Zhifeng Ren

List of Publications by Year in Descending Order

361 papers	39,780 citations	99 h-index	193 g-index
375 ext. papers	46,375 ext. citations	11.5 avg, IF	7.66 L-index

#	Paper	IF	Citations
361	Recent progress on cubic boron arsenide with ultrahigh thermal conductivity. *Journal of Applied Physics*, **2022**, 131, 055102	2.5	0
360	Efficient Alkaline Water/Seawater Hydrogen Evolution by a Nanorod-nanoparticle-structured Ni-MoN Catalyst with Fast Water-dissociation Kinetics.. *Advanced Materials*, **2022**, e2201774	24	16
359	High-performance seawater oxidation by a homogeneous multimetallic layered double hydroxide electrocatalyst.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2202382119	11.5	8
358	Mobility enhancement in heavily doped semiconductors via electron cloaking.. *Nature Communications*, **2022**, 13, 2482	17.4	1
357	Crystallographic design for half-Heuslers with low lattice thermal conductivity. *Materials Today Physics*, **2022**, 25, 100704	8	1
356	The challenge of tuning the ratio of lattice/total thermal conductivity toward conversion efficiency vs power density. *Applied Physics Letters*, **2021**, 119, 180501	3.4	3
355	Engineering In-Plane Nickel Phosphide Heterointerfaces with Interfacial sp H?P Hybridization for Highly Efficient and Durable Hydrogen Evolution at 2 A cm. *Small*, **2021**, e2105642	11	9
354	Thermoelectric performance improvement of p-type Mg3Sb2-based materials by Zn and Ag co-doping. *Materials Today Physics*, **2021**, 21, 100564	8	7
353	Interfacial Superconductivity Achieved in Parent AEFeAs (AE = Ca, Sr, Ba) by a Simple and Realistic Annealing Route. *Nano Letters*, **2021**, 21, 2191-2198	11.5	1
352	Hybrid Transition-Metal Oxide and Nitride@N-Doped Reduced Graphene Oxide Electrodes for High-Performance, Flexible, and All-Solid-State Supercapacitors. *Chemistry - A European Journal*, **2021**, 27, 5761-5768	4.8	2
351	Influence of cation size on the thermoelectric behavior of salt-doped organic nanocomposite thin films. *Applied Physics Letters*, **2021**, 118, 151904	3.4	1
350	Recent advances in flexible thermoelectrics. *Applied Physics Letters*, **2021**, 118, 170503	3.4	3
349	Electronic structure of cubic boron arsenide probed by scanning tunneling spectroscopy. *Journal Physics D: Applied Physics*, **2021**, 54, 31LT01	3	1
348	Boron-modified cobalt iron layered double hydroxides for high efficiency seawater oxidation. *Nano Energy*, **2021**, 83, 105838	17.1	44
347	Ultrahigh Thermoelectric Performance in Environmentally Friendly SnTe Achieved through Stress-Induced Lotus-Seedpod-Like Grain Boundaries. *Advanced Functional Materials*, **2021**, 31, 2101554	15.6	21
346	Rational design of oxygen evolution reaction catalysts for seawater electrolysis. *Trends in Chemistry* , **2021**, 3, 485-498	14.8	21
345	Defect charging and resonant levels in half-Heusler Nb1Ti FeSb. *Materials Today Physics*, **2021**, 16, 100278	8	3

344	Heterogeneous Bimetallic Phosphide Ni 2 P-Fe 2 P as an Efficient Bifunctional Catalyst for Water/Seawater Splitting. *Advanced Functional Materials*, **2021**, 31, 2006484	15.6	134
343	Thermoelectric cooling materials. *Nature Materials*, **2021**, 20, 454-461	27	97
342	Pickering emulsion stabilized by organoclay and intermediately hydrophobic nanosilica for high-temperature conditions. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 610, 125694	5.1	6
