Haitao Huang

List of Publications by Citations

325 papers	12,945 citations	64 h-index	97 g-index
353 ext. papers	15,380 ext. citations	8.6 avg, IF	6.81 L-index

#	Paper	IF	Citations
325	Hollow carbon-nanotube/carbon-nanofiber hybrid anodes for Li-ion batteries. *Journal of the American Chemical Society*, **2013**, 135, 16280-3	16.4	367
324	Stretchable all-solid-state supercapacitor with wavy shaped polyaniline/graphene electrode. *Journal of Materials Chemistry A*, **2014**, 2, 9142-9149	13	264
323	Highly ordered iron oxide nanotube arrays as electrodes for electrochemical energy storage. *Electrochemistry Communications*, **2011**, 13, 657-660	5.1	247
322	Design of Hierarchical Ni?Co@Ni?Co Layered Double Hydroxide Core□Shell Structured Nanotube Array for High-Performance Flexible All-Solid-State Battery-Type Supercapacitors. *Advanced Functional Materials*, **2017**, 27, 1605307	15.6	230
321	Ionic conductivity in the CeO2□d2O3 system (0.05□d/Ce□.4) prepared by oxalate coprecipitation. *Solid State Ionics*, **2002**, 148, 567-573	3.3	221
320	Universal Strategy for HF-Free Facile and Rapid Synthesis of Two-dimensional MXenes as Multifunctional Energy Materials. *Journal of the American Chemical Society*, **2019**, 141, 9610-9616	16.4	208
319	Protonation of Graphitic Carbon Nitride (g-C3N4) for an Electrostatically Self-Assembling Carbon@g-C3N4 Core□Shell Nanostructure toward High Hydrogen Evolution. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 7093-7103	8.3	197
318	Li metal deposition and stripping in a solid-state battery via Coble creep. *Nature*, **2020**, 578, 251-255	50.4	196
317	Correlation between the Melting Point of a Nanosolid and the Cohesive Energy of a Surface Atom. *Journal of Physical Chemistry B*, **2002**, 106, 10701-10705	3.4	188
316	Nitrogen-Doped Carbon for Sodium-Ion Battery Anode by Self-Etching and Graphitization of Bimetallic MOF-Based Composite. *CheM*, **2017**, 3, 152-163	16.2	171
315	Triple-coaxial electrospun amorphous carbon nanotubes with hollow graphitic carbon nanospheres for high-performance Li ion batteries. *Energy and Environmental Science*, **2012**, 5, 7898	35.4	168
314	Large Energy Storage Density and High Thermal Stability in a Highly Textured (111)-Oriented Pb0.8Ba0.2ZrO3 Relaxor Thin Film with the Coexistence of Antiferroelectric and Ferroelectric Phases. *ACS Applied Materials & Interfaces*, **2015**, 7, 13512-7	9.5	148
313	Harvesting the Vibration Energy of BiFeO Nanosheets for Hydrogen Evolution. *Angewandte Chemie - International Edition*, **2019**, 58, 11779-11784	16.4	145
312	Giant Electric Energy Density in Epitaxial Lead-Free Thin Films with Coexistence of Ferroelectrics and Antiferroelectrics. *Advanced Electronic Materials*, **2015**, 1, 1500052	6.4	141
311	Electrospun carbon-based nanostructured electrodes for advanced energy storage □A review. *Energy Storage Materials*, **2016**, 5, 58-92	19.4	140
310	A One-Step and Binder-Free Method to Fabricate Hierarchical Nickel-Based Supercapacitor Electrodes with Excellent Performance. *Advanced Functional Materials*, **2013**, 23, 3675-3681	15.6	136
309	Polyaniline nanowire array encapsulated in titania nanotubes as a superior electrode for supercapacitors. *Nanoscale*, **2011**, 3, 2202-7	7.7	135

308	Direct and seamless coupling of TiO2 nanotube photonic crystal to dye-sensitized solar cell: a single-step approach. *Advanced Materials*, **2011**, 23, 5624-8	24	133
307	Toward Practical High-Areal-Capacity Aqueous Zinc-Metal Batteries: Quantifying Hydrogen Evolution and a Solid-Ion Conductor for Stable Zinc Anodes. *Advanced Materials*, **2021**, 33, e2007406	24	133
306	Hydrogenated TiO2 Nanotube Arrays as High-Rate Anodes for Lithium-Ion Microbatteries. *ChemPlusChem*, **2012**, 77, 991-1000	2.8	130
305	Size-controlled preparation of silver nanoparticles by a modified polyol method. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2010**, 366, 197-202	5.1	127
304	Highly ordered nanoporous TiO2 and its photocatalytic properties. *Electrochemistry Communications*, **2007**, 9, 2854-2858	5.1	125
303	High efficiency bi-harvesting light/vibration energy using piezoelectric zinc oxide nanorods for dye decomposition. *Nano Energy*, **2019**, 62, 376-383	17.1	122
302	Valence Engineering via Selective Atomic Substitution on Tetrahedral Sites in Spinel Oxide for Highly Enhanced Oxygen Evolution Catalysis. *Journal of the American Chemical Society*, **2019**, 141, 8136-8145	16.4	120
301	Design and coupling of multifunctional TiO2 nanotube photonic crystal to nanocrystalline titania layer as semi-transparent photoanode for dye-sensitized solar cell. *Energy and Environmental Science*, **2012**, 5, 9881	35.4	119
300	High-performance fiber-shaped supercapacitors using carbon fiber thread (CFT)@polyanilne and functionalized CFT electrodes for wearable/stretchable electronics. *Nano Energy*, **2015**, 11, 662-670	17.1	118
299	Hollow-tunneled graphitic carbon nanofibers through Ni-diffusion-induced graphitization as high-performance anode materials. *Energy and Environmental Science*, **2014**, 7, 2689-2696	35.4	118
298	Relaxor behavior in CaCu3Ti4O12 ceramics. *Applied Physics Letters*, **2006**, 89, 182904	3.4	118
297	A copper-doped nickel oxide bilayer for enhancing efficiency and stability of hysteresis-free inverted mesoporous perovskite solar cells. *Nano Energy*, **2017**, 40, 155-162	17.1	112
296	Hollow Nanotubes of N-Doped Carbon on CoS. *Angewandte Chemie - International Edition*, **2016**, 55, 15831-15834	16.1	106
295	Pyro-catalytic hydrogen evolution by Ba0.7Sr0.3TiO3 nanoparticles: harvesting cold/hot alternation energy near room-temperature. *Energy and Environmental Science*, **2018**, 11, 2198-2207	35.4	104
294	Grain-size effect on ferroelectric Pb(Zr1−xTix)O3 solid solutions induced by surface bond contraction. *Physical Review B*, **2001**, 63,	3.3	101
293	Tailoring Anisotropic Li-Ion Transport Tunnels on Orthogonally Arranged Li-Rich Layered Oxide Nanoplates Toward High-Performance Li-Ion Batteries. *Nano Letters*, **2017**, 17, 1670-1677	11.5	99
292	First-principles study on the electronic and optical properties of BiFeO3. *Solid State Communications*, **2009**, 149, 641-644	1.6	98
291	Recent advances in lead-free dielectric materials for energy storage. *Materials Research Bulletin*, **2019**, 113, 190-201	5.1	97

