

Zhenrong Li

List of Publications by Year in descending order

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103
papers

1,631
citations

304743
22
h-index

330143
37
g-index

103
all docs

103
docs citations

103
times ranked

1505
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural and Dielectric Properties of $\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3$ – BaTiO_3 Lead-Free Ceramics. Journal of the American Ceramic Society, 2011, 94, 4335-4339.	3.8	133
2	A Reconfigurable Polarization Converter Using Active Metasurface and Its Application in Horn Antenna. IEEE Transactions on Antennas and Propagation, 2016, 64, 5281-5290.	5.1	107
3	Piezoelectric activity in Perovskite ferroelectric crystals. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 18-32.	3.0	94
4	Characterization and piezoelectric thermal stability of PIN–PMN–PT ternary ceramics near the morphotropic phase boundary. Journal of Alloys and Compounds, 2010, 489, 115-118.	5.5	88
5	Dielectric/piezoelectric properties and temperature dependence of domain structure evolution in lead free single crystal. Solid State Communications, 2009, 149, 1646-1649.	1.9	77
6	Influence of MnO_{2} Doping on the Dielectric and Piezoelectric Properties and the Domain Structure in $(\text{K}_{0.5}\text{Na}_{0.5})\text{NbO}_3$ Single Crystals. Journal of the American Ceramic Society, 2010, 93, 941-944.	3.8	71
7	Temperature Dependence of Dielectric/Piezoelectric Properties of $(1-x)\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3$ – $x\text{PbTiO}_3$ Ceramics with an MPB Composition. Journal of the American Ceramic Society, 2010, 93, 3330-3334.	3.8	69
8	Thermal and compositional driven relaxor ferroelectric behaviours of lead-free $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ – SrTiO_3 ceramics. Journal of Materials Chemistry C, 2020, 8, 2411-2418.	5.5	54
9	Phase transition and phase stability in [110]-, [001]-, and [111]-oriented $0.68\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – 0.32PbTiO_3 single crystal under electric field. Journal of Applied Physics, 2008, 104, 024112.	2.5	48
10	Probing the Coexistence of Ferroelectric and Relaxor States in $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ -Based Ceramics for Enhanced Piezoelectric Performance. ACS Applied Materials & Interfaces, 2020, 12, 30548-30556.	8.0	41
11	Dielectric/ferroelectric response and phase transition of PMN0.32PT single crystal. Journal of Materials Science Letters, 2002, 21, 1325-1327.	0.5	35
12	Electric-field and temperature induced phase transitions in $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – 0.3PbTiO_3 single crystals. Journal of Applied Physics, 2010, 108, 034112.	2.5	33
13	Variations of composition and dielectric properties of $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3$ – $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – PbTiO_3 single crystal along growth direction. Journal of Applied Physics, 2013, 113, 124105.	2.5	32
14	Enhanced dielectric and piezoelectric properties in the [001]-poled $0.25\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3$ – $0.43\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – 0.32PbTiO_3 single crystal near morphotropic phase boundary by alternating current treatment. Journal of Applied Physics, 2020, 127, .	2.5	31
15	Dielectric properties anomaly of $(1-x)\text{Pb}(\text{Ni}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – $x\text{PbTiO}_3$ ceramics near the morphotropic phase boundary. Journal of Materials Research, 2001, 16, 834-836.	2.6	28
16	Perovskite Phase Stabilization of $\text{Pb}(\text{Zn}_{1/3}\text{Ta}_{2/3})\text{O}_3$ Ceramics Induced by PbTiO_3 Seeds. Chemistry of Materials, 2004, 16, 717-723.	6.7	28
17	Fully-inverted piezoresponse hysteresis loops mediated by charge injection in $0.29\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3$ – $0.44\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ – 0.27PbTiO_3 single crystals. Applied Physics Letters, 2011, 98, 3.	28	28
18	Preparation and characterization of high T c $(1-x)\text{BiScO}_3$ – $x\text{PbTiO}_3$ ceramics from high energy ball milling process. Journal of Electroceramics, 2008, 21, 605-608.	2.0	26

