Mingwei Chen

List of Publications by Citations

405 papers	44,466 citations	99 h-index	203 g-index
412 ext. papers	49,937 ext. citations	10.2 avg, IF	7.72 L-index

#	Paper	IF	Citations
405	Photoluminescence from chemically exfoliated MoS2. *Nano Letters*, **2011**, 11, 5111-6	11.5	2897
404	High tensile ductility in a nanostructured metal. *Nature*, **2002**, 419, 912-5	50.4	2143
403	Enhanced catalytic activity in strained chemically exfoliated WS nanosheets for hydrogen evolution. *Nature Materials*, **2013**, 12, 850-5	27	2039
402	Nanoporous metal/oxide hybrid electrodes for electrochemical supercapacitors. *Nature Nanotechnology*, **2011**, 6, 232-6	28.7	1705
401	Conducting MoS nanosheets as catalysts for hydrogen evolution reaction. *Nano Letters*, **2013**, 13, 6222-7	11.5	1613
400	A precipitation-hardened high-entropy alloy with outstanding tensile properties. *Acta Materialia*, **2016**, 102, 187-196	8.4	1020
399	Deformation twinning in nanocrystalline aluminum. *Science*, **2003**, 300, 1275-7	33.3	910
398	Coherent atomic and electronic heterostructures of single-layer MoS2. *ACS Nano*, **2012**, 6, 7311-7	16.7	696
397	Atomic origins of the high catalytic activity of nanoporous gold. *Nature Materials*, **2012**, 11, 775-80	27	687
396	High catalytic activity of nitrogen and sulfur co-doped nanoporous graphene in the hydrogen evolution reaction. *Angewandte Chemie - International Edition*, **2015**, 54, 2131-6	16.4	641
395	Multifunctional Porous Graphene for High-Efficiency Steam Generation by Heat Localization. *Advanced Materials*, **2015**, 27, 4302-7	24	597
394	Efficient hydrogen production on MoNi electrocatalysts with fast water dissociation kinetics. *Nature Communications*, **2017**, 8, 15437	17.4	583
393	Oxygen reduction in nanoporous metal-ionic liquid composite electrocatalysts. *Nature Materials*, **2010**, 9, 904-7	27	556
392	Covalent functionalization of monolayered transition metal dichalcogenides by phase engineering. *Nature Chemistry*, **2015**, 7, 45-9	17.6	524
391	Tunable photoluminescence from graphene oxide. *Angewandte Chemie - International Edition*, **2012**, 51, 6662-6	16.4	520
390	Ultrastrong steel via minimal lattice misfit and high-density nanoprecipitation. *Nature*, **2017**, 544, 460-464	50.4	512
389	Nanoporous Graphene with Single-Atom Nickel Dopants: An Efficient and Stable Catalyst for Electrochemical Hydrogen Production. *Angewandte Chemie - International Edition*, **2015**, 54, 14031-5	16.4	480

388	Mechanical Behavior of Metallic Glasses: Microscopic Understanding of Strength and Ductility. *Annual Review of Materials Research*, **2008**, 38, 445-469	12.8	468
387	Core-shell-structured CNT@RuO(2) composite as a high-performance cathode catalyst for rechargeable Li-O(2) batteries. *Angewandte Chemie - International Edition*, **2014**, 53, 442-6	16.4	453
386	Experimental characterization of shear transformation zones for plastic flow of bulk metallic glasses. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 14769-72	11.5	419
385	Versatile nanoporous bimetallic phosphides towards electrochemical water splitting. *Energy and Environmental Science*, **2016**, 9, 2257-2261	35.4	409
384	Shock-induced localized amorphization in boron carbide. *Science*, **2003**, 299, 1563-6	33.3	401
383	Direct observation of local atomic order in a metallic glass. *Nature Materials*, **2011**, 10, 28-33	27	391
382	Engineering water dissociation sites in MoS2 nanosheets for accelerated electrocatalytic hydrogen production. *Energy and Environmental Science*, **2016**, 9, 2789-2793	35.4	386
381	Metallic mesoporous nanocomposites for electrocatalysis. *Journal of the American Chemical Society*, **2004**, 126, 6876-7	16.4	370
380	Nanoporous Metals for Catalytic and Optical Applications. *MRS Bulletin*, **2009**, 34, 569-576	3.2	348
379	Highly optimized embedded-atom-method potentials for fourteen fcc metals. *Physical Review B*, **2011**, 83,	3.3	340
378	Geometric frustration of icosahedron in metallic glasses. *Science*, **2013**, 341, 376-9	33.3	318
377	Ultrafine nanoporous gold by low-temperature dealloying and kinetics of nanopore formation. *Applied Physics Letters*, **2007**, 91, 083105	3.4	300
376	A brief overview of bulk metallic glasses. *NPG Asia Materials*, **2011**, 3, 82-90	10.3	291
375	Surface enhanced Raman scattering of nanoporous gold: Smaller pore sizes stronger enhancements. *Applied Physics Letters*, **2007**, 90, 153120	3.4	291
374	Characterization of nanoscale mechanical heterogeneity in a metallic glass by dynamic force microscopy. *Physical Review Letters*, **2011**, 106, 125504	7.4	286
373	Nanoporous Copper with Tunable Nanoporosity for SERS Applications. *Advanced Functional Materials*, **2009**, 19, 1221-1226	15.6	286
372	Atomic structure of nanoclusters in oxide-dispersion-strengthened steels. *Nature Materials*, **2011**, 10, 922-6	27	279
371	Fe2O3 nanocrystals anchored onto graphene nanosheets as the anode material for low-cost sodium-ion batteries. *Chemical Communications*, **2014**, 50, 1215-7	5.8	266

