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List of Publications by Year in descending order

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82 papers

6,910 citations

36 h-index 80 g-index

83 all docs 83 docs citations 83 times ranked 10031 citing authors

#	Article	IF	CITATIONS
1	Insight into the Ligand-Mediated Synthesis of Colloidal CsPbBr ₃ Perovskite Nanocrystals: The Role of Organic Acid, Base, and Cesium Precursors. ACS Nano, 2016, 10, 7943-7954.	14.6	713
2	Air-stable magnesium nanocomposites provide rapid and high-capacity hydrogen storage without using heavy-metal catalysts. Nature Materials, 2011, 10, 286-290.	27.5	600
3	Swelling of Graphene Oxide Membranes in Aqueous Solution: Characterization of Interlayer Spacing and Insight into Water Transport Mechanisms. ACS Nano, 2017, 11, 6440-6450.	14.6	552
4	Synergism in binary nanocrystal superlattices leads to enhanced p-type conductivity in self-assembled PbTe/Ag2Te thin films. Nature Materials, 2007, 6, 115-121.	27.5	498
5	Nanostructured Metal Hydrides for Hydrogen Storage. Chemical Reviews, 2018, 118, 10775-10839.	47.7	461
6	Understanding the Aqueous Stability and Filtration Capability of MoS ₂ Membranes. Nano Letters, 2017, 17, 7289-7298.	9.1	283
7	Nanocomposite Architecture for Rapid, Spectrally-Selective Electrochromic Modulation of Solar Transmittance. Nano Letters, 2015, 15, 5574-5579.	9.1	179
8	Graphene oxide/metal nanocrystal multilaminates as the atomic limit for safe and selective hydrogen storage. Nature Communications, 2016, 7, 10804.	12.8	178
9	Enhanced permeation arising from dual transport pathways in hybrid polymer–MOF membranes. Energy and Environmental Science, 2016, 9, 922-931.	30.8	178
10	Removal and Recovery of Heavy Metal Ions by Two-dimensional MoS ₂ Nanosheets: Performance and Mechanisms. Environmental Science & Environmen	10.0	177
11	Temperature-dependent supramolecular stereoisomerism in porous copper coordination networks based on a designed carboxylate ligand. Chemical Communications, 2005, , 5447.	4.1	176
12	An assessment of strategies for the development of solid-state adsorbents for vehicular hydrogen storage. Energy and Environmental Science, 2018, 11, 2784-2812.	30.8	162
13	Monodisperse Sn Nanocrystals as a Platform for the Study of Mechanical Damage during Electrochemical Reactions with Li. Nano Letters, 2013, 13, 1800-1805.	9.1	134
14	Influence of Shape on the Surface Plasmon Resonance of Tungsten Bronze Nanocrystals. Chemistry of Materials, 2014, 26, 1779-1784.	6.7	133
15	Dynamic Covalent Synthesis of Crystalline Porous Graphitic Frameworks. CheM, 2020, 6, 933-944.	11.7	123
16	Nanorod Suprastructures from a Ternary Graphene Oxide–Polymer–CsPbX ₃ Perovskite Nanocrystal Composite That Display High Environmental Stability. Nano Letters, 2017, 17, 6759-6765.	9.1	118
17	Uncovering the intrinsic size dependence of hydriding phase transformations in nanocrystals. Nature Materials, 2013, 12, 905-912.	27.5	116
18	Emerging Scientific and Engineering Opportunities within the Water-Energy Nexus. Joule, 2017, 1, 665-688.	24.0	109