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19	Growth of the Relaxor Based Ferroelectric Single Crystals Pb($\text{In}_{1/2}\text{Nb}_{1/2}$)O $_3$ -Pb($\text{Mg}_{1/3}\text{Nb}_{2/3}$)O $_3$ -PbTiO $_3$ by Vertical Bridgman Technique. <i>Ferroelectrics</i> , 2010, 401, 173-180.	0.6	26
20	Piezoresponse force microscopy studies on the domain structures and local switching behavior of Pb($\text{In}_{1/2}\text{Nb}_{1/2}$)O $_3$ -Pb($\text{Mg}_{1/3}\text{Nb}_{2/3}$)O $_3$ -PbTiO $_3$ single crystals. <i>Journal of Applied Physics</i> , 2012, 112, 052006.	2.5	26
21	Dipolar-glass-like relaxor ferroelectric behaviour in the 0.5BaTiO $_3$ -0.5Bi($\text{Mg}_{1/2}\text{Ti}_{1/2}$)O $_3$ electroceramic. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	24
22	Composition and electrical properties characterization of a 5-mm-diameter PIN-PMN-PT single crystal by the modified Bridgman method. <i>Journal of Alloys and Compounds</i> , 2021, 851, 156145.	5.5	24
23	Phase transition characteristics of the relaxor-based 0.24PIN-0.51PMN-0.25PT single crystals. <i>Journal of Alloys and Compounds</i> , 2013, 558, 244-247.	5.5	22
24	High composition uniformity of 4% of PIN-PMN-PT single crystals grown by the modified Bridgman method. <i>Journal of Crystal Growth</i> , 2017, 468, 331-334.	1.5	21
25	Characterization of KNN Single Crystals by Slow-Cooling Technique. <i>Ferroelectrics</i> , 2009, 381, 1-8.	0.6	19
26	Compositional segregation and electrical properties characterization of [001]- and [011]-oriented co-growth Pb($\text{In}_{1/2}\text{Nb}_{1/2}$)O $_3$ -Pb($\text{Mg}_{1/3}\text{Nb}_{2/3}$)O $_3$ -PbTiO $_3$ single crystal. <i>Journal of Applied Physics</i> , 2018, 123, 154107.	2.5	19
27	Dielectric, pyroelectric and piezoelectric properties of (1-x)Pb($\text{Ni}_{1/3}\text{Nb}_{2/3}$)O $_3$ -x PbTiO $_3$ system. <i>Journal of Materials Science Letters</i> , 2001, 20, 273-275.	0.5	15
28	Microstructures, dielectric and piezoelectric properties of unannealed and annealed porous 0.36BiScO $_3$ -0.64PbTiO $_3$ ceramics. <i>Journal of Materials Science</i> , 2016, 51, 5092-5103. Study on the inhomogeneity of $\text{Bi}_{0.36}\text{Sc}_{0.64}\text{Pb}_{0.96}\text{Ti}_{0.04}\text{O}_3$. http://www.w3.org/1998/Math/MathML altimg="si2.gif" display="inline" overflow="scroll"><mml:mstyle>	3.7	15
29			