370	Nanoporous Metals by Dealloying Multicomponent Metallic Glasses. *Chemistry of Materials*, **2008**, 20, 4548-4550	9.6	248
369	Extraordinary plasticity of ductile bulk metallic glasses. *Physical Review Letters*, **2006**, 96, 245502	7.4	248
368	A layered P2- and O3-type composite as a high-energy cathode for rechargeable sodium-ion batteries. *Angewandte Chemie - International Edition*, **2015**, 54, 5894-9	16.4	245
367	Relating activation of shear transformation zones to β relaxations in metallic glasses. *Physical Review B*, **2010**, 81,	3.3	238
366	Bicontinuous nanoporous N-doped graphene for the oxygen reduction reaction. *Advanced Materials* , **2014**, 26, 4145-50	24	229
365	Nanoporous PdNi Bimetallic Catalyst with Enhanced Electrocatalytic Performances for Electro-oxidation and Oxygen Reduction Reactions. *Advanced Functional Materials*, **2011**, 21, 4364-4370	15.6	227
364	Enhanced tensile ductility and toughness in nanostructured Cu. *Applied Physics Letters*, **2002**, 80, 2395-2397	3.4	223
363	Grain rotation mediated by grain boundary dislocations in nanocrystalline platinum. *Nature Communications*, **2014**, 5, 4402	17.4	222
362	Rapid Degradation of Azo Dye by Fe-Based Metallic Glass Powder. *Advanced Functional Materials*, **2012**, 22, 2567-2570	15.6	214
361	AlON: A brief history of its emergence and evolution. *Journal of the European Ceramic Society*, **2009**, 29, 223-236	6	212
360	Wrinkled nanoporous gold films with ultrahigh surface-enhanced Raman scattering enhancement. *ACS Nano*, **2011**, 5, 4407-13	16.7	209
359	Three-dimensional morphology of nanoporous gold. *Applied Physics Letters*, **2008**, 92, 251902	3.4	206
358	Enhanced supercapacitor performance of MnO2 by atomic doping. *Angewandte Chemie - International Edition*, **2013**, 52, 1664-7	16.4	204
357	High-performance symmetric sodium-ion batteries using a new, bipolar O3-type material, Na0.8Ni0.4Ti0.6O2. *Energy and Environmental Science*, **2015**, 8, 1237-1244	35.4	193
356	Nanostructured materials as catalysts: nanoporous-gold-catalyzed oxidation of organosilanes with water. *Angewandte Chemie - International Edition*, **2010**, 49, 10093-5	16.4	190
355	Nanoporous metal enhanced catalytic activities of amorphous molybdenum sulfide for high-efficiency hydrogen production. *Advanced Materials*, **2014**, 26, 3100-4	24	188
354	Quasicrystals in a partially devitrified Zr65Al7.5Ni10Cu12.5Ag5 bulk metallic glass. *Applied Physics Letters*, **1999**, 75, 1697-1699	3.4	185
353	High-quality three-dimensional nanoporous graphene. *Angewandte Chemie - International Edition*, **2014**, 53, 4822-6	16.4	184

