Hanzheng Guo

List of Publications by Year
in descending order

51 papers	4,342 citations	81743 39 h-index	168136 53 g-index
53 all docs	53 docs citations	53 times ranked	2419 citing authors

#	Article	IF	Citations
1	Stabilized antiferroelectricity in xBiScO3-(1-x)NaNbO3 lead-free ceramics with established double hysteresis loops. Applied Physics Letters, 2018, 112, .	1.5	56
2	Microstructures and electrical properties of V2O5and carbon-nanofiber composites fabricated by cold sintering process. Japanese Journal of Applied Physics, 2018, 57, 025702.	0.8	15
3	Cold sintering and electrical characterization of lead zirconate titanate piezoelectric ceramics. APL Materials, 2018, 6, .	2.2	62
4	Interplay of conventional with inverse electrocaloric response in (Pb,Nb)(Zr,Sn,Ti)O3 antiferroelectric materials. Physical Review B, 2018, 97, .	1.1	42
5	Cold sintering process for 8 mol%Y2O3-stabilized ZrO2 ceramics. Journal of the European Ceramic Society, 2017, 37, 2303-2308.	2.8	71
6	Contrasting conduction mechanisms of two internal barrier layer capacitors: (Mn, Nb)-doped SrTiO3 and CaCu3Ti4O12. Journal of Applied Physics, 2017, 121, .	1.1	14
7	High-temperature thermoelectric characterization of filled strontium barium niobates: power factors and carrier concentrations. Journal of Materials Research, 2017, 32, 1160-1167.	1.2	10
8	Cold sintering process of Li_{1.5}Al_{0.5}Ge_{1.5}(PO₄)₃ solid electrolyte. Journal of the American Ceramic Society, 2017, 100, 2123-2135.	1.9	104
9	Cold sintering and coâ€firing of a multilayer device with thermoelectric materials. Journal of the American Ceramic Society, 2017, 100, 3488-3496.	1.9	60
10	Current progress and perspectives of applying cold sintering process to ZrO2-based ceramics. Scripta Materialia, 2017, 136, 141-148.	2.6	58
11	Semiconducting properties of cold sintered V2O5 ceramics and Co-sintered V2O5-PEDOT:PSS composites. Journal of the European Ceramic Society, 2017, 37, 1529-1534.	2.8	46
12	Cold sintering: Current status and prospects. Journal of Materials Research, 2017, 32, 3205-3218.	1.2	195
13	Considering the possibility of bonding utilizing cold sintering for ceramic adhesives. Journal of the American Ceramic Society, 2017, 100, 5421-5432.	1.9	12
14	Cold sintering of a Li-ion cathode: LiFePO4-composite with high volumetric capacity. Ceramics International, 2017, 43, 15370-15374.	2.3	69
15	Cold sintering process for ZrO₂â€based ceramics: significantly enhanced densification evolution in yttriaâ€doped ZrO₂. Journal of the American Ceramic Society, 2017, 100, 491-495.	1.9	64
16	Cold sintering process: A new era for ceramic packaging and microwave device development. Journal of the American Ceramic Society, 2017, 100, 669-677.	1.9	141
17	Demonstration of the cold sintering process study for the densification and grain growth of ZnO ceramics. Journal of the American Ceramic Society, 2017, 100, 546-553.	1.9	197
18	Filled oxygenâ€deficient strontium barium niobates. Journal of the American Ceramic Society, 2017, 100, 774-782.	1.9	6

