Brian C Olsen

List of Publications by Year
in descending order

38 papers	5,320 citations	331259 21 h-index	329751 37 g-index
38 all docs	38 docs citations	38 times ranked	8459 citing authors

#	Article	IF	Citations
1	Mesoporous nitrogen-rich carbons derived from protein for ultra-high capacity battery anodes and supercapacitors. Energy and Environmental Science, 2013, 6, 871.	15.6	983
2	Interconnected Carbon Nanosheets Derived from Hemp for Ultrafast Supercapacitors with High Energy. ACS Nano, 2013, 7, 5131-5141.	7.3	869
3	Carbon Nanosheet Frameworks Derived from Peat Moss as High Performance Sodium Ion Battery Anodes. ACS Nano, 2013, 7, 11004-11015.	7.3	813
4	Carbonized Chicken Eggshell Membranes with 3D Architectures as Highâ€Performance Electrode Materials for Supercapacitors. Advanced Energy Materials, 2012, 2, 431-437.	10.2	573
5	Graphene-nickel cobaltite nanocomposite asymmetrical supercapacitor with commercial level mass loading. Nano Research, 2012, 5, 605-617.	5.8	356
6	Hybrid Device Employing Three-Dimensional Arrays of MnO in Carbon Nanosheets Bridges Batteryâ€“Supercapacitor Divide. Nano Letters, 2014, 14, 1987-1994.	4.5	276
7	How To Optimize Materials and Devices via Design of Experiments and Machine Learning: Demonstration Using Organic Photovoltaics. ACS Nano, 2018, 12, 7434-7444.	7.3	219
8	Supercapacitive Properties of Hydrothermally Synthesized Co₃O₄ Nanostructures. Journal of Physical Chemistry C, 2011, 115, 17599-17605.	1.5	179
9	High Rate Electrochemical Capacitors from Three-Dimensional Arrays of Vanadium Nitride Functionalized Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 24381-24393.	1.5	145
10	Snâ€“Biâ€“Sb alloys as anode materials for sodium ion batteries. Journal of Materials Chemistry A, 2017, 5, 9661-9670.	5.2	124
11	Redox Flow Batteries: How to Determine Electrochemical Kinetic Parameters. ACS Nano, 2020, 14, 2575-2584.	7.3	118
12	Nanopatterning via Solvent Vapor Annealing of Block Copolymer Thin Films. Chemistry of Materials, 2017, 29, 176-188.	3.2	94
13	Î²-SnSb for Sodium Ion Battery Anodes: Phase Transformations Responsible for Enhanced Cycling Stability Revealed by In Situ TEM. ACS Energy Letters, 2018, 3, 1670-1676.	8.8	90
14	Role of Interfacial Layers in Organic Solar Cells: Energy Level Pinning versus Phase Segregation. ACS Applied Materials & Interfaces, 2016, 8, 18238-18248.	4.0	57
15	Sbâ€“Si Alloys and Multilayers for Sodium-Ion Battery Anodes. ACS Applied Energy Materials, 2019, 2, 2205-2213.	2.5	52
16	Nickel/Iron Oxide Nanocrystals with a Nonequilibrium Phase: Controlling Size, Shape, and Composition. Chemistry of Materials, 2014, 26, 4796-4804.	3.2	34
17	Solid-state dewetting mechanisms of ultrathin Ni films revealed by combiningin situtime resolved differential reflectometry monitoring and atomic force microscopy. Physical Review B, 2010, 82, .	1.1	31
18	Nanoscale Plasmonic Stamp Lithography on Silicon. ACS Nano, 2015, 9, 2184-2193.	7.3	25

