Rebecca Lai

List of Publications by Year
in descending order

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60	4,027	147566	128067
papers	citations	31	60
		h-index	g-index

60	60	60	3864
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evidence for surface effects on the intermolecular interactions in Fe(<scp>ii</scp>) spin crossover coordination polymers. Physical Chemistry Chemical Physics, 2022, 24, 883-894.	1.3	11
2	Evidence for long drift carrier lifetimes in [Fe(Htrz)2(trz)](BF4) plus polyaniline composites. Organic Electronics, 2022, 105, 106516.	1.4	6
3	Multiplexed Monitoring of Neurochemicals via Electrografting-Enabled Site-Selective Functionalization of Aptamers on Field-Effect Transistors. Analytical Chemistry, 2022, 94, 8605-8617.	3.2	21
4	Laser vibrational excitation of radicals to prevent crystallinity degradation caused by boron doping in diamond. Science Advances, 2021, 7, .	4.7	6
5	Engineering uranyl-chelating peptides from NikR for electrochemical peptide-based sensing applications. Journal of Electroanalytical Chemistry, 2020, 858, 113698.	1.9	6
6	Waste to wealth translation of e-waste to plasmonic nanostructures for surface-enhanced Raman scattering. Applied Nanoscience (Switzerland), 2020, 10, 1615-1623.	1.6	11
7	Progress in the materials for optical detection of arsenic in water. TrAC - Trends in Analytical Chemistry, 2019, 110, 97-115.	5.8	47
8	Electrochemical aptamer-based sensors for food and water analysis: AÂreview. Analytica Chimica Acta, 2019, 1051, 1-23.	2.6	188
9	A reagentless and reusable electrochemical aptamer-based sensor for rapid detection of ampicillin in complex samples. Talanta, 2018, 176, 619-624.	2.9	85
10	Towards the development of a sensitive and selective electrochemical aptamer-based ampicillin sensor. Sensors and Actuators B: Chemical, 2018, 258, 722-729.	4.0	52
11	Application of Calcium-Binding Motif of E-Cadherin for Electrochemical Detection of Pb(II). Analytical Chemistry, 2018, 90, 6519-6525.	3.2	21
12	Effects of redox label location on the performance of an electrochemical aptamer-based tumor necrosis factor-alpha sensor. Talanta, 2018, 189, 585-591.	2.9	23
13	Electrochemiluminescence Detection in Paperâ€Based and Other Inexpensive Microfluidic Devices. ChemElectroChem, 2017, 4, 1594-1603.	1.7	32
14	Iron(III)â€mediated Electrochemical Detection of Levofloxacin in Complex Biological Samples. Electroanalysis, 2017, 29, 2672-2677.	1.5	9
15	A reagentless and reusable electrochemical aptamer-based sensor for rapid detection of Cd(II). Journal of Electroanalytical Chemistry, 2017, 803, 89-94.	1.9	65
16	Effects of DNA Probe Length on the Performance of a Dynamicsâ€based Electrochemical Hg(II) Sensor. Electroanalysis, 2017, 29, 2239-2245.	1.5	6
17	Tunable Signal-Off and Signal-On Electrochemical Cisplatin Sensor. Analytical Chemistry, 2017, 89, 9984-9989.	3.2	24
18	Hexavalent Chromium as an Electrocatalyst in DNA Sensing. Analytical Chemistry, 2017, 89, 13342-13348.	3.2	7

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19	Folding- and Dynamics-Based Electrochemical DNA Sensors. Methods in Enzymology, 2017, 589, 221-252.	0.4	7
20	Solution-stable anisotropic carbon nanotube/graphene hybrids based on slanted columnar thin films for chemical sensing. RSC Advances, 2016, 6, 63235-63240.	1.7	3
21	A reagentless DNAâ€based electrochemical silver(I) sensor for real time detection of Ag(I) â€“ the effect of probe sequence and orientation on sensor response. Biotechnology Journal, 2016, 11, 788-796.	1.8	26
22	Electrochemical Gold(III) Sensor with High Sensitivity and Tunable Dynamic Range. Analytical Chemistry, 2016, 88, 2227-2233.	3.2	31
23	Scanning Electrochemical and Fluorescence Microscopy for Detection of Reactive Oxygen Species in Living Cells. ACS Symposium Series, 2015, , 415-430.	0.5	3
24	Methylene Blue-Mediated Electrocatalytic Detection of Hexavalent Chromium. Analytical Chemistry, 2015, 87, 2560-2564.	3.2	81
25	Comparison of Mannose, Ethylene Glycol, and Methoxy-Terminated Diluents on Specificity and Selectivity of Electrochemical Peptide-Based Sensors. Analytical Chemistry, 2015, 87, 6966-6973.	3.2	14
26	Comparison of nanostructured silver-modified silver and carbon ultramicroelectrodes for electrochemical detection of nitrate. Analytica Chimica Acta, 2015, 892, 153-159.	2.6	35
27	Electrochemical Detection of Platinum(IV) Prodrug Satraplatin in Serum. Analytical Chemistry, 2015, 87, 11092-11097.	3.2	15
28	Incorporation of extra amino acids in peptide recognition probe to improve specificity and selectivity of an electrochemical peptide-based sensor. Analytica Chimica Acta, 2015, 886, 157-164.	2.6	19
29	Electrochemical hydrogen peroxide sensors fabricated using cytochrome c immobilized on macroelectrodes and ultramicroelectrodes. Colloids and Surfaces B: Biointerfaces, 2014, 123, 866-869.	2.5	15
30	Use of thiolated oligonucleotides as anti-fouling diluents in electrochemical peptide-based sensors. Chemical Communications, 2014, 50, 4690.	2.2	43
31	A Hg(ii)-mediated â€œsignal-onâ€•electrochemical glutathione sensor. Chemical Communications, 2014, 50, 8385.	2.2	26
32	Effects of DNA Probe and Target Flexibility on the Performance of a â€œSignal-onâ€•Electrochemical DNA Sensor. Analytical Chemistry, 2014, 86, 8888-8895.	3.2	35
33	Fabrication of Electrochemical DNA Sensors on Gold-Modified Recessed Platinum Nanoelectrodes. Analytical Chemistry, 2014, 86, 2849-2852.	3.2	48
34	Application of electrochemical surface plasmon resonance spectroscopy for characterization of electrochemical DNA sensors. Colloids and Surfaces B: Biointerfaces, 2014, 122, 835-839.	2.5	19
35	Effect of redox label tether length and flexibility on sensor performance of displacement-based electrochemical DNA sensors. Analytica Chimica Acta, 2014, 812, 176-183.	2.6	13
36	Characterization of an electrochemical mercury sensor using alternating current, cyclic, square wave and differential pulse voltammetry. Analytica Chimica Acta, 2014, 810, 79-85.	2.6	66

