Rodney D L Smith

List of Publications by Year
in descending order

34	3,092	567144 15	477173 29
papers	citations	h-index	g-index

36	36	36	5157
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Identification of Three Coexistent Defect Types in Hematite Photoanodes through Structureâ€“Property Analysis. Energy Technology, 2022, 10, 2100181.	1.8	1
2	Differentiating Defects and Their Influence on Hematite Photoanodes Using X-ray Absorption Spectroscopy and Raman Microscopy. ACS Applied Materials & Interfaces, 2022, 14, 6615-6624.	4.0	11
3	How Cation Substitutions Affect the Oxygen Reduction Reaction on La_{2â^'x}Sr_xNi_{1â^'y}Fe_yO₄. ChemCatChem, 2022, 14, .	1.8	1
4	Identification of non-traditional coordination environments for iron ions in nickel hydroxide lattices. Energy and Environmental Science, 2022, 15, 2638-2652.	15.6	7
5	Correlating Raman and X-Ray Absorption Spectroscopy to Analyze Defects in Hematite Photoandoes. ECS Meeting Abstracts, 2022, MA2022-01, 1885-1885.	0.0	0
6	Analysis of Solid-State Reaction Mechanisms with Two-Dimensional Fourier Transform Infrared Correlation Spectroscopy. Inorganic Chemistry, 2021, 60, 2304-2314.	1.9	3
7	Operando tracking of oxidation-state changes by coupling electrochemistry with time-resolved X-ray absorption spectroscopy demonstrated for water oxidation by a cobalt-based catalyst film. Analytical and Bioanalytical Chemistry, 2021, 413, 5395-5408.	1.9	16
8	Mechanistic insights into lepidocrocite conversion to hematite from variable temperature Raman microscopy. JPhys Energy, 2021, 3, 044002.	2.3	6
9	Structureâ€“property correlations for analysis of heterogeneous electrocatalysts. Chemical Physics Reviews, 2021, 2, .	2.6	8
10	Mechanistic insights into the spontaneous reaction between CO2 and La2â€“xSrxCuO4. Canadian Journal of Chemistry, 2021, 99, 773-779.	0.6	3
11	Identifying protons trapped in hematite photoanodes through structureâ€“property analysis. Chemical Science, 2020, 11, 1085-1096.	3.7	7
12	Exploring the Limits of Self-Repair in Cobalt Oxide Films for Electrocatalytic Water Oxidation. ACS Catalysis, 2020, 10, 7990-7999.	5.5	21
13	Asymmetric Strain in the Oxidized and Reduced States of Heterogeneous Electrocatalysts. ECS Meeting Abstracts, 2020, MA2020-01, 1780-1780.	0.0	0
14	Identifying Structural Defects in Hematite Photoanodes through Structure-Property Analysis. ECS Meeting Abstracts, 2020, MA2020-01, 1712-1712.	0.0	0
15	Evidence of Variations in Atomic Distribution in Disordered Mixed Metal Hydroxides. MRS Advances, 2019, 4, 1843-1850.	0.5	4
16	Electrochemically Induced Phase Changes in La₂CuO₄ During Cathodic Electrocatalysis. ChemElectroChem, 2019, 6, 5116-5123.	1.7	11
17	Probing the Role of Internalized Geometric Strain on Heterogeneous Electrocatalysis. Chemistry of Materials, 2019, 31, 7522-7530.	3.2	14
18	Trapping a Photoelectron behind a Repulsive Coulomb Barrier in Solution. Journal of Physical Chemistry Letters, 2019, 10, 5742-5747.	2.1	2

#	Article	IF	Citations
19	Structural and functional role of anions in electrochemical water oxidation probed by arsenate incorporation into cobalt-oxide materials. Physical Chemistry Chemical Physics, 2019, 21, 12485-12493.	1.3	18
20	H/D Isotope Effects Reveal Factors Controlling Catalytic Activity in Co-Based Oxides for Water Oxidation. Journal of the American Chemical Society, 2019, 141, 2938-2948.	6.6	72
21	Nickel-iron catalysts for electrochemical water oxidation â€“ redox synergism investigated by in situ X-ray spectroscopy with millisecond time resolution. Sustainable Energy and Fuels, 2018, 2, 1986-1994.	2.5	64
22	Geometric distortions in nickel (oxy)hydroxide electrocatalysts by redox inactive iron ions. Energy and Environmental Science, 2018, 11, 2476-2485.	15.6	83
23	Spectroscopic identification of active sites for the oxygen evolution reaction on iron-cobalt oxides. Nature Communications, 2017, 8, 2022.	5.8	147
24	On How Experimental Conditions Affect the Electrochemical Response of Disordered Nickel Oxyhydroxide Films. Chemistry of Materials, 2016, 28, 5635-5642.	3.2	22
25	Accounting for the Dynamic Oxidative Behavior of Nickel Anodes. Journal of the American Chemical Society, 2016, 138, 1561-1567.	6.6	91
26	Mapping the performance of amorphous ternary metal oxide water oxidation catalysts containing aluminium. Journal of Materials Chemistry A, 2015, 3, 756-761.	5.2	48
27	Photochemical Route for the Preparation of Complex Amorphous Water Oxidation Catalyst. ECS Transactions, 2014, 58, 67-76.	0.3	1
28	Facile Photochemical Preparation of Amorphous Iridium Oxide Films for Water Oxidation Catalysis. Chemistry of Materials, 2014, 26, 1654-1659.	3.2	201
29	Water Oxidation Catalysis: Electrocatalytic Response to Metal Stoichiometry in Amorphous Metal Oxide Films Containing Iron, Cobalt, and Nickel. Journal of the American Chemical Society, 2013, 135, 11580-11586.	6.6	817
30	Photochemical Route for Accessing Amorphous Metal Oxide Materials for Water Oxidation Catalysis. Science, 2013, 340, 60-63.	6.0	1,321
31	Photochemical Route for the Preparation of Complex Amorphous Water Oxidation Catalyst. ECS Meeting Abstracts, 2013, , .	0.0	0
32	Nitrogen-rich polymers for the electrocatalytic reduction of CO2. Electrochemistry Communications, 2010, 12, 1749-1751.	2.3	22
33	Novel electroactive surface functionality from the coupling of an aryl diamine to carbon black. Electrochemistry Communications, 2009, 11, 10-13.	2.3	25
34	Voltammetric quantification of the spontaneous chemical modification of carbon black by diazonium coupling. Electrochimica Acta, 2009, 54, 2305-2311.	2.6	43