

# Sheng-Guo Lu

## List of Publications by Year in descending order

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67  
papers

3,864  
citations

201385

27  
h-index

123241

61  
g-index

69  
all docs

69  
docs citations

69  
times ranked

3771  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Electrocaloric Effect in Ferroelectric Polymers Near Room Temperature. <i>Science</i> , 2008, 321, 821-823.	6.0	1,004
2	Electrocaloric Materials for Solid-State Refrigeration. <i>Advanced Materials</i> , 2009, 21, 1983-1987.	11.1	390
3	Electrocaloric Cooling Materials and Devices for Zero-Global-Warming-Potential, High-Efficiency Refrigeration. <i>Joule</i> , 2019, 3, 1200-1225.	11.7	236
4	Anode Improvement in Rechargeable Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2017, 29, 1700542.	11.1	225
5	Pyroelectric and electrocaloric materials. <i>Journal of Materials Chemistry C</i> , 2013, 1, 23-37.	2.7	202
6	Nanoflake Arrays of Lithiophilic Metal Oxides for the Ultra-Stable Anodes of Lithium-Metal Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1803023.	7.8	156
7	Oxygen-vacancy-related relaxation and conduction behavior in $(\text{Pb}_{1-x}\text{Ba}_x)(\text{Zr}_{0.95}\text{Ti}_{0.05})\text{O}_3$ ceramics. <i>AIP Advances</i> , 2014, 4, .	0.6	98
8	Large Electrocaloric Effect in Relaxor Ferroelectric and Antiferroelectric Lanthanum Doped Lead Zirconate Titanate Ceramics. <i>Scientific Reports</i> , 2017, 7, 45335.	1.6	98
9	High-performance lithium ion batteries using $\text{SiO}_2$ -coated $\text{LiNi}_{0.5}\text{Co}_{0.2}\text{Mn}_{0.3}\text{O}_2$ microspheres as cathodes. <i>Journal of Alloys and Compounds</i> , 2017, 709, 708-716.	2.8	90
10	Direct Measurement of Large Electrocaloric Effect in $\text{Ba}(\text{Zr}_x\text{Ti}_{1-x})\text{O}_3$ Ceramics. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 4801-4807.	4.0	90
11	High energy-storage density of lead-free $\text{BiFeO}_3$ doped $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ - $\text{BaTiO}_3$ thin film capacitor with good temperature stability. <i>Journal of Alloys and Compounds</i> , 2018, 757, 169-176.	2.8	79
12	Multifunctionality of lead-free $\text{BiFeO}_3$ -based ergodic relaxor ferroelectric ceramics: High energy storage performance and electrocaloric effect. <i>Journal of Alloys and Compounds</i> , 2019, 803, 185-192.	2.8	79
13	A Review of Advanced Flexible Lithium-Ion Batteries. <i>Advanced Materials Technologies</i> , 2018, 3, 1700375.	3.0	73
14	Multiferroic Polymer Composites with Greatly Enhanced Magnetoelectric Effect under a Low Magnetic Bias. <i>Advanced Materials</i> , 2011, 23, 3853-3858.	11.1	72
15	Enhancement of dielectric energy density in the poly(vinylidene fluoride)-based terpolymer/copolymer blends. <i>Applied Physics Letters</i> , 2008, 93, 152903.	1.5	67
16	Enhanced electrochemical performance of $\text{ZrO}_2$ modified $\text{LiNi}_{0.6}\text{Co}_{0.2}\text{Mn}_{0.2}\text{O}_2$ cathode material for lithium ion batteries. <i>Ceramics International</i> , 2017, 43, 15173-15178.	2.3	64
17	An Ultra-Long-Life Flexible Lithium-Sulfur Battery with Lithium Cloth Anode and Polysulfone-Functionalized Separator. <i>ACS Nano</i> , 2021, 15, 1358-1369.	7.3	53
18	Enhanced electrocaloric effect at room temperature in $\text{Mn}^{2+}$ doped lead-free $(\text{BaSr})\text{TiO}_3$ ceramics via a direct measurement. <i>Journal of Advanced Ceramics</i> , 2021, 10, 482-492.	8.9	40

