

Bin Yang

List of Publications by Year in descending order

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84
papers

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236612

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docs citations

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times ranked

2244
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| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Semiconductor/relaxor A^3 type composites without thermal depolarization in $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ -based lead-free piezoceramics. <i>Nature Communications</i> , 2015, 6, 6615. | 5.8 | 263 |
| 2 | Phase diagram and electrostrictive properties of $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3\text{-}x\text{BaTiO}_3\text{-}(1-x)\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ ceramics. <i>Applied Physics Letters</i> , 2010, 97, . | 1.5 | 73 |
| 3 | Kirigami-Inspired Highly Stretchable Nanoscale Devices Using Multidimensional Deformation of Monolayer MoS_2 . <i>Chemistry of Materials</i> , 2018, 30, 6063-6070. | 3.2 | 66 |
| 4 | Top-Seeded Solution Growth and Properties of $\text{K}_{1-x}\text{Na}_x\text{NbO}_3$ Crystals. <i>Crystal Growth and Design</i> , 2015, 15, 1180-1185. | 1.4 | 58 |
| 5 | Significantly Enhanced Energy-Harvesting Performance and Superior Fatigue-Resistant Behavior in $[001]$ -Textured BaTiO_3 -Based Lead-Free Piezoceramics. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 31488-31497. | 4.0 | 57 |
| 6 | Grain-Oriented Ferroelectric Ceramics with Single-Crystal-like Piezoelectric Properties and Low Texture Temperature. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38415-38424. | 4.0 | 52 |
| 7 | Morphotropic phase boundary and electrical properties in $(1-x)\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3\text{-}x\text{Bi}(\text{Zn}_{0.5}\text{Ti}_{0.5})\text{O}_3$ lead-free piezoceramics. <i>Journal of Applied Physics</i> , 2010, 107, . | 1.1 | 50 |
| 8 | Porous Ultrathin NiSe Nanosheet Networks on Nickel Foam for High-Performance Hybrid Supercapacitors. <i>ChemSusChem</i> , 2020, 13, 260-266. | 3.6 | 50 |
| 9 | The theranostic nanoagent Mo_2C for multi-modal imaging-guided cancer synergistic phototherapy. <i>Biomaterials Science</i> , 2019, 7, 2729-2739. | 2.6 | 48 |
| 10 | Structure and Piezoelectric Properties of Fe-Doped Potassium Sodium Niobate Tantalate Lead-Free Ceramics. <i>Journal of the American Ceramic Society</i> , 2011, 94, 2489-2493. | 1.9 | 44 |
| 11 | Oxygen vacancy induces self-doping effect and metalloid LSPR in non-stoichiometric tungsten suboxide synergistically contributing to the enhanced photoelectrocatalytic performance of $\text{WO}_3\text{-}x\text{/TiO}_2\text{-}x$ heterojunction. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 17268-17278. | 1.3 | 44 |
| 12 | Ultrahigh energy harvesting properties in textured lead-free piezoelectric composites. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3603-3611. | 5.2 | 43 |
| 13 | Electromechanical properties of Mn-doped $\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$ piezoelectric ceramics. <i>Ceramics International</i> , 2016, 42, 15332-15337. | 2.3 | 39 |
| 14 | Metallic tungsten carbide nanoparticles as a near-infrared-driven photocatalyst. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18538-18546. | 5.2 | 39 |
| 15 | Electric-field control of phase separation and memory effect in $\text{Pr}_{0.6}\text{Ca}_{0.4}\text{MnO}_3\text{/Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})_{0.7}\text{Ti}_{0.3}\text{O}_3$ heterostructures. <i>Applied Physics Letters</i> , 2011, 98, . | 1.5 | 38 |
| 16 | Effects of sintering temperature and poling conditions on the electrical properties of $\text{Ba}_{0.70}\text{Ca}_{0.30}\text{TiO}_3$ diphasic piezoelectric ceramics. <i>Ceramics International</i> , 2013, 39, 2967-2973. | 2.3 | 35 |
| 17 | Soft-lithographic processed soluble micropatterns of reduced graphene oxide for wafer-scale thin film transistors and gas sensors. <i>Journal of Materials Chemistry</i> , 2012, 22, 714-718. | 6.7 | 34 |
| 18 | Influence of manganese doping to the full tensor properties of $0.24\text{Pb}(\text{In}_{1/2}\text{Nb}_{1/2})\text{O}_3\text{-}0.47\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-}0.29\text{PbTiO}_3$ single crystals. <i>Journal of Applied Physics</i> , 2013, 113, 74108. | 1.1 | 32 |