341	CALPHAD as a powerful technique for design and fabrication of thermoelectric materials. *Journal of Materials Chemistry A*, **2021**, 9, 6634-6649	13	6
340	High thermoelectric performance at room temperature of n-type Mg3Bi2-based materials by Se doping. *Journal of Magnesium and Alloys*, **2021**,	8.8	2
339	Towards tellurium-free thermoelectric modules for power generation from low-grade heat. *Nature Communications*, **2021**, 12, 1121	17.4	36
338	Effects of Impurities on the Thermal and Electrical Transport Properties of Cubic Boron Arsenide. *Chemistry of Materials*, **2021**, 33, 6974-6982	9.6	4
337	Electrochemical Insight into NaxCoO2 for the Oxygen Evolution Reaction and the Oxygen Reduction Reaction. *Chemistry of Materials*, **2021**, 33, 6299-6310	9.6	4
336	Development of a high-temperature (295–700 K) Seebeck coefficient Standard Reference Material. *Journal of Materials Research*, **2021**, 36, 3339	2.5	0
335	Tuning Metal Elements in Open Frameworks for Efficient Oxygen Evolution and Oxygen Reduction Reaction Catalysts. *ACS Applied Materials & Interfaces*, **2021**, 13, 42715-42723	9.5	5
334	Rational design of core-shell-structured CoPx@FeOOH for efficient seawater electrolysis. *Applied Catalysis B: Environmental*, **2021**, 294, 120256	21.8	33
333	Bioinspired Redox Mediator in Lithium–Oxygen Batteries. *ACS Catalysis*, **2021**, 11, 1833-1840	13.1	4
332	VS4 with a chain crystal structure used as an intercalation cathode for aqueous Zn-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 10761-10766	13	35
331	Ultrafast room-temperature synthesis of porous S-doped Ni/Fe (oxy)hydroxide electrodes for oxygen evolution catalysis in seawater splitting. *Energy and Environmental Science*, **2020**, 13, 3439-3446	35.4	173
330	Atypical Oxygen-Bearing Copper Boosts Ethylene Selectivity toward Electrocatalytic CO Reduction. *Journal of the American Chemical Society*, **2020**, 142, 11417-11427	16.4	99
329	Titanium Doping to Enhance Thermoelectric Performance of 19-Electron VCoSb Half-Heusler Compounds with Vanadium Vacancies. *Annalen Der Physik*, **2020**, 532, 1900440	2.6	6
328	Enhanced thermoelectric performance in polycrystalline N-type Pr-doped SnSe by hot forging. *Acta Materialia*, **2020**, 190, 1-7	8.4	13
327	Recent Advances in Self-Supported Layered Double Hydroxides for Oxygen Evolution Reaction. *Research*, **2020**, 2020, 3976278	7.8	33

326	Laser-Induced Silicon Oxide for Anode-Free Lithium Metal Batteries. *Advanced Materials*, **2020**, 32, e2002850	24	35
325	Bi0.5Sb1.5Te3-based films for flexible thermoelectric devices. *Journal of Materials Chemistry A*, **2020**, 8, 4552-4561	13	27
324	Ultralow thermal conductivity from transverse acoustic phonon suppression in distorted crystalline □MgAgSb. *Nature Communications*, **2020**, 11, 942	17.4	26
323	Achieving high-performance p-type SmMg2Bi2 thermoelectric materials through band engineering and alloying effects. *Journal of Materials Chemistry A*, **2020**, 8, 15760-15766	13	9
322	High-Performance Ag-Modified BiSbTe Films for the Flexible Thermoelectric Generator. *ACS Applied Materials & Interfaces*, **2020**, 12, 7358-7365	9.5	33
321	In Situ Growth of Ru Nanoparticles on (Fe,Ni)(OH)2 to Boost Hydrogen Evolution Activity at High Current Density in Alkaline Media. *Small Methods*, **2020**, 4, 1900796	12.8	36
