Mercouri G Kanatzidis

List of Publications by Citations

882 papers	92,129 citations	142 h-index	282 g-index
929 ext. papers	106,283 ext. citations	12.6 avg, IF	8.72 L-index

#	Paper	IF	Citations
882	Semiconducting tin and lead iodide perovskites with organic cations: phase transitions, high mobilities, and near-infrared photoluminescent properties. *Inorganic Chemistry*, **2013**, 52, 9019-38	5.1	3742
881	Ultralow thermal conductivity and high thermoelectric figure of merit in SnSe crystals. *Nature*, **2014**, 508, 373-7	50.4	3074
880	High-performance bulk thermoelectrics with all-scale hierarchical architectures. *Nature*, **2012**, 489, 414-8	50.4	3069
879	Liquid Exfoliation of Layered Materials. *Science*, **2013**, 340, 1226419-1226419	33.3	2604
878	Cubic AgPb(m)SbTe(2+m): bulk thermoelectric materials with high figure of merit. *Science*, **2004**, 303, 818-21	33.3	2481
877	High-efficiency two-dimensional Ruddlesden-Popper perovskite solar cells. *Nature*, **2016**, 536, 312-6	50.4	2161
876	Lead-free solid-state organic–inorganic halide perovskite solar cells. *Nature Photonics*, **2014**, 8, 489-494	33.9	1966
875	New and old concepts in thermoelectric materials. *Angewandte Chemie - International Edition*, **2009**, 48, 8616-39	16.4	1634
874	2D Homologous Perovskites as Light-Absorbing Materials for Solar Cell Applications. *Journal of the American Chemical Society*, **2015**, 137, 7843-50	16.4	1464
873	All-solid-state dye-sensitized solar cells with high efficiency. *Nature*, **2012**, 485, 486-9	50.4	1392
872	Ultrahigh power factor and thermoelectric performance in hole-doped single-crystal SnSe. *Science*, **2016**, 351, 141-4	33.3	1237
871	Ruddlesden–Popper Hybrid Lead Iodide Perovskite 2D Homologous Semiconductors. *Chemistry of Materials*, **2016**, 28, 2852-2867	9.6	1166
870	Rationally Designing High-Performance Bulk Thermoelectric Materials. *Chemical Reviews*, **2016**, 116, 12123-12149	68.1	1155
869	Nanostructured thermoelectrics: big efficiency gains from small features. *Advanced Materials*, **2010**, 22, 3970-80	24	1085
868	Anomalous band gap behavior in mixed Sn and Pb perovskites enables broadening of absorption spectrum in solar cells. *Journal of the American Chemical Society*, **2014**, 136, 8094-9	16.4	1010
867	Low-temperature fabrication of high-performance metal oxide thin-film electronics via combustion processing. *Nature Materials*, **2011**, 10, 382-8	27	957
866	Crystal Growth of the Perovskite Semiconductor CsPbBr3: A New Material for High-Energy Radiation Detection. *Crystal Growth and Design*, **2013**, 13, 2722-2727	3.5	927

865	Nanostructured Thermoelectrics: The New Paradigm? *Chemistry of Materials*, **2010**, 22, 648-659	9.6	878
864	Strained endotaxial nanostructures with high thermoelectric figure of merit. *Nature Chemistry*, **2011**, 3, 160-6	17.6	794
863	Beyond fossil fuel-driven nitrogen transformations. *Science*, **2018**, 360,	33.3	772
862	CsBi(4)Te(6): A high-performance thermoelectric material for low-temperature applications. *Science*, **2000**, 287, 1024-7	33.3	751
861	The panoscopic approach to high performance thermoelectrics. *Energy and Environmental Science*, **2014**, 7, 251-268	35.4	718
860	Design of active and stable Co-Mo-Sx chalcogels as pH-universal catalysts for the hydrogen evolution reaction. *Nature Materials*, **2016**, 15, 197-203	27	683
859	CsSnI3: Semiconductor or metal? High electrical conductivity and strong near-infrared photoluminescence from a single material. High hole mobility and phase-transitions. *Journal of the American Chemical Society*, **2012**, 134, 8579-87	16.4	675