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19	Magnesium nanocrystal-polymer composites: A new platform for designer hydrogen storage materials. Energy and Environmental Science, 2011, 4, 4882.	30.8	105
20	Chemical Control of Plasmons in Metal Chalcogenide and Metal Oxide Nanostructures. Advanced Materials, 2015, 27, 5830-5837.	21.0	98
21	Carrier Scattering at Alloy Nanointerfaces Enhances Power Factor in PEDOT:PSS Hybrid Thermoelectrics. Nano Letters, 2016, 16, 3352-3359.	9.1	93
22	Stability and Porosity Enhancement through Concurrent Ligand Extension and Secondary Building Unit Stabilization. Inorganic Chemistry, 2006, 45, 7566-7568.	4.0	90
23	Superselective Removal of Lead from Water by Two-Dimensional MoS ₂ Nanosheets and Layer-Stacked Membranes. Environmental Science & Environme	10.0	87
24	A nature-inspired hydrogen-bonded supramolecular complex for selective copper ion removal from water. Nature Communications, 2020, 11, 3947.	12.8	86
25	Dual-Channel, Molecular-Sieving Core/Shell ZIF@MOF Architectures as Engineered Fillers in Hybrid Membranes for Highly Selective CO ₂ Separation. Nano Letters, 2017, 17, 6752-6758.	9.1	82
26	Correlating Interlayer Spacing and Separation Capability of Graphene Oxide Membranes in Organic Solvents. ACS Nano, 2020, 14, 6013-6023.	14.6	81
27	Hydrogenâ€Bonded Polyimide/Metalâ€Organic Framework Hybrid Membranes for Ultrafast Separations of Multiple Gas Pairs. Advanced Functional Materials, 2019, 29, 1903243.	14.9	78
28	Hierarchically Controlled Insideâ€Out Doping of Mg Nanocomposites for Moderate Temperature Hydrogen Storage. Advanced Functional Materials, 2017, 27, 1704316.	14.9	72
29	Progress and Perspective: Soft Thermoelectric Materials for Wearable and Internetâ€ofâ€Things Applications. Advanced Electronic Materials, 2019, 5, 1800823.	5.1	71
30	Insights into the Mechanism of Methanol Steam Reforming Tandem Reaction over CeO ₂ Supported Single-Site Catalysts. Journal of the American Chemical Society, 2021, 143, 12074-12081.	13.7	70
31	Interfacial Solar Evaporation by a 3D Graphene Oxide Stalk for Highly Concentrated Brine Treatment. Environmental Science & Technology, 2021, 55, 15435-15445.	10.0	62
32	Synergistic enhancement of hydrogen storage and air stability via Mg nanocrystal–polymer interfacial interactions. Energy and Environmental Science, 2013, 6, 3267.	30.8	52
33	Low Temperature Synthesis and Surface Plasmon Resonance of Colloidal Lanthanum Hexaboride (LaB ₆) Nanocrystals. Chemistry of Materials, 2015, 27, 6620-6624.	6.7	46
34	High-Performance, Wearable Thermoelectric Generator Based on a Highly Aligned Carbon Nanotube Sheet. ACS Applied Energy Materials, 2020, 3, 1199-1206.	5.1	43
35	Covalent Organic Frameworks with Irreversible Linkages via Reductive Cyclization of Imines. Journal of the American Chemical Society, 2022, 144, 9827-9835.	13.7	39
36	Bandgap Tunability in Sbâ€Alloyed BiVO ₄ Quaternary Oxides as Visible Light Absorbers for Solar Fuel Applications. Advanced Materials, 2015, 27, 6733-6740.	21.0	38