320	Gram-scale bottom-up flash graphene synthesis. *Nature*, **2020**, 577, 647-651	50.4	201
319	Achieving high room-temperature thermoelectric performance in cubic AgCuTe. *Journal of Materials Chemistry A*, **2020**, 8, 4790-4799	13	28
318	Phase Inversion of Pickering Emulsions by Electrolyte for Potential Reversible Water-in-Oil Drilling Fluids. *Energy & Fuels*, **2020**, 34, 1317-1328	4.1	6
317	Defect Engineering for Realizing p-Type AgBiSe2 with a Promising Thermoelectric Performance. *Chemistry of Materials*, **2020**, 32, 3528-3536	9.6	7
316	Facile synthesis of nanoparticle-stacked tungsten-doped nickel iron layered double hydroxide nanosheets for boosting oxygen evolution reaction. *Journal of Materials Chemistry A*, **2020**, 8, 8096-8103	13	30
315	Optical properties of cubic boron arsenide. *Applied Physics Letters*, **2020**, 116, 141903	3.4	6
314	N-Type MgSb Bi Alloys as Promising Thermoelectric Materials. *Research*, **2020**, 2020, 1219461	7.8	10
313	Thermoelectric Properties of Zintl Phase YbMg2Sb2. *Chemistry of Materials*, **2020**, 32, 776-784	9.6	21
312	Quasi-Solid-State Li□2 Batteries with Laser-Induced Graphene Cathode Catalysts. *ACS Applied Energy Materials*, **2020**, 3, 1702-1709	6.1	11
311	Ultrahigh thermal conductivity in isotope-enriched cubic boron nitride. *Science*, **2020**, 367, 555-559	33.3	90
310	Robust Hydrogen-Evolving Electrocatalyst from Heterogeneous Molybdenum Disulfide-Based Catalyst. *ACS Catalysis*, **2020**, 10, 1511-1519	13.1	52
309	Smart Pickering water-in-oil emulsion by manipulating interactions between nanoparticles and surfactant as potential oil-based drilling fluid. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 586, 124246	5.1	17

308	A double four-point probe method for reliable measurement of energy conversion efficiency of thermoelectric materials. *Energy*, **2020**, 191, 116599	7.9	5
307	Suppressed phase transition and enhanced thermoelectric performance in iodine-doped AgCuTe. *Nano Energy*, **2020**, 77, 105297	17.1	8
306	N-type Mg3Sb2-Bi with improved thermal stability for thermoelectric power generation. *Acta Materialia*, **2020**, 201, 572-579	8.4	14
305	Pressure-Dependent Behavior of Defect-Modulated Band Structure in Boron Arsenide. *Advanced Materials*, **2020**, 32, e2001942	24	9
304	Half-Heusler thermoelectric materials: NMR studies. *Journal of Applied Physics*, **2020**, 128, 055106	2.5	3
303	Hydrogen Generation from Seawater Electrolysis over a Sandwich-like NiCoN|NixP|NiCoN Microsheet Array Catalyst. *ACS Energy Letters*, **2020**, 5, 2681-2689	20.1	71
302	CO to Formic Acid Using Cu-Sn on Laser-Induced Graphene. *ACS Applied Materials & Interfaces*, **2020**, 12, 41223-41229	9.5	17
301	Salt doping to improve thermoelectric power factor of organic nanocomposite thin films.. *RSC Advances*, **2020**, 10, 11800-11807	3.7	8
300	Enhanced Thermoelectric Performance in N-Type Mg3.2Sb1.5Bi0.5 by La or Ce Doping into Mg. *Advanced Electronic Materials*, **2020**, 6, 1901391	6.4	8
299	Realizing a Rechargeable High-Performance Cu□n Battery by Adjusting the Solubility of Cu2+. *Advanced Functional Materials*, **2019**, 29, 1905979	15.6	29
298	Effect of boron sources on the growth of boron arsenide single crystals by chemical vapor transport. *Applied Physics Letters*, **2019**, 115, 092103	3.4	6
297	Interactions between amphiphilic Janus nanosheets and a nonionic polymer in aqueous and biphasic systems. *Soft Matter*, **2019**, 15, 7472-7478	3.6	7