290	Sintering and grain growth of CoO-doped CeO 2 ceramics. *Journal of the European Ceramic Society*, **2002**, 22, 27-34	6	96
289	Facile synthesis of truncated cube-like NiSe2 single crystals for high-performance asymmetric supercapacitors. *Chemical Engineering Journal*, **2017**, 330, 1334-1341	14.7	95
288	Barium titanate derived from mechanochemically activated powders. *Journal of Alloys and Compounds*, **2002**, 337, 226-230	5.7	93
287	Advances and prospects of fiber supercapacitors. *Journal of Materials Chemistry A*, **2015**, 3, 20863-20879	13	92
286	Flexible fiber hybrid supercapacitor with NiCo2O4 nanograss@carbon fiber and bio-waste derived high surface area porous carbon. *Electrochimica Acta*, **2016**, 211, 411-419	6.7	91
285	A rectification-free piezo-supercapacitor with a polyvinylidene fluoride separator and functionalized carbon cloth electrodes. *Journal of Materials Chemistry A*, **2015**, 3, 14963-14970	13	88
284	Highly Efficient Porous Carbon Electrocatalyst with Controllable N-Species Content for Selective CO Reduction. *Angewandte Chemie - International Edition*, **2020**, 59, 3244-3251	16.4	88
283	Sulfur encapsulated in porous hollow CNTs@CNFs for high-performance lithium–sulfur batteries. *Journal of Materials Chemistry A*, **2014**, 2, 10126-10130	13	87
282	Preparation of silver nanoparticles in inorganic clay suspensions. *Composites Science and Technology*, **2008**, 68, 2948-2953	8.6	87
281	Fabrication of nickel oxide-embedded titania nanotube array for redox capacitance application. *Electrochimica Acta*, **2008**, 53, 3643-3649	6.7	86
280	Fiber-in-Tube Design of Co S -Carbon/Co S : Enabling Efficient Sodium Storage. *Angewandte Chemie - International Edition*, **2019**, 58, 6239-6243	16.4	85
279	Room-temperature pyro-catalytic hydrogen generation of 2D few-layer black phosphorene under cold-hot alternation. *Nature Communications*, **2018**, 9, 2889	17.4	85
278	Supercapacitor application of nickel oxide–titania nanocomposites. *Composites Science and Technology*, **2009**, 69, 2108-2114	8.6	85
277	Strong piezo-electro-chemical effect of piezoelectric BaTiO3 nanofibers for vibration-catalysis. *Journal of Alloys and Compounds*, **2018**, 762, 915-921	5.7	85
276	In situ formation of hollow graphitic carbon nanospheres in electrospun amorphous carbon nanofibers for high-performance Li-based batteries. *Nanoscale*, **2012**, 4, 6800-5	7.7	83
275	Piezoelectrically/pyroelectrically-driven vibration/cold-hot energy harvesting for mechano-/pyro-bi-catalytic dye decomposition of NaNbO3 nanofibers. *Nano Energy*, **2018**, 52, 351-359	17.1	81
274	Towards high areal capacitance, rate capability, and tailorable supercapacitors: Co3O4@polypyrrole core–shell nanorod bundle array electrodes. *Journal of Materials Chemistry A*, **2018**, 6, 19058-19065	13	79
273	Engineering hetero-epitaxial nanostructures with aligned Li-ion channels in Li-rich layered oxides for high-performance cathode application. *Nano Energy*, **2017**, 35, 271-280	17.1	78

272	Electrospinning-Based Strategies for Battery Materials. *Advanced Energy Materials*, **2021**, 11, 2000845	21.8	78
271	More is Different: Synergistic Effect and Structural Engineering in Double-Atom Catalysts. *Advanced Functional Materials*, **2021**, 31, 2007423	15.6	74
270	Lorentz-type relationship of the temperature dependent dielectric permittivity in ferroelectrics with diffuse phase transition. *Applied Physics Letters*, **2008**, 93, 112906	3.4	73
269	An extended ' quantum confinement' theory: surface-coordination imperfection modifies the entire band structure of a nanosolid. *Journal Physics D: Applied Physics*, **2001**, 34, 3470-3479	3	73
268	Bioelectrocatalytic application of titania nanotube array for molecule detection. *Biosensors and Bioelectronics*, **2007**, 22, 2812-8	11.8	71
267	Iron supported C@Fe3O4 nanotube array: a new type of 3D anode with low-cost for high performance lithium-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 5560		70
266	Dielectric relaxation in A2FeNbO6 (A = Ba, Sr, and Ca) perovskite ceramics. *Journal of Electroceramics*, **2009**, 22, 252-256	1.5	69
265	Effect of alumina addition on the electrical and mechanical properties of Ce0.8Gd0.2O2 ceramics. *Materials Letters*, **2002**, 57, 124-129	3.3	67
264	Transparent Indium Tin Oxide Electrodes on Muscovite Mica for High-Temperature-Processed Flexible Optoelectronic Devices. *ACS Applied Materials & Interfaces*, **2016**, 8, 28406-28411	9.5	67
263	Antiferroelectric-like properties and enhanced polarization of Cu-doped K0.5Na0.5NbO3 piezoelectric ceramics. *Applied Physics Letters*, **2012**, 101, 082901	3.4	65
262	Exceptional electrochemical performance of porous TiO2 carbon nanofibers for lithium ion battery anodes. *Journal of Materials Chemistry A*, **2014**, 2, 3875-3880	13	64
261	Commercial Dacron cloth supported Cu(OH)2 nanobelt arrays for wearable supercapacitors. *Journal of Materials Chemistry A*, **2016**, 4, 14781-14788	13	62
260	Plasmonic Metal Nanoparticles with Core-Bishell Structure for High-Performance Organic and Perovskite Solar Cells. *ACS Nano*, **2019**, 13, 5397-5409	16.7	61
259	The effects of annealing temperature on the sensing properties of low temperature nano-sized SrTiO3 oxygen gas sensor. *Sensors and Actuators B: Chemical*, **2005**, 108, 244-249	8.5	61
258	Thermal strain induced large electrocaloric effect of relaxor thin film on LaNiO3/Pt composite electrode with the coexistence of nanoscale antiferroelectric and ferroelectric phases in a broad temperature range. *Nano Energy*, **2018**, 47, 285-293	17.1	60
257	High Temperature Crystallization of Free-Standing Anatase TiO2 Nanotube Membranes for High Efficiency Dye-Sensitized Solar Cells. *Advanced Functional Materials*, **2013**, 23, 5952-5960	15.6	60
256	Engineering the intermediate band states in amorphous Ti3+-doped TiO2 for hybrid dye-sensitized solar cell applications. *Journal of Materials Chemistry A*, **2015**, 3, 11437-11443	13	59
255	Early-stage sintering mechanisms of Fe-doped CeO2. *Journal of Materials Science*, **2002**, 37, 997-1003	4.3	58