858	Two-Dimensional Hybrid Halide Perovskites: Principles and Promises. *Journal of the American Chemical Society*, **2019**, 141, 1171-1190	16.4	608
857	Hybrid germanium iodide perovskite semiconductors: active lone pairs, structural distortions, direct and indirect energy gaps, and strong nonlinear optical properties. *Journal of the American Chemical Society*, **2015**, 137, 6804-19	16.4	528
856	Thinking Like a Chemist: Intuition in Thermoelectric Materials. *Angewandte Chemie - International Edition*, **2016**, 55, 6826-41	16.4	478
855	The Renaissance of Halide Perovskites and Their Evolution as Emerging Semiconductors. *Accounts of Chemical Research*, **2015**, 48, 2791-802	24.3	476
854	Metal Chalcogenides: A Rich Source of Nonlinear Optical Materials. *Chemistry of Materials*, **2014**, 26, 849-869	9.6	463
853	Solvent-Mediated Crystallization of CH3NH3SnI3 Films for Heterojunction Depleted Perovskite Solar Cells. *Journal of the American Chemical Society*, **2015**, 137, 11445-52	16.4	455
852	Highly Selective and Efficient Removal of Heavy Metals by Layered Double Hydroxide Intercalated with the MoS4(2-) Ion. *Journal of the American Chemical Society*, **2016**, 138, 2858-66	16.4	427
851	Air-stable molecular semiconducting iodosalts for solar cell applications: Cs2SnI6 as a hole conductor. *Journal of the American Chemical Society*, **2014**, 136, 15379-85	16.4	427
850	Hybrid Dion-Jacobson 2D Lead Iodide Perovskites. *Journal of the American Chemical Society*, **2018**, 140, 3775-3783	16.4	426
849	High thermoelectric performance of p-type SnTe via a synergistic band engineering and nanostructuring approach. *Journal of the American Chemical Society*, **2014**, 136, 7006-17	16.4	425
848	Prospects for low-toxicity lead-free perovskite solar cells. *Nature Communications*, **2019**, 10, 965	17.4	420

847	Broad Wavelength Tunable Robust Lasing from Single-Crystal Nanowires of Cesium Lead Halide Perovskites (CsPbX3, X = Cl, Br, I). *ACS Nano*, **2016**, 10, 7963-72	16.7	414
846	Light-induced lattice expansion leads to high-efficiency perovskite solar cells. *Science*, **2018**, 360, 67-70	33.3	413
845	The metal flux: a preparative tool for the exploration of intermetallic compounds. *Angewandte Chemie - International Edition*, **2005**, 44, 6996-7023	16.4	393
844	White-Light Emission and Structural Distortion in New Corrugated Two-Dimensional Lead Bromide Perovskites. *Journal of the American Chemical Society*, **2017**, 139, 5210-5215	16.4	385
843	Spinodal decomposition and nucleation and growth as a means to bulk nanostructured thermoelectrics: enhanced performance in Pb(1-x)Sn(x)Te-PbS. *Journal of the American Chemical Society*, **2007**, 129, 9780-8	16.4	385
842	Non-equilibrium processing leads to record high thermoelectric figure of merit in PbTe-SrTe. *Nature Communications*, **2016**, 7, 12167	17.4	377
841	High performance thermoelectrics from earth-abundant materials: enhanced figure of merit in PbS by second phase nanostructures. *Journal of the American Chemical Society*, **2011**, 133, 20476-87	16.4	377
840	Local Polar Fluctuations in Lead Halide Perovskite Crystals. *Physical Review Letters*, **2017**, 118, 136001	7.4	374
839	Hierarchical Nanoassembly of MoS/CoS/NiS/Ni as a Highly Efficient Electrocatalyst for Overall Water Splitting in a Wide pH Range. *Journal of the American Chemical Society*, **2019**, 141, 10417-10430	16.4	359