296	The effect of carbon quantum dots on the electrocatalytic hydrogen evolution reaction of manganese□ickel phosphide nanosheets. *Journal of Materials Chemistry A*, **2019**, 7, 21488-21495	13	27
295	Large reduction of thermal conductivity leading to enhanced thermoelectric performance in p-type Mg3Bi2□bMg2Bi2 solid solutions. *Journal of Materials Chemistry C*, **2019**, 7, 434-440	7.1	20
294	Realizing high conversion efficiency of Mg3Sb2-based thermoelectric materials. *Journal of Power Sources*, **2019**, 414, 393-400	8.9	47
293	Zintl-phase EuZnSb: A promising thermoelectric material with ultralow thermal conductivity. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 2831-2836	11.5	59
292	Electrostatic-attraction-induced high internal phase emulsion for large-scale synthesis of amphiphilic Janus nanosheets. *Chemical Communications*, **2019**, 55, 1318-1321	5.8	15
291	Understanding the asymmetrical thermoelectric performance for discovering promising thermoelectric materials. *Science Advances*, **2019**, 5, eaav5813	14.3	27

290	High-pressure phases of boron arsenide with potential high thermal conductivity. *Physical Review B*, **2019**, 99,	3.3	11
289	Manipulation of Ni Interstitials for Realizing Large Power Factor in TiNiSn-Based Materials. *Advanced Electronic Materials*, **2019**, 5, 1900166	6.4	23
288	Mechanical properties of boron arsenide single crystal. *Applied Physics Letters*, **2019**, 114, 131903	3.4	15
287	Electrochemical Performance of Free-Standing and Flexible Graphene and TiO Composites with Different Conductive Polymers as Electrodes for Supercapacitors. *Chemistry - A European Journal*, **2019**, 25, 7903-7911	4.8	18
286	Visible-light driven CO2 reduction coupled with water oxidation on Cl-doped Cu2O nanorods. *Nano Energy*, **2019**, 60, 576-582	17.1	71
285	High Thermal Conductivity in Boron Arsenide: From Prediction to Reality. *Angewandte Chemie*, **2019**, 131, 5882-5889	3.6	6
284	New Way to Synthesize Robust and Porous NiFe Layered Double Hydroxide for Efficient Electrocatalytic Oxygen Evolution. *ACS Applied Materials & Interfaces*, **2019**, 11, 32909-32916	9.5	10
283	Realization of higher thermoelectric performance by dynamic doping of copper in n-type PbTe. *Energy and Environmental Science*, **2019**, 12, 3089-3098	35.4	73
282	Li-Breathing Air Batteries Catalyzed by MnNiFe/Laser-Induced Graphene Catalysts. *Advanced Materials Interfaces*, **2019**, 6, 1901035	4.6	15
281	High thermoelectric cooling performance of n-type MgBi-based materials. *Science*, **2019**, 365, 495-498	33.3	240
280	Sustainable Synthesis of Bright Green Fluorescent Nitrogen-Doped Carbon Quantum Dots from Alkali Lignin. *ChemSusChem*, **2019**, 12, 4202-4210	8.3	46
279	A universal synthesis strategy to make metal nitride electrocatalysts for hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2019**, 7, 19728-19732	13	67
278	Improved Thermoelectric Performance of Eco-Friendly □FeSi2□iGe Nanocomposite via Synergistic Hierarchical Structuring, Phase Percolation, and Selective Doping. *Advanced Functional Materials*, **2019**, 29, 1903157	15.6	17
277	Thermal Expansion Coefficient and Lattice Anharmonicity of Cubic Boron Arsenide. *Physical Review Applied*, **2019**, 11,	4.3	10
