Boris Dyatkin

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1214820/publications.pdf

Version: 2024-02-01

44 papers	4,196 citations	257450 24 h-index	243625 44 g-index
51 all docs	51 docs citations	51 times ranked	5942 citing authors

#	Article	IF	Citations
1	Influence of molecular weight on thermal and mechanical properties of bisphenol <scp>Aâ€based</scp> phthalonitrile resins. Journal of Applied Polymer Science, 2022, 139, .	2.6	7
2	Synthesis and material properties of polymer-derived niobium carbide and niobium nitride nanocrystalline ceramics. Ceramics International, 2021, 47, 1163-1168.	4.8	10
3	Synthesis, structure, and properties of polymerâ€derived, metalâ€reinforced boron carbide cermet composites. International Journal of Applied Ceramic Technology, 2021, 18, 457-471.	2.1	2
4	Chemical structure and curing dynamics of bisphenol S, PEEK TM â€like, and resveratrol phthalonitrile thermoset resins. Journal of Polymer Science, 2020, 58, 3419-3431.	3.8	7
5	Microwave-assisted pressureless sintering of silicon-reinforced boron carbide composites. Journal of Solid State Chemistry, 2020, 292, 121659.	2.9	7
6	Ionic liquid dynamics in nanoporous carbon: A pore-size- and temperature-dependent neutron spectroscopy study on supercapacitor materials. Physical Review Materials, 2020, 4, .	2.4	13
7	Side-chain effects on the capacitive behaviour of ionic liquids in microporous electrodes. Molecular Physics, 2019, 117, 3603-3613.	1.7	11
8	Molecular Investigation of Oxidized Graphene: Anatomy of the Double-Layer Structure and Ion Dynamics. Journal of Physical Chemistry C, 2019, 123, 12583-12591.	3.1	15
9	Cation Molecular Structure Affects Mobility and Transport of Electrolytes in Porous Carbons. Journal of the Electrochemical Society, 2019, 166, A507-A514.	2.9	12
10	Mixed Ionic Liquid Improves Electrolyte Dynamics in Supercapacitors. Journal of Physical Chemistry C, 2018, 122, 10476-10481.	3.1	53
11	Ionic liquid structure, dynamics, and electrosorption in carbon electrodes with bimodal pores and heterogeneous surfaces. Carbon, 2018, 129, 104-118.	10.3	36
12	Electrolyte cation length influences electrosorption and dynamics in porous carbon supercapacitors. Electrochimica Acta, 2018, 283, 882-893.	5.2	25
13	Direct formulation of nanocrystalline silicon carbide/nitride solid ceramics. Journal of Materials Science, 2017, 52, 9294-9307.	3.7	5
14	High-density freestanding graphene/carbide-derived carbon film electrodes for electrochemical capacitors. Carbon, 2017, 118, 642-649.	10.3	47
15	Superconducting TaC nanoparticle-containing ceramic nanocomposites thermally transformed from mixed Ta and aromatic molecule precursors. Journal of Materials Research, 2017, 32, 3353-3361.	2.6	5
16	Advocacy, public service, and outreach: Why scientists must step up. MRS Bulletin, 2017, 42, 333.	3.5	0
17	Effect of nanostructured carbon support on copper electrocatalytic activity toward CO2 electroreduction to hydrocarbon fuels. Catalysis Today, 2017, 288, 2-10.	4.4	39
18	Electrode Surface Composition of Dual-Intercalation, All-Graphite Batteries. Journal of Carbon Research, 2017, 3, 5.	2.7	9