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37	Thermal Expansion Characteristics In [001]-Oriented PMN-0.32PT Single Crystals. <i>Ferroelectrics</i> , 2007, 355, 245-251.	0.6	10
38	Structural and dielectric properties of $(1-x)Bi(Ni1/2Ti1/2)O_3-xPbTiO_3$ ceramics with the morphotropic phase boundary composition. <i>Journal of Electroceramics</i> , 2012, 29, 179-182.	2.0	10
39	Temperature dependence of dielectric and piezoelectric properties of $(1-x)(BiScO_3-0.64PbTiO_3)-xLiNbO_3$ high-temperature relaxor ferroelectric ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2011, 22, 1490-1494.	2.2	9
40	GaN crystals growth in the Na-Li-Ca flux by liquid phase epitaxy (LPE) technique. <i>Journal of Crystal Growth</i> , 2019, 521, 30-33.	1.5	9
41	Anisotropic growth kinetics and electric properties of PZT-5H single crystal by solid-state crystal growth method. <i>Journal of the American Ceramic Society</i> , 2022, 105, 3238-3251.	3.8	9
42	Dielectric response of PMN-0.32PT single crystal and ceramics under dc electric field. <i>Ceramics International</i> , 2004, 30, 2015-2018.	4.8	8
43	Dielectric loss anomalies of 0.68PMN-0.32PT single crystal and ceramics at cryogenic temperature. <i>Journal of Electroceramics</i> , 2008, 21, 279-282.	2.0	8
44	Temperature Dependence of Domain Structure in $(K_{0.17}Na_{0.83})NbO_3$ -Lead Free Piezoelectric Single Crystal Grown by Bridgman Method. <i>Ferroelectrics</i> , 2010, 404, 200-206.	0.6	8
45	Structural transitions in [001]/[111]-oriented 0.26Pb(In1/2Nb1/2)O3-0.46Pb(Mg1/3Nb2/3)O3-0.28PbTiO3 single crystals probed via neutron diffraction and electrical characterization. <i>Journal of Applied Physics</i> , 2013, 113, 154104.	2.5	8
46	Tetragonal-to-Tetragonal Phase Transition in Lead-Free $(K_xNa_{1-x})NbO_3$ ($x = 0.11$ and 0.17) Crystals. <i>Crystals</i> , 2014, 4, 113-122.	2.2	8
47	Effect of segregation on Mn-doped relaxor-PT single crystal. <i>Journal of Alloys and Compounds</i> , 2018, 742, 958-965.	5.5	8
48	High-temperature dielectric and energy storage properties of $Bi_{0.5}Na_{0.5}TiO_3$ -based ceramics modified by $Sr_{0.8}Na_{0.4}Nb_{2}O_6$. <i>Journal of the American Ceramic Society</i> , 2021, 104, 5138-5147.	3.8	8
49	Dielectric properties and phase transition of PMN-0.32PT single crystal under dc electric field. <i>Optical Materials</i> , 2003, 23, 429-432.	3.6	7
50	Dielectric properties and thermal induced domain evolution in the piezoelectric single crystal $Pb(In1/2Nb1/2)O_3-Pb(Mg1/3Nb2/3)O_3-PbTiO_3$. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 170, 1-4.	3.5	7
51	Dielectric and Piezoelectric Properties of $(1-x)Bi(Sc_{0.9}Zn_{1/2}Ti_{1/2})_{0.1}O_3-xPbTiO_3$ Ceramics. <i>Ferroelectrics</i> , 2010, 408, 91-97.		
52	Dielectric behavior and phase transition in [111]-oriented PIN-PMN-PT single crystals under dc bias. <i>Journal of Advanced Dielectrics</i> , 2014, 04, 1450004.	2.4	7
53	In-situ observation of domain wall motion in $Pb(In1/2Nb1/2)O_3-Pb(Mg1/3Nb2/3)O_3-PbTiO_3$ crystals. <i>Journal of Applied Physics</i> , 2014, 116, 034105.	2.5	7
54	Growth of GaN Crystals by the Na Flux Method Under a Temperature Gradient. <i>Journal of Electronic Materials</i> , 2014, 43, 1219-1225.	2.2	7

