Ce-Wen Nan

List of Publications by Citations

108 papers	6,272 citations	35 h-index	78 g-index
117 ext. papers	8,108 ext. citations	12.3 avg, IF	6.03 L-index

#	Paper	IF	Citations
108	New horizons for inorganic solid state ion conductors. *Energy and Environmental Science*, **2018**, 11, 1945-1976	33.4	601
107	Synergistic Coupling between LiLaZrTaO and Poly(vinylidene fluoride) Induces High Ionic Conductivity, Mechanical Strength, and Thermal Stability of Solid Composite Electrolytes. *Journal of the American Chemical Society*, **2017**, 139, 13779-13785	16.4	452
106	Giant Energy Density and Improved Discharge Efficiency of Solution-Processed Polymer Nanocomposites for Dielectric Energy Storage. *Advanced Materials*, **2016**, 28, 2055-61	24	432
105	Ultrahigh energy density of polymer nanocomposites containing BaTiO3@TiO2 nanofibers by atomic-scale interface engineering. *Advanced Materials*, **2015**, 27, 819-24	24	416
104	Ultrahigh-energy density lead-free dielectric films via polymorphic nanodomain design. *Science*, **2019**, 365, 578-582	33.3	353
103	Topological-Structure Modulated Polymer Nanocomposites Exhibiting Highly Enhanced Dielectric Strength and Energy Density. *Advanced Functional Materials*, **2014**, 24, 3172-3178	15.6	304
102	Improving the dielectric constants and breakdown strength of polymer composites: effects of the shape of the BaTiO3 nanoinclusions, surface modification and polymer matrix. *Journal of Materials Chemistry*, **2012**, 22, 16491		301
101	Giant energy density and high efficiency achieved in bismuth ferrite-based film capacitors via domain engineering. *Nature Communications*, **2018**, 9, 1813	17.4	237
100	High-Throughput Phase-Field Design of High-Energy-Density Polymer Nanocomposites. *Advanced Materials*, **2018**, 30, 1704380	24	171
99	Self-Suppression of Lithium Dendrite in All-Solid-State Lithium Metal Batteries with Poly(vinylidene difluoride)-Based Solid Electrolytes. *Advanced Materials*, **2019**, 31, e1806082	24	169
98	BiFeO3–SrTiO3 thin film as a new lead-free relaxor-ferroelectric capacitor with ultrahigh energy storage performance. *Journal of Materials Chemistry A*, **2017**, 5, 5920-5926	13	158
97	Polymer Nanocomposites with Ultrahigh Energy Density and High Discharge Efficiency by Modulating their Nanostructures in Three Dimensions. *Advanced Materials*, **2018**, 30, e1707269	24	157
96	High-Energy-Density Ferroelectric Polymer Nanocomposites for Capacitive Energy Storage: Enhanced Breakdown Strength and Improved Discharge Efficiency. *Materials Today*, **2019**, 29, 49-67	21.8	143
95	Super-elastic ferroelectric single-crystal membrane with continuous electric dipole rotation. *Science* , **2019**, 366, 475-479	33.3	127
94	Modulation of topological structure induces ultrahigh energy density of graphene/Ba 0.6 Sr 0.4 TiO 3 nanofiber/polymer nanocomposites. *Nano Energy*, **2015**, 18, 176-186	17.1	119
93	Controllable conductive readout in self-assembled, topologically confined ferroelectric domain walls. *Nature Nanotechnology*, **2018**, 13, 947-952	28.7	104
92	Phase-field modeling and machine learning of electric-thermal-mechanical breakdown of polymer-based dielectrics. *Nature Communications*, **2019**, 10, 1843	17.4	97

