Jessica A Allen

List of Publications by Year
in descending order

37	961	567144 15	454834 30
papers	citations	h-index	g-index

37	37	37	1283
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructural and associated chemical changes during the composting of a high temperature biochar: Mechanisms for nitrate, phosphate and other nutrient retention and release. Science of the Total Environment, 2018, 618, 1210-1223.	3.9	163
2	The Electrochemical Properties of Biochars and How They Affect Soil Redox Properties and Processes. Agronomy, 2015, 5, 322-340.	1.3	122
3	The electrochemical oxidation of aqueous sulfur dioxide: A critical review of work with respect to the hybrid sulfur cycle. Electrochimica Acta, 2010, 55, 573-591.	2.6	111
4	Synchrotron based NEXAFS study on nitrogen doped hydrothermal carbon: Insights into surface functionalities and formation mechanisms. Carbon, 2017, 114, 566-578.	5.4	72
5	Electrochemical aspects of the Hybrid Sulfur Cycle for large scale hydrogen production. International Journal of Hydrogen Energy, 2014, 39, 11376-11389.	3.8	37
6	Electrochemical Oxidation of Aqueous Sulfur Dioxide II. Comparative Studies on Platinum and Gold Electrodes. Journal of the Electrochemical Society, 2012, 159, F585-F593.	1.3	36
7	Prospects for solar only operation of the hybrid sulphur cycle for hydrogen production. International Journal of Hydrogen Energy, 2011, 36, 11596-11603.	3.8	35
8	Influence of selected coal contaminants on graphitic carbon electro-oxidation for application to the direct carbon fuel cell. Journal of Power Sources, 2014, 260, 140-149.	4.0	35
9	Nitrogen doped heat treated and activated hydrothermal carbon: NEXAFS examination of the carbon surface at different temperatures. Carbon, 2018, 128, 179-190.	5.4	34
10	Dynamic Electrodeposition of Manganese Dioxide: Temporal Variation in the Electrodeposition Mechanism. Journal of the Electrochemical Society, 2016, 163, H305-H312.	1.3	32
11	Observed electrochemical oscillations during the oxidation of aqueous sulfur dioxide on a sulfur modified platinum electrode. Electrochimica Acta, 2011, 56, 4224-4230.	2.6	23
12	Carbonate Reduction and the Properties and Applications of Carbon Formed Through Electrochemical Deposition in Molten Carbonates: A Review. Electrochimica Acta, 2015, 176, 1511-1521.	2.6	21
13	The properties and performance of carbon produced through the electrochemical reduction of molten carbonate: A study based on step potential electrochemical spectroscopy. Electrochimica Acta, 2018, 278, 340-351.	2.6	19
14	The Electrochemical Oxidation of Aqueous Sulfur Dioxide. Journal of the Electrochemical Society, 2010, 157, F111.	1.3	18
15	The effect of coal type and pyrolysis temperature on the electrochemical activity of coal at a solid carbon anode in molten carbonate media. Journal of Power Sources, 2015, 279, 384-393.	4.0	18
16	The impact of carbonate salts on char formation and gas evolution during the slow pyrolysis of biomass, cellulose, and lignin. Sustainable Energy and Fuels, 2020, 4, 5987-6003.	2.5	18
17	Modification of Biochar Formation during Slow Pyrolysis in the Presence of Alkali Metal Carbonate Additives. Energy & Fuels, 2019, 33, 11235-11245.	2.5	15
18	Carbon electro-catalysis in the direct carbon fuel cell utilising alkali metal molten carbonates: A mechanistic review. Journal of Power Sources, 2020, 453, 227662.	4.0	15

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19	Thermal Investigation of a Doped Alkali-Metal Carbonate Ternary Eutectic for Direct Carbon Fuel Cell Applications. Energy & Fuels, 2015, 29, 5423-5433.	2.5	14
20	The Properties of Carbons Derived through the Electrolytic Reduction of Molten Carbonates under Varied Conditions: Part I. A Study Based on Step Potential Electrochemical Spectroscopy. Journal of the Electrochemical Society, 2018, 165, A2608-A2624.	1.3	13
21	Kinetic Analysis of the Anodic Carbon Oxidation Mechanism in a Molten Carbonate Medium. Electrochimica Acta, 2014, 129, 389-395.	2.6	11
22	Optimized Electrolytic Carbon and Electrolyte Systems for Electrochemical Capacitors. ChemElectroChem, 2020, 7, 266-282.	1.7	11
23	An investigation of mineral distribution in coking and thermal coal chars as fuels for the direct carbon fuel cell. Fuel, 2018, 217, 11-20.	3.4	10
24	Influence of counter ions of ammonium for nitrogen doping and carbon properties in hydrothermal carbonization: characterization and supercapacitor performance. Materials Advances, 2021, 2, 384-397.	2.6	10
25	Molten Carbonate Composition Effects on Carbon Electro-Oxidation at a Solid Anode Interface. Journal of the Electrochemical Society, 2015, 162, F76-F83.	1.3	9
26	Carbon Gasification from a Molten Carbonate Eutectic. Energy Technology, 2019, 7, 1900602.	1.8	8
27	Thermochemical Conversion of Biomass in the Presence of Molten Alkali-Metal Carbonates under Reducing Environments of N2 and CO2. Energies, 2020, 13, 5395.	1.6	8
28	Analysis of theoretical efficiency in a model 10â€¯kW direct carbon fuel cell using a coal based carbonate slurry. Electrochimica Acta, 2020, 329, 135131.	2.6	6
29	Predicting Slow Pyrolysis Process Outcomes with Simplified Empirical Correlations for a Consistent Higher Heating Temperature: Biochar Yield and Ash Content. Energy & Fuels, 2020, 34, 14223-14231.	2.5	6
30	Characterization of carbonate derived carbons through electrochemical impedance spectroscopy. Electrochimica Acta, 2020, 338, 135847.	2.6	6
31	Sodium-ion battery anodes from carbon depositions. Electrochimica Acta, 2021, 379, 138109.	2.6	6
32	Gas Atmosphere Effects Over the Anode Compartment of a Tubular Direct Carbon Fuel Cell Module. Energy & Fuels, 2019, 33, 7901-7907.	2.5	5
33	Physical characteristics of capacitive carbons derived from the electrolytic reduction of alkali metal carbonate molten salts. RSC Advances, 2019, 9, 36771-36787.	1.7	5
34	Thermal and electrochemical impact of kaolin on a direct carbon fuel cell. Fuel, 2021, 291, 120215.	3.4	3
35	Electrochemical Ammonia: Power to Ammonia Ratio and Balance of Plant Requirements for Two Different Electrolysis Approaches. Frontiers in Chemical Engineering, 2021, 3, .	1.3	3
36	The interplay between ternary molten carbonate and biomaterials during pressurized slow pyrolysis. Reaction Chemistry and Engineering, 0, , .	1.9	3

#	Article	IF	Citations
37	Silicate Formation in a Ternary Alkali Metal Carbonate Melt. Energy & Fuels, 2019, 33, 12008-12015.	2.5	0