838	Anharmonicity and Disorder in the Black Phases of Cesium Lead Iodide Used for Stable Inorganic Perovskite Solar Cells. *ACS Nano*, **2018**, 12, 3477-3486	16.7	359
837	Layered metal sulfides capture uranium from seawater. *Journal of the American Chemical Society*, **2012**, 134, 16441-6	16.4	351
836	Porous semiconducting gels and aerogels from chalcogenide clusters. *Science*, **2007**, 317, 490-3	33.3	346
835	Strong Electron−Phonon Coupling and Self-Trapped Excitons in the Defect Halide Perovskites A3M2I9 (A = Cs, Rb; M = Bi, Sb). *Chemistry of Materials*, **2017**, 29, 4129-4145	9.6	344
834	High performance bulk thermoelectrics via a panoscopic approach. *Materials Today*, **2013**, 16, 166-176	21.8	344
833	Importance of Reducing Vapor Atmosphere in the Fabrication of Tin-Based Perovskite Solar Cells. *Journal of the American Chemical Society*, **2017**, 139, 836-842	16.4	340
832	Controllable perovskite crystallization at a gas-solid interface for hole conductor-free solar cells with steady power conversion efficiency over 10%. *Journal of the American Chemical Society*, **2014**, 136, 16411-9	16.4	340
831	High thermoelectric figure of merit and nanostructuring in bulk p-type Na1-xPbmSbyTem+2. *Angewandte Chemie - International Edition*, **2006**, 45, 3835-9	16.4	319
830	Efficient uranium capture by polysulfide/layered double hydroxide composites. *Journal of the American Chemical Society*, **2015**, 137, 3670-7	16.4	311

829	Nanostructuring, compositional fluctuations, and atomic ordering in the thermoelectric materials AgPb(m)SbTe(2+m). The myth of solid solutions. *Journal of the American Chemical Society*, **2005**, 127, 9177-90	16.4	311
828	Codoping in SnTe: Enhancement of Thermoelectric Performance through Synergy of Resonance Levels and Band Convergence. *Journal of the American Chemical Society*, **2015**, 137, 5100-12	16.4	310
827	SnSe: a remarkable new thermoelectric material. *Energy and Environmental Science*, **2016**, 9, 3044-3060	35.4	297
826	Valence Band Modification and High Thermoelectric Performance in SnTe Heavily Alloyed with MnTe. *Journal of the American Chemical Society*, **2015**, 137, 11507-16	16.4	289
825	High performance Na-doped PbTe-PbS thermoelectric materials: electronic density of states modification and shape-controlled nanostructures. *Journal of the American Chemical Society*, **2011**, 133, 16588-97	16.4	289
824	High Members of the 2D Ruddlesden-Popper Halide Perovskites: Synthesis, Optical Properties, and Solar Cells of (CH3(CH2)3NH3)2(CH3NH3)4Pb5I16. *CheM*, **2017**, 2, 427-440	16.2	285
823	High thermoelectric performance via hierarchical compositionally alloyed nanostructures. *Journal of the American Chemical Society*, **2013**, 135, 7364-70	16.4	281
822	Extraordinary role of Hg in enhancing the thermoelectric performance of p-type SnTe. *Energy and Environmental Science*, **2015**, 8, 267-277	35.4	279
821	Thin Films and Solar Cells Based on Semiconducting Two-Dimensional Ruddlesden□Popper (CH3(CH2)3NH3)2(CH3NH3)n□1SnnI3n+1 Perovskites. *ACS Energy Letters*, **2017**, 2, 982-990	20.1	274
820	Microstructure-Lattice Thermal Conductivity Correlation in Nanostructured PbTe0.7S0.3 Thermoelectric Materials. *Advanced Functional Materials*, **2010**, 20, 764-772	15.6	268
819	Raising the thermoelectric performance of p-type PbS with endotaxial nanostructuring and valence-band offset engineering using CdS and ZnS. *Journal of the American Chemical Society*, **2012**, 134, 16327-36	16.4	264
818	Halide Perovskites: Poor Man's High-Performance Semiconductors. *Advanced Materials*, **2016**, 28, 5778-93	24	263