#	ARTICLE	IF	CITATIONS
19	Large Electrocaloric Effect in a Dielectric Liquid Possessing a Large Dielectric Anisotropy Near the Isotropic–Nematic Transition. <i>Advanced Functional Materials</i> , 2013, 23, 2894-2898.	7.8	37
20	Enhanced Electrocaloric Effect in Sr <sup>2+</sup> -Modified Lead-Free BaZr <sub>x</sub> Ti <sub>1-x</sub> O <sub>3</sub> Ceramics. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 20167-20173.	4.0	37
21	Enhanced electrocaloric analysis and energy-storage performance of lanthanum modified lead titanate ceramics for potential solid-state refrigeration applications. <i>Scientific Reports</i> , 2018, 8, 396.	1.6	35
22	Enhancement of the electrocaloric effect over a wide temperature range in PLZT ceramics by doping with Gd <sup>3+</sup> and Sn <sup>4+</sup> ions. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1093-1102.	2.8	35
23	A Self-Healing Amalgam Interface in Metal Batteries. <i>Advanced Materials</i> , 2020, 32, e2004798.	11.1	34
24	LARGE ELECTROCALORIC EFFECT IN RELAXOR FERROELECTRICS. <i>Journal of Advanced Dielectrics</i> , 2012, 02, 1230011.	1.5	33
25	High thermal conductivity and low electrical conductivity tailored in carbon nanotube (carbon) Tj ETQq1 1 0.784314 rgBT / Overlock 10 3.8 31		
26	Dielectric, Ferroelectric, and Magnetic Properties of Sm-Doped BiFeO <sub>3</sub> Ceramics Prepared by a Modified Solid-State-Reaction Method. <i>Materials</i> , 2018, 11, 2208.	1.3	29
27	Enhancement of the Oil Absorption Capacity of Poly(Lactic Acid) Nano Porous Fibrous Membranes Derived via a Facile Electrospinning Method. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1014.	1.3	29
28	Enhanced electrocaloric strengths at room temperature in (Sr <sub>x</sub> Ba <sub>1-x</sub> )(Sn <sub>0.05</sub> Ti <sub>0.95</sub> )O <sub>3</sub> lead-free ceramics. <i>Journal of Alloys and Compounds</i> , 2021, 871, 159519.	2.8	27
29	Enhanced Electrocaloric Effect in 0.73Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -0.27PbTiO <sub>3</sub> Single Crystals via Direct Measurement. <i>Crystals</i> , 2020, 10, 451.	1.0	25
30	Direct and indirect measurement of large electrocaloric effect in barium strontium titanate ceramics. <i>International Journal of Applied Ceramic Technology</i> , 2020, 17, 1354-1361.	1.1	23
31	Superior energy storage density and giant negative electrocaloric effects in (Pb <sub>0.98</sub> La <sub>0.02</sub> )(Zr, Sn)O <sub>3</sub> antiferroelectric ceramics. <i>Scripta Materialia</i> , 2021, 200, 113920.	2.6	21
32	Giant negative electrocaloric effect in B-site non-stoichiometric (Pb <sub>0.97</sub> La <sub>0.02</sub> )(Zr <sub>0.95</sub> Ti <sub>0.05</sub> ) <sub>1-x</sub> O <sub>3-x</sub> anti-ferroelectric ceramics. <i>Materials Research Letters</i> , 2018, 6, 384-389.	3.4	20
33	Enhanced piezoelectric properties and electrocaloric effect in novel lead-free (Bi <sub>0.5</sub> K <sub>0.5</sub> )TiO <sub>3</sub> –La(Mg <sub>0.5</sub> Ti <sub>0.5</sub> )O <sub>3</sub> ceramics. <i>Journal of the American Ceramic Society</i> , 2018, 101, 5503-5513.		20
34	Investigations on the properties of Li <sub>3x</sub> La <sub>2/3-x</sub> TiO <sub>3</sub> based all-solid-state supercapacitor: Relationships between the capacitance, ionic conductivity, and temperature. <i>Journal of the European Ceramic Society</i> , 2020, 40, 2396-2403.	2.8	20
35	Composition dependence of giant electrocaloric effect in Pb Sr <sub>1-x</sub> TiO <sub>3</sub> ceramics for energy-related applications. <i>Journal of Materiomics</i> , 2019, 5, 118-126.	2.8	19
36	Metallic coloration on polyester fabric with sputtered copper and copper oxides films. <i>Vacuum</i> , 2020, 178, 109489.	1.6	19