276	Giant Poisson□ Effect for Wrinkle-Free Stretchable Transparent Electrodes. *Advanced Materials*, **2019**, 31, e1902955	24	25
275	Thermodynamic calculation and its experimental correlation with the growth process of boron arsenide single crystals. *Journal of Applied Physics*, **2019**, 126, 155108	2.5	
274	n-Type TaCoSn-Based Half-Heuslers as Promising Thermoelectric Materials. *ACS Applied Materials & Interfaces*, **2019**, 11, 41321-41329	9.5	25
273	Design of High-Performance Disordered Half-Heusler Thermoelectric Materials Using 18-Electron Rule. *Advanced Functional Materials*, **2019**, 29, 1905044	15.6	38

272	Non-noble metal-nitride based electrocatalysts for high-performance alkaline seawater electrolysis. *Nature Communications*, **2019**, 10, 5106	17.4	318
271	High Thermal Conductivity in Boron Arsenide: From Prediction to Reality. *Angewandte Chemie - International Edition*, **2019**, 58, 5824-5831	16.4	26
270	Enhancement of thermoelectric performance across the topological phase transition in dense lead selenide. *Nature Materials*, **2019**, 18, 1321-1326	27	47
269	Photothermal Heating-Induced Localized Structural Disruption in a Poly-ε-caprolactone Nanocarrier System for Controlled Drug Delivery.. *ACS Applied Bio Materials*, **2019**, 2, 464-469	4.1	4
268	Flexible Electronics: Stretchable Electrodes and Their Future. *Advanced Functional Materials*, **2019**, 29, 1805924	15.6	305
267	Thermoelectric properties of silicon and recycled silicon sawing waste. *Journal of Materiomics*, **2019**, 5, 15-33	6.7	15
266	Discovery of TaFeSb-based half-Heuslers with high thermoelectric performance. *Nature Communications*, **2019**, 10, 270	17.4	155
265	Highly Efficient Hydrogen Evolution from a Mesoporous Hybrid of Nickel Phosphide Nanoparticles Anchored on Cobalt Phosphosulfide/Phosphide Nanosheet Arrays. *Small*, **2019**, 15, e1804272	11	65
264	Nickel phosphide based hydrogen producing catalyst with low overpotential and stability at high current density. *Electrochimica Acta*, **2019**, 299, 756-761	6.7	27
263	Laser-Induced Graphene Hybrid Catalysts for Rechargeable Zn-Air Batteries. *ACS Applied Energy Materials*, **2019**, 2, 1460-1468	6.1	36
262	Freestanding RGO□Co3O4□PPy Composite Films as Electrodes for Supercapacitors. *Energy Technology*, **2019**, 7, 1800606	3.5	12
261	Improved Thermoelectric Performance of Tellurium by Alloying with a Small Concentration of Selenium to Decrease Lattice Thermal Conductivity. *ACS Applied Materials & Interfaces*, **2019**, 11, 511-516	9.5	5
260	Deep defect level engineering: a strategy of optimizing the carrier concentration for high thermoelectric performance. *Energy and Environmental Science*, **2018**, 11, 933-940	35.4	110
259	Poly(sodium 4-styrenesulfonate) Stabilized Janus Nanosheets in Brine with Retained Amphiphilicity. *Langmuir*, **2018**, 34, 3694-3700	4	13
258	Nano-microstructural control of phonon engineering for thermoelectric energy harvesting. *MRS Bulletin*, **2018**, 43, 181-186	3.2	80
257	Study on anisotropy of n-type Mg3Sb2-based thermoelectric materials. *Applied Physics Letters*, **2018**, 112, 092103	3.4	22
256	Amorphous NiFe layered double hydroxide nanosheets decorated on 3D nickel phosphide nanoarrays: a hierarchical core□shell electrocatalyst for efficient oxygen evolution. *Journal of Materials Chemistry A*, **2018**, 6, 13619-13623	13	105
255	Oxidized Laser-Induced Graphene for Efficient Oxygen Electrocatalysis. *Advanced Materials*, **2018**, 30, e1707319	24	63