817	Origin of the high performance in GeTe-based thermoelectric materials upon Bi2Te3 doping. *Journal of the American Chemical Society*, **2014**, 136, 11412-9	16.4	259
816	Enhanced photovoltaic performance and stability with a new type of hollow 3D perovskite {en}FASnI. *Science Advances*, **2017**, 3, e1701293	14.3	258
815	From unstable CsSnI3 to air-stable Cs2SnI6: A lead-free perovskite solar cell light absorber with bandgap of 1.48 eV and high absorption coefficient. *Solar Energy Materials and Solar Cells*, **2017**, 159, 227-234	6.4	258
814	Tunable White-Light Emission in Single-Cation-Templated Three-Layered 2D Perovskites (CHCHNH)PbBrCl. *Journal of the American Chemical Society*, **2017**, 139, 11956-11963	16.4	254
813	Nanostructures boost the thermoelectric performance of PbS. *Journal of the American Chemical Society*, **2011**, 133, 3460-70	16.4	254
812	Entropically stabilized local dipole formation in lead chalcogenides. *Science*, **2010**, 330, 1660-3	33.3	254

811	New Type of 2D Perovskites with Alternating Cations in the Interlayer Space, (C(NH))(CHNH)PbI: Structure, Properties, and Photovoltaic Performance. *Journal of the American Chemical Society*, **2017**, 139, 16297-16309	16.4	251
810	High spectral resolution of gamma-rays at room temperature by perovskite CsPbBr single crystals. *Nature Communications*, **2018**, 9, 1609	17.4	246
809	Distinct Impact of Alkali-Ion Doping on Electrical Transport Properties of Thermoelectric p-Type Polycrystalline SnSe. *Journal of the American Chemical Society*, **2016**, 138, 8875-82	16.4	243
808	Overcoming Short-Circuit in Lead-Free CH3NH3SnI3 Perovskite Solar Cells via Kinetically Controlled Gas-Solid Reaction Film Fabrication Process. *Journal of Physical Chemistry Letters*, **2016**, 7, 776-82	6.4	242
807	Remnant PbI2, an unforeseen necessity in high-efficiency hybrid perovskite-based solar cells?a). *APL Materials*, **2014**, 2, 091101	5.7	238
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805	Photochemical nitrogen conversion to ammonia in ambient conditions with FeMoS-chalcogels. *Journal of the American Chemical Society*, **2015**, 137, 2030-4	16.4	232
804	Understanding Film Formation Morphology and Orientation in High Member 2D Ruddlesden–Popper Perovskites for High-Efficiency Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1700979	21.8	231
803	Efficient Removal and Recovery of Uranium by a Layered Organic-Inorganic Hybrid Thiostannate. *Journal of the American Chemical Society*, **2016**, 138, 12578-85	16.4	230
802	"Unleaded" Perovskites: Status Quo and Future Prospects of Tin-Based Perovskite Solar Cells. *Advanced Materials*, **2019**, 31, e1803230	24	217
801	Performance Enhancement of Lead-Free Tin-Based Perovskite Solar Cells with Reducing Atmosphere-Assisted Dispersible Additive. *ACS Energy Letters*, **2017**, 2, 897-903	20.1	216
800	Exfoliated and Restacked MoS2 and WS2: Ionic or Neutral Species? Encapsulation and Ordering of Hard Electropositive Cations. *Journal of the American Chemical Society*, **1999**, 121, 11720-11732	16.4	216
799	Power generation from nanostructured PbTe-based thermoelectrics: comprehensive development from materials to modules. *Energy and Environmental Science*, **2016**, 9, 517-529	35.4	215
798	Structure of Restacked MoS2 and WS2 Elucidated by Electron Crystallography. *Journal of the American Chemical Society*, **1999**, 121, 638-643	16.4	214