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|----|---|-----|-----------|
| 19 | Origin of Improvement in Mechanical Quality Factor in Acceptor-Doped Relaxor-Based Ferroelectric Single Crystals. <i>Physical Review Applied</i> , 2018, 9, . | 1.5 | 32 |
| 20 | Enhanced Multiferroic and Magnetocapacitive Properties of $(1-x)Ba_{0.7}Ca_{0.3}TiO_3$ Ceramics. <i>Journal of the American Ceramic Society</i> , 2014, 97, 816-825. | 1.5 | 32 |
| 21 | High piezoelectricity of Eu^{3+} -doped $Pb(Mg_{1/3}Nb_{2/3})O_3 \cdot 0.25PbTiO_3$ transparent ceramics. <i>Journal of Materials Chemistry C</i> , 2021, 9, 2426-2436. | 2.7 | 30 |
| 22 | Nonlinear electronic polarization and optical response in borophosphate BPO_4 . <i>Physical Review B</i> , 2016, 93, . | 1.5 | 26 |
| 23 | Intrinsic Dipole Coupling in 2D van der Waals Ferroelectrics for Gate-Controlled Switchable Rectifier. <i>Advanced Electronic Materials</i> , 2020, 6, 1900975. | 2.6 | 27 |
| 24 | Temperature-dependent leakage current characteristics of Pr and Mn cosubstituted $BiFeO_3$ thin films. <i>Applied Physics Letters</i> , 2010, 96, 202904. | 1.5 | 26 |
| 25 | From two-dimensional trapezoid-like layer to three-dimensional porous indium-4,4'-biphenyldicarboxylate MOFs. <i>CrystEngComm</i> , 2012, 14, 193-199. | 1.3 | 25 |
| 26 | Photoluminescence and Temperature Dependent Electrical Properties of Er -Doped $0.94Bi_{0.5}Na_{0.5}TiO_3 \cdot 0.07Ba(Ti_{0.945}Zr_{0.055})O_3$ Ceramics. <i>Journal of the American Ceramic Society</i> , 2014, 97, 3877-3882. | 1.5 | 24 |
| 27 | Mn doping effects on electric properties of $0.93(Bi_{0.5}Na_{0.5})TiO_3 \cdot 0.07Ba(Ti_{0.945}Zr_{0.055})O_3$ ceramics. <i>Journal of the American Ceramic Society</i> , 2018, 101, 2996-3004. | 1.5 | 24 |
| 28 | Morphotropic phase boundary and electric properties in $(1-x)Bi_{0.5}Na_{0.5}TiO_3 \cdot xBiCoO_3$ lead-free piezoelectric ceramics. <i>Journal of Applied Physics</i> , 2012, 111, . | 1.1 | 24 |
| 29 | Phase coexistence and domain configuration in $Pb(Mg_{1/3}Nb_{2/3})O_3 \cdot 0.34PbTiO_3$ single crystal revealed by synchrotron-based X-ray diffractive three-dimensional reciprocal space mapping and piezoresponse force microscopy. <i>Applied Physics Letters</i> , 2016, 108, . | 1.5 | 24 |
| 30 | The high enrichment of <i>Geobacter</i> by TiN nanoarray anode catalyst for efficient microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7726-7735. | 5.2 | 23 |
| 31 | Phase transition, microstructure and electrical properties of Fe doped $Ba_{0.70}Ca_{0.30}TiO_3$ lead-free piezoelectric ceramics. <i>Ceramics International</i> , 2013, 39, 8701-8708. | 2.3 | 22 |
| 32 | Plasmonic Enhanced Reactive Oxygen Species Activation on Low-Work-Function Tungsten Nitride for Direct Near-Infrared Driven Photocatalysis. <i>Small</i> , 2020, 16, e2004557. | 5.2 | 22 |
| 33 | Large, thermally stabilized and fatigue-resistant piezoelectric strain response in textured relaxor- $PbTiO_3$ ferroelectric ceramics. <i>Journal of Materials Chemistry C</i> , 2021, 9, 2008-2015. | 2.7 | 22 |
| 34 | Sn_xWO_3 as a theranostic platform for realizing multi-imaging-guided photothermal/photodynamic combination therapy. <i>Nanoscale</i> , 2019, 11, 3300-3310. | 2.8 | 21 |
| 35 | Enhanced Energy Storage with Polar Vortices in Ferroelectric Nanocomposites. <i>Physical Review Applied</i> , 2017, 8, . | 1.5 | 20 |
| 36 | Theoretical study on local domain pinning effect due to defect dipole alignment. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 415303. | 1.3 | 20 |