254	Routes for high-performance thermoelectric materials. *Materials Today*, **2018**, 21, 974-988	21.8	187
253	Highly efficient hydrogen evolution by self-standing nickel phosphide-based hybrid nanosheet arrays electrocatalyst. *Materials Today Physics*, **2018**, 4, 1-6	8	52
252	Trimetallic NiFeMo for Overall Electrochemical Water Splitting with a Low Cell Voltage. *ACS Energy Letters*, **2018**, 3, 546-554	20.1	120
251	In Situ Synthesis of Efficient Water Oxidation Catalysts in Laser-Induced Graphene. *ACS Energy Letters*, **2018**, 3, 677-683	20.1	64
250	Robust and selective electrochemical reduction of CO2: the case of integrated 3D TiO2@MoS2 architectures and Ti□ bonding effects. *Journal of Materials Chemistry A*, **2018**, 6, 4706-4713	13	49
249	Seeded growth of boron arsenide single crystals with high thermal conductivity. *Applied Physics Letters*, **2018**, 112, 031903	3.4	31
248	Significant Role of Mg Stoichiometry in Designing High Thermoelectric Performance for Mg(Sb,Bi)-Based n-Type Zintls. *Journal of the American Chemical Society*, **2018**, 140, 1910-1915	16.4	82
247	Recent progress towards high performance of tin chalcogenide thermoelectric materials. *Journal of Materials Chemistry A*, **2018**, 6, 2432-2448	13	71
246	Unusual consequences of donor and acceptor doping on the thermoelectric properties of the MgAg0.97Sb0.99 alloy. *Journal of Materials Chemistry A*, **2018**, 6, 2600-2611	13	4
245	Ultrahigh Power Factor in Thermoelectric System NbMFeSb (M = Hf, Zr, and Ti). *Advanced Science*, **2018**, 5, 1800278	13.6	31
244	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. *Nature Communications*, **2018**, 9, 1721	17.4	77
243	Bio-derived three-dimensional hierarchical carbon-graphene-TiO as electrode for supercapacitors. *Scientific Reports*, **2018**, 8, 4412	4.9	19
242	Electrochemical CO2 Reduction with Atomic Iron-Dispersed on Nitrogen-Doped Graphene. *Advanced Energy Materials*, **2018**, 8, 1703487	21.8	277
241	Self-compensation induced vacancies for significant phonon scattering in InSb. *Nano Energy*, **2018**, 48, 189-196	17.1	23
240	High thermoelectric performance of □MgAgSb for power generation. *Energy and Environmental Science*, **2018**, 11, 23-44	35.4	94
239	Synthesis of graphene-based amphiphilic Janus nanosheets via manipulation of hydrogen bonding. *Carbon*, **2018**, 126, 105-110	10.4	27
238	The Effects of Excess Co on the Phase Composition and Thermoelectric Properties of Half-Heusler NbCoSb. *Materials*, **2018**, 11,	3.5	5
237	Phase-transition temperature suppression to achieve cubic GeTe and high thermoelectric performance by Bi and Mn codoping. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5332-5337	11.5	130

236	Ternary Ni2(1-x)Mo2xP nanowire arrays toward efficient and stable hydrogen evolution electrocatalysis under large-current-density. *Nano Energy*, **2018**, 53, 492-500	17.1	148
235	Achieving Self-Stiffening and Laser Healing by Interconnecting Graphene Oxide Sheets with Amine-Functionalized Ovalbumin. *Advanced Materials Interfaces*, **2018**, 5, 1800932	4.6	4
234	Native defects and impurity band behavior in half-Heusler thermoelectric NbFeSb. *Physical Chemistry Chemical Physics*, **2018**, 20, 21960-21967	3.6	6