797	Structural Diversity in White-Light-Emitting Hybrid Lead Bromide Perovskites. *Journal of the American Chemical Society*, **2018**, 140, 13078-13088	16.4	214
796	Enhanced Thermoelectric Properties in the Counter-Doped SnTe System with Strained Endotaxial SrTe. *Journal of the American Chemical Society*, **2016**, 138, 2366-73	16.4	213
795	Stable Light-Emitting Diodes Using Phase-Pure Ruddlesden-Popper Layered Perovskites. *Advanced Materials*, **2018**, 30, 1704217	24	210
794	Synergistically optimized electrical and thermal transport properties of SnTe via alloying high-solubility MnTe. *Energy and Environmental Science*, **2015**, 8, 3298-3312	35.4	209

793	Strong second harmonic generation from the tantalum thioarsenates A3Ta2AsS11 (A = K and Rb). *Journal of the American Chemical Society*, **2009**, 131, 75-7	16.4	207
792	Rhombohedral to Cubic Conversion of GeTe via MnTe Alloying Leads to Ultralow Thermal Conductivity, Electronic Band Convergence, and High Thermoelectric Performance. *Journal of the American Chemical Society*, **2018**, 140, 2673-2686	16.4	206
791	Thermoelectrics with earth abundant elements: low thermal conductivity and high thermopower in doped SnS. *Journal of Materials Chemistry A*, **2014**, 2, 17302-17306	13	201
790	High ZT in p-type (PbTe)1-2x(PbSe)x(PbS)x thermoelectric materials. *Journal of the American Chemical Society*, **2014**, 136, 3225-37	16.4	198
789	Imine-Linked Microporous Polymer Organic Frameworks. *Chemistry of Materials*, **2010**, 22, 4974-4979	9.6	198
788	Thermoelectrics with earth abundant elements: high performance p-type PbS nanostructured with SrS and CaS. *Journal of the American Chemical Society*, **2012**, 134, 7902-12	16.4	197
787	Phase Transition Control for High Performance Ruddlesden-Popper Perovskite Solar Cells. *Advanced Materials*, **2018**, 30, e1707166	24	192
786	Selective Removal of Cs+, Sr2+, and Ni2+ by K2xMgxSn3□S6 (x = 0.5□) (KMS-2) Relevant to Nuclear Waste Remediation. *Chemistry of Materials*, **2013**, 25, 2116-2127	9.6	192
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784	Soluble semiconductors AAsSe2 (A = Li, Na) with a direct-band-gap and strong second harmonic generation: a combined experimental and theoretical study. *Journal of the American Chemical Society*, **2010**, 132, 3484-95	16.4	190
783	Layered metal sulfides: exceptionally selective agents for radioactive strontium removal. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 3696-9	11.5	190
782	Thermoelectrics: From history, a window to the future. *Materials Science and Engineering Reports*, **2019**, 138, 100501	30.9	190
781	Role of Organic Counterion in Lead- and Tin-Based Two-Dimensional Semiconducting Iodide Perovskites and Application in Planar Solar Cells. *Chemistry of Materials*, **2016**, 28, 7781-7792	9.6	189
780	Metal sulfide ion exchangers: superior sorbents for the capture of toxic and nuclear waste-related metal ions. *Chemical Science*, **2016**, 7, 4804-4824	9.4	184
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777	On the origin of increased phonon scattering in nanostructured PbTe based thermoelectric materials. *Journal of the American Chemical Society*, **2010**, 132, 8669-75	16.4	177
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774	Controlling Metallurgical Phase Separation Reactions of the Ge0.87Pb0.13Te Alloy for High Thermoelectric Performance. *Advanced Energy Materials*, **2013**, 3, 815-820	21.8	172
773	TiO-ZnS Cascade Electron Transport Layer for Efficient Formamidinium Tin Iodide Perovskite Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 14998-15003	16.4	171