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|----|---|-----|-----------|
| 37 | Experimental and theoretical investigation on photocatalytic activities of 1D Ag/Ag ₂ WO ₄ nanostructures. Nanotechnology, 2017, 28, 385702. | 1.3 | 18 |
| 38 | Enhanced electric field induced strain in (1-x)((Bi _{0.5} Na _{0.5})TiO ₃ -Ba(Ti, Zr)O ₃)-xSrTiO ₃ ceramics. Ceramics International, 2018, 44, 12869-12876. | 2.3 | 17 |
| 39 | Domain evolution with electric field and delineation of extrinsic contributions in (K, Na, Li)(Nb, Ta) _{1-x} ETQq ₁ 1 0.784314 rgBT /Overlo | 1.5 | 16 |
| 40 | AX ₆ octahedra influencing the arrangement of anionic groups and optical properties in inverse-perovskite [B ₆ O ₁₀]X ₃ (X = Cl, Br; A = alkali metal). Physical Chemistry Chemical Physics, 2016, 18, 15394-15398. | 1.3 | 16 |
| 41 | Tetragonal (K, Na)NbO ₃ based lead-free single crystal: Growth, full tensor properties, and their orientation dependence. Applied Physics Letters, 2017, 111, . | 1.5 | 16 |
| 42 | Enhancing the Temperature Stability of 0.42PNN-0.21PZ-0.37PT Ceramics through Texture Engineering. ACS Applied Materials & Interfaces, 2022, 14, 3076-3083. | 4.0 | 16 |
| 43 | The characteristics of laser-driven shock wave investigated by time-resolved Raman spectroscopy. Journal of Raman Spectroscopy, 2011, 42, 345-348. | 1.2 | 15 |
| 44 | Improved depolarization behavior and electric properties in (Bi _{0.5} Na _{0.5})TiO ₃ -based piezoelectric composites. Journal of Alloys and Compounds, 2018, 769, 660-668. | 2.8 | 15 |
| 45 | Dynamic scaling of internal bias field in Mn-doped 0.24Pb(In _{1/2} Nb _{1/2})O ₃ â€“0.42Pb(Mg _{1/3} Nb _{2/3})O ₃ â€“0.34PbTiO ₃ ferroelectric ceramic. Journal of Materials Science, 2018, 53, 12762-12769. | 1.7 | 15 |
| 46 | Scaling relations of domain reversal dynamics in rhombohedral and tetragonal PINâ€“PMNâ€“PT ferroelectric single crystals. Applied Physics Letters, 2021, 119, . | 1.5 | 15 |
| 47 | Topochemical transformation of single crystalline SrTiO ₃ microplatelets from Bi ₄ Ti ₃ O ₁₂ precursors and their orientation-dependent surface piezoelectricity. CrystEngComm, 2018, 20, 3084-3095. | 1.3 | 14 |
| 48 | Targeted photothermal therapy of mice and rabbits realized by macrophage-loaded tungsten carbide. Biomaterials Science, 2019, 7, 5350-5358. | 2.6 | 12 |
| 49 | Dynamic characteristics of defect dipoles in Mn-doped 0.24Pb(In _{1/2} Nb _{1/2})O ₃ â€“0.47Pb(Mg _{1/3} Nb _{2/3})O ₃ â€“0.34PbTiO ₃ ferroelectric single crystal. CrystEngComm, 2019, 21, 348-355. | 1.3 | 12 |
| 50 | Analysis of the influencing factors on the anti-aging performance of a hybrid-modified asphalt mixture using the grey relational theory. International Journal of Pavement Engineering, 2021, 22, 597-612. | 2.2 | 11 |
| 51 | Phase Transition and Electrical Properties of Ba _{0.7} Ca _{0.3} TiO ₃ Ceramics. Journal of the American Ceramic Society, 2012, 95, 3901-3905. | 1.3 | 11 |
| 52 | Domain structure and evolution in ZnO-modified Pb(Mg _{1/3} Nb _{2/3})O ₃ â€“0.32PbTiO ₃ ceramics. Journal of the American Ceramic Society, 2019, 102, 4874-4881. | 1.9 | 9 |
| 53 | Modeling dynamic rotation of defect dipoles and poling time dependence of piezoelectric effect in ferroelectrics. Applied Physics Letters, 2019, 114, . | 1.5 | 8 |
| 54 | Structural and Electric Properties of MnO ₂ -Doped KNN-LT Lead-Free Piezoelectric Ceramics. Crystals, 2020, 10, 705. | 1.0 | 8 |

