

# Shanming Ke

## List of Publications by Year in descending order

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118  
papers

3,589  
citations

126708

33  
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155451

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120  
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120  
docs citations

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times ranked

4649  
citing authors

#	ARTICLE	IF	CITATIONS
1	Giant Electric Energy Density in Epitaxial Lead-Free Thin Films with Coexistence of Ferroelectrics and Antiferroelectrics. <i>Advanced Electronic Materials</i> , 2015, 1, 1500052.	2.6	195
2	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. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13512-13517.	4.0	185
3	Ferroelectric-Enhanced Polysulfide Trapping for Lithium-Sulfur Battery Improvement. <i>Advanced Materials</i> , 2017, 29, 1604724.	11.1	149
4	Photoflexoelectric effect in halide perovskites. <i>Nature Materials</i> , 2020, 19, 605-609.	13.3	132
5	Relaxor behavior in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramics. <i>Applied Physics Letters</i> , 2006, 89, 182904.	1.5	128
6	Vibration catalysis of eco-friendly $\text{Na}_0.5\text{K}_0.5\text{NbO}_3$ -based piezoelectric: An efficient phase boundary catalyst. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119353.	10.8	128
7	Flexoelectric materials and their related applications: A focused review. <i>Journal of Advanced Ceramics</i> , 2019, 8, 153-173.	8.9	127
8	Lorentz-type relationship of the temperature dependent dielectric permittivity in ferroelectrics with diffuse phase transition. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	85
9	Transparent Indium Tin Oxide Electrodes on Muscovite Mica for High-Temperature-Processed Flexible Optoelectronic Devices. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 28406-28411.	4.0	83
10	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
11	Effect of sintering temperature on the structure and properties of cerium-doped $0.94(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3\text{-}0.06\text{BaTiO}_3$ piezoelectric ceramics. <i>Journal of Alloys and Compounds</i> , 2008, 458, 504-508.	2.8	78
12	Dielectric relaxation in $\text{A}_2\text{FeNbO}_6$ ( $\text{A} = \text{Ba, Sr, and Ca}$ ) perovskite ceramics. <i>Journal of Electroceramics</i> , 2009, 22, 252-256.	0.8	75
13	Antiferroelectric-like properties and enhanced polarization of Cu-doped $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ piezoelectric ceramics. <i>Applied Physics Letters</i> , 2012, 101, 082901.	1.5	71
14	Panchromatic thin perovskite solar cells with broadband plasmonic absorption enhancement and efficient light scattering management by $\text{Au@Ag}$ core-shell nanocuboids. <i>Nano Energy</i> , 2017, 41, 654-664.	8.2	68
15	Ionic liquid modified $\text{SnO}_2$ nanocrystals as a robust electron transporting layer for efficient planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22086-22095.	5.2	66
16	A giant negative electrocaloric effect in Eu-doped $\text{PbZrO}_3$ thin films. <i>Journal of Materials Chemistry C</i> , 2016, 4, 3375-3378.	2.7	62
17	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
18	Ultrasonic vibration driven piezocatalytic activity of lead-free $\text{K}_0.5\text{Na}_0.5\text{NbO}_3$ materials. <i>Ceramics International</i> , 2019, 45, 22486-22492.	2.3	59

