

# Shanming Ke

## List of Publications by Year in descending order

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118  
papers

3,589  
citations

126708

33  
h-index

155451

55  
g-index

120  
all docs

120  
docs citations

120  
times ranked

4649  
citing authors

#	ARTICLE	IF	CITATIONS
1	Interplay of defect dipole and flexoelectricity in linear dielectrics. Scripta Materialia, 2022, 210, 114427.	2.6	11
2	High-Temperature Flexible Transparent Heater for Rapid Thermal Annealing of Thin Films. Physical Review Applied, 2022, 17, .	1.5	1
3	The flexoelectric transition in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ material with colossal permittivity. Journal of Applied Physics, 2022, 132, 024101.	1.1	3
4	Electric Polarization Switching on an Atomically Thin Metallic Oxide. Nano Letters, 2021, 21, 144-150.	4.5	19
5	Electric modulation of conduction in $\text{MAPbBr}_3$ single crystals. Journal of Advanced Ceramics, 2021, 10, 320-327.	8.9	11
6	Local structural heterogeneity induced large flexoelectricity in Sm-doped $\text{PMN-PT}$ ceramics. Journal of Applied Physics, 2021, 129, .	1.1	11
7	Structural and optoelectronic properties of combining Nb-doped $\text{SrTiO}_3/\text{ITO}$ films on (0 0 1)-YSZ substrate. Results in Physics, 2021, 26, 104436.	2.0	0
8	Effects of strain on ultrahigh-performance optoelectronics and growth behavior of high-quality indium tin oxide films on yttria-stabilized zirconia (001) substrates. Journal of Materials Science: Materials in Electronics, 2021, 32, 21462-21471.	1.1	2
9	Visualization of Bubble Nucleation and Growth Confined in 2D Flakes. Small, 2021, 17, e2103301.	5.2	9
10	Visualization of Bubble Nucleation and Growth Confined in 2D Flakes (Small 39/2021). Small, 2021, 17, 2170205.	5.2	1
11	Flexible $\text{TiO}_2/\text{Au}$ thin films with greatly enhanced photocurrents for photoelectrochemical water splitting. Journal of Alloys and Compounds, 2020, 815, 152471.	2.8	13
12	Large photoelectrochemical activity of flexible $\text{TiO}_2/\text{SrRuO}_3$ oxide heterojunction. Applied Surface Science, 2020, 504, 144544.	3.1	6
13	Efficient decomplexation of heavy metal-EDTA complexes by $\text{Co}^{2+}$ /peroxymonosulfate process: The critical role of replacement mechanism. Chemical Engineering Journal, 2020, 392, 123639.	6.6	19
14	Atomic Steps Induce the Aligned Growth of Ice Crystals on Graphite Surfaces. Nano Letters, 2020, 20, 8112-8119.	4.5	17
15	Vibration catalysis of eco-friendly $\text{Na}_0.5\text{K}_0.5\text{NbO}_3$ -based piezoelectric: An efficient phase boundary catalyst. Applied Catalysis B: Environmental, 2020, 279, 119353.	10.8	128
16	Perovskite $\text{MAPb}(\text{Br}_1\hat{\sim}\text{Cl})_3$ single crystals: Solution growth and electrical properties. Journal of Crystal Growth, 2020, 549, 125869.	0.7	7
17	Epitaxial array of $\text{Fe}_3\text{O}_4$ nanodots for high rate high capacity conversion type lithium ion batteries electrode with long cycling life. Nano Energy, 2020, 74, 104876.	8.2	51
18	Nano-electrical conductivity guided optimization of pulsed laser deposited ZnO electron transporting layer for efficient perovskite solar cell. Journal of Power Sources, 2020, 468, 228392.	4.0	8