91	High-Conductivity Argyrodite LiPSCl Solid Electrolytes Prepared via Optimized Sintering Processes for All-Solid-State Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 42279-42285	9.5	94
90	Synergy of micro-/mesoscopic interfaces in multilayered polymer nanocomposites induces ultrahigh energy density for capacitive energy storage. *Nano Energy*, **2019**, 62, 220-229	17.1	84
89	Polymer Nanocomposites with Interpenetrating Gradient Structure Exhibiting Ultrahigh Discharge Efficiency and Energy Density. *Advanced Energy Materials*, **2019**, 9, 1803411	21.8	84
88	Ultrahigh discharge efficiency in multilayered polymer nanocomposites of high energy density. *Energy Storage Materials*, **2019**, 18, 213-221	19.4	77
87	Enhanced electrochemical performance of bulk type oxide ceramic lithium batteries enabled by interface modification. *Journal of Materials Chemistry A*, **2018**, 6, 4649-4657	13	76
86	Ultrahigh Breakdown Strength and Improved Energy Density of Polymer Nanocomposites with Gradient Distribution of Ceramic Nanoparticles. *Advanced Functional Materials*, **2020**, 30, 1906112	15.6	65
85	Tuning Phase Composition of Polymer Nanocomposites toward High Energy Density and High Discharge Efficiency by Nonequilibrium Processing. *ACS Applied Materials & Interfaces*, **2017**, 9, 29717-29731	9.5	63
84	Electric-field control of ferromagnetism through oxygen ion gating. *Nature Communications*, **2017**, 8, 2156	17.4	63
83	2D Metals by Repeated Size Reduction. *Advanced Materials*, **2016**, 28, 8170-8176	24	53
82	Unlocking the energy capabilities of micron-sized LiFePO4. *Nature Communications*, **2015**, 6, 7898	17.4	51
81	Controlled functionalization of poly(4-methyl-1-pentene) films for high energy storage applications. *Journal of Materials Chemistry A*, **2016**, 4, 4797-4807	13	50
80	Ultrahigh energy storage in superparaelectric relaxor ferroelectrics. *Science*, **2021**, 374, 100-104	33.3	49
79	Composition Modulation and Structure Design of Inorganic-in-Polymer Composite Solid Electrolytes for Advanced Lithium Batteries. *Small*, **2020**, 16, e1902813	11	44
78	Current-controlled propagation of spin waves in antiparallel, coupled domains. *Nature Nanotechnology*, **2019**, 14, 691-697	28.7	43
77	Manipulation of Magnetic Properties by Oxygen Vacancies in Multiferroic YMnO3. *Advanced Functional Materials*, **2016**, 26, 3589-3598	15.6	40
76	Coaxial-Structured Weavable and Wearable Electroluminescent Fibers. *Advanced Electronic Materials*, **2017**, 3, 1700401	6.4	38
75	Good Low-Temperature Properties of Nitrogen-Enriched Porous Carbon as Sulfur Hosts for High-Performance Li-S Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 17253-9	9.5	38
74	High Capacity, Superior Cyclic Performances in All-Solid-State Lithium-Ion Batteries Based on 78LiS-22PS Glass-Ceramic Electrolytes Prepared via Simple Heat Treatment. *ACS Applied Materials & Interfaces*, **2017**, 9, 28542-28548	9.5	36