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37	Atomically Thin Interfacial Suboxide Key to Hydrogen Storage Performance Enhancements of Magnesium Nanoparticles Encapsulated in Reduced Graphene Oxide. Nano Letters, 2017, 17, 5540-5545.	9.1	37
38	Graphene-polyelectrolyte multilayer membranes with tunable structure and internal charge. Carbon, 2020, 160, 219-227.	10.3	36
39	Lightweight wearable thermoelectric cooler with rationally designed flexible heatsink consisting of phase-change material/graphite/silicone elastomer. Journal of Materials Chemistry A, 2021, 9, 15696-15703.	10.3	35
40	Enhanced and stabilized hydrogen production from methanol by ultrasmall Ni nanoclusters immobilized on defect-rich h-BN nanosheets. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29442-29452.	7.1	34
41	Supercompliant and Soft <mml:math display="inline" xmins:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:msub><mml:mrow><mml:mi>CH</mml:mi></mml:mrow><mml:mrow><mr< td=""><td>ml:n7n8∘3<td>mnal3mn></td></td></mr<></mml:mrow></mml:msub></mml:mrow></mml:msub></mml:mrow></mml:math>	ml:n 7 n8∘3 <td>mnal3mn></td>	mn al3 mn>
42	Physical Review Letters, 2019, 123, 155901. Tuning the Surface Plasmon Resonance of Lanthanum Hexaboride to Absorb Solar Heat: A Review. Materials, 2018, 11, 2473.	2.9	30
43	A Mechanistic Analysis of Phase Evolution and Hydrogen Storage Behavior in Nanocrystalline Mg(BH ₄) ₂ within Reduced Graphene Oxide. ACS Nano, 2020, 14, 1745-1756.	14.6	29
44	Rapid Stoichiometry Control in Cu ₂ Se Thin Films for Room-Temperature Power Factor Improvement. ACS Applied Energy Materials, 2019, 2, 1517-1525.	5.1	28
45	Edge-Functionalized Graphene Nanoribbon Encapsulation To Enhance Stability and Control Kinetics of Hydrogen Storage Materials. Chemistry of Materials, 2019, 31, 2960-2970.	6.7	26
46	Enhanced Forward Osmosis Desalination with a Hybrid Ionic Liquid/Hydrogel Thermoresponsive Draw Agent System. ACS Omega, 2019, 4, 4296-4303.	3.5	25
47	Structural and spectroscopic characterization of an einsteinium complex. Nature, 2021, 590, 85-88.	27.8	25
48	Solution-Processed Cu2Se Nanocrystal Films with Bulk-Like Thermoelectric Performance. Scientific Reports, 2017, 7, 2765.	3.3	24
49	Molecular insight into the lower critical solution temperature transition of aqueous alkyl phosphonium benzene sulfonates. Communications Chemistry, 2019, 2, .	4.5	22
50	Modifying Li ⁺ and Anion Diffusivities in Polyacetal Electrolytes: A Pulsed-Field-Gradient NMR Study of Ion Self-Diffusion. Chemistry of Materials, 2021, 33, 4915-4926.	6.7	21
51	Solar Desalination Using Thermally Responsive Ionic Liquids Regenerated with a Photonic Heater. Environmental Science & Environmental Science & Enviro	10.0	20
52	Stabilized open metal sites in bimetallic metal–organic framework catalysts for hydrogen production from alcohols. Journal of Materials Chemistry A, 2021, 9, 10869-10881.	10.3	20
53	Pyrazine-Fused Porous Graphitic Framework-Based Mixed Matrix Membranes for Enhanced Gas Separations. ACS Applied Materials & Amp; Interfaces, 2020, 12, 16922-16929.	8.0	19
54	Evolution of Vibrational Properties in Lanthanum Hexaboride Nanocrystals. Journal of Physical Chemistry C, 2016, 120, 5188-5195.	3.1	18