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19	Atomic-Scale insight into the reversibility of polar order in ultrathin epitaxial Nb:SrTiO <sub>3</sub> /BaTiO <sub>3</sub> heterostructure and its implication to resistive switching. <i>Acta Materialia</i> , 2020, 188, 23-29.	3.8	12
20	Photoflexoelectric effect in halide perovskites. <i>Nature Materials</i> , 2020, 19, 605-609.	13.3	132
21	Ultrasonic vibration driven piezocatalytic activity of lead-free K <sub>0.5</sub> Na <sub>0.5</sub> NbO <sub>3</sub> materials. <i>Ceramics International</i> , 2019, 45, 22486-22492.	2.3	59
22	Versatile and Highly Efficient Controls of Reversible Topotactic Metal-Insulator Transitions through Proton Intercalation. <i>Advanced Functional Materials</i> , 2019, 29, 1907072.	7.8	28
23	High-temperature ferromagnetic insulating phase in strained La <sub>0.8</sub> Sr <sub>0.2</sub> MnO <sub>3</sub> thin films. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 485001.	1.3	5
24	Large flexoelectric response in PMN-PT ceramics through composition design. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	16
25	Designing electron transporting layer for efficient perovskite solar cell by deliberating over nano-electrical conductivity. <i>Solar Energy Materials and Solar Cells</i> , 2019, 200, 109995.	3.0	10
26	Negative Coriolis effect in piezoelectric metamaterials. <i>Journal of Alloys and Compounds</i> , 2019, 801, 262-266.	2.8	2
27	Flexoelectric materials and their related applications: A focused review. <i>Journal of Advanced Ceramics</i> , 2019, 8, 153-173.	8.9	127
28	Epitaxial ultrathin Au films on transparent mica with oxide wetting layer applied to organic light-emitting devices. <i>Applied Physics Letters</i> , 2019, 114, 081902.	1.5	12
29	Revisit of amorphous semiconductor InGaZnO <sub>4</sub> : A new electron transport material for perovskite solar cells. <i>Journal of Alloys and Compounds</i> , 2019, 789, 276-281.	2.8	16
30	A novel and sensitive sarcosine biosensor based on organic electrochemical transistor. <i>Electrochimica Acta</i> , 2019, 307, 100-106.	2.6	35
31	Facile fabrication of highly efficient ETL-free perovskite solar cells with 20% efficiency by defect passivation and interface engineering. <i>Chemical Communications</i> , 2019, 55, 2777-2780.	2.2	61
32	Pulsed laser deposition of amorphous InGaZnO <sub>4</sub> as an electron transport layer for perovskite solar cells. <i>Journal of Advanced Dielectrics</i> , 2019, 09, 1950042.	1.5	4
33	Non-linear behavior of flexoelectricity. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	14
34	Origin of Ferroelectricity in Epitaxial Si-Doped HfO <sub>2</sub> Films. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 4139-4144.	4.0	48
35	A monolithically integrated photonic microwave generator. <i>Laser Physics Letters</i> , 2018, 15, 016201.	0.6	2
36	Black phosphorus quantum dots as dual-functional electron-selective materials for efficient plastic perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8886-8894.	5.2	80

