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List of Publications by Year
in descending order

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71 papers	5,467 citations	76326 40 h-index	91884 69 g-index
73 all docs	73 docs citations	73 times ranked	6782 citing authors

#	Article	IF	Citations
1	MOF Crystal Chemistry Paving the Way to Gas Storage Needs: Aluminum-Based soc-MOF for CH₄, O₂, and CO₂ Storage. Journal of the American Chemical Society, 2015, 137, 13308-13318.	13.7	632
2	Enhanced photovoltaic performance and stability with a new type of hollow 3D perovskite {en}FASnI ₃. Science Advances, 2017, 3, e1701293.	10.3	325
3	Myths and reality of HPbI3 in halide perovskite solar cells. Nature Communications, 2018, 9, 4785.	12.8	238
4	Efficient Lead-Free Solar Cells Based on Hollow {en}MASnI₃ Perovskites. Journal of the American Chemical Society, 2017, 139, 14800-14806.	13.7	230
5	Compositional and Solvent Engineering in Dionâ€“Jacobson 2D Perovskites Boosts Solar Cell Efficiency and Stability. Advanced Energy Materials, 2019, 9, 1803384.	19.5	219
6	CsPbBr3 perovskite detectors with 1.4% energy resolution for high-energy Î³-rays. Nature Photonics, 2021, 15, 36-42.	31.4	210
7	Reticular Synthesis of HKUST-like tbo-MOFs with Enhanced CH₄ Storage. Journal of the American Chemical Society, 2016, 138, 1568-1574.	13.7	193
8	Uniaxial Expansion of the 2D Ruddlesdenâ€“Popper Perovskite Family for Improved Environmental Stability. Journal of the American Chemical Society, 2019, 141, 5518-5534.	13.7	193
9	Conjugated Organic Cations Enable Efficient Self-Healing FASnI3 Solar Cells. Joule, 2019, 3, 3072-3087.	24.0	190
10	Dopant-Free Tetrakis-Triphenylamine Hole Transporting Material for Efficient Tin-Based Perovskite Solar Cells. Journal of the American Chemical Society, 2018, 140, 388-393.	13.7	163
11	Tripleâ€Cation and Mixedâ€Halide Perovskite Single Crystal for Highâ€Performance Xâ€ray Imaging. Advanced Materials, 2021, 33, e2006010.	21.0	163
12	Unraveling the Chemical Nature of the 3D â€œHollowâ€•Hybrid Halide Perovskites. Journal of the American Chemical Society, 2018, 140, 5728-5742.	13.7	132
13	Conventional Solvent Oxidizes Sn(II) in Perovskite Inks. ACS Energy Letters, 2020, 5, 1153-1155.	17.4	127
14	Improved Environmental Stability and Solar Cell Efficiency of (MA,FA)PbI₃ Perovskite Using a Wide-Band-Gap 1D Thiazolium Lead Iodide Capping Layer Strategy. ACS Energy Letters, 2019, 4, 1763-1769.	17.4	118
15	Diammonium Cations in the FASnI₃ Perovskite Structure Lead to Lower Dark Currents and More Efficient Solar Cells. ACS Energy Letters, 2018, 3, 1470-1476.	17.4	114
16	A Straight Forward Route for the Development of Metalâ€“Organic Frameworks Functionalized with Aromatic â^’OH Groups: Synthesis, Characterization, and Gas (N₂, Ar, H₂,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 855-862.	4.0	107
17	Narrow-Bandgap Mixed Lead/Tin-Based 2D Dionâ€“Jacobson Perovskites Boost the Performance of Solar Cells. Journal of the American Chemical Society, 2020, 142, 15049-15057.	13.7	103
18	Reticular Chemistry at Its Best: Directed Assembly of Hexagonal Building Units into the Awaited Metal-Organic Framework with the Intricate Polybenzene Topology, pbz-MOF. Journal of the American Chemical Society, 2016, 138, 12767-12770.	13.7	101