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55	Moving the Plasmon of LaB6 from IR to Near-IR via Eu-Doping. Materials, 2018, 11, 226.	2.9	18
56	Enhanced Charge Carrier Transport in 2D Perovskites by Incorporating Single-Walled Carbon Nanotubes or Graphene. ACS Energy Letters, 2020, 5, 109-116.	17.4	17
57	Exchange Bias in a Layered Metal–Organic Topological Spin Glass. ACS Central Science, 2021, 7, 1317-1326.	11.3	17
58	Experimental Phonon Dispersion and Lifetimes of Tetragonal CH3NH3PbI3 Perovskite Crystals. Journal of Physical Chemistry Letters, 2019, 10, 1-6.	4.6	15
59	Dimensional Control over Metal Halide Perovskite Crystallization Guided by Active Learning. Chemistry of Materials, 2022, 34, 756-767.	6.7	13
60	Inâ€Situ/Operando Xâ€ray Characterization of Metal Hydrides. ChemPhysChem, 2019, 20, 1261-1271.	2.1	12
61	Anion-mediated negative thermal expansion in lanthanum hexaboride. Solid State Communications, 2017, 265, 47-51.	1.9	11
62	Defying Thermodynamics: Stabilization of Alane Within Covalent Triazine Frameworks for Reversible Hydrogen Storage. Angewandte Chemie - International Edition, 2021, 60, 25815-25824.	13.8	11
63	Nanocrystal Superlattice Embedded within an Inorganic Semiconducting Matrix by in Situ Ligand Exchange: Fabrication and Morphology. Chemistry of Materials, 2015, 27, 2755-2758.	6.7	10
64	Long-Range Order in Nanocrystal Assemblies Determines Charge Transport of Films. ACS Omega, 2017, 2, 3681-3690.	3.5	10
65	Runaway Carbon Dioxide Conversion Leads to Enhanced Uptake in a Nanohybrid Form of Porous Magnesium Borohydride. Advanced Materials, 2019, 31, e1904252.	21.0	10
66	Effects of Size and Structural Defects on the Vibrational Properties of Lanthanum Hexaboride Nanocrystals. ACS Omega, 2017, 2, 2248-2254.	3.5	9
67	Sugar-alcohol@ZIF nanocomposites display suppressed phase-change temperatures. Journal of Materials Chemistry A, 2020, 8, 23795-23802.	10.3	9
68	Hydrogen Storage Performance of Preferentially Oriented Mg/rGO Hybrids. Chemistry of Materials, 2022, 34, 2963-2971.	6.7	8
69	Chloride influence on the formation of lanthanum hexaboride: An in-situ diffraction study. Journal of Crystal Growth, 2018, 486, 60-65.	1.5	7
70	Adapting the Electron Beam from SEM as a Quantitative Heating Source for Nanoscale Thermal Metrology. Nano Letters, 2020, 20, 3019-3029.	9.1	7
71	Independent tuning of work function and field enhancement factor in hybrid lanthanum hexaboride-graphene-silicon field emitters. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 062202.	1.2	6
72	Tailoring Polymer Conformation for Nanocrystal Growth: The Role of Chain Length and Solvent. Small, 2017, 13, 1602572.	10.0	6

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73	Additive Destabilization of Porous Magnesium Borohydride Framework with Coreâ€Shell Structure. Small, 2021, 17, e2101989.	10.0	6
74	Iron(III) Dopant Counterions Affect the Charge-Transport Properties of Poly(Thiophene) and Poly(Dialkoxythiophene) Derivatives. ACS Applied Materials & Samp; Interfaces, 2022, 14, 29039-29051.	8.0	5
75	Using Additives to Control the Decomposition Temperature of Sodium Borohydride. , 2020, 2, 1-20.		4
76	Calcium chloride substitution in sodium borohydride. Journal of Solid State Chemistry, 2020, 290, 121499.	2.9	3
77	Melting Point Depression and Phase Identification of Sugar Alcohols Encapsulated in ZIF Nanopores. Journal of Physical Chemistry C, 2021, 125, 10001-10010.	3.1	2
78	Defying Thermodynamics: Stabilization of Alane Within Covalent Triazine Frameworks for Reversible Hydrogen Storage. Angewandte Chemie, 2021, 133, 26019-26028.	2.0	2
79	Modulation of Carrier Type in Nanocrystal-in-Matrix Composites by Interfacial Doping. Chemistry of Materials, 2018, 30, 2544-2549.	6.7	1
80	Design Rules for Selfâ€Assembly of 2D Nanocrystal/Metal–Organic Framework Superstructures. Angewandte Chemie, 2018, 130, 13356-13360.	2.0	1
81	Impact of Source Position and Obstructions on Fume Hood Releases. Annals of Work Exposures and Health, 2019, 63, 937-949.	1.4	1
82	Chloride influence on the reaction mechanism of lanthanum hexaboride. Journal of Crystal Growth, 2019, 518, 30-33.	1.5	O