233	A Metamaterial-Plasmonic Scheme Based on a Random Metallic Network for Controlling Thermal Emission. *Physica Status Solidi (A) Applications and Materials Science*, **2018**, 215, 1800206	1.6	1
232	Proton irradiation effect on thermoelectric properties of nanostructured n-type half-Heusler Hf0.25Zr0.75NiSn0.99Sb0.01. *Applied Physics Letters*, **2018**, 112, 243902	3.4	4
231	Discovery of ZrCoBi based half Heuslers with high thermoelectric conversion efficiency. *Nature Communications*, **2018**, 9, 2497	17.4	154
230	Multi-scale study of the deformation mechanisms of thermoelectric p-type half-Heusler Hf0.44Zr0.44Ti0.12CoSb0.8Sn0.2. *Journal of Applied Physics*, **2018**, 124, 175104	2.5	
229	Impurity-derived p-type conductivity in cubic boron arsenide. *Applied Physics Letters*, **2018**, 113, 251902	3.4	24
228	Advances in thermoelectrics. *Advances in Physics*, **2018**, 67, 69-147	18.4	225
227	Power Generation from Nanostructured Half-Heusler Thermoelectrics for Efficient and Robust Energy Harvesting. *ACS Applied Energy Materials*, **2018**, 1, 5986-5992	6.1	8
226	Hierarchical CoP/Ni5P4/CoP microsheet arrays as a robust pH-universal electrocatalyst for efficient hydrogen generation. *Energy and Environmental Science*, **2018**, 11, 2246-2252	35.4	204
225	Water splitting by electrolysis at high current densities under 1.6 volts. *Energy and Environmental Science*, **2018**, 11, 2858-2864	35.4	273
224	Unusual high thermal conductivity in boron arsenide bulk crystals. *Science*, **2018**, 361, 582-585	33.3	185
223	High-performance bifunctional porous non-noble metal phosphide catalyst for overall water splitting. *Nature Communications*, **2018**, 9, 2551	17.4	566
222	Capillary-Force-Induced Cold Welding in Silver-Nanowire-Based Flexible Transparent Electrodes. *Nano Letters*, **2017**, 17, 1090-1096	11.5	145
221	Using the 18-Electron Rule To Understand the Nominal 19-Electron Half-Heusler NbCoSb with Nb Vacancies. *Chemistry of Materials*, **2017**, 29, 1210-1217	9.6	59
220	Three-Dimensional Nanoporous Iron Nitride Film as an Efficient Electrocatalyst for Water Oxidation. *ACS Catalysis*, **2017**, 7, 2052-2057	13.1	151
219	Grain Boundary Engineering for Achieving High Thermoelectric Performance in n-Type Skutterudites. *Advanced Energy Materials*, **2017**, 7, 1602582	21.8	146

218	A Highly Stretchable and Fatigue-Free Transparent Electrode Based on an In-Plane Buckled Au Nanotrough Network. *Advanced Electronic Materials*, **2017**, 3, 1600534	6.4	28
217	The microscopic origin of low thermal conductivity for enhanced thermoelectric performance of Yb doped MgAgSb. *Acta Materialia*, **2017**, 128, 227-234	8.4	30
216	Tuning the carrier scattering mechanism to effectively improve the thermoelectric properties. *Energy and Environmental Science*, **2017**, 10, 799-807	35.4	227
215	Thermal conductivity of (VO2)1-xCux composites across the phase transition temperature. *Journal of Applied Physics*, **2017**, 121, 155103	2.5	10
214	Engineering the Thermoelectric Transport in Half-Heusler Materials through a Bottom-Up Nanostructure Synthesis. *Advanced Energy Materials*, **2017**, 7, 1700446	21.8	40
213	Highly active catalyst derived from a 3D foam of Fe(PO)/NiP for extremely efficient water oxidation. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 5607-5611	11.5	225
212	Filling fraction of Yb in CoSb3 Skutterudite studied by electron microscopy. *Applied Physics Letters*, **2017**, 110, 163901	3.4	5