254	Phase-transition induced giant negative electrocaloric effect in a lead-free relaxor ferroelectric thin film. *Energy and Environmental Science*, **2019**, 12, 1708-1717	35.4	53
253	Energy storage characteristics of (Pb,La)(Zr,Sn,Ti)O3 antiferroelectric ceramics with high Sn content. *Applied Physics Letters*, **2018**, 113, 063902	3.4	53
252	Dielectric dispersion behavior of Ba(ZrxTi1⊠)O3 solid solutions with a quasiferroelectric state. *Journal of Applied Physics*, **2008**, 104, 034108	2.5	53
251	MgAl2O4 spinel phase derived from oxide mixture activated by a high-energy ball milling process. *Materials Letters*, **2002**, 56, 238-243	3.3	53
250	A giant negative electrocaloric effect in Eu-doped PbZrO3 thin films. *Journal of Materials Chemistry C*, **2016**, 4, 3375-3378	7.1	52
249	Effects of dopant concentration and aging on the electrical properties of Y-doped ceria electrolytes. *Solid State Sciences*, **2003**, 5, 1505-1511	3.4	51
248	Fabrication of iron oxide nanotube arrays by electrochemical anodization. *Corrosion Science*, **2014**, 88, 66-75	6.8	50
247	Sponge-like Ni(OH)2-NiF2 composite film with excellent electrochemical performance. *Physical Chemistry Chemical Physics*, **2013**, 15, 1601-5	3.6	50
246	Panchromatic thin perovskite solar cells with broadband plasmonic absorption enhancement and efficient light scattering management by Au@Ag core-shell nanocuboids. *Nano Energy*, **2017**, 41, 654-664	17.1	49
245	Enhanced piezoelectric-induced catalysis of SrTiO nanocrystal with well-defined facets under ultrasonic vibration. *Ultrasonics Sonochemistry*, **2020**, 61, 104819	8.9	49
244	Flexible and wearable fiber shaped high voltage supercapacitors based on copper hexacyanoferrate and porous carbon coated carbon fiber electrodes. *Journal of Materials Chemistry A*, **2016**, 4, 4934-4940	13	48
243	Colossal dielectric response in barium iron niobate ceramics obtained by different precursors. *Ceramics International*, **2008**, 34, 1059-1062	5.1	48
242	Theoretical Investigation of V3C2 MXene as Prospective High-Capacity Anode Material for Metal-Ion (Li, Na, K, and Ca) Batteries. *Journal of Physical Chemistry C*, **2019**, 123, 18207-18214	3.8	46
241	Sintering behavior and ionic conductivity of Ce0.8Gd0.2O1.9 with a small amount of MnO2 doping. *Journal of Solid State Electrochemistry*, **2003**, 7, 348-354	2.6	46
240	Densification, microstructure and grain growth in the CeO2⊟e2O3 system (0?Fe/Ce?20%). *Journal of the European Ceramic Society*, **2001**, 21, 2221-2228	6	46
239	Flexible dielectric nanocomposites with simultaneously large discharge energy density and high energy efficiency utilizing (Pb,La)(Zr,Sn,Ti)O3 antiferroelectric nanoparticles as fillers. *Journal of Materials Chemistry A*, **2019**, 7, 13473-13482	13	45
238	A facile route to fabricate an anodic TiO2 nanotube-nanoparticle hybrid structure for high efficiency dye-sensitized solar cells. *Nanoscale*, **2012**, 4, 5148-53	7.7	45
237	A high-power wearable triboelectric nanogenerator prepared from self-assembled electrospun poly(vinylidene fluoride) fibers with a heart-like structure. *Journal of Materials Chemistry A*, **2019**, 7, 11724-11733	13	44

236	Inserting Sn Nanoparticles into the Pores of TiO2 Nanofibers by Lithiation. *Advanced Functional Materials*, **2016**, 26, 376-383	15.6	44
235	The effect of Fe doping on the sintering behavior of commercial CeO2 powder. *Journal of Materials Processing Technology*, **2001**, 113, 463-468	5.3	44
234	Fullerene-Anchored Core-Shell ZnO Nanoparticles for Efficient and Stable Dual-Sensitized Perovskite Solar Cells. *Joule*, **2019**, 3, 417-431	27.8	44
233	Boosting the oxygen evolution reaction in non-precious catalysts by structural and electronic engineering. *Journal of Materials Chemistry A*, **2018**, 6, 10253-10263	13	43
232	Facile synthesis of a mechanically robust and highly porous NiO film with excellent electrocatalytic activity towards methanol oxidation. *Nanoscale*, **2016**, 8, 11256-63	7.7	43
231	Dielectric transition of nanostructured diamond films. *Applied Physics Letters*, **2001**, 78, 1826-1828	3.4	42
230	Dielectric suppression and its effect on photoabsorption of nanometric semiconductors. *Journal Physics D: Applied Physics*, **2001**, 34, 2359-2362	3	42
229	Electrospun bismuth ferrite nanofibers for potential applications in ferroelectric photovoltaic devices. *ACS Applied Materials & Interfaces*, **2015**, 7, 3665-70	9.5	41
228	Surface bond contraction and its effect on the nanometric sized lead zirconate titanate. *Journal of Physics Condensed Matter*, **2000**, 12, L127-L132	1.8	41
227	Dielectric relaxation and transition of porous silicon. *Journal of Applied Physics*, **2003**, 94, 2695-2700	2.5	40
226	Sintering and densification behavior of Mn-doped CeO2. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2001**, 83, 235-241	3.1	40
225	Open-ended TiO2 nanotubes formed by two-step anodization and their application in dye-sensitized solar cells. *Nanoscale*, **2012**, 4, 448-50	7.7	39
224	First-principles study of structural, electronic, and optical properties of. *Solid State Communications* , **2009**, 149, 1849-1852	1.6	39
223	Uniaxial strain-modulated conductivity in manganite superlattice (LaMnO3/SrMnO3). *Applied Physics Letters*, **2011**, 98, 031910	3.4	39
222	A Catalytic Etching-Wetting-Dewetting Mechanism in the Formation of Hollow Graphitic Carbon Fiber. *CheM*, **2017**, 2, 299-310	16.2	38
221	Ultrafine Cobalt Sulfide Nanoparticles Encapsulated Hierarchical N-doped Carbon Nanotubes for High-performance Lithium Storage. *Electrochimica Acta*, **2017**, 225, 137-142	6.7	38
220	Enhanced photocatalytic activity of CoO/TiO2 nanotube composite. *Electrochimica Acta*, **2012**, 81, 117-122	5.7	38
219	Sintering study on commercial CeO2 powder with small amount of MnO2 doping. *Materials Letters*, **2002**, 57, 507-512	3.3	38

218	Photonic crystals for sensitized solar cells: fabrication, properties, and applications. *Journal of Materials Chemistry C*, **2015**, 3, 10665-10686	7.1	36
217	TiO2/SiO2 hybrid nanomaterials: synthesis and variable UV-blocking properties. *Journal of Sol-Gel Science and Technology*, **2011**, 58, 326-329	2.3	36
216	Predicting two-dimensional pentagonal transition metal monophosphides for efficient electrocatalytic nitrogen reduction. *Journal of Materials Chemistry A*, **2019**, 7, 11444-11451	13	35
215	Electrical modulus analysis on the Ni/CCTO/PVDF system near the percolation threshold. *Journal Physics D: Applied Physics*, **2011**, 44, 475305	3	35
214	Effect of alkaline-earth oxides on phase formation and morphology development of mullite ceramics. *Ceramics International*, **2004**, 30, 1319-1323	5.1	35
213	Harvesting vibration energy to piezo-catalytically generate hydrogen through Bi2WO6 layered-perovskite. *Nano Energy*, **2020**, 78, 105351	17.1	35
212	In situ growth of CoP nanoparticles anchored on (N,P) co-doped porous carbon engineered by MOFs as advanced bifunctional oxygen catalyst for rechargeable Zn–air battery. *Journal of Materials Chemistry A*, **2020**, 8, 19043-19049	13	35
211	Stable freestanding Li-ion battery cathodes by in situ conformal coating of conducting polypyrrole on NiS-carbon nanofiber films. *Journal of Power Sources*, **2016**, 331, 360-365	8.9	35
210	Low temperature formation of yttrium aluminum garnet from oxides via a high-energy ball milling process. *Materials Letters*, **2002**, 56, 344-348	3.3	34
209	High pyrocatalytic properties of pyroelectric BaTiO3 nanofibers loaded by noble metal under room-temperature thermal cycling. *Ceramics International*, **2018**, 44, 21835-21841	5.1	34
208	Efficient Planar Perovskite Solar Cells with Reduced Hysteresis and Enhanced Open Circuit Voltage by Using PW12-TiO2 as Electron Transport Layer. *ACS Applied Materials & Interfaces*, **2016**, 8, 8520-6	9.5	33
207	Fabrication of crack-free anodic nanoporous titania and its enhanced photoelectrochemical response. *Applied Catalysis B: Environmental*, **2009**, 90, 262-267	21.8	33
206	Organic-free Anatase TiO2 Paste for Efficient Plastic Dye-Sensitized Solar Cells and Low Temperature Processed Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 19431-8	9.5	32
205	Effect of transition metal oxides on mullite whisker formation from mechanochemically activated powders. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 359, 75-81	5.3	32
204	Improved performance of asymmetric fiber-based micro-supercapacitors using carbon nanoparticles for flexible energy storage. *Journal of Materials Chemistry A*, **2015**, 3, 15633-15641	13	31
203	Analysis of internal stresses induced by strain recovery in a single SMA fiber–matrix composite. *Composites Part B: Engineering*, **2011**, 42, 1135-1143	10	31
202	Dielectric, ferroelectric properties, and grain growth of CaxBa1−xNb2O6 ceramics with tungsten-bronzes structure. *Journal of Applied Physics*, **2008**, 104, 024101	2.5	31
201	Growth of mullite whiskers in mechanochemically activated oxides doped with WO3. *Journal of the European Ceramic Society*, **2003**, 23, 2257-2264	6	31