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55	Fabrication and electrical properties of porous $\text{BS}^{0.64}\text{PT}$ high temperature piezoceramics using polystyrene microsphere. <i>Ceramics International</i> , 2015, 41, S414-S420.	4.8	7
56	Temperature dependence of the transverse piezoelectric properties in the [001]-poled $0.25\text{Pb}(\text{In}1/2\text{Nb}1/2)\text{O}3-0.42\text{Pb}(\text{Mg}1/3\text{Nb}2/3)\text{O}3-0.33\text{PbTiO}3$ single crystal with alternating current treatment. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	7
57	Structural Characterization and Dielectric Properties of Sol-Gel Synthesized $\text{BiScO}_3-0.64\text{PbTiO}_3$ Ceramics. <i>Ferroelectrics</i> , 2010, 402, 142-149.	0.6	6
58	Fabrication of GaN single crystals at 700°C using Na-Li-Ca mixed flux system. <i>AIP Advances</i> , 2018, 8, .	1.3	6
59	Growth Temperature Dependence of Morphology of GaN Single Crystals in the Na-Li-Ca Flux Method. <i>Journal of Electronic Materials</i> , 2018, 47, 1569-1574.	2.2	6
60	5\AA^3 diameter PIN-PMN-PT crystal growth by the Bridgman method. <i>Journal of Advanced Dielectrics</i> , 2020, 10, 2050001.	2.4	6
61	Enhanced energy harvesting performance of PIN-PMN-PT single crystal unimorph using alternating current poling. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	6
62	Core-shell microstructures in $0.68\text{Pb}(\text{Fe}2/3\text{W}1/3)\text{O}3-0.32\text{PbTiO}3$ at the morphotropic phase boundary. <i>Journal of Physics Condensed Matter</i> , 2005, 17, 2167-2175.	1.8	5
63	The polarization fatigue behavior in $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.32\text{PbTiO}_3$ single crystals. <i>Journal of Physics: Conference Series</i> , 2009, 152, 012088.	0.4	5
64	Lead magnesium niobate-lead titanate piezoelectric immunosensors. <i>Sensors and Actuators A: Physical</i> , 2010, 163, 82-87.	4.1	5
65	The Effect of Ga^{3+} Substituting Sc^{3+} on Properties of $\text{BiScO}_3-\text{PbTiO}_3$ Ceramics. <i>Ferroelectrics</i> , 2010, 409, 72-77.	0.6	5
66	Structure and dielectric/piezoelectric properties of LiNbO_3 -doped $\text{BiScO}_3-\text{PbTiO}_3$ ceramics with morphotropic phase boundary composition. <i>Journal of Materials Science</i> , 2012, 47, 696-701.	3.7	5
67	Temperature-independent permittivity of $x\text{BaTiO}_3-(1-x)(0.5\text{Bi}(\text{Mg}1/2\text{Ti}1/2)\text{O}3-0.5\text{BiScO}3)$ ceramics. <i>Ceramics International</i> , 2016, 42, 10608-10613.	4.8	5
68	Structure, electrical properties and temperature stability of PIN-PZN-PT piezoelectric ceramics with morphotropic phase boundary compositions. <i>Journal of Advanced Dielectrics</i> , 2019, 09, 1950009.	2.4	5
69	Title is missing!. <i>Journal of Materials Science Letters</i> , 1998, 17, 1921-1923.	0.5	4
70	High Temperature Phase Diagram of PMN-PT Binary System. <i>Ferroelectrics</i> , 2005, 326, 31-35.	0.6	4
71	Mechanochemical Synthesis of $\text{K}_x\text{Na}_{1-x}\text{NbO}_3$ Powders. <i>Ferroelectrics</i> , 2010, 401, 211-217.	0.6	4
72	Phase transition in $(1-x)\text{Bi}(\text{Mg}1/2\text{Ti}1/2)\text{O}3-x\text{PbTiO}3$ ceramics. <i>Materials Letters</i> , 2011, 65, 3143-3145.	2.6	4

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73	Ferroelectric Domain Engineered Photochemical Deposition for Area-selectable Broadband Enhancement of Quantum Dot Photoluminescence. <i>Advanced Optical Materials</i> , 2013, 1, 720-723.	7.3	4
74	Growth and electrical properties characterization of $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3-\text{PbTiO}_3$ tetragonal single crystal by the modified flux-Bridgman method. <i>Journal of Crystal Growth</i> , 2017, 468, 382-386.	1.5	4
75	Effect of Mn-doping on the structure and electrical properties of $(\text{Pb}_{0.325}\text{Sr}_{0.675})\text{TiO}_3$ ceramics. <i>Ceramics International</i> , 2018, 44, 16654-16659.	4.8	4
76	A study on the growth process for liquid phase epitaxy of GaN crystal using Na-Ca flux. <i>Materials Science in Semiconductor Processing</i> , 2022, 143, 106565.	4.0	4
77	Investigation on the Thermal Stability of $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-\text{PbTiO}_3$ Single Crystals. <i>Ferroelectrics</i> , 2010, 402, 187-192.	0.6	3
78	Effects of annealing on dielectric and ferroelectric properties in $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3-x\text{PbTiO}_3(x \approx 0.30)$ ceramics. <i>Ceramics International</i> , 2015, 41, S100-S105.	4.8	3
79	Analysis on the anisotropic electromechanical properties of lead magnoniobate titanate single crystal for ring type ultrasonic motors. <i>AIP Advances</i> , 2016, 6, 115017.	1.3	3
80	Effects of Growth Temperature on Morphology of GaN Crystals by Na Flux Liquid Phase Epitaxial Method. <i>Journal of Electronic Materials</i> , 2019, 48, 3570-3578.	2.2	3
81	Effects of MnO ₂ addition on the structure and electrical properties of PIN-PZN-PT ceramics with MPB composition. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 22740-22748.	2.2	3
82	Effects of Cooling Process on GaN Crystal Growth by Na Flux Method. <i>Journal of Electronic Materials</i> , 2020, 49, 5260-5265.	2.2	3
83	Enhanced transverse piezoelectric properties by composition and poling electric field induced phase transition in PIN-PMN-PT single crystal near morphotropic phase boundary. <i>Journal of Applied Physics</i> , 2021, 130, 064101.	2.5	3
84	Structure and properties of Bi ₂ O ₃ doped $\text{Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3-0.38\text{PbTiO}_3$ ceramics with MPB composition. <i>Journal of Electroceramics</i> , 2016, 36, 16-20.	2.0	2
85	The effect of machining on domain configuration in [001]-oriented tetragonal $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-\text{PbTiO}_3$ single crystals. <i>Journal of Applied Physics</i> , 2018, 124, 173103.	2.5	2
86	Temperature and DC Bias Dependences of Dielectric Behavior of Different Oriented 0.23PIN-0.52PMN-0.25PT Single Crystals. <i>Journal of Electronic Materials</i> , 2018, 47, 6282-6288.	2.2	2
87	The morphologies of GaN crystals grown on Ga- and N-face of HVPE seeds by the Na flux liquid phase epitaxial method. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SC1048.	1.5	2
88	Dislocation evolution along the growth direction of 2-inch GaN crystal grown by Na-flux LPE. <i>Materials Science in Semiconductor Processing</i> , 2021, 126, 105684.	4.0	2
89	Effects of Anneal on the Microstructure of PMN-32%PT Polycrystal. <i>Ferroelectrics</i> , 2006, 332, 105-110.	0.6	1
90	Perovskite phase stabilization and dielectric properties of $\text{Pb}(\text{Zn}_{1/3}\text{Ta}_{2/3})\text{O}_3-\text{BaTiO}_3$ ceramics. <i>Materials Letters</i> , 2006, 60, 1603-1606.	2.6	1