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37	Direct and indirect measurement of large electrocaloric effect in B2O3-ZnO glass modified Ba0.65Sr0.35TiO3 bulk ceramics. Scripta Materialia, 2021, 193, 59-63.	2.6	17
38	Large energy-storage density and positive electrocaloric effect in BiFeO3-based lead-free ferroelectric ceramics. Journal of Alloys and Compounds, 2021, 842, 1302-1312.	2.7	17
39	Enhancement of energy-storage properties in BiFeO3-based lead-free bulk ferroelectrics. Ceramics International, 2022, 48, 16792-16799.	2.3	17
40	Large electrocaloric effect in lead-free Ba(ZrxTi1-x)O3 thick film ceramics. Journal of Alloys and Compounds, 2018, 742, 165-171.	2.8	15
41	Asymmetric diffusion of Zr, Sc and Ce, Gd at the interface between zirconia electrolyte and ceria interlayer for solid oxide fuel cells. Journal of Alloys and Compounds, 2016, 679, 191-195.	2.8	14
42	Large electrocaloric effect in BaTiO3 based multilayer ceramic capacitors. Science China Technological Sciences, 2016, 59, 1054-1058.	2.0	14
43	Enhanced energy-storage density and temperature stability of Pb0.89La0.06Sr0.05(Zr0.95Ti0.05)O3 anti-ferroelectric thin film capacitor. Journal of Materiomics, 2022, 8, 239-246.	2.8	14
44	Influence of electric field on the phenomenological coefficient and electrocaloric strength in ferroelectrics. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 127701.	0.2	12
45	Structural coloration and its application to textiles: a review. Journal of the Textile Institute, 2020, 111, 756-764.	1.0	11
46	Large electrocaloric effect in tetragonal perovskite 0.03Bi(Mg1/2Ti1/2)O3-0.97(0.875Bi1/2Na1/2TiO3-0.125BaTiO3) lead-free ferroelectric ceramics. Scripta Materialia, 2019, 162, 256-260.	2.6	10
47	Enhancement of solvent uptake in porous PVDF nanofibers derived by a water-mediated electrospinning technique. Journal of Materiomics, 2021, 7, 244-253.	2.8	10
48	Dimensional analysis of NiO grains at anode/electrolyte interface for SOFC during redox reaction. International Journal of Applied Ceramic Technology, 2017, 14, 543-549.	1.1	9
49	Preparation and electrochemical properties of Li0.33SrLa0.56Ti2/3TiO3-based solid-state ionic supercapacitor. Ceramics International, 2019, 45, 2584-2590.	2.3	9
50	Large electrocaloric effect obtained in Ba(SnTi1-x)O3 lead-free ceramics using direct and indirect measurements. Journal of Advanced Dielectrics, 2018, 08, 1850038.	1.5	8
51	Metallic coloration with Cu/CuO coating on polypropylene nonwoven fabric via a physical vapor deposition method and its multifunctional properties. Journal of the Textile Institute, 2022, 113, 1345-1354.	1.0	8
52	The Effects of Aluminum-Nitride Nano-Fillers on the Mechanical, Electrical, and Thermal Properties of High Temperature Vulcanized Silicon Rubber for High-Voltage Outdoor Insulator Applications. Materials, 2019, 12, 3562.	1.3	7
53	Antibacterial and ultraviolet protective neodymium-doped TiO2 film coated on polypropylene nonwoven fabric via a sputtering method. Journal of Engineered Fibers and Fabrics, 2021, 16, 155892502110252.	0.5	7
54	Experimental and theoretical studies of a thermal switch based on shape-memory alloy clad with graphene paper. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, 42, 898-908.	1.2	6

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55	Direct measurement of enhanced electrocaloric effect in Mn <sup>2+</sup> doped lead-free Ba(ZrTi)O <sub>3</sub> ceramics. Scripta Materialia, 2020, 176, 67-72.	2.6	6
56	Effects of organic additives on the microstructural, rheological and electrical properties of silver paste for LTCC applications. Journal of Materials Science: Materials in Electronics, 2021, 32, 14368-14384.	1.1	6
57	Electrical and thermal properties of surface passivated carbon nanotube/polyvinylidene fluoride composites. IET Nanodielectrics, 2018, 1, 122-126.	2.0	5
58	Large energy storage density and electrocaloric strength of Pb <sub>0.97</sub> La <sub>0.02</sub> (Zr <sub>0.46-x</sub> Sn <sub>0.54</sub> Ti <sub>x</sub> )O <sub>3</sub> antiferroelectric thick film ceramics. Scripta Materialia, 2022, 210, 114426.	2.6	5
59	Conversion of layered materials to ultrathin amorphous nanosheets induced by ball-milling insertion and pure-water exfoliation. Journal of Materials Chemistry A, 2022, 10, 11766-11773.	5.2	5
60	Electrospinning-Derived PLA/Shellac/PLA Sandwiched Structural Membrane Sensor for Detection of Alcoholic Vapors with a Low Molecular Weight. Applied Sciences (Switzerland), 2019, 9, 5419.	1.3	4
61	Novel barium zirconate titanate-based lead-free ceramics with stably high energy storage performance over a broad temperature and frequency range. Journal of Materials Science: Materials in Electronics, 2021, 32, 11845-11856.	1.1	4
62	Pore orientation of the gadolinia-doped ceria cathode interlayer for a tubular SOFC using dip-coating. International Journal of Applied Ceramic Technology, 2017, 14, 185-190.	1.1	3
63	Preparation and Characterization of FC Films Coated on PET Substrates by RF Magnetron Sputtering. MATEC Web of Conferences, 2018, 142, 03008.	0.1	3
64	Metallic coloration and multifunctional preparation on fabrics via nitriding reactive sputtering with copper and titanium targets. Vacuum, 2022, 202, 111177.	1.6	3
65	Multifunctionality in (K,Na)NbO <sub>3</sub> -based ceramic near polymorphic phase boundary. Journal of Applied Physics, 2021, 130, 064102.	1.1	2
66	Recent Advances in the Applications of Ferroelectric Polymers. Recent Patents on Materials Science, 2010, 3, 40-56.	0.5	1
67	High performance electrostatically driven thermal switch incorporated with a mini-channel cooling. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, , 1-16.	1.2	0