Maria Cuartero

List of Publications by Year
in descending order

87 papers	2,913 citations	147801 31 h-index	189892 50 g-index
88 all docs	88 docs citations	88 times ranked	2584 citing authors

#	Article	IF	Citations
1	Addressing the Detection of Ammonium Ion in Environmental Water Samples via Tandem Potentiometryâ€“Ion Chromatography. ACS Measurement Science Au, 2022, 2, 199-207.	4.4	3
2	Selective Ion Capturing via Carbon Nanotubes Charging. Analytical Chemistry, 2022, , .	6.5	1
3	Spectroelectrochemistry with Ultrathin Ion-Selective Membranes: Three Distinct Ranges for Analytical Sensing. Analytical Chemistry, 2022, 94, 9140-9148.	6.5	2
4	Ultrathin ion-selective membranes for trace detection of lead, copper and silver ions. Electrochimica Acta, 2022, 427, 140870.	5.2	3
5	Microneedle based electrochemical (Bio)Sensing: Towards decentralized and continuous health status monitoring. TrAC - Trends in Analytical Chemistry, 2021, 135, 116148.	11.4	54
6	Capturing the Real-Time Hydrolytic Degradation of a Library of Biomedical Polymers by Combining Traditional Assessment and Electrochemical Sensors. Biomacromolecules, 2021, 22, 949-960.	5.4	10
7	Toward In Vivo Transdermal pH Sensing with a Validated Microneedle Membrane Electrode. ACS Sensors, 2021, 6, 1129-1137.	7.8	43
8	Electrochemical detection of trace silver. Electrochimica Acta, 2021, 374, 137929.	5.2	19
9	Anodic Stripping Voltammetry with the Hanging Mercury Drop Electrode for Trace Metal Detection in Soil Samples. Chemosensors, 2021, 9, 107.	3.6	9
10	Electrochemical sensors for in-situ measurement of ions in seawater. Sensors and Actuators B: Chemical, 2021, 334, 129635.	7.8	31
11	Electrochemical biosensor for glycine detection in biological fluids. Biosensors and Bioelectronics, 2021, 182, 113154.	10.1	20
12	Lactate Biosensing for Reliable On-Body Sweat Analysis. ACS Sensors, 2021, 6, 2763-2771.	7.8	98
13	Semi-empirical treatment of ionophore-assisted ion-transfers in ultrathin membranes coupled to a redox conducting polymer. Electrochimica Acta, 2021, 388, 138634.	5.2	6
14	Can Wearable Sweat Lactate Sensors Contribute to Sports Physiology?. ACS Sensors, 2021, 6, 3496-3508.	7.8	45
15	Reagentless Acidâ€“Base Titration for Alkalinity Detection in Seawater. Analytical Chemistry, 2021, 93, 14130-14137.	6.5	10
16	Potentiometric pH Nanosensor for Intracellular Measurements: Real-Time and Continuous Assessment of Local Gradients. Analytical Chemistry, 2021, 93, 15744-15751.	6.5	13
17	Modelling electrochemical modulation of ion release in thin-layer samples. Journal of Electroanalytical Chemistry, 2021, 903, 115851.	3.8	3
18	Molybdenum and boron synergistically boosting efficient electrochemical nitrogen fixation. Nano Energy, 2020, 78, 105391.	16.0	21