200	Core/shell TiO2/MnO2/MnO2 heterostructure anodes for high-performance lithium-ion batteries. *RSC Advances*, **2014**, 4, 39906	3.7	30
199	Structural dependence of piezoelectric, dielectric and ferroelectric properties of K0.5Na0.5(Nb1−x/5Cux)O3 lead-free ceramics with high Qm. *Materials Research Bulletin*, **2012**, 47, 4472-4477	5.1	30
198	Interfacial engineering of front-contact with finely tuned polymer interlayers for high-performance large-area flexible perovskite solar cells. *Nano Energy*, **2019**, 62, 734-744	17.1	29
197	Unravelling the Mechanism of Ionic Fullerene Passivation for Efficient and Stable Methylammonium-Free Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 2015-2022	20.1	29
196	Epitaxial ferroelectric Hf0.5Zr0.5O2 thin film on a buffered YSZ substrate through interface reaction. *Journal of Materials Chemistry C*, **2018**, 6, 9224-9231	7.1	28
195	Revisit of the Vogel–Fulcher freezing in lead magnesium niobate relaxors. *Applied Physics Letters*, **2010**, 97, 132905	3.4	28
194	Crossover from a nearly constant loss to a superlinear power-law behavior in Mn-doped Bi(Mg1/2Ti1/2)O3–PbTiO3 ferroelectrics. *Journal of Applied Physics*, **2010**, 107, 084112	2.5	28
193	Enhanced charge storage by the electrocatalytic effect of anodic TiO2 nanotubes. *Nanoscale*, **2011**, 3, 4174-81	7.7	28
192	Lead zirconate titanate ceramics derived from oxide mixture treated by a high-energy ball milling process. *Materials Letters*, **2001**, 50, 129-133	3.3	28
191	Photocatalysis-Assisted CoO/g-CN p-n Junction All-Solid-State Supercapacitors: A Bridge between Energy Storage and Photocatalysis. *Advanced Science*, **2020**, 7, 2001939	13.6	28
190	TiO2-B nanowires via topological conversion with enhanced lithium-ion intercalation properties. *Journal of Materials Chemistry A*, **2019**, 7, 3842-3847	13	27
189	Ni@NiO core/shell dendrites for ultra-long cycle life electrochemical energy storage. *Journal of Materials Chemistry A*, **2016**, 4, 15049-15056	13	27
188	Harvesting the Vibration Energy of BiFeO3 Nanosheets for Hydrogen Evolution. *Angewandte Chemie*, **2019**, 131, 11905-11910	3.6	26
187	Tuning of dielectric and ferroelectric properties in single phase BiFeO3 ceramics with controlled Fe2+/Fe3+ ratio. *Ceramics International*, **2014**, 40, 5263-5268	5.1	26
186	Vacancy-induced magnetism in BaTiO3(001) thin films based on density functional theory. *Physical Chemistry Chemical Physics*, **2011**, 13, 4738-45	3.6	26
185	Enhanced photoelectrochemical current response of titania nanotube array. *Materials Letters*, **2006**, 60, 3558-3560	3.3	26
184	Zinc niobate derived from mechanochemically activated oxides. *Journal of Alloys and Compounds*, **2002**, 347, 308-313	5.7	26
183	Electrocatalytic Iodine Reduction Reaction Enabled by Aqueous Zinc-Iodine Battery with Improved Power and Energy Densities. *Angewandte Chemie - International Edition*, **2021**, 60, 3791-3798	16.4	26

182	Nitrogen-doped graphitic hierarchically porous carbon nanofibers obtained via bimetallic-coordination organic framework modification and their application in supercapacitors. *Dalton Transactions*, **2018**, 47, 7316-7326	4.3	25
181	Highly efficient perovskite solar cells with precursor composition-dependent morphology. *Solar Energy Materials and Solar Cells*, **2016**, 145, 231-237	6.4	25
180	Suppressing the Coffee-Ring Effect in Semitransparent MnO2 Film for a High-Performance Solar-Powered Energy Storage Window. *ACS Applied Materials & Interfaces*, **2016**, 8, 9088-96	9.5	25
179	Variable-range-hopping conductivity in high-k Ba(Fe0.5Nb0.5)O3 ceramics. *Journal of Applied Physics*, **2013**, 114, 104106	2.5	25
178	Ultrahigh piezoelectric coefficient of a lead-free K0.5Na0.5NbO3-based single crystal fabricated by a simple seed-free solid-state growth method. *Journal of Materials Chemistry C*, **2019**, 7, 14845-14854	7.1	25
177	Engineering NiFe layered double hydroxide by valence control and intermediate stabilization toward the oxygen evolution reaction. *Journal of Materials Chemistry A*, **2020**, 8, 26130-26138	13	24
176	Pressure-Induced Topological Nontrivial Phase and Tunable Optical Properties in All-Inorganic Halide Perovskites. *Journal of Physical Chemistry C*, **2018**, 122, 17718-17725	3.8	24
175	Chiral Coupling of Valley Excitons and Light through Photonic Spin□Orbit Interactions. *Advanced Optical Materials*, **2020**, 8, 1901233	8.1	24
174	Facile preparation of hierarchical TiO2 nanowire□anoparticle/nanotube architecture for highly efficient dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 20366-20374	13	23
173	Aperiodic TiO2 nanotube photonic crystal: full-visible-spectrum solar light harvesting in photovoltaic devices. *Scientific Reports*, **2014**, 4, 6442	4.9	23
172	Polyimide-Surface-Modified Silica Tubes: Preparation and Cryogenic Properties. *Chemistry of Materials*, **2007**, 19, 1939-1945	9.6	23
171	Enhanced photoelectrocatalytic performance of polyoxometalate-titania nanocomposite photoanode. *Applied Catalysis B: Environmental*, **2007**, 76, 15-23	21.8	23
170	Structural and electric properties of barium strontium titanate based ceramic composite as a humidity sensor. *Solid State Ionics*, **2008**, 179, 1632-1635	3.3	23
169	Microstructural composite mullite derived from oxides via a high-energy ball milling process. *Ceramics International*, **2004**, 30, 1313-1317	5.1	23
168	Enhancement of dielectric performance upto GHz of the composites with polymer encapsulated hybrid BaTiO3□u as fillers: multiple interfacial polarizations playing a key role. *RSC Advances*, **2016**, 6, 36450-36458	3.7	23
167	Origin of Ferroelectricity in Epitaxial Si-Doped HfO Films. *ACS Applied Materials & Interfaces*, **2019**, 11, 4139-4144	9.5	23
166	Nanocomposite of Mo2N Quantum [email□protected]3@Nitrogen-Doped Carbon as a High-Performance Anode for Lithium-Ion Batteries. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10198-10206	8.3	22
165	Single semicircular response of dielectric properties of diamond films. *Thin Solid Films*, **2001**, 381, 52-56	2.2	22

