Brian M Leonard

List of Publications by Year
in descending order

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44 papers	3,369 citations	218677 26 h-index	233421 45 g-index
50 all docs	50 docs citations	50 times ranked	5409 citing authors

#	Article	IF	Citations
1	Multiple Phases of Molybdenum Carbide as Electrocatalysts for the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2014, 53, 6407-6410.	13.8	685
2	The recent progress and future of oxygen reduction reaction catalysis: A review. Renewable and Sustainable Energy Reviews, 2017, 69, 401-414.	16.4	300
3	Ligand Induced Circular Dichroism and Circularly Polarized Luminescence in CdSe Quantum Dots. ACS Nano, 2013, 7, 11094-11102.	14.6	245
4	Iron-Doped Molybdenum Carbide Catalyst with High Activity and Stability for the Hydrogen Evolution Reaction. Chemistry of Materials, 2015, 27, 4281-4288.	6.7	237
5	Metallurgy in a Beaker:Â Nanoparticle Toolkit for the Rapid Low-Temperature Solution Synthesis of Functional Multimetallic Solid-State Materials. Journal of the American Chemical Society, 2005, 127, 3506-3515.	13.7	160
6	Carbides of group IVA, VA and VIA transition metals as alternative HER and ORR catalysts and support materials. Journal of Materials Chemistry A, 2015, 3, 10085-10091.	10.3	153
7	Low-Temperature Polyol Synthesis of AuCuSn2and AuNiSn2:Â Using Solution Chemistry to Access Ternary Intermetallic Compounds as Nanocrystals. Journal of the American Chemical Society, 2005, 127, 7326-7327.	13.7	101
8	Toward High-Yielding Supramolecular Synthesis:â€‰ Directed Assembly of Ditopic Imidazoles/Benzimidazoles and Dicarboxylic Acids into Cocrystals via Selective Oâ˜HÂ·Â·Â·N Hydrogen Bonds. Crystal Growth and Design, 2005, 5, 865-873.	3.0	101
9	Chirality Inversion of CdSe and CdS Quantum Dots without Changing the Stereochemistry of the Capping Ligand. ACS Nano, 2016, 10, 3809-3815.	14.6	94
10	Pt Alloy and Intermetallic Phases with V, Cr, Mn, Ni, and Cu: Synthesis As Nanomaterials and Possible Applications As Fuel Cell Catalysts. Chemistry of Materials, 2010, 22, 2190-2202.	6.7	92
11	Synthesis of Intermetallic PtZn Nanoparticles by Reaction of Pt Nanoparticles with Zn Vapor and Their Application as Fuel Cell Catalysts. Chemistry of Materials, 2009, 21, 2661-2667.	6.7	91
12	Use of Nanoporous FeOOH as a Catalytic Support for NaHCO₃ Decomposition Aimed at Reduction of Energy Requirement of Na₂CO₃/NaHCO₃ Based CO₂ Separation Technology. Journal of Physical Chemistry C, 2011, 115, 15532-15544.	3.1	80
13	Facile Synthesis of PtNi Intermetallic Nanoparticles: Influence of Reducing Agent and Precursors on Electrocatalytic Activity. Chemistry of Materials, 2011, 23, 1136-1146.	6.7	79
14	Synthesis of metastable chromium carbide nanomaterials and their electrocatalytic activity for the hydrogen evolution reaction. Dalton Transactions, 2017, 46, 13524-13530.	3.3	70
15	Crystal structure and morphology control of molybdenum carbide nanomaterials synthesized from an amineâ€“metal oxide composite. Chemical Communications, 2013, 49, 10409-10411.	4.1	66
16	CdSe Quantum Dots Functionalized with Chiral, Thiol-Free Carboxylic Acids: Unraveling Structural Requirements for Ligand-Induced Chirality. ACS Nano, 2017, 11, 9846-9853.	14.6	55
17	Nanocrystalline Mo₂C as a Bifunctional Water Splitting Electrocatalyst. ChemCatChem, 2015, 7, 3911-3915.	3.7	53
18	Colloidal Crystal Microarrays and Two-Dimensional Superstructures:Â A Versatile Approach for Patterned Surface Assembly. Langmuir, 2004, 20, 7293-7297.	3.5	49

