Zhilun Lu

List of Publications by Year
in descending order

53 papers	2,832 citations	236925 25 h-index	175258 52 g-index
54 all docs	54 docs citations	54 times ranked	2054 citing authors

#	Article	IF	Citations
1	Electroceramics for High-Energy Density Capacitors: Current Status and Future Perspectives. Chemical Reviews, 2021, 121, 6124-6172.	47.7	579
2	Superior energy density through tailored dopant strategies in multilayer ceramic capacitors. Energy and Environmental Science, 2020, 13, 2938-2948.	30.8	212
3	Mechanism of enhanced energy storage density in AgNbO3-based lead-free antiferroelectrics. Nano Energy, 2021, 79, 105423.	16.0	180
4	High-Figure-of-Merit Thermoelectric La-Doped A-Site-Deficient SrTiO₃ Ceramics. Chemistry of Materials, 2016, 28, 925-935.	6.7	172
5	Ultrahigh energy density in short-range tilted NBT-based lead-free multilayer ceramic capacitors by nanodomain percolation. Energy Storage Materials, 2021, 38, 113-120.	18.0	139
6	Novel BaTiO₃-Based, Ag/Pd-Compatible Lead-Free Relaxors with Superior Energy Storage Performance. ACS Applied Materials & Interfaces, 2020, 12, 43942-43949.	8.0	130
7	Fatigue resistant lead-free multilayer ceramic capacitors with ultrahigh energy density. Journal of Materials Chemistry A, 2020, 8, 11414-11423.	10.3	114
8	Origin of the large electrostrain in BiFeO₃-BaTiO₃ based lead-free ceramics. Journal of Materials Chemistry A, 2019, 7, 21254-21263.	10.3	101
9	Ultrahigh piezoelectricity in lead-free piezoceramics by synergistic design. Nano Energy, 2020, 76, 104944.	16.0	99
10	Lead-free (Ba,Sr)TiO3 â€“ BiFeO3 based multilayer ceramic capacitors with high energy density. Journal of the European Ceramic Society, 2020, 40, 1779-1783.	5.7	79
11	Finite field regime for a quantum spin liquid in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>â^'</mml:mtext><mml:msub Physical Review B, 2019, 100, .	3.2	78
12	The nature of spin excitations in the one-third magnetization plateau phase of Ba3CoSb2O9. Nature Communications, 2018, 9, 2666.	12.8	62
13	Cold sintering of microwave dielectric ceramics and devices. Journal of Materials Research, 2021, 36, 333-349.	2.6	59
14	Field-induced quantum spin disordered state in spin-1/2 honeycomb magnet Na2Co2TeO6. Nature Communications, 2021, 12, 5559.	12.8	57
15	Enhancement of densification and microwave dielectric properties in LiF ceramics via a cold sintering and post-annealing process. Journal of the European Ceramic Society, 2021, 41, 1726-1729.	5.7	56
16	Direct Integration of Cold Sintered, Temperature-Stable Bi2Mo2O9-K2MoO4 Ceramics on Printed Circuit Boards for Satellite Navigation Antennas. Journal of the European Ceramic Society, 2020, 40, 4029-4034.	5.7	52
17	High-temperature BaTiO3-based ternary dielectric multilayers for energy storage applications with high efficiency. Chemical Engineering Journal, 2021, 414, 128760.	12.7	51
18	Cold sintered LiMgPO₄ based composites for low temperature coâ€fired ceramic (LTCC) applications. Journal of the American Ceramic Society, 2020, 103, 6237-6244.	3.8	45

#	Article	IF	Citations
19	Effects of solution treatment on the microstructure and mechanical properties of Alâ€“Cuâ€“Mgâ€“Ag alloy. Materials & Design, 2010, 31, 4392-4397.	5.1	44
20	5G microstrip patch antenna and microwave dielectric properties of cold sintered LiWVO6â€“K2MoO4 composite ceramics. Ceramics International, 2021, 47, 19241-19246.	4.8	37
21	Artificial neural network prediction to the hot compressive deformation behavior of Alâ€“Cuâ€“Mgâ€“Ag heat-resistant aluminum alloy. Mechanics Research Communications, 2011, 38, 192-197.	1.8	36
22	Cold sintered, temperature-stable CaSnSiO5-K2MoO4 composite microwave ceramics and its prototype microstrip patch antenna. Journal of the European Ceramic Society, 2021, 41, 424-429.	5.7	36
23	Protocols for the Fabrication, Characterization, and Optimization of n-Type Thermoelectric Ceramic Oxides. Chemistry of Materials, 2017, 29, 265-280.	6.7	35
24	High QÃ—f values of Zn-Ni co-modified LiMg0.9Zn0.1-Ni PO4 microwave dielectric ceramics for 5G/6G LTCC modules. Journal of the European Ceramic Society, 2022, 42, 5684-5690.	5.7	34
25	Decoupled spin dynamics in the rare-earth orthoferrite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>YbFeO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:r : Evolution of magnetic excitations through the spin-reorientation transition. Physical Review B, 2018, 98, .	3.2	31
26	In situ poling X-ray diffraction studies of lead-free BiFeO3â€“SrTiO3 ceramics. Materials Today Physics, 2021, 19, 100426.	6.0	24
27	Crystal growth and phase diagram of 112-type iron pnictide superconductor Ca_{1â^'y}La_yFe_{1â^'x}Ni_xAs₂. Superconductor Science and Technology, 2017, 30, 095002.	3.5	21
28	Electric fieldâ€induced irreversible relaxor to ferroelectric phase transformations in Na_{0.5}Bi_{0.5}TiO₃â€NaNbO₃ ceramics. Journal of the American Ceramic Society, 2019, 102, 7746-7754.	3.8	20
29	Oxygen-loss in A-site deficient Sr_{0.85}La_{0.10}TiO₃ perovskite. RSC Advances, 2014, 4, 32549-32554.	3.6	19
30	Lattice distortion effects on the frustrated spin-1 triangular-antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>A</mml:mi><mml:mn>3</mml:mn></mml:m mathvariant="normal">b</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi		