164	Preparation of the solid solution Sn0.5Ti0.5O2 from an oxide mixture via a mechanochemical process. *Journal of Alloys and Compounds*, **2002**, 336, 315-319	5.7	22
163	Strong competition between electromagnetic enhancement and surface-energy-transfer induced quenching in plasmonic dye-sensitized solar cells: A generic yet controllable effect. *Nano Energy*, **2016**, 26, 297-304	17.1	22
162	Facile and tailored synthesis of ultrahigh-surface-area clews of carbon nanobelts for high-rate lithiumSulfur batteries. *Journal of Materials Chemistry A*, **2017**, 5, 23209-23220	13	21
161	Ultrahigh Energy Efficiency and Large Discharge Energy Density in Flexible Dielectric Nanocomposites with PbLa(ZrSnTi)O Antiferroelectric Nanofillers. *ACS Applied Materials & Interfaces*, **2020**, 12, 12847-12856	9.5	21
160	Hierarchical Architectured Ternary Nanostructures Photocatalysts with In(OH)3 Nanocube on ZnIn2S4/NiS Nanosheets for Photocatalytic Hydrogen Evolution. *Solar Rrl*, **2020**, 4, 2000027	7.1	21
159	Enhanced light harvesting in dye-sensitized solar cells coupled with titania nanotube photonic crystals: a theoretical study. *ACS Applied Materials & Interfaces*, **2013**, 5, 13022-8	9.5	21
158	Giant low frequency dielectric tunability in high-k Ba(Fe1/2Nb1/2)O3 ceramics at room temperature. *Journal of Applied Physics*, **2010**, 108, 064104	2.5	21
157	Micromechanics approach to the magnetoelectric properties of laminate and fibrous piezoelectric/magnetostrictive composites. *Journal Physics D: Applied Physics*, **2004**, 37, 3361-3366	3	21
156	Cracks bring robustness: a pre-cracked NiO nanosponge electrode with greatly enhanced cycle stability and rate performance. *Journal of Materials Chemistry A*, **2016**, 4, 8211-8218	13	21
155	High dielectric tunability, electrostriction strain and electrocaloric strength at a tricritical point of tetragonal, rhombohedral and pseudocubic phases. *Journal of Alloys and Compounds*, **2015**, 646, 597-602	5.7	20
154	Large electrocaloric strength in the (100)-oriented relaxor ferroelectric Pb[(Ni1/3Nb2/3)0.6Ti0.4]O3 single crystal at near morphotropic phase boundary. *Ceramics International*, **2015**, 41, 9344-9349	5.1	20
153	Fluorinated polyimideSilica films with low permittivity and low dielectric loss. *Journal of Materials Science*, **2012**, 47, 1958-1963	4.3	20
152	Effect of excess PbO on microstructure and electrical properties of PLZT7/60/40 ceramics derived from a high-energy ball milling process. *Journal of Alloys and Compounds*, **2002**, 345, 238-245	5.7	20
151	Stable 4 V-class bicontinuous cathodes by hierarchically porous carbon coating on Li3V2(PO4)3 nanospheres. *Nanoscale*, **2014**, 6, 12426-33	7.7	19
150	Sulfur-impregnated N-doped hollow carbon nanofibers as cathode for lithium-sulfur batteries. *Materials Letters*, **2017**, 209, 505-508	3.3	19
149	Enhanced efficiencies in thin and semi-transparent dye-sensitized solar cells under low photon flux conditions using TiO2 nanotube photonic crystal. *Journal of Power Sources*, **2015**, 293, 170-177	8.9	19
148	Theoretical prediction on the structural, electronic, and polarization properties of tetragonal Bi2ZnTiO6. *Journal of Applied Physics*, **2009**, 105, 053713	2.5	19
147	Dielectric relaxation in polyimide nanofoamed films with low dielectric constant. *Applied Physics Letters*, **2008**, 92, 052910	3.4	19

146	A new low-temperature solution route to Aurivillius-type layered oxyfluoride perovskites Bi2MO5F (M = Nb, Ta) as photocatalysts. *Applied Catalysis B: Environmental*, **2017**, 205, 112-120	21.8	18
145	Realization of ultra-long columnar single crystals in TiO2 nanotube arrays as fast electron transport channels for high efficiency dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 11520-11529	13	18
144	A strategy to reduce the angular dependence of a dye-sensitized solar cell by coupling to a TiO2 nanotube photonic crystal. *Nanoscale*, **2014**, 6, 13060-7	7.7	18
143	Stress distributions in single shape memory alloy fiber composites. *Materials & Design*, **2011**, 32, 3783-3789		18
142	Novel Solid-State Reaction Route to Synthesize Pb(Mg1/3Nb2/3)O3−PbTiO3 Ceramics with a Pure Perovskite Phase. *Chemistry of Materials*, **2007**, 19, 2718-2720	9.6	18
141	Crystallization of magnesium niobate from mechanochemically derived amorphous phase. *Journal of Alloys and Compounds*, **2002**, 340, L1-L4	5.7	18
140	Frequency shift in the photoluminescence of nanometric SiOx: surface bond contraction and oxidation. *Journal of Physics Condensed Matter*, **1999**, 11, L547-L550	1.8	18
139	ZnO-Decorated Carbon Nanotube Hybrids as Fillers Leading to Reversible Nonlinear I-V Behavior of Polymer Composites for Device Protection. *ACS Applied Materials & Interfaces*, **2016**, 8, 35545-35551	9.5	18
138	Giant dielectric response and enhanced thermal stability of multiferroic BiFeO3. *Journal of Alloys and Compounds*, **2014**, 600, 118-124	5.7	17
137	Intense and stable blue-light emission of Pb(ZrxTi1−x)O3. *Applied Physics Letters*, **2001**, 79, 1082-1084	3.4	17
136	Low temperature transfer of well-tailored TiO2 nanotube array membrane for efficient plastic dye-sensitized solar cells. *Journal of Power Sources*, **2017**, 343, 47-53	8.9	16
135	Remarkably Enhanced Negative Electrocaloric Effect in PbZrO Thin Film by Interface Engineering. *ACS Applied Materials & Interfaces*, **2019**, 11, 36863-36870	9.5	16
134	Metal−Organic-Framework-Derived N-, P-, and O-Codoped Nickel/Carbon Composites Homogeneously Decorated on Reduced Graphene Oxide for Energy Storage. *ACS Applied Nano Materials*, **2020**, 3, 5625-5636	5.6	16
133	Dual-active-sites design of CoSx anchored on nitrogen-doped carbon with tunable mesopore enables efficient Bi-Functional oxygen catalysis for ultra-stable zinc-air batteries. *Journal of Power Sources*, **2019**, 438, 226953	8.9	16
132	Electronic, magnetic and dielectric properties of multiferroic MnTiO3. *Journal of Materials Research* , **2012**, 27, 1421-1429	2.5	16
131	Effect of Mn Substitution for Fe in Multiferroic BiFeO3: A First-Principles Study. *Science of Advanced Materials*, **2010**, 2, 184-189	2.3	16
130	Low-temperature-poling awakened high dielectric breakdown strength and outstanding improvement of discharge energy density of (Pb,La)(Zr,Sn,Ti)O3 relaxor thin film. *Nano Energy*, **2020**, 77, 105132	17.1	16
129	Dielectric spectroscopy of biodegradable poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) films. *European Polymer Journal*, **2012**, 48, 79-85	5.2	15