352	Zinc-Mediated Template Synthesis of Fe-N-C Electrocatalysts with Densely Accessible Fe-N Active Sites for Efficient Oxygen Reduction. *Advanced Materials*, **2020**, 32, e1907399	24	183
351	Effect of defects on fracture strength of graphene sheets. *Computational Materials Science*, **2012**, 54, 236-239	3.2	183
350	Li storage in 3D nanoporous Au-supported nanocrystalline tin. *Advanced Materials*, **2011**, 23, 2443-7	24	183
349	Dealloying to nanoporous Au/Pt alloys and their structure sensitive electrocatalytic properties. *Physical Chemistry Chemical Physics*, **2010**, 12, 239-46	3.6	183
348	Mechanical properties of refractory high-entropy alloys: Experiments and modeling. *Journal of Alloys and Compounds*, **2017**, 696, 1139-1150	5.7	177
347	3D Nanoporous Nitrogen-Doped Graphene with Encapsulated RuO2 Nanoparticles for Li-O2 Batteries. *Advanced Materials*, **2015**, 27, 6137-43	24	174
346	Lithiophilic 3D Nanoporous Nitrogen-Doped Graphene for Dendrite-Free and Ultrahigh-Rate Lithium-Metal Anodes. *Advanced Materials*, **2019**, 31, e1805334	24	173
345	Single molecule detection from a large-scale SERS-active Au□Ag□ substrate. *Scientific Reports*, **2011**, 1, 112	4.9	172
344	Metal and Nonmetal Codoped 3D Nanoporous Graphene for Efficient Bifunctional Electrocatalysis and Rechargeable Zn-Air Batteries. *Advanced Materials*, **2019**, 31, e1900843	24	170
343	Environmentally stable interface of layered oxide cathodes for sodium-ion batteries. *Nature Communications*, **2017**, 8, 135	17.4	166
342	Atomic-scale heterogeneity of a multicomponent bulk metallic glass with excellent glass forming ability. *Physical Review Letters*, **2009**, 103, 075502	7.4	164
341	Toward the Theoretical Capacitance of RuO2 Reinforced by Highly Conductive Nanoporous Gold. *Advanced Energy Materials*, **2013**, 3, 851-856	21.8	162
340	Stress-temperature scaling for steady-state flow in metallic glasses. *Physical Review Letters*, **2010**, 104, 205701	7.4	162
339	A Phthalocyanine-Based Layered Two-Dimensional Conjugated Metal-Organic Framework as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 10677-10682	16.4	160
338	Evolution of a diffusion aluminide bond coat for thermal barrier coatings during thermal cycling. *Acta Materialia*, **2003**, 51, 2205-2217	8.4	160
337	Nanoporous gold based optical sensor for sub-ppt detection of mercury ions. *ACS Nano*, **2013**, 7, 4595-600	16.7	156
336	Flow unit perspective on room temperature homogeneous plastic deformation in metallic glasses. *Physical Review Letters*, **2014**, 113, 045501	7.4	147
335	Intrinsic correlation between □relaxation and spatial heterogeneity in a metallic glass. *Nature Communications*, **2016**, 7, 11516	17.4	147

