Evaluation with nanospheres and cellulose paper. Analytica Chimica Acta, 2021, 1175, 338752.	2.6	5
71	Recent advance in dual-functional luminescent probes for reactive species and common biological ions. Analytical and Bioanalytical Chemistry, 2022, 414, 5087-5103.	1.9	5
72	Visible light induced photoacid generation within plasticized PVC membranes for copper (II) ion extraction. Sensors and Actuators B: Chemical, 2014, 204, 807-810.	4.0	4

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73	Ruthenium bipyridine complexes as electrochemiluminescent transducers for ionophore-based ion-selective detection. Analyst, The, 2021, 146, 6955-6959.	1.7	4
74	Phase transfer of fatty acids into ultrasmall nanospheres for colorimetric detection of lipase and albumin. Chemical Communications, 2022, , .	2.2	4
75	Perspective on fluorescence cell imaging with ionophore-based ion-selective nano-optodes. Biomicrofluidics, 2022, 16, .	1.2	3
76	Agarose hydrogel containing immobilized pH buffer microemulsion without increasing permselectivity. Talanta, 2018, 177, 191-196.	2.9	2
77	<scp>Singleâ€Component</scp> Chemical Nose with a Hemicyanine Probe for <scp>Patternâ€Based</scp> Discrimination of Metal Ions^{â€}. Chinese Journal of Chemistry, 2021, 39, 1517-1522.	2.6	2
78	Environmental Sensing of Aquatic Systems at the University of Geneva. Chimia, 2014, 68, 772-777.	0.3	1
79	Editorial: Chemical Sensors for Biomedical Use. Frontiers in Chemistry, 2021, 9, 685563.	1.8	1
80	Ionophore-Based Potassium Selective Fluorescent Organosilica Nano-Optodes Containing Covalently Attached Solvatochromic Dyes. Chemosensors, 2022, 10, 23.	1.8	1
81	One-Pot Synthesized Organosilica Nanospheres for Multiplexed Fluorescent Nanobarcoding and Subcellular Tracking. Nanoscale, 2022, , .	2.8	1
82	Advancing Schwarzenbach's Complexometry: Nano-scale Titration Reagents Based on Heterogeneous Reactions. Chimia, 2014, 68, 899.	0.3	0
83	Expanding benzothiadiazole-tetrazole photo-triggered click reaction with chloride ion into reaction-based chloride ion receptor. Dyes and Pigments, 2021, 191, 109345.	2.0	0