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37	High-Quality AZO/Au/AZO Sandwich Film with Ultralow Optical Loss and Resistivity for Transparent Flexible Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 16160-16168.	4.0	45
38	van der Waals epitaxy of Al-doped ZnO film on mica as a flexible transparent heater with ultrafast thermal response. Applied Physics Letters, 2018, 112, .	1.5	43
39	Ferroelastic domain structure and phase transition in single-crystalline $[\text{PbZn}_{1/3}\text{Nb}_{2/3}\text{O}_3]_{1-x}[\text{PbTiO}_3]_x$ observed via in situ x-ray microbeam. Journal of the European Ceramic Society, 2018, 38, 1488-1497.	2.8	4
40	A novel protein binding strategy for energy-transfer-based photoelectrochemical detection of enzymatic activity of botulinum neurotoxin A. Electrochemistry Communications, 2018, 97, 114-118.	2.3	5
41	Flexoelectric fatigue in $(\text{K},\text{Na},\text{Li})(\text{Nb},\text{Sb})\text{O}_3$ ceramics. Applied Physics Letters, 2018, 113, .	1.5	13
42	Thermal-evaporated selenium as a hole-transporting material for planar perovskite solar cells. Solar Energy Materials and Solar Cells, 2018, 185, 130-135.	3.0	22
43	Modulation of Abnormal Poisson's Ratios and Electronic Properties in Mixed-Valence Perovskite Manganite Films. ACS Applied Materials & Interfaces, 2018, 10, 18029-18035.	4.0	13
44	Ionic liquid modified $\text{SnO}_2$ nanocrystals as a robust electron transporting layer for efficient planar perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 22086-22095.	5.2	66
45	Large increase of Curie temperature in (110)-oriented $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ films. Ceramics International, 2018, 44, 13695-13698.	2.3	7
46	Organic Photoelectrochemical Transistor-Based Biosensor: A Proof-of-Concept Study toward Highly Sensitive DNA Detection. Advanced Healthcare Materials, 2018, 7, e1800536.	3.9	54
47	Epitaxial ferroelectric $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{O}_2$ thin film on a buffered YSZ substrate through interface reaction. Journal of Materials Chemistry C, 2018, 6, 9224-9231.	2.7	38
48	Synthesis of ferroelectric $\text{KNbO}_3$ nanosheets by liquid exfoliation of layered perovskite $\text{K}_2\text{NbO}_3$ . Journal of Alloys and Compounds, 2017, 698, 357-363.	2.8	8
49	Ferroelectric-Enhanced Polysulfide Trapping for Lithium-Sulfur Battery Improvement. Advanced Materials, 2017, 29, 1604724.	11.1	149
50	Effect of oxygen pressure on pulsed laser deposited $\text{WO}_3$ thin films for photoelectrochemical water splitting. Journal of Alloys and Compounds, 2017, 722, 913-919.	2.8	21
51	Performance of a building-integrated photovoltaic/thermal system under frame shadows. Energy and Buildings, 2017, 134, 71-79.	3.1	19
52	Panchromatic thin perovskite solar cells with broadband plasmonic absorption enhancement and efficient light scattering management by $\text{Au@Ag}$ core-shell nanocuboids. Nano Energy, 2017, 41, 654-664.	8.2	68
53	Flexoelectric behavior in PIN-PMN-PT single crystals over a wide temperature range. Applied Physics Letters, 2017, 111, .	1.5	23
54	Origin of colossal dielectric response in $(\text{In}_{x}\text{Nb}_{1-x})$ co-doped $\text{TiO}_2$ rutile ceramics: a potential electrothermal material. Scientific Reports, 2017, 7, 10144.	1.6	18