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19	Dielectric dispersion behavior of Ba(ZrxTi1-x)O3 solid solutions with a quasiferroelectric state. Journal of Applied Physics, 2008, 104, .	1.1	56
20	Organic Photoelectrochemical Transistor-Based Biosensor: A Proof-of-Concept Study toward Highly Sensitive DNA Detection. Advanced Healthcare Materials, 2018, 7, e1800536.	3.9	54
21	Colossal dielectric response in barium iron niobate ceramics obtained by different precursors. Ceramics International, 2008, 34, 1059-1062.	2.3	53
22	Electrical modulus analysis on the Ni/CCTO/PVDF system near the percolation threshold. Journal Physics D: Applied Physics, 2011, 44, 475305.	1.3	53
23	Epitaxial array of Fe3O4 nanodots for high rate high capacity conversion type lithium ion batteries electrode with long cycling life. Nano Energy, 2020, 74, 104876.	8.2	51
24	Origin of Ferroelectricity in Epitaxial Si-Doped HfO2 Films. ACS Applied Materials & Interfaces, 2019, 11, 4139-4144.	4.0	48
25	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
26	TiO2/SiO2 hybrid nanomaterials: synthesis and variable UV-blocking properties. Journal of Sol-Gel Science and Technology, 2011, 58, 326-329.	1.1	43
27	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
28	Epitaxial ferroelectric Hf0.5Zr0.5O2 thin film on a buffered YSZ substrate through interface reaction. Journal of Materials Chemistry C, 2018, 6, 9224-9231.	2.7	38
29	Dielectric, ferroelectric properties, and grain growth of CaxBa1-xNb2O6 ceramics with tungsten-bronzes structure. Journal of Applied Physics, 2008, 104, .	1.1	37
30	Nearly constant dielectric loss behavior in poly(3-hydroxybutyrate-co-3-hydroxyvalerate) biodegradable polyester. Journal of Applied Physics, 2009, 105, .	1.1	37
31	Tuning of dielectric and ferroelectric properties in single phase BiFeO3 ceramics with controlled Fe2+/Fe3+ ratio. Ceramics International, 2014, 40, 5263-5268.	2.3	36
32	Structure, corrosion resistance and in vitro bioactivity of Ca and P containing TiO2 coating fabricated on NiTi alloy by plasma electrolytic oxidation. Applied Surface Science, 2015, 356, 1234-1243.	3.1	36
33	Structural dependence of piezoelectric, dielectric and ferroelectric properties of K0.5Na0.5(Nb1/2/5Cu)O3 lead-free ceramics with high Q. Materials Research Bulletin, 2012, 47, 4472-4477.	2.7	35
34	Ferroelectric Polymer Thin Films for Organic Electronics. Journal of Nanomaterials, 2015, 2015, 1-14.	1.5	35
35	A novel and sensitive sarcosine biosensor based on organic electrochemical transistor. Electrochimica Acta, 2019, 307, 100-106.	2.6	35
36	Interfaces between hexagonal and cubic oxides and their structure alternatives. Nature Communications, 2017, 8, 1474.	5.8	31

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37	Revisit of the VÄngelâ€Fulcher freezing in lead magnesium niobate relaxors. Applied Physics Letters, 2010, 97, 132905.	1.5	30
38	Variable-range-hopping conductivity in high-k Ba(Fe0.5Nb0.5)O3 ceramics. Journal of Applied Physics, 2013, 114, .	1.1	30
39	Crossover from a nearly constant loss to a superlinear power-law behavior in Mn-doped Bi(Mg1/2Ti1/2)O3â€PbTiO3 ferroelectrics. Journal of Applied Physics, 2010, 107, .	1.1	29
40	Versatile and Highly Efficient Controls of Reversible Topotactic Metalâ€Insulator Transitions through Proton Intercalation. Advanced Functional Materials, 2019, 29, 1907072.	7.8	28
41	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
42	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
43	Dielectric relaxation in polyimide nanofoamed films with low dielectric constant. Applied Physics Letters, 2008, 92, .	1.5	25
44	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
45	Large nonlinear dielectric behavior in BaTi1âˆxSnxO3. Scientific Reports, 2017, 7, 6693.	1.6	24
46	Giant low frequency dielectric tunability in high-k Ba(Fe1/2Nb1/2)O3 ceramics at room temperature. Journal of Applied Physics, 2010, 108, 064104.	1.1	23
47	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
48	Large electrocaloric strength in the (100)-oriented relaxor ferroelectric Pb[(Ni1/3Nb2/3)0.6Ti0.4]O3 single crystal at near morphotropic phase boundary. Ceramics International, 2015, 41, 9344-9349.	2.3	23
49	Multichannel quartz crystal microbalance array: Fabrication, evaluation, application in biomarker detection. Analytical Biochemistry, 2016, 494, 85-92.	1.1	23
50	Flexoelectric behavior in PIN-PMN-PT single crystals over a wide temperature range. Applied Physics Letters, 2017, 111, .	1.5	23
51	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
52	Giant dielectric response and enhanced thermal stability of multiferroic BiFeO3. Journal of Alloys and Compounds, 2014, 600, 118-124.	2.8	21
53	Effect of oxygen pressure on pulsed laser deposited WO3 thin films for photoelectrochemical water splitting. Journal of Alloys and Compounds, 2017, 722, 913-919.	2.8	21
54	Relaxor behavior and dielectric properties of lead magnesium niobateâ€lead titanate thick films prepared by electrophoresis deposition. Journal of Alloys and Compounds, 2009, 478, 853-857.	2.8	19