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19	Why Not Glycine Electrochemical Biosensors?. Sensors, 2020, 20, 4049.	3.8	9
20	Spectroelectrochemical Evidence of Interconnected Charge and Ion Transfer in Ultrathin Membranes Modulated by a Redox Conducting Polymer. Analytical Chemistry, 2020, 92, 14085-14093.	6.5	7
21	Magnetizing lead-free halide double perovskites. Science Advances, 2020, 6, .	10.3	56
22	A sustainable amperometric biosensor for the analysis of ascorbic, benzoic, gallic and kojic acids through catechol detection. Innovation and signal processing. Analyst, The, 2020, 145, 3645-3655.	3.5	8
23	Selective electrochemical hydrogen evolution on cerium oxide protected catalyst surfaces. Electrochimica Acta, 2020, 341, 136022.	5.2	13
24	Epidermal Patch with Glucose Biosensor: pH and Temperature Correction toward More Accurate Sweat Analysis during Sport Practice. Analytical Chemistry, 2020, 92, 10153-10161.	6.5	116
25	Subnanomolar detection of ions using thin voltammetric membranes with reduced Exchange capacity. Sensors and Actuators B: Chemical, 2020, 321, 128453.	7.8	13
26	Thin-Layer Potentiometry for Creatinine Detection in Undiluted Human Urine Using Ion-Exchange Membranes as Barriers for Charged Interferences. Analytical Chemistry, 2020, 92, 3315-3323.	6.5	22
27	Why ammonium detection is particularly challenging but insightful with ionophore-based potentiometric sensors â€“ an overview of the progress in the last 20 years. Analyst, The, 2020, 145, 3188-3210.	3.5	39
28	Lowering the limit of detection of ion-selective membranes backside contacted with a film of poly(3-octylthiophene). Sensors and Actuators B: Chemical, 2019, 297, 126781.	7.8	17
29	Efficient BiVO₄ Photoanodes by Postsynthetic Treatment: Remarkable Improvements in Photoelectrochemical Performance from Facile Borate Modification. Angewandte Chemie - International Edition, 2019, 58, 19027-19033.	13.8	108
30	Polyaniline Films as Electrochemical-Proton Pump for Acidification of Thin Layer Samples. Analytical Chemistry, 2019, 91, 14951-14959.	6.5	18
31	Efficient BiVO₄ Photoanodes by Postsynthetic Treatment: Remarkable Improvements in Photoelectrochemical Performance from Facile Borate Modification. Angewandte Chemie, 2019, 131, 19203-19209.	2.0	35
32	Cytotoxicity Study of Ionophore-Based Membranes: Toward On-Body and in Vivo Ion Sensing. ACS Sensors, 2019, 4, 2524-2535.	7.8	35
33	Modern creatinine (Bio)sensing: Challenges of point-of-care platforms. Biosensors and Bioelectronics, 2019, 130, 110-124.	10.1	74
34	Wearable Potentiometric Sensors for Medical Applications. Sensors, 2019, 19, 363.	3.8	100
35	Selective Hydrogen Evolution on Manganese Oxide Coated Electrodes: New Cathodes for Sodium Chlorate Production. ACS Sustainable Chemistry and Engineering, 2019, 7, 12170-12178.	6.7	12
36	Ferrocene self assembled monolayer as a redox mediator for triggering ion transfer across nanometer-sized membranes. Electrochimica Acta, 2019, 315, 84-93.	5.2	26