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91	Structure and properties of LiNbO ₃ doped Bi(Mg _{1/2} Ti _{1/2})O ₃ –PbTiO ₃ ceramics with the morphotropic phase boundary composition. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 295-298.	2.2	1
92	Temperature Dependence of Electrical Properties and Crystal Structure of 0.29Pb(In _{1/2} Nb _{1/2})O ₃ –0.44Pb(Mg _{1/3} Nb _{2/3})O ₃ Crystals. <i>Advances in Condensed Matter Physics</i> , 2013, 2013, 1-5.		
93	Thermal expansion characteristics of [001]-oriented PIN-PMN-PT single crystal. , 2015, , .		1
94	Temperature and DC bias dependence of the phase transition behavior of [011]- and [001]-oriented PIN–PMN–PT single crystals with MPB composition. <i>Journal of Materials Research</i> , 2018, 33, 4053-4061.	2.6	1
95	Electrical properties and temperature stability of high TC/TR-T Pb(In _{1/2} Nb _{1/2})O ₃ –Pb(Zn _{1/3} Nb _{2/3})O ₃ –PbTiO ₃ piezoelectric ceramics with compositions near the morphotropic phase boundary. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 20411-20422.	2.2	1
96	Synthesis of GaN Crystals by Nitrogen Pressure-Controlled Recrystallization Technique in Na Alloy Melt. <i>Crystals</i> , 2021, 11, 1058.	2.2	1
97	Dielectric properties and phase structure of Pb(Ni _{1/3} Nb _{2/3})O ₃ -based biphasic ceramics. <i>Ferroelectrics</i> , 1999, 229, 279-284.	0.6	0
98	Solid solution characteristics of Pb(B _{1/3} Nb _{2/3})O ₃ -based composite ceramics. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2008, 23, 456-459.	1.0	0
99	Stability of perovskite-type clusters in melts for relaxor ferroelectric crystal growth. <i>Journal of Electroceramics</i> , 2009, 22, 302-308.	2.0	0
100	Improved Performance of the Piezoelectric Monomorph with Perpendicular Electrode Connections for Sensing and Energy Harvesting. <i>Smart Materials Research</i> , 2013, 2013, 1-5.	0.5	0
101	Patterned photochemical deposition on domain engineered ferroelectric single crystals. , 2014, , .		0
102	Effects of pore sizes on the electrical properties for porous 0.36BS–0.64PT ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 9309-9315.	2.2	0
103	Patterned photochemical deposition on domain engineered ferroelectric single crystals. , 2014, , .		0