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55	Large nonlinear dielectric behavior in BaTi $_{1-x}$ Sn $_x$ O $_3$ . Scientific Reports, 2017, 7, 6693.	1.6	24
56	Interfaces between hexagonal and cubic oxides and their structure alternatives. Nature Communications, 2017, 8, 1474.	5.8	31
57	A sensitive DNA sensor based on an organic electrochemical transistor using a peptide nucleic acid-modified nanoporous gold gate electrode. RSC Advances, 2017, 7, 52118-52124.	1.7	27
58	A Novel Organic Electrochemical Transistor-Based Platform for Monitoring the Senescent Green Vegetative Phase of Haematococcus pluvialis Cells. Sensors, 2017, 17, 1997.	2.1	11
59	1-Butyl-3-Methylimidazolium Tetrafluoroborate Film as a Highly Selective Sensing Material for Non-Invasive Detection of Acetone Using a Quartz Crystal Microbalance. Sensors, 2017, 17, 194.	2.1	15
60	A Diagram of the Structure Evolution of Pb(Zn $_{1/3}$ Nb $_{2/3}$ )O $_3$ -9%PbTiO $_3$ Relaxor Ferroelectric Crystals with Excellent Piezoelectric Properties. Crystals, 2017, 7, 130.	1.0	6
61	A Rapid, Label-free and Impedimetric DNA Sensor Based on PNA-modified Nanoporous Gold Electrode. International Journal of Electrochemical Science, 2017, 12, 10511-10523.	0.5	6
62	Intrinsic and extrinsic effects on the ferroelectric switching of thin poly(vinylidene fluoride) (PVDF) thin films. Journal of Applied Physics, 2016, 119, 124101.	2.2	18
63	Realizing 60 GHz narrow-linewidth photonic microwaves with very low RF driving power. Laser Physics Letters, 2016, 13, 126202.	0.6	3
64	Use of a novel layered titanoniobate as an anode material for long cycle life sodium ion batteries. RSC Advances, 2016, 6, 35746-35750.	1.7	27
65	A giant negative electrocaloric effect in Eu-doped PbZrO $_3$ thin films. Journal of Materials Chemistry C, 2016, 4, 3375-3378.	2.7	62
66	Morphotropic domain structures and dielectric relaxation in piezo-/ferroelectric Pb(In $_{1/2}$ Nb $_{1/2}$ )O $_3$ -Pb(Zn $_{1/3}$ Nb $_{2/3}$ )O $_3$ -PbTiO $_3$ single crystals. Journal of Crystal Growth, 2016, 441, 33-40.	0.7	4
67	Transparent Indium Tin Oxide Electrodes on Muscovite Mica for High-Temperature-Processed Flexible Optoelectronic Devices. ACS Applied Materials & Interfaces, 2016, 8, 28406-28411.	4.0	83
68	Multichannel quartz crystal microbalance array: Fabrication, evaluation, application in biomarker detection. Analytical Biochemistry, 2016, 494, 85-92.	1.1	23
69	Structural and optical characteristics of the hexagonal ZnO films grown on cubic MgO (001) substrates. Optics Letters, 2016, 41, 4895.	1.7	5
70	Preparation and characterization of hydroxyapatite-poly(lactic acid) HA-PLA composite film. Shenzhen Daxue Xuebao (Ligong Ban)/Journal of Shenzhen University Science and Engineering, 2016, 33, 10.	0.1	1
71	Temperature-dependent reversible and irreversible processes in Nb-doped PbZrO $_3$ relaxor ferroelectric thin films. Applied Physics Letters, 2015, 107, .	1.5	8
72	Integration of a Miniature Quartz Crystal Microbalance with a Microfluidic Chip for Amyloid Beta-A $_{\beta}$ 242 Quantitation. Sensors, 2015, 15, 25746-25760.	2.1	13