211	Outstanding hydrogen evolution reaction catalyzed by porous nickel diselenide electrocatalysts. *Energy and Environmental Science*, **2017**, 10, 1487-1492	35.4	138
210	A TiO/FeMnP Core/Shell Nanorod Array Photoanode for Efficient Photoelectrochemical Oxygen Evolution. *ACS Nano*, **2017**, 11, 4051-4059	16.7	93
209	Colloidal Stability of Graphene-Based Amphiphilic Janus Nanosheet Fluid. *Chemistry of Materials*, **2017**, 29, 3454-3460	9.6	28
208	Thermoelectric Properties of n-type ZrNiPb-Based Half-Heuslers. *Chemistry of Materials*, **2017**, 29, 867-872	9.6	48
207	Graphene Flakes: Orientation Control of Graphene Flakes by Magnetic Field: Broad Device Applications of Macroscopically Aligned Graphene (Adv. Mater. 1/2017). *Advanced Materials*, **2017**, 29,	24	6
206	Phonon scattering by nanoscale twin boundaries. *Nano Energy*, **2017**, 32, 174-179	17.1	54
205	Hierarchical Cu@CoFe layered double hydroxide core-shell nanoarchitectures as bifunctional electrocatalysts for efficient overall water splitting. *Nano Energy*, **2017**, 41, 327-336	17.1	174
204	A rapid method to extract Seebeck coefficient under a large temperature difference. *Review of Scientific Instruments*, **2017**, 88, 094902	1.7	5
203	Anomalous electrical conductivity of n-type Te-doped Mg3.2Sb1.5Bi0.5. *Materials Today Physics*, **2017**, 3, 1-6	8	67
202	Tellurium doped n-type Zintl Zr3Ni3Sb4 thermoelectric materials: Balance between carrier-scattering mechanism and bipolar effect. *Materials Today Physics*, **2017**, 2, 54-61	8	56
201	The effect of Sn doping on thermoelectric performance of n-type half-Heusler NbCoSb. *Physical Chemistry Chemical Physics*, **2017**, 19, 25683-25690	3.6	19

200	Vertically Aligned MoS2/Mo2C hybrid Nanosheets Grown on Carbon Paper for Efficient Electrocatalytic Hydrogen Evolution. *ACS Catalysis*, **2017**, 7, 7312-7318	13.1	141
199	Manipulation of ionized impurity scattering for achieving high thermoelectric performance in n-type MgSb-based materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 10548-10553	11.5	183
198	Secondary Oil Recovery Using Graphene-Based Amphiphilic Janus Nanosheet Fluid at an Ultralow Concentration. *Industrial & Engineering Chemistry Research*, **2017**, 56, 11125-11132	3.9	59
197	Defect Engineering for Realizing High Thermoelectric Performance in n-Type Mg3Sb2-Based Materials. *ACS Energy Letters*, **2017**, 2, 2245-2250	20.1	130
196	Bifunctional metal phosphide FeMnP films from single source metal organic chemical vapor deposition for efficient overall water splitting. *Nano Energy*, **2017**, 39, 444-453	17.1	89
195	Computational modelling of the thermoelectric properties of p-type Zintl compound CaMg2Bi2. *Materials Today Physics*, **2017**, 2, 40-45	8	33
194	Improved thermoelectric performance of n-type half-Heusler MCo1-xNixSb (M = Hf, Zr). *Materials Today Physics*, **2017**, 1, 24-30	8	110
193	Recent progress and future challenges on thermoelectric Zintl materials. *Materials Today Physics*, **2017**, 1, 74-95	8	195
192	V□O2 core□shell structure for potential thermal switching. *RSC Advances*, **2017**, 7, 33775-33781	3.7	5
191	Cu nanowires shelled with NiFe layered double hydroxide nanosheets as bifunctional electrocatalysts for overall water splitting. *Energy and Environmental Science*, **2017**, 10, 1820-1827	35.4	733
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