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19	Cation Engineering in Two-Dimensional Ruddlesdenâ€“Popper Lead Iodide Perovskites with Mixed Large A-Site Cations in the Cages. Journal of the American Chemical Society, 2020, 142, 4008-4021.	13.7	101
20	Ethylenediammonium-Based â€œHollowâ€• Pb/Sn Perovskites with Ideal Band Gap Yield Solar Cells with Higher Efficiency and Stability. Journal of the American Chemical Society, 2019, 141, 8627-8637.	13.7	93
21	Drastic Enhancement of the CO₂ Adsorption Properties in Sulfone-Functionalized Zr- and Hf-UiO-67 MOFs with Hierarchical Mesopores. Inorganic Chemistry, 2014, 53, 679-681.	4.0	87
22	Alternative Organic Spacers for More Efficient Perovskite Solar Cells Containing Ruddlesdenâ€“Popper Phases. Journal of the American Chemical Society, 2020, 142, 19705-19714.	13.7	83
23	Insight on the Stability of Thick Layers in 2D Ruddlesdenâ€“Popper and Dionâ€“Jacobson Lead Iodide Perovskites. Journal of the American Chemical Society, 2021, 143, 2523-2536.	13.7	79
24	High Figure of Merit in Gallium-Doped Nanostructured n-Type PbTe-<i>x</i>GeTe with Midgap States. Journal of the American Chemical Society, 2019, 141, 16169-16177.	13.7	76
25	Enhancement of Thermoelectric Performance for n-Type PbS through Synergy of Gap State and Fermi Level Pinning. Journal of the American Chemical Society, 2019, 141, 6403-6412.	13.7	67
26	Out-of-Plane Mechanical Properties of 2D Hybrid Organicâ€“Inorganic Perovskites by Nanoindentation. ACS Applied Materials & Interfaces, 2018, 10, 22167-22173.	8.0	64
27	Organic Cation Alloying on Intralayer A and Interlayer Aâ€™ sites in 2D Hybrid Dionâ€“Jacobson Lead Bromide Perovskites (Aâ€™)(A)Pb₂Br₇. Journal of the American Chemical Society, 2020, 142, 8342-8351.	13.7	64
28	Stretching and Breaking of Ultrathin 2D Hybrid Organicâ€“Inorganic Perovskites. ACS Nano, 2018, 12, 10347-10354.	14.6	60
29	Amphoteric Indium Enables Carrier Engineering to Enhance the Power Factor and Thermoelectric Performance in <i>n</i>â€Type Ag<i>_n</i>Pb₁₀₀In<i>_n</i>Te₁₀₀₊₂<i>_n</i> (LIST). Advanced Energy Materials, 2019, 9, 1900414.	19.5	60
30	Water-Stable 1D Hybrid Tin(II) Iodide Emits Broad Light with 36% Photoluminescence Quantum Efficiency. Journal of the American Chemical Society, 2020, 142, 9028-9038.	13.7	57
31	Exceptional TcO₄^{âˆ’} sorption capacity and highly efficient ReO₄^{âˆ’} luminescence sensing by Zr⁴⁺ MOFs. Journal of Materials Chemistry A, 2018, 6, 20813-20821.	10.3	54
32	Liquid phase epitaxial growth of heterostructured hierarchical MOF thin films. Chemical Communications, 2017, 53, 6191-6194.	4.1	53
33	Light-activated interlayer contraction in two-dimensional perovskites for high-efficiency solar cells. Nature Nanotechnology, 2022, 17, 45-52.	31.5	52
34	Benzodithiophene Holeâ€Transporting Materials for Efficient Tinâ€Based Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905393.	14.9	49
35	Probing Strain-Induced Band Gap Modulation in 2D Hybrid Organicâ€“Inorganic Perovskites. ACS Energy Letters, 2019, 4, 796-802.	17.4	47
36	Exploring the Factors Affecting the Mechanical Properties of 2D Hybrid Organicâ€“Inorganic Perovskites. ACS Applied Materials & Interfaces, 2020, 12, 20440-20447.	8.0	47

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37	Understanding Instability in Formamidinium Lead Halide Perovskites: Kinetics of Transformative Reactions at Grain and Subgrain Boundaries. ACS Energy Letters, 2022, 7, 1534-1543.	17.4	45
38	Nanotechnology for catalysis and solar energy conversion. Nanotechnology, 2021, 32, 042003.	2.6	44
39	Understanding the adsorption mechanism of noble gases Kr and Xe in CPO-27-Ni, CPO-27-Mg, and ZIF-8. Physical Chemistry Chemical Physics, 2014, 16, 23908-23914.	2.8	43
40	3D-printed lab-in-a-syringe voltammetric cell based on a working electrode modified with a highly efficient Ca-MOF sorbent for the determination of Hg(II). Sensors and Actuators B: Chemical, 2020, 321, 128508.	7.8	43
41	Exceptional gravimetric and volumetric CO2 uptake in a palladated NbO-type MOF utilizing cooperative acidic and basic, metalâ€“CO2 interactions. Chemical Communications, 2016, 52, 10559-10562.	4.1	40
42	Heterometallic In(III)â€“Pd(II) Porous Metalâ€“Organic Framework with Square-Octahedron Topology Displaying High CO₂ Uptake and Selectivity toward CH₄ and N₂. Inorganic Chemistry, 2018, 57, 7244-7251.	4.0	37
43	Tunable Broad Light Emission from 3D â€œHollowâ€• Bromide Perovskites through Defect Engineering. Journal of the American Chemical Society, 2021, 143, 7069-7080.	13.7	37
44	Enhanced gas-sorption properties of a high surface area, ultramicroporous magnesium formate. CrystEngComm, 2015, 17, 532-539.	2.6	32
45	Incorporated Guanidinium Expands the CH₃NH₃PbI₃ Lattice and Enhances Photovoltaic Performance. ACS Applied Materials & Interfaces, 2020, 12, 43885-43891.	8.0	31
46	Shedding Light on the Stability and Structureâ€“Property Relationships of Two-Dimensional Hybrid Lead Bromide Perovskites. Chemistry of Materials, 2021, 33, 5085-5107.	6.7	29
47	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie - International Edition, 2021, 60, 268-273.	13.8	28
48	Chalcogenide Aerogels as Sorbents for Noble Gases (Xe, Kr). ACS Applied Materials & Interfaces, 2017, 9, 33389-33394.	8.0	25
49	Reticular Chemistry and the Discovery of a New Family of Rare Earth (4, 8)-Connected Metal-Organic Frameworks with csq Topology Based on RE₄(Î¼₃-O)₂(COO)₈ Clusters. ACS Applied Materials & Interfaces, 2017, 9, 44560-44566.	8.0	25
50	A Microporous Co²⁺ Metal Organic Framework with Single-Crystal to Single-Crystal Transformation Properties and High CO₂ Uptake. Crystal Growth and Design, 2015, 15, 185-193.	3.0	24
51	Tuning Ionic and Electronic Conductivities in the â€œHollowâ€• Perovskite {<i>en</i>}MAPbI₃. Chemistry of Materials, 2021, 33, 719-726.	6.7	24
52	A microporous Cu²⁺MOF based on a pyridyl isophthalic acid Schiff base ligand with high CO₂uptake. Inorganic Chemistry Frontiers, 2016, 3, 1527-1535.	6.0	22
53	Entropy Stabilization Effects and Ion Migration in 3D â€œHollowâ€• Halide Perovskites. Journal of the American Chemical Society, 2022, 144, 8223-8230.	13.7	18
54	High-phase purity two-dimensional perovskites with 17.3% efficiency enabled by interface engineering of hole transport layer. Cell Reports Physical Science, 2021, 2, 100601.	5.6	17