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37	MultiFLEXX - The new multi-analyzer at the cold triple-axis spectrometer FLEXX. Scientific Reports, 2017, 7, 13637.	3.3	12
38	The Influence of La Doping and Heterogeneity on the Thermoelectric Properties of Sr₃Ti₂O₇ Ceramics. Journal of the American Ceramic Society, 2016, 99, 515-522.	3.8	10
39	Spin fluctuation anisotropy as a probe of orbital-selective hole-electron quasiparticle excitations in detwinned <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Ba</mml:mi><mml:msub><mml:mrow><mml:mo>(</m Physical Review B, 2019, 100, .	3.2	10
40	Frequency and temperature independent (Nb0.5Ga0.5)x(Ti0.9Zr0.1)1-xO2 ceramics with giant dielectric permittivity and low loss. Ceramics International, 2020, 46, 2954-2959.	4.8	10
41	Field-induced magnetic incommensurability in multiferroic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ni</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2020, 101, .	3.2	9
42	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ba</mml:mi><mml:mn>8</mml:mn></mml:m mathvariant="normal">O</mml:mi><mml:mn>24</mml:mn></mml:msub></mml:mrow></mml:math> : A model two-dimensional spin- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mfrac><mml:mn>5</mml:mn><mml:mn>2</mml:mn></mml:mfrac></mml triangular lattice antiferromagnet. Physical Review Materials, 2019, 3, .	2.4	9
43	Significantly reduced conductivity in strontium titanate-based lead-free ceramics by excess bismuth. Materials Letters, 2022, 309, 131453.	2.6	8
44	Spin-wave directional anisotropies in antiferromagnetic Ba3NbFe3Si2O14. Physical Review B, 2019, 100, .	3.2	5
45	Thermally-induced local structural transformations in Na0.5Bi0.5TiO3-KNbO3 ceramics. Journal of the European Ceramic Society, 2021, 41, 3832-3837.	5.7	5
46	Evidence for Magnetic Fractional Excitations in a Kitaev Quantum-Spin-Liquid Candidate Î±-RuCl3. Chinese Physics Letters, 2022, 39, 027501.	3.3	5
47	Evolution of the propagation vector of antiferroquadrupolar phases in Ce3Pd20Si6 under magnetic field. Physical Review B, 2019, 99, .	3.2	4
48	Unconventional Antiferromagnetic Quantum Critical Point in Ba(Fe0.97Cr0.03)2(As1â^'xPx)2. Physical Review Letters, 2019, 122, 037001.	7.8	4
49	Double pentavalent (Sb5+, Nb5+) and trivalent (Sm3+, Y3+) co-doped Ti0.9Zr0.1O2 colossal dielectric permittivity multilayer ceramics for the miniaturization of the next-generation electronics. Ceramics International, 2020, 46, 23433-23441.	4.8	4
50	The mediation of bond strain by vacancies and displacive disorder in A-site-deficient perovskites. Acta Materialia, 2021, 207, 116678.	7.9	4
51	Neutron Spectroscopy Evidence for a Possible Magnetic-Field-Induced Gapless Quantum-Spin-Liquid Phase in a Kitaev Material Î±-RuCl₃. Chinese Physics Letters, 2022, 39, 057501.	3.3	4
52	Microstructure and Mechanical Properties of Al-Cu-Mg-Ag Alloy during Thermal Exposed at Elevated Temperature. Advanced Materials Research, 0, 152-153, 1426-1436.	0.3	2
53	High-energy storage performance in BaTiO₃-based lead-free multilayer ceramic capacitors. Journal of Materials Research, 0, , 1-10.	2.6	0