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37	Wearable Potentiometric Ion Patch for On-Body Electrolyte Monitoring in Sweat: Toward a Validation Strategy to Ensure Physiological Relevance. Analytical Chemistry, 2019, 91, 8644-8651.	6.5	93
38	Wearable All-Solid-State Potentiometric Microneedle Patch for Intradermal Potassium Detection. Analytical Chemistry, 2019, 91, 1578-1586.	6.5	116
39	Wearable potentiometric ion sensors. TrAC - Trends in Analytical Chemistry, 2019, 110, 303-320.	11.4	211
40	In Situ Detection of Macronutrients and Chloride in Seawater by Submersible Electrochemical Sensors. Analytical Chemistry, 2018, 90, 4702-4710.	6.5	59
41	All-solid-state potentiometric sensors: A new wave for in situ aquatic research. Current Opinion in Electrochemistry, 2018, 10, 98-106.	4.8	101
42	Comparative enzymatic studies using ion-selective electrodes. The case of cholinesterases. Talanta, 2018, 180, 316-322.	5.5	9
43	Fluorinated tripodal receptors for potentiometric chloride detection in biological fluids. Biosensors and Bioelectronics, 2018, 99, 70-76.	10.1	29
44	Electron Hopping between Fe 3â€‰d States in Ethynylferroceneâ€doped Poly(Methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (M	2.9	2
45	Lightâ€Addressable Ion Sensing for Realâ€Time Monitoring of Extracellular Potassium. Angewandte Chemie, 2018, 130, 17043-17047.	2.0	3
46	Lightâ€Addressable Ion Sensing for Realâ€Time Monitoring of Extracellular Potassium. Angewandte Chemie - International Edition, 2018, 57, 16801-16805.	13.8	31
47	Using Potentiometric Electrodes Based on Nonselective Polymeric Membranes as Potential Universal Detectors for Ion Chromatography: Investigating an Original Research Problem from an Inquiry-Based-Learning Perspective. Journal of Chemical Education, 2018, 95, 2172-2181.	2.3	7
48	In-Line Seawater Phosphate Detection with Ion-Exchange Membrane Reagent Delivery. ACS Sensors, 2018, 3, 2455-2462.	7.8	17
49	Colorimetric Readout for Potentiometric Sensors with Closed Bipolar Electrodes. Analytical Chemistry, 2018, 90, 6376-6379.	6.5	41
50	Electrochemical Mechanism of Ferrocene-Based Redox Molecules in Thin Film Membrane Electrodes. Electrochimica Acta, 2017, 238, 357-367.	5.2	36
51	Multianalyte detection using potentiometric ionophore-based ion-selective electrodes. Sensors and Actuators B: Chemical, 2017, 243, 144-151.	7.8	10
52	Voltammetric Thin-Layer Ionophore-Based Films: Part 2. Semi-Empirical Treatment. Analytical Chemistry, 2017, 89, 595-602.	6.5	19
53	In-Line Acidification for Potentiometric Sensing of Nitrite in Natural Waters. Analytical Chemistry, 2017, 89, 571-575.	6.5	39
54	Voltammetric Thin-Layer Ionophore-Based Films: Part 1. Experimental Evidence and Numerical Simulations. Analytical Chemistry, 2017, 89, 586-594.	6.5	39

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55	In Situ Detection of Species Relevant to the Carbon Cycle in Seawater with Submersible Potentiometric Probes. Environmental Science and Technology Letters, 2017, 4, 410-415.	8.7	59
56	Electrochemical ion transfer mediated by a lipophilic Os(<scp>ii</scp>)/Os(<scp>iii</scp>) dinonyl bipyridyl probe incorporated in thin film membranes. Chemical Communications, 2017, 53, 10757-10760.	4.1	19
57	Environmental water analysis with membrane electrodes. Current Opinion in Electrochemistry, 2017, 3, 97-105.	4.8	36
58	Terminal carbohydrates abundance, immune related enzymes, bactericidal activity and physico-chemical parameters of the Senegalese sole (Solea senegalensis, Kaup) skin mucus. Fish and Shellfish Immunology, 2017, 60, 483-491.	3.6	32
59	Evidence of double layer/capacitive charging in carbon nanomaterial-based solid contact polymeric ion-selective electrodes. Chemical Communications, 2016, 52, 9703-9706.	4.1	33
60	Polyurethane Ionophore-Based Thin Layer Membranes for Voltammetric Ion Activity Sensing. Analytical Chemistry, 2016, 88, 5649-5654.	6.5	53
61	Electrochemical Ion Transfer with Thin Films of Poly(3-octylthiophene). Analytical Chemistry, 2016, 88, 6939-6946.	6.5	27
62	Ionophore-Based Voltammetric Ion Activity Sensing with Thin Layer Membranes. Analytical Chemistry, 2016, 88, 1654-1660.	6.5	57
63	Description and comparative study of physico-chemical parameters of the teleost fish skin mucus. Biorheology, 2015, 52, 247-256.	0.4	20
64	Thin Layer Samples Controlled by Dynamic Electrochemistry. Chimia, 2015, 69, 203.	0.6	18
65	Paper-Based Thin-Layer Coulometric Sensor for Halide Determination. Analytical Chemistry, 2015, 87, 1981-1990.	6.5	82
66	Tandem Electrochemical Desalinationâ€“Potentiometric Nitrate Sensing for Seawater Analysis. Analytical Chemistry, 2015, 87, 8084-8089.	6.5	47
67	Thin Layer Ionophore-Based Membrane for Multianalyte Ion Activity Detection. Analytical Chemistry, 2015, 87, 7729-7737.	6.5	78
68	New Potentiometric Electronic Tongue for Analysing Teas and Infusions. Electroanalysis, 2015, 27, 782-788.	2.9	14
69	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
70	Binding studies and anion-selective electrodes with neutral isophthalamide-based receptors. Analyst, The, 2015, 140, 287-294.	3.5	3
71	Environmental Sensing of Aquatic Systems at the University of Geneva. Chimia, 2014, 68, 772-777.	0.6	1
72	Exhaustive Thin-Layer Cyclic Voltammetry for Absolute Multianalyte Halide Detection. Analytical Chemistry, 2014, 86, 11387-11395.	6.5	31