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37	An electrochemical peptide-based Ara h 2 antibody sensor fabricated on a nickel(II)-nitriloacetic acid self-assembled monolayer using a His-tagged peptide. Analytica Chimica Acta, 2014, 828, 85-91.	2.6	20
38	Electrochemical techniques for characterization of stem-loop probe and linear probe-based DNA sensors. Methods, 2013, 64, 267-275.	1.9	49
39	Development of a â€œsignal-onâ€•electrochemical DNA sensor with an oligo-thymine spacer for point mutation detection. Chemical Communications, 2013, 49, 3422.	2.2	49
40	Development of an electrochemical insulin sensor based on the insulin-linked polymorphicregion. Biosensors and Bioelectronics, 2013, 42, 62-68.	5.3	62
41	Design and Synthesis of a Class of Twinâ€Chain Amphiphiles for Selfâ€Assembled Monolayerâ€Based Electrochemical Biosensor Applications. European Journal of Organic Chemistry, 2013, 2013, 3263-3270.	1.2	3
42	A reagentless and reusable electrochemical DNA sensor based on target hybridization-induced stem-loop probe formation. Chemical Communications, 2012, 48, 10523.	2.2	53
43	Effect of diluent chain length on the performance of the electrochemical DNA sensor at elevated temperature. Analyst, The, 2011, 136, 134-139.	1.7	22
44	Design and characterization of a metal ionâ€“imidazole self-assembled monolayer for reversible immobilization of histidine-tagged peptides. Chemical Communications, 2011, 47, 12391.	2.2	9
45	Design and characterization of an electrochemical peptide-based sensor fabricated viaâ€œclickâ€• chemistry. Chemical Communications, 2011, 47, 8688.	2.2	38
46	Comparison of the Stem-Loop and Linear Probe-Based Electrochemical DNA Sensors by Alternating Current Voltammetry and Cyclic Voltammetry. Langmuir, 2011, 27, 14669-14677.	1.6	66
47	A folding-based electrochemical aptasensor for detection of vascular endothelial growth factor in human whole blood. Biosensors and Bioelectronics, 2011, 26, 2442-2447.	5.3	145
48	An electrochemical peptide-based biosensing platform for HIV detection. Chemical Communications, 2010, 46, 395-397.	2.2	74
49	Fabrication of an electrochemical DNA sensor array via potential-assisted â€œclickâ€•chemistry. Chemical Communications, 2010, 46, 3941.	2.2	39
50	Folding-based electrochemical DNA sensor fabricated by â€œclickâ€•chemistry. Chemical Communications, 2009, , 4835.	2.2	31
51	Continuous, Real-Time Monitoring of Cocaine in Undiluted Blood Serum via a Microfluidic, Electrochemical Aptamer-Based Sensor. Journal of the American Chemical Society, 2009, 131, 4262-4266.	6.6	333
52	Folding-based electrochemical DNA sensor fabricated on a gold-plated screen-printed carbon electrode. Chemical Communications, 2009, , 2902.	2.2	43
53	Microfluidic Device Architecture for Electrochemical Patterning and Detection of Multiple DNA Sequences. Langmuir, 2008, 24, 1102-1107.	1.6	77
54	Aptamer-Based Electrochemical Detection of Picomolar Platelet-Derived Growth Factor Directly in Blood Serum. Analytical Chemistry, 2007, 79, 229-233.	3.2	329

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55	Linear, redox modified DNA probes as electrochemical DNA sensors. Chemical Communications, 2007, , 3768.	2.2	108
56	Effect of Molecular Crowding on the Response of an Electrochemical DNA Sensor. Langmuir, 2007, 23, 6827-6834.	1.6	293
57	An Electronic, Aptamer-Based Small-Molecule Sensor for the Rapid, Label-Free Detection of Cocaine in Adulterated Samples and Biological Fluids. Journal of the American Chemical Society, 2006, 128, 3138-3139.	6.6	759
58	Comparison of the Signaling and Stability of Electrochemical DNA Sensors Fabricated from 6- or 11-Carbon Self-Assembled Monolayers. Langmuir, 2006, 22, 10796-10800.	1.6	103
59	Differential Labeling of Closely Spaced Biosensor Electrodes via Electrochemical Lithography. Langmuir, 2006, 22, 1932-1936.	1.6	29
60	Rapid, sequence-specific detection of unpurified PCR amplicons via a reusable, electrochemical sensor. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4017-4021.	3.3	174