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55	Performance of a building-integrated photovoltaic/thermal system under frame shadows. Energy and Buildings, 2017, 134, 71-79.	3.1	19
56	Efficient decomplexation of heavy metal-EDTA complexes by Co <sup>2+</sup> /peroxymonosulfate process: The critical role of replacement mechanism. Chemical Engineering Journal, 2020, 392, 123639.	6.6	19
57	Electric Polarization Switching on an Atomically Thin Metallic Oxide. Nano Letters, 2021, 21, 144-150.	4.5	19
58	Origin of colossal dielectric response in (In <sup>2+</sup> +Nb) co-doped TiO <sub>2</sub> rutile ceramics: a potential electrothermal material. Scientific Reports, 2017, 7, 10144.	1.6	18
59	Atomic Steps Induce the Aligned Growth of Ice Crystals on Graphite Surfaces. Nano Letters, 2020, 20, 8112-8119.	4.5	17
60	Large flexoelectric response in PMN-PT ceramics through composition design. Applied Physics Letters, 2019, 115, .	1.5	16
61	Revisit of amorphous semiconductor InGaZnO <sub>4</sub> : A new electron transport material for perovskite solar cells. Journal of Alloys and Compounds, 2019, 789, 276-281.	2.8	16
62	Dielectric spectroscopy of biodegradable poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) films. European Polymer Journal, 2012, 48, 79-85.	2.6	15
63	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
64	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
65	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
66	Non-linear behavior of flexoelectricity. Applied Physics Letters, 2019, 115, .	1.5	14
67	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
68	Intrinsic and extrinsic effects on the ferroelectric switching of thin poly(vinylidene fluoride) (PVDF) thin films. Applied Physics Letters, 2018, 113, .	2.2	13
69	Flexoelectric fatigue in (K,Na,Li)(Nb,Sb)O <sub>3</sub> ceramics. Applied Physics Letters, 2018, 113, .	1.5	13
70	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
71	Flexible TiO <sub>2</sub> /Au thin films with greatly enhanced photocurrents for photoelectrochemical water splitting. Journal of Alloys and Compounds, 2020, 815, 152471.	2.8	13
72	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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73	Dielectric and Thermal Properties of Polyimide/Poly(ethylene oxide) Nanofoamed Films. <i>Journal of Electronic Materials</i> , 2012, 41, 2281-2285.	1.0	12
74	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
75	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
76	Relaxor behavior and electrical properties of high dielectric constant materials. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 2180-2185.	0.9	11
77	A Novel Organic Electrochemical Transistor-Based Platform for Monitoring the Senescent Green Vegetative Phase of <i>Haematococcus pluvialis</i> Cells. <i>Sensors</i> , 2017, 17, 1997.	2.1	11
78	Electric modulation of conduction in MAPbBr <sub>3</sub> single crystals. <i>Journal of Advanced Ceramics</i> , 2021, 10, 320-327.	8.9	11
79	Local structural heterogeneity induced large flexoelectricity in Sm-doped PMN/PT ceramics. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	11
80	Interplay of defect dipole and flexoelectricity in linear dielectrics. <i>Scripta Materialia</i> , 2022, 210, 114427.	2.6	11
81	Dielectric behaviors of PHBHH/BaTiO <sub>3</sub> multifunctional composite films. <i>Composites Science and Technology</i> , 2012, 72, 370-375.	3.8	10
82	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
83	Growth and properties of (1-x)Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -xPbTiO <sub>3</sub> (x=0.07-0.11) ferroelectric single crystals by a top-seeded solution growth method. <i>Ceramics International</i> , 2015, 41, 14427-14434.	2.3	9
84	Visualization of Bubble Nucleation and Growth Confined in 2D Flakes. <i>Small</i> , 2021, 17, e2103301.	5.2	9
85	Microstructure evolutions and electrical properties of Pb <sub>1-x</sub> Lax(Zr <sub>0.56</sub> Ti <sub>0.44</sub> ) <sub>1-x</sub> /4O <sub>3</sub> ceramics. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2007, 138, 205-209.	1.7	8
86	Structure and properties of PMN/PT/NZFO laminates and composites. <i>Ceramics International</i> , 2008, 34, 701-704.	2.3	8
87	Temperature-dependent reversible and irreversible processes in Nb-doped PbZrO <sub>3</sub> relaxor ferroelectric thin films. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	8
88	Synthesis of ferroelectric KNbO <sub>3</sub> nanosheets by liquid exfoliation of layered perovskite K <sub>2</sub> NbO <sub>3</sub> F. <i>Journal of Alloys and Compounds</i> , 2017, 698, 357-363.	2.8	8
89	Nano-electrical conductivity guided optimization of pulsed laser deposited ZnO electron transporting layer for efficient perovskite solar cell. <i>Journal of Power Sources</i> , 2020, 468, 228392.	4.0	8
90	Mean-Field Approach to Dielectric Relaxation in Giant Dielectric Constant Perovskite Ceramics. <i>Journal of Ceramics</i> , 2013, 2013, 1-7.	0.9	8