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771	The 2D Halide Perovskite Rulebook: How the Spacer Influences Everything from the Structure to Optoelectronic Device Efficiency. *Chemical Reviews*, **2021**, 121, 2230-2291	68.1	171
770	Selective incarceration of caesium ions by Venus flytrap action of a flexible framework sulfide. *Nature Chemistry*, **2010**, 2, 187-91	17.6	169
769	Efficient Lead-Free Solar Cells Based on Hollow {en}MASnI Perovskites. *Journal of the American Chemical Society*, **2017**, 139, 14800-14806	16.4	168
768	Intrinsic femtosecond charge generation dynamics in single crystal CH3NH3PbI3. *Energy and Environmental Science*, **2015**, 8, 3700-3707	35.4	166
767	Highly efficient and rapid Cs+ uptake by the layered metal sulfide K(2x)Mn(x)Sn(3-x)S(6) (KMS-1). *Journal of the American Chemical Society*, **2009**, 131, 6599-607	16.4	166
766	Nitrogenase-mimic iron-containing chalcogels for photochemical reduction of dinitrogen to ammonia. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5530-5	11.5	166
765	Enhanced Efficiency of Hot-Cast Large-Area Planar Perovskite Solar Cells/Modules Having Controlled Chloride Incorporation. *Advanced Energy Materials*, **2017**, 7, 1601660	21.8	164
764	Predicting synthesizability. *Journal Physics D: Applied Physics*, **2019**, 52,	3	161
763	Optical-Vibrational Properties of the Cs2SnX6 (X = Cl, Br, I) Defect Perovskites and Hole-Transport Efficiency in Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2016**, 120, 11777-11785	3.8	161
762	Antagonism between Spin-Orbit Coupling and Steric Effects Causes Anomalous Band Gap Evolution in the Perovskite Photovoltaic Materials CH3NH3Sn1-xPbxI3. *Journal of Physical Chemistry Letters*, **2015**, 6, 3503-9	6.4	160
761	Myths and reality of HPbI in halide perovskite solar cells. *Nature Communications*, **2018**, 9, 4785	17.4	159
760	Structure-Band Gap Relationships in Hexagonal Polytypes and Low-Dimensional Structures of Hybrid Tin Iodide Perovskites. *Inorganic Chemistry*, **2017**, 56, 56-73	5.1	158
759	Dynamic Stereochemical Activity of the Sn(2+) Lone Pair in Perovskite CsSnBr3. *Journal of the American Chemical Society*, **2016**, 138, 11820-32	16.4	158
758	Superior thermoelectric performance in PbTe-PbS pseudo-binary: extremely low thermal conductivity and modulated carrier concentration. *Energy and Environmental Science*, **2015**, 8, 2056-2068	35.4	157

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756	A new thermoelectric material: CsBi4Te6. *Journal of the American Chemical Society*, **2004**, 126, 6414-28	16.4	157
755	High Thermoelectric Performance SnTe□h2Te3 Solid Solutions Enabled by Resonant Levels and Strong Vacancy Phonon Scattering. *Chemistry of Materials*, **2015**, 27, 7801-7811	9.6	155
754	High thermoelectric performance in Bi0.46Sb1.54Te3 nanostructured with ZnTe. *Energy and Environmental Science*, **2018**, 11, 1520-1535	35.4	155
753	Molten alkali-metal polychalcogenides as reagents and solvents for the synthesis of new chalcogenide materials. *Chemistry of Materials*, **1990**, 2, 353-363	9.6	155
752	High thermoelectric figure of merit in nanostructured p-type PbTe□MTe (M = Ca, Ba). *Energy and Environmental Science*, **2011**, 4, 4675	35.4	153
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749	Structural and thermodynamic limits of layer thickness in 2D halide perovskites. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 58-66	11.5	152