128	Enhanced surface roughness and corrosion resistance of NiTi alloy by anodization in diluted HF solution. *Smart Materials and Structures*, **2009**, 18, 024003	3.4	15
127	F spots and domain patterns in rhombohedral PbZr0.90Ti0.10O3. *Applied Physics Letters*, **2003**, 83, 3692-3694	3.4	15
126	Greatly enhanced photocurrent in inorganic perovskite [KNbO3]0.9[BaNi0.5Nb0.5O3-δ]0.1 ferroelectric thin-film solar cell. *Journal of the American Ceramic Society*, **2018**, 101, 4892-4898	3.8	15
125	Metal-Nitrogen-Carbon Catalysts of Specifically Coordinated Configurations toward Typical Electrochemical Redox Reactions. *Advanced Materials*, **2021**, 33, e2100997	24	15
124	Role of transition metal oxides in g-C3N4-based heterojunctions for photocatalysis and supercapacitors. *Journal of Energy Chemistry*, **2022**, 64, 214-235	12	15
123	Multifunctional NiTiO3 nanocoating fabrication based on the dual-Kirkendall effect enabling a stable cathode/electrolyte interface for nickel-rich layered oxides. *Journal of Materials Chemistry A*, **2018**, 6, 2643-2652	13	14
122	Large-diameter titanium dioxide nanotube arrays as a scattering layer for high-efficiency dye-sensitized solar cell. *Nanoscale Research Letters*, **2014**, 9, 362	5	14
121	Electrocatalytic Iodine Reduction Reaction Enabled by Aqueous Zinc-Iodine Battery with Improved Power and Energy Densities. *Angewandte Chemie*, **2021**, 133, 3835-3842	3.6	14
120	Fatigue mechanism verified using photovoltaic properties of Pb(Zr0.52Ti0.48)O3 thin films. *Applied Physics Letters*, **2017**, 110, 133903	3.4	13
119	Electrical and Dielectric Properties of Exfoliated Graphite/Polyimide Composite Films with Low Percolation Threshold. *Journal of Electronic Materials*, **2012**, 41, 2439-2446	1.9	13
118	A Polyethylene Glycol-Modified Solid-State Reaction Route to Synthesize Relaxor Ferroelectric Pb(Mg1/3Nb2/3)O3–PbTiO3 (PMN–PT). *Journal of the American Ceramic Society*, **2008**, 91, 1057-1064	3.8	13
117	Effect of A-Site Substitution of Calcium on Zr-Rich Lead Zirconate Titanate. *Ferroelectrics*, **2002**, 274, 55-65	0.6	13
116	Bimetallic Sulfide with Controllable Mg Substitution Anchored on CNTs as Hierarchical Bifunctional Catalyst toward Oxygen Catalytic Reactions for Rechargeable Zinc-Air Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 37164-37172	9.5	13
115	Unravelling the origin of bifunctional OER/ORR activity for single-atom catalysts supported on C2N by DFT and machine learning. *Journal of Materials Chemistry A*, **2021**, 9, 16860-16867	13	13
114	An overview of flow cell architecture design and optimization for electrochemical CO2 reduction. *Journal of Materials Chemistry A*, **2021**, 9, 20897-20918	13	13
113	Hollow Nanotubes of N-Doped Carbon on CoS. *Angewandte Chemie*, **2016**, 128, 16063-16066	3.6	12
112	A Universal Strategy To Prepare Sulfur-Containing Polymer Composites with Desired Morphologies for Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 22002-22012	9.5	12
111	Electrochemically assisted flexible lanthanide upconversion luminescence sensing of heavy metal contamination with high sensitivity and selectivity. *Nanoscale Advances*, **2019**, 1, 265-272	5.1	12

110	Origin of colossal dielectric response in (In + Nb) co-doped TiO rutile ceramics: a potential electrothermal material. *Scientific Reports*, **2017**, 7, 10144	4.9	12
109	Highly Efficient Porous Carbon Electrocatalyst with Controllable N-Species Content for Selective CO2 Reduction. *Angewandte Chemie*, **2020**, 132, 3270-3277	3.6	12
108	Aligned TiO□nanotube/nanoparticle heterostructures with enhanced electrochemical performance as three-dimensional anode for lithium-ion microbatteries. *Nanotechnology*, **2014**, 25, 455401	3.4	11
107	Dielectric and Thermal Properties of Polyimide□Poly(ethylene oxide) Nanofoamed Films. *Journal of Electronic Materials*, **2012**, 41, 2281-2285	1.9	11
106	A polyethylene glycol-assisted route to synthesize Pb(Ni1/3Nb2/3)O3-PbTiO3 in pure perovskite phase. *Journal of Alloys and Compounds*, **2009**, 480, 510-515	5.7	11
105	Broadband and omnidirectional light harvesting enhancement in photovoltaic devices with aperiodic TiO 2 nanotube photonic crystal. *Journal of Power Sources*, **2017**, 345, 12-20	8.9	10
104	Three-dimensional macroporous graphene monoliths with entrapped MoS nanoflakes from single-step synthesis for high-performance sodium-ion batteries.. *RSC Advances*, **2018**, 8, 2477-2484	3.7	10
103	Dielectric behaviors of PHBHHx□BaTiO3 multifunctional composite films. *Composites Science and Technology*, **2012**, 72, 370-375	8.6	10
102	Dielectric relaxations of high-k poly(butylene succinate) based all-organic nanocomposite films for capacitor applications. *Journal of Materials Research*, **2011**, 26, 2493-2502	2.5	10
101	MgTiO3 doping effect on dielectric properties of Ba0.6Sr0.4TiO3 ceramics via a molten salt process. *Composites Part A: Applied Science and Manufacturing*, **2008**, 39, 597-601	8.4	10
100	Electronic structure and chemical bonding of □and □Ta4AlC3 phases: Full-potential calculation. *Journal of Materials Research*, **2008**, 23, 2350-2356	2.5	10
99	Improved anatase phase stability in small diameter TiO2 nanotube arrays for high performance dye-sensitized solar cells. *Journal of Alloys and Compounds*, **2014**, 607, 50-53	5.7	9
98	Facile fabrication of highly porous photoanode at low temperature for all-plastic dye-sensitized solar cells with quasi-solid state electrolyte. *Journal of Power Sources*, **2014**, 271, 8-15	8.9	9
97	Design of multi-layered TiO2 nanotube/nanoparticle hybrid structure for enhanced efficiency in dye-sensitized solar cells. *RSC Advances*, **2014**, 4, 45180-45184	3.7	9
96	Stabilizing the cationic/anionic redox chemistry of Li-rich layered cathodes by tuning the upper cut-off voltage for high energy-density lithium-ion batteries. *Journal of Materials Chemistry A*, **2020**, 8, 14214-14222	13	9
95	Monolayer PC/PC: promising anode materials for lithium-ion batteries. *Physical Chemistry Chemical Physics*, **2020**, 22, 16665-16671	3.6	8
94	Improving the efficiency of dye-sensitized solar cell via tuning the Au plasmons inlaid TiO2 nanotube array photoanode. *Journal of Applied Electrochemistry*, **2018**, 48, 1139-1149	2.6	8
93	First-principles prediction of the hardness of fluorite TiO2. *Physica B: Condensed Matter*, **2009**, 404, 79-81	2.8	8