#	Article	IF	Citations
19	UV-Initiated Siâ€“S, Siâ€“Se, and Siâ€“Te Bond Formation on Si(111): Coverage, Mechanism, and Electronics. Journal of Physical Chemistry C, 2018, 122, 13803-13814.	1.5	25
20	Bipolar Resistive Switching in Junctions of Gallium Oxide and p-type Silicon. Nano Letters, 2021, 21, 2666-2674.	4.5	24
21	Stabilizing Tin Anodes in Sodium-Ion Batteries by Alloying with Silicon. ACS Applied Energy Materials, 2020, 3, 9950-9962.	2.5	23
22	Optimization of the Bulk Heterojunction of All-Small-Molecule Organic Photovoltaics Using Design of Experiment and Machine Learning Approaches. ACS Applied Materials & Interfaces, 2020, 12, 54596-54607.	4.0	22
23	Substance over Subjectivity: Moving beyond the Histogram. Chemistry of Materials, 2016, 28, 5973-5975.	3.2	21
24	Preferential Alignment of Incommensurate Block Copolymer Dot Arrays Forming MoirÃ© Superstructures. ACS Nano, 2017, 11, 3237-3246.	7.3	21
25	Alternating Silicon and Carbon Multilayer-Structured Anodes Suppress Formation of the c-Li_{3.75}Si Phase. Chemistry of Materials, 2019, 31, 6578-6589.	3.2	19
26	Sequential Nanopatterned Block Copolymer Self-Assembly on Surfaces. Langmuir, 2016, 32, 5890-5898.	1.6	17
27	Understanding the Effects of a High Surface Area Nanostructured Indium Tin Oxide Electrode on Organic Solar Cell Performance. ACS Applied Materials & Interfaces, 2017, 9, 38706-38715.	4.0	14
28	Understanding the Mechanism of Enhanced Cycling Stability in Snâ€“Sb Composite Na-Ion Battery Anodes: Operando Alloying and Diffusion Barriers. ACS Applied Energy Materials, 2019, 2, 5133-5139.	2.5	14
29	Polymers, Plasmons, and Patterns: Mechanism of Plasmon-Induced Hydrosilylation on Silicon. Chemistry of Materials, 2016, 28, 9158-9168.	3.2	13
30	Solvent Vapor Annealing, Defect Analysis, and Optimization of Self-Assembly of Block Copolymers Using Machine Learning Approaches. ACS Applied Materials & Interfaces, 2021, 13, 28639-28649.	4.0	12
31	Carbonized Chicken Eggshell Membranes with 3D Architectures as High-Performance Electrode Materials for Supercapacitors (Adv. Energy Mater. 4/2012). Advanced Energy Materials, 2012, 2, 430-430.	10.2	10
32	Adhesion and Surface Layers on Silicon Anodes Suppress Formation of c-Li_{3.75}Si and Solid-Electrolyte Interphase. ACS Applied Energy Materials, 2020, 3, 1609-1616.	2.5	10
33	Water-soluble pH-switchable cobalt complexes for aqueous symmetric redox flow batteries. Chemical Communications, 2020, 56, 3605-3608.	2.2	9
34	Vapor-Phase Nanopatterning of Aminosilanes with Electron Beam Lithography: Understanding and Minimizing Background Functionalization. Langmuir, 2018, 34, 4780-4792.	1.6	8
35	Plasmonic Stamps Fabricated by Gold Dewetting on PDMS for Catalyzing Hydrosilylation on Silicon Surfaces. ACS Applied Nano Materials, 2019, 2, 3238-3245.	2.4	8
36	van der Waals Epitaxy of Soft Twisted Bilayers: Lattice Relaxation and Mass Density Waves. ACS Nano, 2020, 14, 13441-13450.	7.3	8

#	Article	IF	Citations
37	Beyond Thin Films: Clarifying the Impact of c-Li₁₅Si₄ Formation in Thin Film, Nanoparticle, and Porous Si Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 38147-38160.	4.0	4
38	Kinetics of Plasmon-Driven Hydrosilylation of Silicon Surfaces: Photogenerated Charges Drive Siliconâ€“Carbon Bond Formation. Journal of Physical Chemistry C, 2021, 125, 17983-17992.	1.5	0