334	A Three-Dimensional Gold-Decorated Nanoporous Copper Core–Shell Composite for Electrocatalysis and Nonenzymatic Biosensing. *Advanced Functional Materials*, **2010**, 20, 2279-2285	15.6	146
333	Atomic structure of amorphous shear bands in boron carbide. *Nature Communications*, **2013**, 4, 2483	17.4	145
332	Self-grown oxy-hydroxide@ nanoporous metal electrode for high-performance supercapacitors. *Advanced Materials*, **2014**, 26, 269-72	24	143
331	3D Nanoporous Metal Phosphides toward High-Efficiency Electrochemical Hydrogen Production. *Advanced Materials*, **2016**, 28, 2951-5	24	137
330	Chemically exfoliated ReS2 nanosheets. *Nanoscale*, **2014**, 6, 12458-62	7.7	136
329	In situ atomic-scale observation of continuous and reversible lattice deformation beyond the elastic limit. *Nature Communications*, **2013**, 4, 2413	17.4	135
328	Geometrically Controlled Nanoporous PdAu Bimetallic Catalysts with Tunable Pd/Au Ratio for Direct Ethanol Fuel Cells. *ACS Catalysis*, **2013**, 3, 1220-1230	13.1	129
327	Depressurization amorphization of single-crystal boron carbide. *Physical Review Letters*, **2009**, 102, 075505	7.4	126
326	Dynamic plasticity and failure of high-purity alumina under shock loading. *Nature Materials*, **2006**, 5, 614-8	37	126
325	Field emission from atomically thin edges of reduced graphene oxide. *ACS Nano*, **2011**, 5, 4945-52	16.7	125
324	Fabrication of large-scale nanoporous nickel with a tunable pore size for energy storage. *Journal of Power Sources*, **2014**, 247, 896-905	8.9	123
323	Atomic-Sized Pores Enhanced Electrocatalysis of TaS Nanosheets for Hydrogen Evolution. *Advanced Materials*, **2016**, 28, 8945-8949	24	121
322	High Catalytic Activity of Nitrogen and Sulfur Co-Doped Nanoporous Graphene in the Hydrogen Evolution Reaction. *Angewandte Chemie*, **2015**, 127, 2159-2164	3.6	118
321	Novel Nanoporous AuPd Alloy with High Catalytic Activity and Excellent Electrochemical Stability. *Journal of Physical Chemistry C*, **2010**, 114, 2600-2603	3.8	118
320	Structural origins of Johari-Goldstein relaxation in a metallic glass. *Nature Communications*, **2014**, 5, 3238	17.4	117
319	Microstructure characterization of Cu-rich nanoprecipitates in a Fe2.5 Cu1.5 Mn4.0 Ni1.0 Al multicomponent ferritic alloy. *Acta Materialia*, **2013**, 61, 2133-2147	8.4	117
318	Localized surface plasmon resonance of nanoporous gold. *Applied Physics Letters*, **2011**, 98, 093701	3.4	117
317	Effect of Chemical Doping on Cathodic Performance of Bicontinuous Nanoporous Graphene for Li-O2 Batteries. *Advanced Energy Materials*, **2016**, 6, 1501870	21.8	116

316	Microstructural Characterization of Commercial Hot-Pressed Boron Carbide Ceramics. *Journal of the American Ceramic Society*, **2005**, 88, 1935-1942	3.8	115
315	Bicontinuous nanotubular graphene□olypyrrole hybrid for high performance flexible supercapacitors. *Nano Energy*, **2016**, 19, 391-400	17.1	114
314	A High-Voltage and Ultralong-Life Sodium Full Cell for Stationary Energy Storage. *Angewandte Chemie - International Edition*, **2015**, 54, 11701-5	16.4	112
313	Thermodynamic origins of shear band formation and the universal scaling law of metallic glass strength. *Physical Review Letters*, **2009**, 103, 065504	7.4	112
312	Monodispersed hierarchical Co3O4 spheres intertwined with carbon nanotubes for use as anode materials in sodium-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 13805	13	110
311	Three-Dimensional (3D) Bicontinuous Au/Amorphous-Ge Thin Films as Fast and High-Capacity Anodes for Lithium-Ion Batteries. *Advanced Energy Materials*, **2013**, 3, 281-285	21.8	109
310	Unveiling Electronic Properties in Metal-Phthalocyanine-Based Pyrazine-Linked Conjugated Two-Dimensional Covalent Organic Frameworks. *Journal of the American Chemical Society*, **2019**, 141, 16810-16816	16.4	107
309	A Core-Shell Nanoporous Pt-Cu Catalyst with Tunable Composition and High Catalytic Activity. *Advanced Functional Materials*, **2013**, 23, 4156-4162	15.6	103
308	Atomic observation of catalysis-induced nanopore coarsening of nanoporous gold. *Nano Letters*, **2014**, 14, 1172-7	11.5	100
307	Formation of an intermediate compound with a B12H12 cluster: experimental and theoretical studies on magnesium borohydride Mg(BH4)2. *Nanotechnology*, **2009**, 20, 204013	3.4	99
306	High Strength and Good Ductility of Bulk Quasicrystalline Base Alloys in Zr65Al7.5Ni10Cu17.5−xPdx System. *Materials Transactions, JIM*, **1999**, 40, 1137-1143		99
305	High-temperature bulk metallic glasses developed by combinatorial methods. *Nature*, **2019**, 569, 99-103	50.4	98
304	Raman spectroscopy of pressure-induced amorphous boron carbide. *Applied Physics Letters*, **2006**, 88, 131905	3.4	98
303	Structural origins of the excellent glass forming ability of Pd40Ni40P20. *Physical Review Letters*, **2012**, 108, 175501	7.4	97
302	Atomic-scale disproportionation in amorphous silicon monoxide. *Nature Communications*, **2016**, 7, 11591	17.4	96
301	Aligned Nanoporous Pt□u Bimetallic Microwires with High Catalytic Activity toward Methanol Electrooxidation. *ACS Catalysis*, **2015**, 5, 3779-3785	13.1	96
300	Surface coating of lithium□anganese-rich layered oxides with delaminated MnO2 nanosheets as cathode materials for Li-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 4422	13	95
299	First-order liquid-liquid phase transition in cerium. *Physical Review Letters*, **2013**, 110, 125503	7.4	95