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91	Dielectric and ageing behaviour of strontium barium niobate with barium strontium titanate additives. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 6797-6802.	1.3	7
92	Large increase of Curie temperature in (110)-oriented La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> films. <i>Ceramics International</i> , 2018, 44, 13695-13698.	2.3	7
93	Perovskite MAPb(Br <sub>1-x</sub> Cl <sub>x</sub> ) <sub>3</sub> single crystals: Solution growth and electrical properties. <i>Journal of Crystal Growth</i> , 2020, 549, 125869.	0.7	7
94	Low-temperature synthesis of (Pb,La)(Zr,Ti)O <sub>3</sub> thick film on Ti substrates by the hydrothermal method using oxide precursors. <i>Applied Physics Letters</i> , 2006, 88, 012901.	1.5	6
95	Low-temperature growth of lead magnesium niobate thick films by a hydrothermal process. <i>Ceramics International</i> , 2008, 34, 1063-1066.	2.3	6
96	A Diagram of the Structure Evolution of Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -9%PbTiO <sub>3</sub> Relaxor Ferroelectric Crystals with Excellent Piezoelectric Properties. <i>Crystals</i> , 2017, 7, 130.	1.0	6
97	A Rapid, Label-free and Impedimetric DNA Sensor Based on PNA-modified Nanoporous Gold Electrode. <i>International Journal of Electrochemical Science</i> , 2017, 12, 10511-10523.	0.5	6
98	Large photoelectrochemical activity of flexible TiO <sub>2</sub> /SrRuO <sub>3</sub> oxide heterojunction. <i>Applied Surface Science</i> , 2020, 504, 144544.	3.1	6
99	A novel protein binding strategy for energy-transfer-based photoelectrochemical detection of enzymatic activity of botulinum neurotoxin A. <i>Electrochemistry Communications</i> , 2018, 97, 114-118.	2.3	5
100	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
101	Structural and optical characteristics of the hexagonal ZnO films grown on cubic MgO (001) substrates. <i>Optics Letters</i> , 2016, 41, 4895.	1.7	5
102	Slow relaxation of piezoelectric response in CdZnTe ferroelectric semiconductor single crystals. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	4
103	Morphotropic domain structures and dielectric relaxation in piezo-/ferroelectric Pb(In <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> -Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -PbTiO <sub>3</sub> single crystals. <i>Journal of Crystal Growth</i> , 2016, 441, 33-40.	0.7	4
104	Ferroelastic domain structure and phase transition in single-crystalline [PbZn <sub>1/3</sub> Nb <sub>2/3</sub> O <sub>3</sub> ] <sub>1-x</sub> [PbTiO <sub>3</sub> ] <sub>x</sub> observed via in situ x-ray microbeam. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1488-1497.	2.8	4
105	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
106	Realizing 60 GHz narrow-linewidth photonic microwaves with very low RF driving power. <i>Laser Physics Letters</i> , 2016, 13, 126202.	0.6	3
107	The flexoelectric transition in CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> material with colossal permittivity. <i>Journal of Applied Physics</i> , 2022, 132, 024101.	1.1	3
108	Micro-Raman scattering and DC field dependent dielectric properties of BaZr <sub>x</sub> Ti <sub>1-x</sub> O <sub>3</sub> relaxor ferroelectric ceramics. <i>Proceedings of SPIE</i> , 2007, , .	0.8	2

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109	A monolithically integrated photonic microwave generator. Laser Physics Letters, 2018, 15, 016201.	0.6	2
110	Negative Coriolis effect in piezoelectric metamaterials. Journal of Alloys and Compounds, 2019, 801, 262-266.	2.8	2
111	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
112	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
113	Visualization of Bubble Nucleation and Growth Confined in 2D Flakes (Small 39/2021). Small, 2021, 17, 2170205.	5.2	1
114	High-Temperature Flexible Transparent Heater for Rapid Thermal Annealing of Thin Films. Physical Review Applied, 2022, 17, .	1.5	1
115	Dielectric property of all-organic composite film composed of cobalt phthalocyanine and poly(vinylidene fluoride). , 2012, , .		0
116	Structural and optoelectronic properties of combining Nb-doped SrTiO <sub>3</sub> /ITO films on (0 0 1)-YSZ substrate. Results in Physics, 2021, 26, 104436.	2.0	0
117	Glucose sensors based on solution-gated graphene transistors. Shenzhen Daxue Xuebao (Ligong) Tj ETQq1 1 0.784314 rgBT /Overlock	0.1	0
118	Study on dielectric properties of hyperbranched zinc phthalocyanine. Shenzhen Daxue Xuebao (Ligong) Tj ETQq0 0,0,rgBT /Oyerlock 10	0.1	0