Juan Balach

List of Publications by Year in descending order

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Version: 2024-02-01

31	2,492	377584 21	466096 32
papers	citations	h-index	g-index

33	33	33	4937
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MXenes and the progress of Liâ€“S battery developmentâ€”a perspective. JPhys Energy, 2021, 3, 021002.	2.3	10
2	MXenes in lithiumâ€“sulfur batteries: Scratching the surface of a complex 2D material â€“ A minireview. Materials Today Communications, 2021, 27, 102323.	0.9	20
3	LiV₃O₈-Based Functional Separator Coating as Effective Polysulfide Mediator for Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 2893-2899.	2.5	27
4	A top-down approach to build Li2S@rGO cathode composites for high-loading lithiumâ€“sulfur batteries in carbonate-based electrolyte. Electrochimica Acta, 2019, 296, 243-250.	2.6	21
5	Application of sulfonated nanoporous carbons as acid catalysts for Fischer esterification reactions. Arabian Journal of Chemistry, 2019, 12, 3172-3182.	2.3	27
6	Lightweight, free-standing 3D interconnected carbon nanotube foam as a flexible sulfur host for high performance lithium-sulfur battery cathodes. Energy Storage Materials, 2018, 10, 206-215.	9.5	91
7	Metal-based nanostructured materials for advanced lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 23127-23168.	5.2	195
8	One-Pot Synthesis of Graphene-Sulfur Composites for Li-S Batteries: Influence of Sulfur Precursors. Journal of Carbon Research, 2018, 4, 2.	1.4	7
9	Nanosized Li2S-based cathodes derived from MoS2 for high-energy density Liâ€“S cells and Siâ€“Li2S full cells in carbonate-based electrolyte. Energy Storage Materials, 2017, 8, 209-216.	9.5	47
10	Softwood Lignin as a Sustainable Feedstock for Porous Carbons as Active Material for Supercapacitors Using an Ionic Liquid Electrolyte. ACS Sustainable Chemistry and Engineering, 2017, 5, 4094-4102.	3.2	50
11	Dichlorosilane-derived nano-silicon inside hollow carbon spheres as a high-performance anode for Li-ion batteries. Journal of Materials Chemistry A, 2017, 5, 9262-9271.	5.2	28
12	Prediction of Effective Properties of Porous Carbon Electrodes from a Parametric 3D Random Morphological Model. Transport in Porous Media, 2017, 120, 141-165.	1.2	12
13	Lifetime vs. rate capability: Understanding the role of FEC and VC in high-energy Li-ion batteries with nano-silicon anodes. Energy Storage Materials, 2017, 6, 26-35.	9.5	166
14	Hierarchically nanostructured hollow carbon nanospheres for ultra-fast and long-life energy storage. Carbon, 2016, 106, 306-313.	5.4	31
15	Synergistically Enhanced Polysulfide Chemisorption Using a Flexible Hybrid Separator with N and S Dual-Doped Mesoporous Carbon Coating for Advanced Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2016, 8, 14586-14595.	4.0	153
16	Enhanced polysulphide redox reaction using a RuO₂ nanoparticle-decorated mesoporous carbon as functional separator coating for advanced lithiumâ€“sulphur batteries. Chemical Communications, 2016, 52, 8134-8137.	2.2	81
17	Reconfiguration of lithium sulphur batteries: â€œEnhancement of Liâ€“S cell performance by employing a highly porous conductive separator coatingâ€• Journal of Power Sources, 2016, 309, 76-81.	4.0	69
18	Probing the interactions of phenol with oxygenated functional groups on curved fullerene-like sheets in activated carbon. Physical Chemistry Chemical Physics, 2016, 18, 3700-3705.	1.3	10

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19	Role of 1,3-Dioxolane and LiNO₃Addition on the Long Term Stability of Nanostructured Silicon/Carbon Anodes for Rechargeable Lithium Batteries. Journal of the Electrochemical Society, 2016, 163, A557-A564.	1.3	83
20	Improved cycling stability of lithiumâ€“sulfur batteries using a polypropylene-supported nitrogen-doped mesoporous carbon hybrid separator as polysulfide adsorbent. Journal of Power Sources, 2016, 303, 317-324.	4.0	114
21	Functional Mesoporous Carbonâ€Coated Separator for Longâ€Life, Highâ€Energy Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2015, 25, 5285-5291.	7.8	374
22	Stimuli-responsive nanogel composites and their application in nanomedicine. Chemical Society Reviews, 2015, 44, 6161-6186.	18.7	449
23	Mesoporous Carbon Interlayers with Tailored Pore Volume as Polysulfide Reservoir for High-Energy Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry C, 2015, 119, 4580-4587.	1.5	120
24	SEI-component formation on sub 5 nm sized silicon nanoparticles in Li-ion batteries: the role of electrode preparation, FEC addition and binders. Physical Chemistry Chemical Physics, 2015, 17, 24956-24967.	1.3	129
25	Poly(ionic liquid)-derived nitrogen-doped hollow carbon spheres: synthesis and loading with Fe2O3 for high-performance lithium ion batteries. RSC Advances, 2013, 3, 7979.	1.7	37
26	A Direct and Quantitative Three-Dimensional Reconstruction of the Internal Structure of Disordered Mesoporous Carbon with Tailored Pore Size. Microscopy and Microanalysis, 2013, 19, 745-750.	0.2	10
27	Facile preparation of hierarchical porous carbons with tailored pore size obtained using a cationic polyelectrolyte as a soft template. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 415, 343-348.	2.3	22
28	A direct and quantitative image of the internal nanostructure of nonordered porous monolithic carbon using FIB nanotomography. Journal of Microscopy, 2012, 246, 274-278.	0.8	16
29	Electrostatic self-assembly of hierarchical porous carbon microparticles. Journal of Power Sources, 2012, 199, 386-394.	4.0	36
30	HIERARCHICAL POROUS MATERIALS: CAPILLARIES IN NANOPOROUS CARBON. Functional Materials Letters, 2009, 02, 135-138.	0.7	22
31	Functionalised conjugated materials as building blocks of electronic nanostructures. Faraday Discussions, 2006, 131, 235-252.	1.6	34