92	Microstructural and dielectric studies of A-site calcium doped PbZr0.94Ti0.06O3 ceramics. *Journal of Electroceramics*, **2006**, 16, 343-346	1.5	8
91	The ferroelectric□antiferroelectric transition in Pb[Zr0.9(CexTi1□)0.1]O3 due to Ce4+ doping. *Solid State Communications*, **2003**, 125, 297-300	1.6	8
90	Energy balance model for the Vickers hardness of ferroelectric PZT ceramics. *Journal of Materials Science Letters*, **1999**, 18, 1675-1677		8
89	Thermodynamically Metal Atom Trapping in Van der Waals Layers Enabling Multifunctional 3D Carbon Network. *Advanced Functional Materials*, **2020**, 30, 2002626	15.6	8
88	Synthesis of ferroelectric KNbO 3 nanosheets by liquid exfoliation of layered perovskite K 2 NbO 3 F. *Journal of Alloys and Compounds*, **2017**, 698, 357-363	5.7	7
87	A Hierarchically Porous Hollow Structure of Layered Bi2TiO4F2 for Efficient Photocatalysis. *European Journal of Inorganic Chemistry*, **2017**, 2017, 1892-1899	2.3	7
86	Growth and properties of (1□)Pb(Zn1/3Nb2/3)O3□PbTiO3 (x=0.07□0.11) ferroelectric single crystals by a top-seeded solution growth method. *Ceramics International*, **2015**, 41, 14427-14434	5.1	7
85	Effect of hollow structure and covalent bonding on the mechanical properties of core□shell silica nanoparticles modified poly(methyl acrylate) composites. *Materials Chemistry and Physics*, **2011**, 129, 77-82	4.4	7
84	An atomistic approach to the dielectric modes of BaTiO3 and SrTiO3. *Solid State Communications*, **2011**, 151, 474-477	1.6	7
83	Dielectric and ageing behaviour of strontium barium niobate with barium strontium titanate additives. *Journal Physics D: Applied Physics*, **2007**, 40, 6797-6802	3	7
82	Fabrication of highly oriented microstructures and nanostructures of ferroelectric P(VDF-TrFE) copolymer via dip-pen nanolithography. *Superlattices and Microstructures*, **2004**, 36, 21-29	2.8	7
81	Rapid deposition of high temperature YBa2Cu3O 7□ superconducting thin films directly on silver substrates. *Applied Physics Letters*, **1993**, 62, 894-895	3.4	7
80	Boosting the Redox Kinetics of High-Voltage P2-Type Cathode by Radially Oriented {010} Exposed Nanoplates for High-Power Sodium-Ion Batteries. *Small Structures*, **2022**, 3, 2100123	8.7	7
79	Electrospinning Techniques: Electrospinning-Based Strategies for Battery Materials (Adv. Energy Mater. 2/2021). *Advanced Energy Materials*, **2021**, 11, 2170010	21.8	7
78	Graphene/carbon aerogel for high areal capacity sulfur cathode of Li-S batteries. *Ionics*, **2019**, 25, 4615-4624	2.7	6
77	Fiber-in-Tube Design of Co9S8-Carbon/Co9S8: Enabling Efficient Sodium Storage. *Angewandte Chemie*, **2019**, 131, 6305-6309	3.6	6
76	Aluminum electrolysis derivative spent cathodic carbon for dendrite-free Li metal anode. *Materials Today Energy*, **2020**, 17, 100465	7	6
75	Temperature-dependent reversible and irreversible processes in Nb-doped PbZrO3 relaxor ferroelectric thin films. *Applied Physics Letters*, **2015**, 107, 202902	3.4	6

74	Microstructure promoted photosensitization activity of dye-titania/titanium composites. *Composites Part A: Applied Science and Manufacturing*, **2008**, 39, 690-696	8.4	6
73	Structure and properties of PMNPT/NZFO laminates and composites. *Ceramics International*, **2008**, 34, 701-704	5.1	6
72	Stress Effect on the Pyroelectric Properties of Lead Titanate Thin Films. *Integrated Ferroelectrics*, **2003**, 51, 81-90	0.8	6
71	Mean-Field Approach to Dielectric Relaxation in Giant Dielectric Constant Perovskite Ceramics. *Journal of Ceramics*, **2013**, 2013, 1-7		6
70	Tailoring Phase Purity in the 2D/3D Perovskite Heterostructures Using Lattice Mismatch. *ACS Energy Letters*,550-559	20.1	6
69	Theoretical Investigation of Monolayer RhTeCl Semiconductors as Photocatalysts for Water Splitting. *Journal of Physical Chemistry C*, **2020**, 124, 639-646	3.8	6
68	Applications of ESEM on Materials Science: Recent Updates and a Look Forward. *Small Methods*, **2020**, 4, 1900588	12.8	6
67	Rational Design and Synthesis of Ultra-Thin Ni(OH) Nanoplates for High Performance All-Solid-State Flexible Supercapacitors. *Frontiers in Chemistry*, **2020**, 8, 602322	5	6
66	Transition metal-tetracyanoquinodimethane monolayers as single-atom catalysts for the electrocatalytic nitrogen reduction reaction. *Materials Advances*, **2020**, 1, 1285-1292	3.3	6
65	A fast and general approach to produce a carbon coated Janus metal/oxide hybrid for catalytic water splitting. *Journal of Materials Chemistry A*, **2021**, 9, 7606-7616	13	6
64	Incipient ferroelectrics: Anomalous T1 behaviors and their rotor interpretation. *Solid State Communications*, **2012**, 152, 112-115	1.6	5
63	Pyrochlore-Free Pb(Ni1/3Nb2/3)O3PbTiO3 Ceramics with Superior Piezoelectric Properties Synthesized Using an Optimized Polyethylene Glycol-Assisted Solid-State Reaction. *Journal of the American Ceramic Society*, **2010**, 93, 2244-2251	3.8	5
62	Critical behavior of two-dimensional spin systems under the random-bond six-state clock model. *Journal of Applied Physics*, **2012**, 112, 063924	2.5	5
61	Preparation, structure, and properties of Bi(Mg 1/2 Ti 1/2)-PbTiO 3 ceramics and Mn-doping effect **2007**, 6423, 1151		5
60	Mechanical and electrical properties of (Ce1 Zr x)0.85Gd0.15O2 ceramics (0 x 0.5). *Journal of Materials Science Letters*, **2002**, 21, 1167-1169		5
59	Anisotropic mullitization in CuO-doped oxide mixture activated by high-energy ball milling. *Materials Letters*, **2003**, 57, 3660-3666	3.3	5
58	The relationship between the mechanical properties and microstructures of sintered PZT. *Journal of Materials Processing Technology*, **1999**, 89-90, 538-543	5.3	5
57	Structural composite energy storage devices a review. *Materials Today Energy*, **2022**, 24, 100924	7	5

56	Plasmon-induced trap filling at grain boundaries in perovskite solar cells. *Light: Science and Applications*, **2021**, 10, 219	16.7	5
55	Atomic Steps Induce the Aligned Growth of Ice Crystals on Graphite Surfaces. *Nano Letters*, **2020**, 20, 8112-8119	11.5	5
54	Deuterium permeation properties of Er2O3/Cr2O3 composite coating prepared by MOCVD on 316L stainless steel. *Fusion Engineering and Design*, **2016**, 113, 205-210	1.7	5
53	Depolarization electric field and poling voltage-modulated Pb,La(Zr,Ti)O3-based self-powered ultraviolet photodetectors. *Journal of the American Ceramic Society*, **2021**, 104, 928-935	3.8	5
52	Ferroelectrics in Photocatalysis **2018**, 265-309		5
51	A Diagram of the Structure Evolution of Pb(Zn1/3Nb2/3) O3-9%PbTiO3 Relaxor Ferroelectric Crystals with Excellent Piezoelectric Properties. *Crystals*, **2017**, 7, 130	2.3	4
50	On the origin of oxygen isotope exchange induced ferroelectricity in strontium titanate. *European Physical Journal B*, **2012**, 85, 1	1.2	4
49	Slow relaxation of piezoelectric response in CdZnTe ferroelectric semiconductor single crystals. *Applied Physics Letters*, **2007**, 91, 162901	3.4	4
48	(1 □x)PNZ□BT ceramics derived from mechanochemically synthesized powders. *Materials Research Bulletin*, **2002**, 37, 1085-1092	5.1	4
47	Lead zinc niobate (PZN)□barium titanate (BT) ceramics from mechanochemically synthesized powders. *Materials Research Bulletin*, **2002**, 37, 2491-2498	5.1	4
46	Effect of SiO2 additive on the mechanical and dielectric properties of pzfntu ceramics. *Ferroelectrics*, **1999**, 229, 291-296	0.6	4
45	Pt NPs-loaded siloxene nanosheets for hydrogen co-evolutions from Zn-H2O fuel cells-powered water-splitting. *Applied Catalysis B: Environmental*, **2022**, 304, 121008	21.8	4
44	Nitride MXenes as sulfur hosts for thermodynamic and kinetic suppression of polysulfide shuttling: a computational study. *Journal of Materials Chemistry A*,	13	4
43	Advantageous Configurative Heteroatoms-Doped Carbon Foams Design and Application for Ultrahigh-Powered Zn□air Batteries. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 731-738	8.3	4
42	Phase control of ultrafine FeSe nanocrystals in a N-doped carbon matrix for highly efficient and stable oxygen reduction reaction. *Journal of Materials Chemistry A*, **2021**, 9, 3464-3471	13	4
41	Electrochemical activation strategies of a novel high entropy amorphous V-based cathode material for high-performance aqueous zinc-ion batteries. *Journal of Materials Chemistry A*, **2021**, 9, 18488-18497	13	4
40	Electrocatalytic Selenium Redox Reaction for High-Mass-Loading Zinc-Selenium Batteries with Improved Kinetics and Selenium Utilization. *Advanced Energy Materials*,2201322	21.8	4
39	First principles study of transport properties of LaAlO3/SrTiO3 heterostructure with water adsorbates. *Solid State Communications*, **2013**, 169, 46-49	1.6	3