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73	Ferroelectric Polymer Thin Films for Organic Electronics. Journal of Nanomaterials, 2015, 2015, 1-14.	1.5	35
74	Large Energy Storage Density and High Thermal Stability in a Highly Textured (111)-Oriented $\text{Pb}_{0.8}\text{Ba}_{0.2}\text{ZrO}_3$ Relaxor Thin Film with the Coexistence of Antiferroelectric and Ferroelectric Phases. ACS Applied Materials & Interfaces, 2015, 7, 13512-13517.	4.0	185
75	Growth and properties of $(1-x)\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3-x\text{PbTiO}_3$ ( $x=0.07\sim 0.11$ ) ferroelectric single crystals by a top-seeded solution growth method. Ceramics International, 2015, 41, 14427-14434.	2.3	9
76	High dielectric tunability, electrostriction strain and electrocaloric strength at a tricritical point of tetragonal, rhombohedral and pseudocubic phases. Journal of Alloys and Compounds, 2015, 646, 597-602.	2.8	23
77	Large electrocaloric strength in the (100)-oriented relaxor ferroelectric $\text{Pb}[(\text{Ni}_{1/3}\text{Nb}_{2/3})_{0.6}\text{Ti}_{0.4}]\text{O}_3$ single crystal at near morphotropic phase boundary. Ceramics International, 2015, 41, 9344-9349.	2.3	23
78	Giant Electric Energy Density in Epitaxial Lead-Free Thin Films with Coexistence of Ferroelectrics and Antiferroelectrics. Advanced Electronic Materials, 2015, 1, 1500052.	2.6	195
79	Structure, corrosion resistance and in vitro bioactivity of Ca and P containing $\text{TiO}_2$ coating fabricated on NiTi alloy by plasma electrolytic oxidation. Applied Surface Science, 2015, 356, 1234-1243.	3.1	36
80	Tuning of dielectric and ferroelectric properties in single phase $\text{BiFeO}_3$ ceramics with controlled $\text{Fe}^{2+}/\text{Fe}^{3+}$ ratio. Ceramics International, 2014, 40, 5263-5268.	2.3	36
81	Giant dielectric response and enhanced thermal stability of multiferroic $\text{BiFeO}_3$ . Journal of Alloys and Compounds, 2014, 600, 118-124.	2.8	21
82	Glucose sensors based on solution-gated graphene transistors. Shenzhen Daxue Xuebao (Ligong) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.1	0
83	Study on dielectric properties of hyperbranched zinc phthalocyanine. Shenzhen Daxue Xuebao (Ligong) Tj ETQq1 1 0,784314 rgBT /Oe	0.1	0
84	Variable-range-hopping conductivity in high-k $\text{Ba}(\text{Fe}_{0.5}\text{Nb}_{0.5})\text{O}_3$ ceramics. Journal of Applied Physics, 2013, 114, .	1.1	30
85	Mean-Field Approach to Dielectric Relaxation in Giant Dielectric Constant Perovskite Ceramics. Journal of Ceramics, 2013, 2013, 1-7.	0.9	8
86	Antiferroelectric-like properties and enhanced polarization of Cu-doped $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ piezoelectric ceramics. Applied Physics Letters, 2012, 101, 082901.	1.5	71
87	Dielectric property of all-organic composite film composed of cobalt phthalocyanine and poly(vinylidene fluoride). , 2012, , .		0
88	Electrical and Dielectric Properties of Exfoliated Graphite/Polyimide Composite Films with Low Percolation Threshold. Journal of Electronic Materials, 2012, 41, 2439-2446.	1.0	14
89	Structural dependence of piezoelectric, dielectric and ferroelectric properties of $\text{K}_{0.5}\text{Na}_{0.5}(\text{Nb}_{1-x}\text{Cu}_x)_2\text{O}_3$ lead-free ceramics with high Q. Materials Research Bulletin, 2012, 47, 4472-4477.	2.7	35
90	Dielectric spectroscopy of biodegradable poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) films. European Polymer Journal, 2012, 48, 79-85.	2.6	15

