James S Cooper

List of Publications by Year
in descending order

30 papers	707 citations	516215 16 h-index	525886 27 g-index
30 all docs	30 docs citations	30 times ranked	846 citing authors

#	Article	IF	Citations
1	Combinatorial screening of thin film electrocatalysts for a direct methanol fuel cell anode. Journal of Power Sources, 2006, 163, 330-338.	4.0	76
2	SECM characterization of Ptâ€“Ruâ€“WC and Ptâ€“Ruâ€“Co ternary thin film combinatorial libraries as anode electrocatalysts for PEMFC. Journal of Power Sources, 2006, 161, 106-114.	4.0	62
3	Gold Nanoparticle Chemiresistor Sensor Array that Differentiates between Hydrocarbon Fuels Dissolved in Artificial Seawater. Analytical Chemistry, 2010, 82, 3788-3795.	3.2	55
4	Scanning electrochemical microscope characterization of thin film combinatorial libraries for fuel cell electrode applications. Measurement Science and Technology, 2005, 16, 174-182.	1.4	51
5	Combinatorial screening of fuel cell cathode catalyst compositions. Applied Surface Science, 2007, 254, 662-668.	3.1	51
6	Methanol electro-oxidation by a ternary Ptâ€“Ruâ€“Cu catalyst identified by a combinatorial approach. Journal of Power Sources, 2008, 185, 913-916.	4.0	45
7	Functionalized graphene as an aqueous phase chemiresistor sensing material. Sensors and Actuators B: Chemical, 2011, 155, 154-158.	4.0	45
8	High-Throughput Fabrication and Screening Improves Gold Nanoparticle Chemiresistor Sensor Performance. ACS Combinatorial Science, 2015, 17, 120-129.	3.8	32
9	Performance of graphene, carbon nanotube, and gold nanoparticle chemiresistor sensors for the detection of petroleum hydrocarbons in water. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	29
10	SECM imaging of electrocatalytic activity for oxygen reduction reaction on thin film materials. Electrochimica Acta, 2007, 52, 5172-5181.	2.6	28
11	Investigation of PtCoCr/C catalysts for methanol electro-oxidation identified by a thin film combinatorial method. Journal of Power Sources, 2009, 192, 391-395.	4.0	25
12	Combinatorial screening of ternary Ptâ€“Niâ€“Cr catalysts for methanol electro-oxidation. Electrochemistry Communications, 2008, 10, 1545-1547.	2.3	24
13	Plasma sputtering system for deposition of thin film combinatorial libraries. Review of Scientific Instruments, 2005, 76, 062221.	0.6	20
14	Characterization of the Sensor Response of Gold Nanoparticle Chemiresistors. Journal of Physical Chemistry C, 2010, 114, 17529-17534.	1.5	20
15	Gold nanoparticle chemiresistors operating in biological fluids. Lab on A Chip, 2012, 12, 3040.	3.1	20
16	Detection of bacterial metabolites for the discrimination of bacteria utilizing gold nanoparticle chemiresistor sensors. Sensors and Actuators B: Chemical, 2015, 220, 895-902.	4.0	20
17	Scanning electrochemical microscope characterization of thin film Ptâ€“Ru alloys for fuel cell applications. Chemical Engineering Science, 2004, 59, 4839-4845.	1.9	16
18	Dynamic response of gold nanoparticle chemiresistors to organic analytes in aqueous solution. Physical Chemistry Chemical Physics, 2011, 13, 18208.	1.3	16

#	Article	IF	Citations
19	Quantifying BTEX in aqueous solutions with potentially interfering hydrocarbons using a partially selective sensor array. Analyst, The, 2015, 140, 3233-3238.	1.7	16
20	Quantifying mixtures of hydrocarbons dissolved in water with a partially selective sensor array using random forests analysis. Sensors and Actuators B: Chemical, 2014, 202, 279-285.	4.0	15
21	Flow-controlled synthesis of gold nanoparticles in a biphasic system with inline liquidâ€“liquid separation. Reaction Chemistry and Engineering, 2020, 5, 356-366.	1.9	13
22	Solvent-induced modulation of the chemical sensing performance of gold nanoparticle film chemiresistors. Sensors and Actuators B: Chemical, 2019, 284, 316-322.	4.0	7
23	Chemical Sensor Array That Can Differentiate Complex Hydrocarbon Mixtures Dissolved in Seawater. Sensor Letters, 2011, 9, 609-611.	0.4	7
24	Transistorâ€Like Modulation of Gold Nanoparticle Film Conductivity Using Hydrophobic Ions. Advanced Materials Interfaces, 2014, 1, 1400062.	1.9	5
25	Influence of Gold Nanoparticle Film Porosity on the Chemiresistive Sensing Performance. Electroanalysis, 2013, 25, 2313-2320.	1.5	4
26	Electrical noise in gold nanoparticle chemiresistors: Effects of measurement environment and organic linker properties. , 2010, , .		3
27	Detecting and discriminating pyrethroids with chemiresistor sensors. Environmental Chemistry, 2019, 16, 553.	0.7	1
28	Strong enhancement of gold nanoparticle chemiresistor response to low-partitioning organic analytes induced by pre-exposure to high partitioning organics. Physical Chemistry Chemical Physics, 2020, 22, 9117-9123.	1.3	1
29	Sensor System for Directly Detecting and Identifying Hydrocarbons in Water. , 2012, , .		0
30	Using Chemiresistor Sensor Arrays to Test Petrol Station Groundwater Samples for Hydrocarbon Pollutants. ECS Meeting Abstracts, 2020, MA2020-01, 2204-2204.	0.0	0