748	Compositional and Solvent Engineering in Dion□acobson 2D Perovskites Boosts Solar Cell Efficiency and Stability. *Advanced Energy Materials*, **2019**, 9, 1803384	21.8	149
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746	Thermoelectrics from abundant chemical elements: high-performance nanostructured PbSe-PbS. *Journal of the American Chemical Society*, **2011**, 133, 10920-7	16.4	146
745	Molten salt synthesis and properties of three new solid-state ternary bismuth chalcogenides, .beta.-CsBiS2, .gamma.-CsBiS2, and K2Bi8Se13. *Chemistry of Materials*, **1993**, 5, 331-340	9.6	144
744	Pushing up the efficiency of planar perovskite solar cells to 18.2% with organic small molecules as the electron transport layer. *Journal of Materials Chemistry A*, **2017**, 5, 7339-7344	13	143
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742	Varied pore organization in mesostructured semiconductors based on the [SnSe4](4-) anion. *Nature* , **2001**, 410, 671-5	50.4	143
741	Dopant-Free Hole Transporting Polymers for High Efficiency, Environmentally Stable Perovskite Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1600502	21.8	141
740	Highly selective and efficient heavy metal capture with polysulfide intercalated layered double hydroxides. *Journal of Materials Chemistry A*, **2014**, 2, 10280-10289	13	140

739	Nucleation-controlled growth of superior lead-free perovskite CsBiI single-crystals for high-performance X-ray detection. *Nature Communications*, **2020**, 11, 2304	17.4	139
738	A □lick-based□porous organic polymer from tetrahedral building blocks. *Journal of Materials Chemistry*, **2011**, 21, 1700		139
737	Two-Dimensional Halide Perovskites Incorporating Straight Chain Symmetric Diammonium Ions, (NHC HNH)(CHNH) Pb I (m = 4-9; n = 1-4). *Journal of the American Chemical Society*, **2018**, 140, 12226-12238	16.4	139
736	High Thermopower and Low Thermal Conductivity in Semiconducting Ternary K□Bi□Se Compounds. Synthesis and Properties of □K2Bi8Se13 and K2.5Bi8.5Se14 and Their Sb Analogues. *Chemistry of Materials*, **1997**, 9, 3060-3071	9.6	138
735	Two-Dimensional Dion-Jacobson Hybrid Lead Iodide Perovskites with Aromatic Diammonium Cations. *Journal of the American Chemical Society*, **2019**, 141, 12880-12890	16.4	135
734	Dynamical Transformation of Two-Dimensional Perovskites with Alternating Cations in the Interlayer Space for High-Performance Photovoltaics. *Journal of the American Chemical Society*, **2019**, 141, 2684-2694	16.4	135
733	Enhanced Structural Stability and Photo Responsiveness of CH NH SnI Perovskite via Pressure-Induced Amorphization and Recrystallization. *Advanced Materials*, **2016**, 28, 8663-8668	24	134
732	Uniaxial Expansion of the 2D Ruddlesden-Popper Perovskite Family for Improved Environmental Stability. *Journal of the American Chemical Society*, **2019**, 141, 5518-5534	16.4	133
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730	Amorphous Infinite Coordination Polymer Microparticles: A New Class of Selective Hydrogen Storage Materials. *Advanced Materials*, **2008**, 20, 2105-2110	24	128
729	Unique pore selectivity for Cs+ and exceptionally high NH4+ exchange capacity of the chalcogenide material K6Sn[Zn4Sn4S17]. *Journal of the American Chemical Society*, **2006**, 128, 8875-83	16.4	127
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727	High-performance tellurium-free thermoelectrics: all-scale hierarchical structuring of p-type PbSe-MSe systems (M = Ca, Sr, Ba). *Journal of the American Chemical Society*, **2013**, 135, 5152-60	16.4	123
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