298	RETRACTED Formation and properties of Zr-based bulk quasicrystalline alloys with high strength and good ductility. *Journal of Materials Research*, **2000**, 15, 2195-2208	2.5	95
297	Myotube formation on gelatin nanofibers - multi-walled carbon nanotubes hybrid scaffolds. *Biomaterials*, **2014**, 35, 6268-77	15.6	93
296	Three-dimensional bicontinuous nanoporous Au/polyaniline hybrid films for high-performance electrochemical supercapacitors. *Journal of Power Sources*, **2012**, 197, 325-329	8.9	93
295	Reversible anionic redox activity in Na3RuO4 cathodes: a prototype Na-rich layered oxide. *Energy and Environmental Science*, **2018**, 11, 299-305	35.4	90
294	Enhanced mechanical properties of nanocrystalline boron carbide by nanoporosity and interface phases. *Nature Communications*, **2012**, 3, 1052	17.4	89
293	Regulating infrared photoresponses in reduced graphene oxide phototransistors by defect and atomic structure control. *ACS Nano*, **2013**, 7, 6310-20	16.7	89
292	Correlation between Chemical Dopants and Topological Defects in Catalytically Active Nanoporous Graphene. *Advanced Materials*, **2016**, 28, 10644-10651	24	88
291	A high-capacity, low-cost layered sodium manganese oxide material as cathode for sodium-ion batteries. *ChemSusChem*, **2014**, 7, 2115-9	8.3	83
290	Dispersing Pt atoms onto nanoporous gold for high performance direct formic acid fuel cells. *Chemical Science*, **2014**, 5, 403-409	9.4	81
289	Chemical Vapor Deposition of Monolayer Mo(1-x)W(x)S2 Crystals with Tunable Band Gaps. *Scientific Reports*, **2016**, 6, 21536	4.9	80
288	High-energy-density nonaqueous MnO2@nanoporous gold based supercapacitors. *Journal of Materials Chemistry A*, **2013**, 1, 9202	13	78
287	Nanoporous metal based flexible asymmetric pseudocapacitors. *Journal of Materials Chemistry A*, **2014**, 2, 10910-10916	13	77
286	Correlation between Local Structure Order and Spatial Heterogeneity in a Metallic Glass. *Physical Review Letters*, **2017**, 119, 215501	7.4	77
285	New twinning route in face-centered cubic nanocrystalline metals. *Nature Communications*, **2017**, 8, 2142	17.4	75
284	Precipitation of icosahedral phase from a supercooled liquid region in Zr65Cu7.5Al7.5Ni10Ag10 metallic glass. *Applied Physics Letters*, **1999**, 75, 3497-3499	3.4	75
283	Understanding sodium-ion diffusion in layered P2 and P3 oxides via experiments and first-principles calculations: a bridge between crystal structure and electrochemical performance. *NPG Asia Materials*, **2016**, 8, e266-e266	10.3	74
282	Evolution of structural and dynamic heterogeneities and activation energy distribution of deformation units in metallic glass. *Applied Physics Letters*, **2013**, 102, 101903	3.4	73
281	Geometric effect on surface enhanced Raman scattering of nanoporous gold: Improving Raman scattering by tailoring ligament and nanopore ratios. *Applied Physics Letters*, **2009**, 94, 213109	3.4	73