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91	Dielectric and Thermal Properties of Polyimide/Poly(ethylene oxide) Nanofoamed Films. Journal of Electronic Materials, 2012, 41, 2281-2285.	1.0	12
92	Dielectric behaviors of PHBHHx/BaTiO <sub>3</sub> multifunctional composite films. Composites Science and Technology, 2012, 72, 370-375.	3.8	10
93	Electrical modulus analysis on the Ni/CCTO/PVDF system near the percolation threshold. Journal Physics D: Applied Physics, 2011, 44, 475305.	1.3	53
94	TiO <sub>2</sub> /SiO <sub>2</sub> hybrid nanomaterials: synthesis and variable UV-blocking properties. Journal of Sol-Gel Science and Technology, 2011, 58, 326-329.	1.1	43
95	Dielectric relaxations of high- <i>k</i> poly(butylene succinate) based all-organic nanocomposite films for capacitor applications. Journal of Materials Research, 2011, 26, 2493-2502.	1.2	14
96	Giant low frequency dielectric tunability in high- <i>k</i> Ba(Fe <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> ceramics at room temperature. Journal of Applied Physics, 2010, 108, 064104.	1.1	23
97	Revisit of the V <sub>A</sub> gel/Fulcher freezing in lead magnesium niobate relaxors. Applied Physics Letters, 2010, 97, 132905.	1.5	30
98	Crossover from a nearly constant loss to a superlinear power-law behavior in Mn-doped Bi(Mg <sub>1/2</sub> Ti <sub>1/2</sub> )O <sub>3</sub> /PbTiO <sub>3</sub> ferroelectrics. Journal of Applied Physics, 2010, 107, .	1.1	29
99	Dielectric relaxation in A <sub>2</sub> FeNbO <sub>6</sub> (A = Ba, Sr, and Ca) perovskite ceramics. Journal of Electroceramics, 2009, 22, 252-256.	0.8	75
100	Relaxor behavior and electrical properties of high dielectric constant materials. Science in China Series D: Earth Sciences, 2009, 52, 2180-2185.	0.9	11
101	Nearly constant dielectric loss behavior in poly(3-hydroxybutyrate-co-3-hydroxyvalerate) biodegradable polyester. Journal of Applied Physics, 2009, 105, .	1.1	37
102	Relaxor behavior and dielectric properties of lead magnesium niobate/lead titanate thick films prepared by electrophoresis deposition. Journal of Alloys and Compounds, 2009, 478, 853-857.	2.8	19
103	Structure and properties of PMN/PT/NZFO laminates and composites. Ceramics International, 2008, 34, 701-704.	2.3	8
104	Colossal dielectric response in barium iron niobate ceramics obtained by different precursors. Ceramics International, 2008, 34, 1059-1062.	2.3	53
105	Low-temperature growth of lead magnesium niobate thick films by a hydrothermal process. Ceramics International, 2008, 34, 1063-1066.	2.3	6
106	Structural and electric properties of barium strontium titanate based ceramic composite as a humidity sensor. Solid State Ionics, 2008, 179, 1632-1635.	1.3	24
107	Effect of sintering temperature on the structure and properties of cerium-doped 0.94(Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> /0.06BaTiO <sub>3</sub> piezoelectric ceramics. Journal of Alloys and Compounds, 2008, 458, 504-508.	2.8	78
108	MgTiO <sub>3</sub> doping effect on dielectric properties of Ba <sub>0.6</sub> Sr <sub>0.4</sub> TiO <sub>3</sub> ceramics via a molten salt process. Composites Part A: Applied Science and Manufacturing, 2008, 39, 597-601.	3.8	12

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109	Lorentz-type relationship of the temperature dependent dielectric permittivity in ferroelectrics with diffuse phase transition. Applied Physics Letters, 2008, 93, .	1.5	85
110	Dielectric, ferroelectric properties, and grain growth of $\text{Ca}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$ ceramics with tungsten-bronzes structure. Journal of Applied Physics, 2008, 104, .	1.1	37
111	Dielectric relaxation in polyimide nanofoamed films with low dielectric constant. Applied Physics Letters, 2008, 92, .	1.5	25
112	Dielectric dispersion behavior of $\text{Ba}(\text{Zr}_x\text{Ti}_{1-x})\text{O}_3$ solid solutions with a quasiferroelectric state. Journal of Applied Physics, 2008, 104, .	1.1	56
113	Dielectric and ageing behaviour of strontium barium niobate with barium strontium titanate additives. Journal Physics D: Applied Physics, 2007, 40, 6797-6802.	1.3	7
114	Micro-Raman scattering and DC field dependent dielectric properties of $\text{BaZr}_x\text{Ti}_{1-x}\text{O}_3$ relaxor ferroelectric ceramics. Proceedings of SPIE, 2007, , .	0.8	2
115	Slow relaxation of piezoelectric response in CdZnTe ferroelectric semiconductor single crystals. Applied Physics Letters, 2007, 91, .	1.5	4
116	Microstructure evolutions and electrical properties of $\text{Pb}_{1-x}\text{La}_x(\text{Zr}_{0.56}\text{Ti}_{0.44})_{1-x}/4\text{O}_3$ ceramics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 138, 205-209.	1.7	8
117	Relaxor behavior in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramics. Applied Physics Letters, 2006, 89, 182904.	1.5	128
118	Low-temperature synthesis of $(\text{Pb},\text{La})(\text{Zr},\text{Ti})\text{O}_3$ thick film on Ti substrates by the hydrothermal method using oxide precursors. Applied Physics Letters, 2006, 88, 012901.	1.5	6