73	Electrical and Thermal Transport Behavior in Zn-Doped BiCuSeO Oxyselenides. *Journal of Electronic Materials*, **2015**, 44, 1627-1631	1.9	32
72	Dielectric films for high performance capacitive energy storage: multiscale engineering. *Nanoscale*, **2020**, 12, 19582-19591	7.7	32
71	High Capacity and Superior Cyclic Performances of All-Solid-State Lithium Batteries Enabled by a Glass-Ceramics Solo. *ACS Applied Materials & Interfaces*, **2018**, 10, 10029-10035	9.5	31
70	Interfacial challenges for all-solid-state batteries based on sulfide solid electrolytes. *Journal of Materiomics*, **2021**, 7, 209-218	6.7	30
69	High-performance all-solid-state lithium–sulfur batteries with sulfur/carbon nano-hybrids in a composite cathode. *Journal of Materials Chemistry A*, **2018**, 6, 23345-23356	13	30
68	Interface reconstruction with emerging charge ordering in hexagonal manganite. *Science Advances*, **2018**, 4, eaar4298	14.3	28
67	Role of the interface on the magnetoelectric properties of BaTiO3 thin films deposited on polycrystalline Ni foils. *Journal of Materials Chemistry C*, **2014**, 2, 708-714	7.1	26
66	A four-state memory cell based on magnetoelectric composite. *Science Bulletin*, **2008**, 53, 2135-2138	10.6	26
65	Influence of Crystallinity of Lithium Thiophosphate Solid Electrolytes on the Performance of Solid-State Batteries. *Advanced Energy Materials*, **2021**, 11, 2100654	21.8	25
64	Self-Reconstructed Formation of a One-Dimensional Hierarchical Porous Nanostructure Assembled by Ultrathin TiO Nanobelts for Fast and Stable Lithium Storage. *ACS Applied Materials & Interfaces*, **2018**, 10, 19047-19058	9.5	25
63	Response to Comment on "Self-Suppression of Lithium Dendrite in All-Solid-State Lithium Metal Batteries with Poly(vinylidene difluoride)-Based Solid Electrolytes". *Advanced Materials*, **2020**, 32, e2000026	24	24
62	Self-Propagating Enabling High Lithium Metal Utilization Ratio Composite Anodes for Lithium Metal Batteries. *Nano Letters*, **2021**, 21, 791-797	11.5	24
61	High-performance Li6PS5Cl-based all-solid-state lithium-ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 18612-18618	13	23
60	Ferroelectric Photodetector with High Current on–off Ratio (~1 × 10⁴%) in Self-Assembled Topological Nanoislands. *ACS Applied Electronic Materials*, **2019**, 1, 862-868	4	22
59	Tunable magnetic and electrical behaviors in perovskite oxides by oxygen octahedral tilting. *Science China Materials*, **2015**, 58, 302-312	7.1	22
58	Photoelectrochemical Performance Observed in Mn-Doped BiFeO₃ Heterostructured Thin Films. *Nanomaterials*, **2016**, 6,	5.4	22
57	Lithium Argyrodite as Solid Electrolyte and Cathode Precursor for Solid-State Batteries with Long Cycle Life. *Advanced Energy Materials*, **2021**, 11, 2101370	21.8	20
56	Strong phonon localization in PbTe with dislocations and large deviation to Matthiessen's rule. *Npj Computational Materials*, **2019**, 5,	10.9	19

55	High-conductivity free-standing Li6PS5Cl/poly(vinylidene difluoride) composite solid electrolyte membranes for lithium-ion batteries. *Journal of Materiomics*, **2020**, 6, 70-76	6.7	19
54	Electric-field control of skyrmions in multiferroic heterostructure via magnetoelectric coupling. *Nature Communications*, **2021**, 12, 322	17.4	19
53	Tunable pseudocapacitive contribution in nanosheet-constructed titania hierarchical tubes to achieve superior lithium-storage properties by phase control. *Journal of Materials Chemistry A*, **2018**, 6, 24298-24310	13	19
52	Mechanical properties of polymer-infiltrated-ceramic (sodium aluminum silicate) composites for dental restoration. *Journal of Dentistry*, **2017**, 62, 91-97	4.8	18
51	Scalable preparation of hierarchical porous activated carbon/graphene composites for high-performance supercapacitors. *Journal of Materials Chemistry A*, **2019**, 7, 10058-10066	13	17
50	Room temperature magnetoelectric coupling in intrinsic multiferroic Aurivillius phase textured ceramics. *Dalton Transactions*, **2016**, 45, 14049-14052	4.3	17
49	Bi3.25La0.75Ti2.5Nb0.25(Fe0.5Co0.5)0.25O12, a single phase room temperature multiferroic. *Journal of Materials Chemistry C*, **2018**, 6, 2733-2740	7.1	16
48	Strain-Mediated Converse Magnetoelectric Coupling in La0.7Sr0.3MnO3/Pb(Mg1/3Nb2/3)O3PbTiO3 Multiferroic Heterostructures. *Crystal Growth and Design*, **2018**, 18, 5934-5939	3.5	15
47	Robust polarization switching in self-assembled BiFeO3 nanoislands with quad-domain structures. *Acta Materialia*, **2019**, 175, 324-330	8.4	14
46	Optimization of the thermoelectric properties of Bi2O2Se ceramics by altering the temperature of spark plasma sintering. *Journal of Electroceramics*, **2016**, 37, 66-72	1.5	14
45	Understanding and predicting geometrical constraint ferroelectric charged domain walls in a BiFeO3 island via phase-field simulations. *Applied Physics Letters*, **2018**, 113, 222902	3.4	13
44	Nanoscale Bandgap Tuning across an Inhomogeneous Ferroelectric Interface. *ACS Applied Materials & Interfaces*, **2017**, 9, 24704-24710	9.5	12
43	Thermoelectric Properties of Cl-Doped BiCuSeO Oxyselenides. *Journal of Electronic Materials*, **2017**, 46, 2593-2598	1.9	10
42	Structure and electrochemical properties of C-coated Li2O□V2O5□P2O5 glass-ceramic as cathode material for lithium-ion batteries. *Functional Materials Letters*, **2019**, 12, 1951002	1.2	10
41	Challenges, interface engineering, and processing strategies toward practical sulfide-based all-solid-state lithium batteries. *Informa□□Materi□y*,	23.1	9
40	Multifield-Inspired Tunable Carrier Effects Based on Ferroelectric-Silicon PN Heterojunction. *Advanced Electronic Materials*, **2020**, 6, 1900795	6.4	9
39	Designing polymer nanocomposites with high energy density using machine learning. *Npj Computational Materials*, **2021**, 7,	10.9	9
38	Large-scale self-assembled ag nanotubes. *Tsinghua Science and Technology*, **2005**, 10, 736-740	3.4	8