280	Coral-Shaped MoS Decorated with Graphene Quantum Dots Performing as a Highly Active Electrocatalyst for Hydrogen Evolution Reaction. *ACS Applied Materials & Interfaces*, **2017**, 9, 3653-3660	9.5	72
279	Periosteum-mimetic structures made from freestanding microgrooved nanosheets. *Advanced Materials*, **2014**, 26, 3290-6	24	72
278	Characteristic Length and Temperature Dependence of Surface Enhanced Raman Scattering of Nanoporous Gold. *Journal of Physical Chemistry C*, **2009**, 113, 10956-10961	3.8	72
277	Unusually small electrical resistance of three-dimensional nanoporous gold in external magnetic fields. *Physical Review Letters*, **2008**, 101, 166601	7.4	72
276	Ductile quasicrystalline alloys. *Applied Physics Letters*, **2000**, 76, 967-969	3.4	72
275	Aerobic oxidation of alcohols in the liquid phase with nanoporous gold catalysts. *Chemical Communications*, **2012**, 48, 4540-2	5.8	71
274	Liquid-gated ambipolar transport in ultrathin films of a topological insulator Bi2Te3. *Nano Letters*, **2011**, 11, 2601-5	11.5	71
273	Ultra-Large Room-Temperature Compressive Plasticity of a Nanocrystalline Metal. *Nano Letters*, **2007**, 7, 2108-2111	11.5	71
272	Hybrid nanostructured aluminum alloy with super-high strength. *NPG Asia Materials*, **2015**, 7, e229-e229	10.3	70
271	Nanoporous metal by dealloying for electrochemical energy conversion and storage. *MRS Bulletin*, **2018**, 43, 43-48	3.2	69
270	Nanoporous Graphene with Single-Atom Nickel Dopants: An Efficient and Stable Catalyst for Electrochemical Hydrogen Production. *Angewandte Chemie*, **2015**, 127, 14237-14241	3.6	69
269	Three-dimensional bicontinuous nanoporous materials by vapor phase dealloying. *Nature Communications*, **2018**, 9, 276	17.4	68
268	Nucleation of shear bands in amorphous alloys. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 3938-42	11.5	68
267	Electroplated Thick Manganese Oxide Films with Ultrahigh Capacitance. *Advanced Energy Materials*, **2013**, 3, 857-863	21.8	68
266	Enhanced Supercapacitor Performance of MnO2 by Atomic Doping. *Angewandte Chemie*, **2013**, 125, 1708-1711	3.6	67
265	Micromechanisms of serrated flow in a Ni50Pd30P20 bulk metallic glass with a large compression plasticity. *Acta Materialia*, **2008**, 56, 2834-2842	8.4	67
264	Epitaxial casting of nanotubular mesoporous platinum. *Angewandte Chemie - International Edition*, **2005**, 44, 4002-6	16.4	67
263	Ferritic Alloys with Extreme Creep Resistance via Coherent Hierarchical Precipitates. *Scientific Reports*, **2015**, 5, 16327	4.9	66

262	Coupling between chemical and dynamic heterogeneities in a multicomponent bulk metallic glass. *Physical Review B*, **2010**, 81,	3.3	66
261	Correlation between structural relaxation and shear transformation zone volume of a bulk metallic glass. *Applied Physics Letters*, **2009**, 95, 141909	3.4	66
260	Visualizing Under-Coordinated Surface Atoms on 3D Nanoporous Gold Catalysts. *Advanced Materials*, **2016**, 28, 1753-9	24	65
259	Synergistic alloying effect on microstructural evolution and mechanical properties of Cu precipitation-strengthened ferritic alloys. *Acta Materialia*, **2013**, 61, 7726-7740	8.4	65
258	High-Resolution Electrochemical Mapping of the Hydrogen Evolution Reaction on Transition-Metal Dichalcogenide Nanosheets. *Angewandte Chemie - International Edition*, **2020**, 59, 3601-3608	16.4	65
257	Spatial heterogeneity as the structure feature for structure-property relationship of metallic glasses. *Nature Communications*, **2018**, 9, 3965	17.4	65
256	Asymmetric metal oxide pseudocapacitors advanced by three-dimensional nanoporous metal electrodes. *Journal of Materials Chemistry A*, **2014**, 2, 8448	13	64
255	Enhanced Superconductivity in Restacked TaS Nanosheets. *Journal of the American Chemical Society* , **2017**, 139, 4623-4626	16.4	62
254	A nanoscale co-precipitation approach for property enhancement of Fe-base alloys. *Scientific Reports*, **2013**, 3, 1327	4.9	62
253	Enhance the thermal stability and glass forming ability of Al-based metallic glass by Ca minor-alloying. *Intermetallics*, **2012**, 29, 35-40	3.5	61
252	Structure and mechanical properties of boron-rich boron carbides. *Journal of the European Ceramic Society*, **2017**, 37, 4514-4523	6	60
251	Observation of superconductivity in 1T?-MoS2 nanosheets. *Journal of Materials Chemistry C*, **2017**, 5, 10855-10860	7.1	60
250	Macrodeformation Twins in Single-Crystal Aluminum. *Physical Review Letters*, **2016**, 116, 075501	7.4	58
249	Microstructural characterization of boron-rich boron carbide. *Acta Materialia*, **2017**, 136, 202-214	8.4	58
248	Effect of Residual Silver on Surface-Enhanced Raman Scattering of Dealloyed Nanoporous Gold. *Journal of Physical Chemistry C*, **2011**, 115, 19583-19587	3.8	58
247	Full Performance Nanoporous Graphene Based Li-O2 Batteries through Solution Phase Oxygen Reduction and Redox-Additive Mediated Li2O2 Oxidation. *Advanced Energy Materials*, **2017**, 7, 1601933	21.8	57
246	Low-Temperature Carbide-Mediated Growth of Bicontinuous Nitrogen-Doped Mesoporous Graphene as an Efficient Oxygen Reduction Electrocatalyst. *Advanced Materials*, **2018**, 30, e1803588	24	57
245	On-Chip Micro-Pseudocapacitors for Ultrahigh Energy and Power Delivery. *Advanced Science*, **2015**, 2, 1500067	13.6	57