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73	Ion-selective electrodes for the determination of l-carnitine. Application in dissolution testing of a dietary supplement. Monatshefte FÃ¼r Chemie, 2014, 145, 1879-1885.	1.8	4
74	New carbazolo[1,2-a]carbazole derivative as ionophore for anion-selective electrodes: Remarkable recognition towards dicarboxylate anions. Talanta, 2014, 123, 200-206.	5.5	11
75	Rubber-based substrates modified with carbon nanotubes inks to build flexible electrochemical sensors. Analytica Chimica Acta, 2014, 827, 95-102.	5.4	33
76	Differential dynamic potentiometric responses obtained with anion-selective electrodes for perchlorate, thiocyanate, iodide, nitrate, sulfate, picrate and bis(trifluoromethylsulfonyl) imide. Electrochimica Acta, 2013, 93, 272-278.	5.2	8
77	A SO2-selective electrode based on a Zn-porphyrin for wine analysis. Analytica Chimica Acta, 2013, 787, 57-63.	5.4	10
78	New approach for the potentiometric-enzymatic assay of reversible-competitive enzyme inhibitors. Application to acetylcholinesterase inhibitor galantamine and its determination in pharmaceuticals and human urine. Talanta, 2013, 110, 8-14.	5.5	15
79	Assay of acetylcholinesterase activity by potentiometric monitoring of acetylcholine. Analytical Biochemistry, 2012, 421, 208-212.	2.4	32
80	Differential dynamic potentiometry with ion selective electrodes: A tool for drug fingerprinting. Electrochimica Acta, 2012, 69, 152-159.	5.2	8
81	Benzodipyrrole derivates as new ionophores for anion-selective electrodes: Improving potentiometric selectivity towards divalent anions. Talanta, 2011, 85, 1876-1881.	5.5	20
82	Voltammetric behaviour and square-wave voltammetric determination of the potent antioxidant and anticarcinogenic agent ellagic acid in foodstuffs. Food Chemistry, 2011, 128, 549-554.	8.2	24
83	Use of a New Ziprasidone-Selective Electrode in Mixed Solvents and Its Application in the Analysis of Pharmaceuticals and Biological Fluids. Sensors, 2011, 11, 8813-8825.	3.8	5
84	Response of an ion-selective electrode to butylmethylimidazolium and other ionic liquid cations. Applications in toxicological and bioremediation studies. Electrochimica Acta, 2010, 55, 5598-5603.	5.2	11
85	Novel flow-through bulk optode for spectrophotometric determination of lithium in pharmaceuticals and saliva. Sensors and Actuators B: Chemical, 2010, 145, 133-138.	7.8	18
86	Application of a trazodone-selective electrode to pharmaceutical quality control and urine analyses. Analytical and Bioanalytical Chemistry, 2009, 394, 1563-1567.	3.7	10
87	A Micro-Coated Wire Ion-Selective Electrode for Flow-Injection Analysis of Trazodone in Pharmaceuticals, Human Urine and Serum. Sensor Letters, 2009, 7, 615-620.	0.4	3