37	Mechanical and biocompatible properties of polymer-infiltrated-ceramic-network materials for dental restoration. *Journal of Advanced Ceramics*, **2020**, 9, 123-128	10.7	7
36	A Ferroconcrete-Like All-Organic Nanocomposite Exhibiting Improved Mechanical Property, High Breakdown Strength, and High Energy Efficiency. *Macromolecular Materials and Engineering*, **2019**, 304, 1900433	3.9	7
35	Ge Incorporation to Stabilize Efficient Inorganic CsPbI 3 Perovskite Solar Cells. *Advanced Energy Materials*,2103690	21.8	7
34	Three-dimensional structured asymmetric electrolytes for high interface stability and fast Li-ion transport in solid-state Li-metal batteries. *Materials Today Energy*, **2020**, 18, 100522	7	7
33	Thermoelectric transport properties of BiCuSeO with embedded La0.8Sr0.2CoO3 nanoinclusions. *Science China Technological Sciences*, **2016**, 59, 1036-1041	3.5	7
32	An alternating multilayer architecture boosts ultrahigh energy density and high discharge efficiency in polymer composites.. *RSC Advances*, **2020**, 10, 5886-5893	3.7	6
31	Highly (001)-Textured Tetragonal BiFeO Film and Its Photoelectrochemical Behaviors Tuned by Magnetic Field. *ACS Applied Materials & Interfaces*, **2017**, 9, 30127-30132	9.5	6
30	In Vitro Cell Proliferation and Mechanical Behaviors Observed in Porous Zirconia Ceramics. *Materials*, **2016**, 9,	3.5	6
29	The Effects of Spark-Plasma Sintering (SPS) on the Microstructure and Mechanical Properties of BaTiO3/3Y-TZP Composites. *Materials*, **2016**, 9,	3.5	6
28	Robust Ferromagnetism in Highly Strained SrCoO3 Thin Films. *Physical Review X*, **2020**, 10,	9.1	5
27	Mechanisms of Skyrmion and Skyrmion Crystal Formation from the Conical Phase. *Nano Letters*, **2020**, 20, 4731-4738	11.5	5
26	High-temperature electrical and thermal transport behaviors in layered structure WSe2. *Journal of the American Ceramic Society*, **2017**, 100, 5528-5535	3.8	5
25	Topologically protected oxygen redox in a layered manganese oxide cathode for sustainable batteries. *Nature Sustainability*,	22.1	5
24	Structure design boosts concomitant enhancement of permittivity, breakdown strength, discharged energy density and efficiency in all-organic dielectrics. *IET Nanodielectrics*, **2020**, 3, 147-155	2.8	5
23	Modulating interfacial charge distribution and compatibility boosts high energy density and discharge efficiency of polymer nanocomposites.. *RSC Advances*, **2019**, 9, 35990-35997	3.7	5
22	Enhanced electric resistivity and dielectric energy storage by vacancy defect complex. *Energy Storage Materials*, **2021**, 42, 836-844	19.4	5
21	Growth behaviors and characteristics of low temperature spin-sprayed ZnO and Al-doped ZnO microstructures. *Journal of Materials Science: Materials in Electronics*, **2013**, 24, 2058-2066	2.1	4
20	The Phase Characterization of BaTiO3-LaCaMnO3 Complete Solid Solution and Its Physical Properties. *Ferroelectrics*, **2015**, 489, 60-64	0.6	4