38	Enhanced Unipolar Fatigue Resistance in Ferroelectric Pb(Ni1/3Nb2/3O3)PbTiO3 Ceramics Prepared via Glycerol-Assisted Solid-State Reaction. *Journal of the American Ceramic Society*, **2011**, 94, 488-495	3.8	3
37	Effect of excess TiO2 on the phase evolution and densification of sol-gel derived (Ba,Sr)TiO3 powders. *Journal of Electroceramics*, **2006**, 16, 337-341	1.5	3
36	Nonlinear stress-strain behaviour and stress relaxation of PZFNTU ceramics in the three-point bending test. *Journal Physics D: Applied Physics*, **2000**, 33, L33-L37	3	3
35	Reduce the low-frequency dielectric loss of (In0.5Nb0.5)0.05Ti0.95O2 ceramics by constructing insulating ZrO2 phase boundaries. *Journal of Alloys and Compounds*, **2020**, 838, 155617	5.7	3
34	High-temperature energy storage properties in polyimide-based nanocomposites filled with antiferroelectric nanoparticles. *Journal of Materials Research and Technology*, **2020**, 9, 11344-11350	5.5	3
33	Morphotropic domain structures and dielectric relaxation in piezo-/ferroelectric Pb(In1/2Nb1/2)O3Pb(Zn1/3Nb2/3)O3PbTiO3 single crystals. *Journal of Crystal Growth*, **2016**, 441, 33-40	1.6	3
32	Tailoring carrier dynamics in inverted mesoporous perovskite solar cells with interface-engineered plasmonics. *Journal of Materials Chemistry A*, **2021**, 9, 2394-2403	13	3
31	Ferroelastic domain structure and phase transition in single-crystalline [PbZn1/3Nb2/3O3]1-x[PbTiO3]x observed via in situ x-ray microbeam. *Journal of the European Ceramic Society*, **2018**, 38, 1488-1497	6	3
30	Fundamentals of Ferroelectric Materials **2018**, 1-31		3
29	Pyroelectric Energy Harvesting: Materials and Applications **2018**, 203-229		3
28	"Carbon quantum dots-glue" enabled high-capacitance and highly stable nickel sulphide nanosheet electrode for supercapacitors. *Journal of Colloid and Interface Science*, **2021**, 601, 669-677	9.3	3
27	Photovoltaic Devices: Direct and Seamless Coupling of TiO2 Nanotube Photonic Crystal to Dye-Sensitized Solar Cell: A Single-Step Approach (Adv. Mater. 47/2011). *Advanced Materials*, **2011**, 23, 5623-5623	24	2
26	Micro-Raman scattering and DC field dependent dielectric properties of BaZr x Ti 1 - x O 3 relaxor ferroelectric ceramics **2007**,		2
25	Stress- and strain-relaxation in lead zirconate titanate based ceramics. *Materials Chemistry and Physics*, **2002**, 75, 186-189	4.4	2
24	Phase field modeling for the morphological and microstructural evolution of metallic materials under environmental attack. *Npj Computational Materials*, **2021**, 7,	10.9	2
23	High-performance electrospun nanostructured composite fiber anodes for lithiumon batteries **2015**, 662-689		1
22	Power spectral density of free-standing viscoelastic films by adiabatic approximation. *Langmuir*, **2013**, 29, 4283-9	4	1
21	Stress analysis of shape memory alloy composites **2009**,		1

20	Improvements in the sinterability of commercial CeO2 powder by addition of MnO2. *Journal of Materials Science Letters*, **2002**, 21, 71-73		1
19	Sintering of Co-doped CeO2 powder. *Journal of Materials Science Letters*, **2002**, 21, 75-77		1
18	Squeezed-state approach to the first excited state of the linear E-e Jahn-Teller system. *Solid State Communications*, **1993**, 88, 601-603	1.6	1
17	Plasmon-Enhanced Photocatalytic Activity of Organic Heterostructure for Indoor-Light Antibacterial Therapy. *Advanced Therapeutics*, **2022**, 5, 2100202	4.9	1
16	Niobium Carbide as a Promising Pseudocapacitive Sodium-Ion Storage Anode. *Energy Technology*, **2021**, 9, 2100298	3.5	1
15	First-Principles Calculations on Ferroelectrics for Energy Applications **2018**, 311-348		1
14	Piezoelectric Energy Generation **2018**, 33-59		1
13	Dielectric Ceramics and Films for Electrical Energy Storage **2018**, 119-168		1
12	Ferroelectric Polymer Materials for Electric Energy Storage **2018**, 169-202		1
11	Double-Atom Catalysts: More is Different: Synergistic Effect and Structural Engineering in Double-Atom Catalysts (Adv. Funct. Mater. 3/2021). *Advanced Functional Materials*, **2021**, 31, 2170015	15.6	0
10	PPy enhanced Fe, W Co-doped Co3O4 free-standing electrode for highly-efficient oxygen evolution reaction. *Journal of Applied Electrochemistry*, **2018**, 48, 1189-1195	2.6	0
9	Ultrasensitive self-powered UV PDs via depolarization and heterojunction fields jointly enhanced carriers separation. *Journal of the American Ceramic Society*, **2022**, 105, 392	3.8	0
8	Space-confined Engineering Boosted High-performance of Ultrafine Nickel Selenide Nanocomposites for Sodium-ion Capacitors. *Materials Today Sustainability*, **2022**, 100151	5	0
7	Estimate bond angle dependence of superconducting transition temperature in NaFeAs with the first principle methods. *Solid State Communications*, **2016**, 246, 12-16	1.6	
6	Probable realization of rotor systems in SrTiO3 and PbZr1−xTixO3. *Physica B: Condensed Matter*, **2013**, 421, 83-86	2.8	
5	Ferroelectrics in Electrocaloric Cooling **2018**, 231-264		
4	Ferroelectric Photovoltaics **2018**, 61-94		
3	Organic–Inorganic Hybrid Perovskites for Solar Energy Conversion **2018**, 95-117		

2	Co/Ni dual-metal embedded in heteroatom doped porous carbon core-shell bifunctional electrocatalyst for rechargeable Zn-air batteries. *Materials Reports Energy*, **2022**, 100090	
1	Enhanced Ion Diffusion in Flexible Ti 3 C 2 T X MXene Film for High-Performance Supercapacitors. *Advanced Energy and Sustainability Research*,2100216	1.6