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55	Polariton Dynamics in Two-Dimensional Ruddlesdenâ€"Popper Perovskites Strongly Coupled with Plasmonic Lattices. ACS Nano, 2022, 16, 3917-3925.	14.6	17
56	In Quest of Environmentally Stable Perovskite Solar Cells: A Perspective. Helvetica Chimica Acta, 2021, 104, .	1.6	15
57	In-Plane Mechanical Properties of Two-Dimensional Hybrid Organicâ€"Inorganic Perovskite Nanosheets: Structureâ€"Property Relationships. ACS Applied Materials & Interfaces, 2021, 13, 31642-31649.	8.0	15
58	Polaron Plasma in Equilibrium with Bright Excitons in 2D and 3D Hybrid Perovskites. Advanced Optical Materials, 2021, 9, 2100295.	7.3	14
59	Thick-Layer Lead Iodide Perovskites with Bifunctional Organic Spacers Allylammonium and Iodopropylammonium Exhibiting Trap-State Emission. Journal of the American Chemical Society, 2022, 144, 6390-6409.	13.7	13
60	High-quality graphene sheets decorated with ZIF-8 nanocrystals. Microporous and Mesoporous Materials, 2018, 262, 68-76.	4.4	12
61	Selective Capture Mechanism of Radioactive Thorium from Highly Acidic Solution by a Layered Metal Sulfide. ACS Applied Materials & Interfaces, 2021, 13, 37308-37315.	8.0	11
62	A â€œturn-onâ€â€"turning-to-ratiometric sensor for zinc(<scp>ii</scp>) ions in aqueous media. RSC Advances, 2014, 4, 693-696.	3.6	10
63	Antiferromagnetic Semiconductor BaFMn_{0.5}Te with Unique Mn Ordering and Red Photoluminescence. Journal of the American Chemical Society, 2019, 141, 17421-17430.	13.7	10
64	Directed assembly of a high surface area 2D metalâ€"organic framework displaying the augmented â€œkagomÃ© dualâ€•(kgd-a) layered topology with high H₂and CO₂uptake. Inorganic Chemistry Frontiers, 2017, 4, 825-832.	6.0	8
65	Hidden Complexity in the Chemistry of Ammonolysis-Derived â€œÎ³-Mo₂Nâ€: An Overlooked Oxynitride Hydride. Chemistry of Materials, 2021, 33, 6671-6684.	6.7	8
66	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie, 2021, 133, 272-277.	2.0	7
67	Sn_{4â^'Î´}B₁₂Se₁₂[Q_{<i>x</i>}], Q = Se, Te, a B₁₂ Cluster Tunnel Framework Hosting Neutral Chalcogen Chains. Chemistry of Materials, 2021, 33, 1723-1730.	6.7	6
68	A Microporous Co(II)-Based 3-D Metal Organic Framework Built from Magnetic Infinite Rod-Shaped Secondary Building Units. European Journal of Inorganic Chemistry, 2019, 2019, 4056-4062.	2.0	4
69	2D Homologous Series SrFM_{<i>n</i>}BiS_{<i>n</i>+2} (M = Pb,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Sr₂F₂Bi_{2/3}S₂. Inorganic Chemistry, 2022, 61, 8233-8240.	4.0	2
70	A Microporous Co(II)-Based 3-D Metal Organic Framework Built from Magnetic Infinite Rod-Shaped Secondary Building Units. European Journal of Inorganic Chemistry, 2019, 2019, 4055-4055.	2.0	0
71	Understanding morphology, microstructure, and stability of photovoltaic materials using solid-state NMR spectroscopy. , 0, , .		0