#	Article	IF	Citations
19	An Atomistic Carbide-Derived Carbon Model Generated Using ReaxFF-Based Quenched Molecular Dynamics. Journal of Carbon Research, 2017, 3, 32.	2.7	13
20	Influence of humidity on performance and microscopic dynamics of an ionic liquid in supercapacitor. Physical Review Materials, 2017, 1, .	2.4	15
21	Synthesis and Charge Storage Properties of Hierarchical Niobium Pentoxide/Carbon/Niobium Carbide (MXene) Hybrid Materials. Chemistry of Materials, 2016, 28, 3937-3943.	6.7	210
22	Influence of Surface Oxidation on Ion Dynamics and Capacitance in Porous and Nonporous Carbon Electrodes. Journal of Physical Chemistry C, 2016, 120, 8730-8741.	3.1	40
23	Energy Focus: Novel method developed to investigate stiffness and mechanical stress in Li-ion batteries. MRS Bulletin, 2016, 41, 725.	3.5	0
24	Nanocrystals embedded in nanoporous carbon increase energy-storage capacity. MRS Bulletin, 2016, 41, 425-425.	3.5	0
25	High capacitance of coarse-grained carbide derived carbon electrodes. Journal of Power Sources, 2016, 306, 32-41.	7.8	65
26	Effect of Metal Ion Intercalation on the Structure of MXene and Water Dynamics on its Internal Surfaces. ACS Applied Materials & Interfaces, 2016, 8, 8859-8863.	8.0	225
27	In situ synthesis of cotton-derived Ni/C catalysts with controllable structures and enhanced catalytic performance. Green Chemistry, 2016, 18, 3594-3599.	9.0	44
28	Capacitance, charge dynamics, and electrolyte-surface interactions in functionalized carbide-derived carbon electrodes. Progress in Natural Science: Materials International, 2015, 25, 631-641.	4.4	29
29	Highlights from Faraday Discussion 172: Carbon in Electrochemistry, Sheffield, UK, July 2014. Chemical Communications, 2015, 51, 2199-2207.	4.1	1
30	Synthesis of Carbon/Sulfur Nanolaminates by Electrochemical Extraction of Titanium from Ti₂SC. Angewandte Chemie - International Edition, 2015, 54, 4810-4814.	13.8	100
31	Synthesis of carbon coreâ€“shell pore structures and their performance as supercapacitors. Microporous and Mesoporous Materials, 2015, 218, 130-136.	4.4	35
32	Synthesis and electrochemical properties of niobium pentoxide deposited on layered carbide-derived carbon. Journal of Power Sources, 2015, 274, 121-129.	7.8	66
33	Effects of structural disorder and surface chemistry on electric conductivity and capacitance of porous carbon electrodes. Faraday Discussions, 2014, 172, 139-62.	3.2	54
34	Roomâ€Temperature Carbideâ€Derived Carbon Synthesis by Electrochemical Etching of MAX Phases. Angewandte Chemie - International Edition, 2014, 53, 4877-4880.	13.8	133
35	The many faces of carbon in electrochemistry: general discussion. Faraday Discussions, 2014, 172, 117-137.	3.2	4
36	One-step synthesis of nanocrystalline transition metal oxides on thin sheets of disordered graphitic carbon by oxidation of MXenes. Chemical Communications, 2014, 50, 7420-7423.	4.1	614

#	Article	IF	Citations
37	Carbon electrodes for energy storage: general discussion. Faraday Discussions, 2014, 172, 239-260.	3.2	11
38	Highly porous carbon spheres for electrochemical capacitors and capacitive flowable suspension electrodes. Carbon, 2014, 77, 155-164.	10.3	148
39	Ion Dynamics in Porous Carbon Electrodes in Supercapacitors Using in Situ Infrared Spectroelectrochemistry. Journal of the American Chemical Society, 2013, 135, 12818-12826.	13.7	174
40	Development of a Green Supercapacitor Composed Entirely of Environmentally Friendly Materials. ChemSusChem, 2013, 6, 2269-2280.	6.8	155
41	Kinetics of aluminum extraction from Ti3AlC2 in hydrofluoric acid. Materials Chemistry and Physics, 2013, 139, 147-152.	4.0	348
42	Polymer Single Crystal-Decorated Superhydrophobic Buckypaper with Controlled Wetting and Conductivity. ACS Nano, 2012, 6, 1204-1213.	14.6	48
43	MXene: a promising transition metal carbide anode for lithium-ion batteries. Electrochemistry Communications, 2012, 16, 61-64.	4.7	1,252
44	A Combined Theoretical and Experimental Characterization of a Zirconium MOF with Potential Application to Supercapacitors. Applied Magnetic Resonance, 0, , 1.	1.2	2