19	Interfacial-hybridization-modified Ir ferromagnetism and electronic structure in LaMnO3/SrIrO3 superlattices. *Physical Review Research*, **2020**, 2,	3.9	4
18	A sandwich structure assisted by defect engineering for higher thermoelectric performance in ZnO-based films. *Journal of the American Ceramic Society*, **2021**, 104, 1370-1378	3.8	4
17	Magnetoelectric phase transition driven by interfacial-engineered Dzyaloshinskii-Moriya interaction. *Nature Communications*, **2021**, 12, 5453	17.4	4
16	Controllable electrical, magnetoelectric and optical properties of BiFeO3 via domain engineering. *Progress in Materials Science*, **2022**, 127, 100943	42.2	4
15	Tunable photoelectric response in NiO-based heterostructures by various orientations. *Applied Physics Letters*, **2018**, 112, 093301	3.4	3
14	Magnetic and electrical properties of PbTiO3/Mn-Zn ferrite multiphase nanotube arrays by electro-deposition. *Journal of Applied Physics*, **2012**, 112, 104310	2.5	3
13	Self-assembly growth of a multiferroic topological nanoisland array. *Nanoscale*, **2019**, 11, 20514-20521	7.7	3
12	Synthesis and Broadband Spectra Photocatalytic Properties of Bi[illegible]. *Materials*, **2018**, 11,	3.5	3
11	Long decay length of magnon-polarons in BiFeO/LaSrMnO heterostructures.. *Nature Communications*, **2021**, 12, 7258	17.4	2
10	Stabilization of ferroelastic charged domain walls in self-assembled BiFeO3 nanoislands. *Journal of Applied Physics*, **2020**, 128, 124103	2.5	2
9	Machine learning in energy storage materials		2
8	Highly Sensitive Strain Sensor from Topological-Structure Modulated Dielectric Elastic Nanocomposites. *Advanced Materials Technologies*,2101190	6.8	1
7	2D Metals: 2D Metals by Repeated Size Reduction (Adv. Mater. 37/2016). *Advanced Materials*, **2016**, 28, 8169-8169	24	1
6	Polarization-switching pathway determined electrical transport behaviors in rhombohedral BiFeO thin films. *Nanoscale*, **2021**, 13, 17746-17753	7.7	1
5	Perspectives on domain engineering for dielectric energy storage thin films. *Applied Physics Letters*, **2022**, 120, 150501	3.4	1
4	Strain-induced modulation of magnetic anisotropy in Co/BaTiO3 composite. *Science Bulletin*, **2014**, 59, 5191-5193		0
3	Voltage-controlled Kerr response in Ni/Pb(Zr0.52Ti0.48)O3 heterostructures. *Science Bulletin*, **2014**, 59, 5218-5222		0
2	Oxide Semiconductors: Arc-Melting to Narrow the Bandgap of Oxide Semiconductors (Adv. Mater. 16/2015). *Advanced Materials*, **2015**, 27, 2675-2675	24	

1	Integrating Novel Microscopy into Battery Research: From Atomic Resolution to In Situ and Functional Imaging. *Microscopy and Microanalysis*, **2017**, 23, 1998-1999	0.5