244	Characterization of oxide nanoprecipitates in an oxide dispersion strengthened 14YWT steel using aberration-corrected STEM. *Acta Materialia*, **2012**, 60, 5686-5696	8.4	57
243	Large enhancement of quantum dot fluorescence by highly scalable nanoporous gold. *Advanced Materials*, **2014**, 26, 1289-94	24	56
242	Biofunctionalized nanoporous gold for electrochemical biosensors. *Electrochimica Acta*, **2012**, 67, 1-5	6.7	56
241	A nanostructured skeleton catalyst: Suzuki-coupling with a reusable and sustainable nanoporous metallic glass Pd-catalyst. *Chemical Communications*, **2011**, 47, 5985-7	5.8	55
240	Tensile behavior and dynamic failure of aluminum 6092/B4C composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 433, 70-82	5.3	55
239	Intercalation pseudocapacitance of amorphous titanium dioxide@nanoporous graphene for high-rate and large-capacity energy storage. *Nano Energy*, **2018**, 49, 354-362	17.1	54
238	Size Effects in the Mechanical Properties of Bulk Bicontinuous Ta/Cu Nanocomposites Made by Liquid Metal Dealloying. *Advanced Engineering Materials*, **2016**, 18, 46-50	3.5	53
237	Direct observation of interlocked domain walls in hexagonal RMnO3 (R=Tm, Lu). *Physical Review B*, **2012**, 85,	3.3	53
236	The atomic origin of nickel-doping-induced catalytic enhancement in MoS for electrochemical hydrogen production. *Nanoscale*, **2019**, 11, 7123-7128	7.7	52
235	A nanoporous metal recuperated MnO2 anode for lithium ion batteries. *Nanoscale*, **2015**, 7, 15111-6	7.7	52
234	Dynamic Compressive Failure of AlON Under Controlled Planar Confinement. *Journal of the American Ceramic Society*, **2008**, 91, 3619-3629	3.8	52
233	Strengthening and softening of nanocrystalline nickel during multistep nanoindentation. *Applied Physics Letters*, **2006**, 88, 161922	3.4	52
232	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. *Angewandte Chemie - International Edition*, **2018**, 57, 13302-13307	16.4	51
231	A Phthalocyanine-Based Layered Two-Dimensional Conjugated Metal–Organic Framework as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction. *Angewandte Chemie*, **2019**, 131, 10787-10792	3.6	49
230	Extraordinary tensile strength and ductility of scalable nanoporous graphene. *Science Advances*, **2019**, 5, eaat6951	14.3	49
229	Ultrastable Silicon Anode by Three-Dimensional Nanoarchitecture Design. *ACS Nano*, **2020**, 14, 4374-4382	26.7	49
228	Reduced Graphene Oxide Thin Films as Ultrabarriers for Organic Electronics. *Advanced Energy Materials*, **2014**, 4, 1300986	21.8	49
227	Core–Shell-Structured CNT@RuO2 Composite as a High-Performance Cathode Catalyst for Rechargeable Li–O2 Batteries. *Angewandte Chemie*, **2014**, 126, 452-456	3.6	49

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