#	Article	IF	Citations
19	Base Metal Co-Fired Multilayer Piezoelectrics. Actuators, 2016, 5, 8.	1.2	55
20	Demonstration of Copper Coâ€Fired (Na, K)NbO₃ Multilayer Structures for Piezoelectric Applications. Journal of the American Ceramic Society, 2016, 99, 2017-2023.	1.9	52
21	A perovskite lead-free antiferroelectric xCaHfO3-(1-x) NaNbO3 with induced double hysteresis loops at room temperature. Journal of Applied Physics, 2016, 120, .	1.1	64
22	Valence and electronic trap states of manganese in SrTiO₃-based colossal permittivity barrier layer capacitors. RSC Advances, 2016, 6, 92127-92133.	1.7	10
23	Hydrothermal-Assisted Cold Sintering Process: A New Guidance for Low-Temperature Ceramic Sintering. ACS Applied Materials & Interfaces, 2016, 8, 20909-20915.	4.0	170
24	Cold Sintering: A Paradigm Shift for Processing and Integration of Ceramics. Angewandte Chemie - International Edition, 2016, 55, 11457-11461.	7.2	335
25	Protocol for Ultralow-Temperature Ceramic Sintering: An Integration of Nanotechnology and the Cold Sintering Process. ACS Nano, 2016, 10, 10606-10614.	7.3	157
26	Utilizing the Cold Sintering Process for Flexibleâ€“Printable Electroceramic Device Fabrication. Journal of the American Ceramic Society, 2016, 99, 3202-3204.	1.9	67
27	Cold Sintering: A Paradigm Shift for Processing and Integration of Ceramics. Angewandte Chemie, 2016, 128, 11629-11633.	1.6	61
28	Cold Sintering Process of Composites: Bridging the Processing Temperature Gap of Ceramic and Polymer Materials. Advanced Functional Materials, 2016, 26, 7115-7121.	7.8	218
29	Disrupting long-range polar order with an electric field. Physical Review B, 2016, 93, .	1.1	50
30	Cold Sintering Process: A Novel Technique for Lowâ€Temperature Ceramic Processing of Ferroelectrics. Journal of the American Ceramic Society, 2016, 99, 3489-3507.	1.9	284
31	Microstructural evolution in NaNbO3-based antiferroelectrics. Journal of Applied Physics, 2015, 118, .	1.1	27
32	Direct evidence of an incommensurate phase in NaNbO3 and its implication in NaNbO3-based lead-free antiferroelectrics. Applied Physics Letters, 2015, 107, .	1.5	76
33	Seedâ€Free Solidâ€State Growth of Large Leadâ€Free Piezoelectric Single Crystals: (Na_{1/2}K_{1/2})NbO₃. Journal of the American Ceramic Society, 2015, 98, 2988-2996.	1.9	43
34	In situ TEM study on the microstructural evolution during electric fatigue in 0.7Pb(Mg1/3Nb2/3)O3â€“0.3PbTiO3 ceramic. Journal of Materials Research, 2015, 30, 364-372.	1.2	10
35	Lead-free antiferroelectric: xCaZrO₃-(1 âˆ’ x)NaNbO₃ system (0 â‰ x â‰ 0.10). Dalton Transactions, 2015, 44, 10763-10772.	1.6	236
36	Direct observation of the recovery of an antiferroelectric phase during polarization reversal of an induced ferroelectric phase. Physical Review B, 2015, 91, .	1.1	33

#	Article	IF	Citations
37	Nanofragmentation of Ferroelectric Domains During Polarization Fatigue. Advanced Functional Materials, 2015, 25, 270-277.	7.8	47
38	Strategy for stabilization of the antiferroelectric phase (<i>Pbma</i>) over the metastable ferroelectric phase (<i>P21ma</i>) to establish double loop hysteresis in lead-free (1âˆ’<i>x</i>)NaNbO3-<i>x</i>SrZrO3 solid solution. Journal of Applied Physics, 2015, 117, .	1.1	89
39	Domain configuration changes under electric field-induced antiferroelectric-ferroelectric phase transitions in NaNbO3-based ceramics. Journal of Applied Physics, 2015, 118, .	1.1	46
40	Effect of <scp><scp>Ba</scp></scp> Content on the Stress Sensitivity of the Antiferroelectric to Ferroelectric Phase Transition in (<scp><scp>Pb</scp></scp>,<scp><scp>La</scp></scp>,<scp><scp>Ba</scp></scp>,)(<scp><scp>Zr</scp></scp>,<scp><scp>Sn</sc Ceramics. Journal of the American Ceramic Society, 2014, 97, 206-212.	1.9	44
41	Evolution of structure and electrical properties with lanthanum content in [(Bi1/2Na1/2)0.95Ba0.05]1âˆ’xLaxTiO3 ceramics. Journal of the European Ceramic Society, 2014, 34, 2997-3006.	2.8	71
42	Thermal analysis of phase transitions in perovskite electroceramics. Journal of Thermal Analysis and Calorimetry, 2014, 115, 587-593.	2.0	15
43	Polarization alignment, phase transition, and piezoelectricity development in polycrystalline<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>0.5Ba</mml:mi><mml:mo>(</mml:mo><mml:msub><mml:mi>Zr</m Physical Review B, 2014, 90, .	1.1	75
44	Unique single-domain state in a polycrystalline ferroelectric ceramic. Physical Review B, 2014, 89, .	1.1	59
45	Block copolymer/ferroelectric nanoparticle nanocomposites. Nanoscale, 2013, 5, 8695.	2.8	54
46	Microstructural origin for the piezoelectricity evolution in (K0.5Na0.5)NbO3-based lead-free ceramics. Journal of Applied Physics, 2013, 114, .	1.1	56
47	A New Phase Boundary in (Bi_{1/2}Na_{1/2})TiO₃âˆ’BaTiO₃ Revealed via a Novel Method of Electron Diffraction Analysis. Advanced Functional Materials, 2013, 23, 5261-5266.	7.8	127
48	Dynamics of polystyrene-block-poly(methylmethacrylate) (PS-b-PMMA) diblock copolymers and PS/PMMA blends: A dielectric study. Journal of Non-Crystalline Solids, 2013, 359, 27-32.	1.5	7
49	Electrical poling below coercive field for large piezoelectricity. Applied Physics Letters, 2013, 102, .	1.5	73
50	Creation and Destruction of Morphotropic Phase Boundaries through Electrical Poling: A Case Study of Lead-Free<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mo mathvariant="bold"		