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19	Use of multifunctional nanoporous TiO(OH)2 for catalytic NaHCO3 decomposition-eventually for Na2CO3/NaHCO3 based CO2 separation technology. Separation and Purification Technology, 2011, 80, 364-374.	7.9	45
20	Multistep Solution-Mediated Formation of AuCuSn2:Â Mechanistic Insights for the Guided Design of Intermetallic Solid-State Materials and Complex Multimetal Nanocrystals. Journal of the American Chemical Society, 2006, 128, 11475-11482.	13.7	43
21	General Synthesis Method for Bimetallic Carbides of Group VIIIA First Row Transition Metals with Molybdenum and Tungsten. Chemistry of Materials, 2014, 26, 2609-2616.	6.7	40
22	Probing synergetic effects between platinum nanoparticles deposited via atomic layer deposition and a molybdenum carbide nanotube support through surface characterization and device performance. Journal of Materials Chemistry A, 2016, 4, 9253-9265.	10.3	39
23	Supramolecular ssDNA Templated Porphyrin and Metalloporphyrin Nanoassemblies with Tunable Helicity. Chemistry - A European Journal, 2014, 20, 1878-1892.	3.3	33
24	Oxidative Transformation of Intermetallic Nanoparticles:â€‰ An Alternative Pathway to Metal/Oxide Nanocomposites, Textured Ceramics, and Nanocrystalline Multimetal Oxides. Chemistry of Materials, 2007, 19, 4545-4550.	6.7	30
25	Orthogonal Reactivity of Metal and Multimetal Nanostructures for Selective, Stepwise, and Spatially-Controlled Solid-State Modification. ACS Nano, 2009, 3, 940-948.	14.6	26
26	Catalyst supports for polymer electrolyte fuel cells. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 3243-3253.	3.4	21
27	Silver delafossite nitride, AgTaN2?. Journal of Solid State Chemistry, 2011, 184, 7-11.	2.9	17
28	Single-Crystal X-Ray Diffraction Study of Na[OCN] at 170 K and its Vibrational Spectra. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2010, 65, 528-532.	0.7	12
29	Low temperature growth of CuO nanowires through direct oxidation. Nano Structures Nano Objects, 2017, 11, 124-128.	3.5	12
30	Functional Nanoassemblies with Mirror-Image Chiroptical Properties Templated by a Single Homochiral DNA Strand. Chemistry of Materials, 2020, 32, 2272-2281.	6.7	10
31	Formation Mechanism of Nanostructured Metal Carbides via Salt-Flux Synthesis. Inorganic Chemistry, 2015, 54, 3889-3895.	4.0	9
32	Two-Dimensional 2M-WS₂ Nanolayers for Superconductivity. ACS Omega, 2021, 6, 2966-2972.	3.5	9
33	Alkali Metal Intercalation and Reduction of Layered WO₂Cl₂. Chemistry of Materials, 2020, 32, 10482-10488.	6.7	6
34	Salt flux synthesis of single and bimetallic carbide nanowires. Materials Research Express, 2016, 3, 074002.	1.6	5
35	The effect of molecular isomerism on the induced circular dichroism of cadmium sulfide quantum dots. Journal of Materials Chemistry C, 2021, 9, 17483-17495.	5.5	5
36	Biomass derived metal carbide catalysts formed using a salt flux synthesis. Materials Research Express, 2019, 6, 115519.	1.6	3

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37	Converting raw coal powder into polycrystalline nano-graphite by metal-assisted microwave treatment. Nano Structures Nano Objects, 2021, 25, 100660.	3.5	3
38	Multistep Fractionation of Coal and Application for Graphene Synthesis. ACS Omega, 2021, 6, 16573-16583.	3.5	3
39	Non-aqueous thermolytic route to oxynitride photomaterials using molecular precursors Ti(OtBu)4 and Nî€,Mo(OtBu)3. Journal of Materials Chemistry A, 2013, 1, 14066.	10.3	2
40	Amine-based synthesis of Fe3C nanomaterials: mechanism and impact of synthetic conditions. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2021, .	0.7	2
41	Low-Temperature Polyol Synthesis of AuCuSn2 and AuNiSn2: Using Solution Chemistry to Access Ternary Intermetallic Compounds as Nanocrystals.. ChemInform, 2005, 36, no.	0.0	1
42	Synthesis of Metastable Ternary Pd-W and Pd-Mo Transition Metal Carbide Nanomaterials. Molecules, 2021, 26, 6650.	3.8	1
43	Surface Characterization and Platinum-like Electrocatalytic Activity of Nano-Scale Platinum Deposited on Transition Metal Carbide Nanotubes via Atomic Layer Deposition. ECS Transactions, 2015, 69, 77-89.	0.5	0
44	A Facile Synthesis of Highly Stable Modified Carbon Nanotubes as Efficient Oxygen Reduction Reaction Catalysts. ChemistrySelect, 2017, 2, 1932-1938.	1.5	0