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|----|--|-----|-----------|
| 55 | Low-work-function LaB6 for realizing photodynamic-enhanced photothermal therapy. Journal of Materials Chemistry B, 2021, 9, 4380-4389. | 2.9 | 8 |
| 56 | Effect of misfit strain on ferroelectric domain formation at the morphotropic phase boundary. Physical Review B, 2016, 94, . | 1.1 | 7 |
| 57 | Dielectric relaxation properties of [001] _c , [011] _c , and [111] _c -oriented 0.24PIN-0.47PMN-0.29PT single crystals. Journal of the American Ceramic Society, 2019, 102, 4103-4112. | 1.9 | 7 |
| 58 | Dielectric relaxation and local domain structures of ferroelectric PIMNT and PMNT single crystals. Journal of the American Ceramic Society, 2020, 103, 1744-1754. | 1.9 | 7 |
| 59 | Elimination of pyrochlore phase in high-concentration Sm ³⁺ -doped PMN-PT piezoelectric ceramics by excessive MgO. Journal of the American Ceramic Society, 2022, 105, 4180-4190. | 1.9 | 7 |
| 60 | Electrical properties of 0.94Bi0.5Na0.5TiO3-0.06Ba(Zr0.055Ti0.945)O3 lead-free ceramics with high thermal stability. Journal of Materials Science: Materials in Electronics, 2018, 29, 2357-2362. | 1.1 | 6 |
| 61 | Domain engineering and full matrix material constants of the [111] _c -poled 0.63Pb(Mg _{1/3} Nb _{2/3})-0.37PbTiO ₃ single crystal. CrystEngComm, 2018, 20, 4745-4751. | 1.3 | 6 |
| 62 | Nonlinear optical absorption in Bi3TiNbO9 thin films using Z-scan technique. Applied Physics A: Materials Science and Processing, 2009, 96, 1017-1021. | 1.1 | 5 |
| 63 | The Multiferroic Properties of (Bi0.9Ba0.1)(Fe0.95Mn0.05)O3 Films. Journal of Superconductivity and Novel Magnetism, 2011, 24, 1497-1500. | 0.8 | 5 |
| 64 | Structure and piezoelectric properties of MnO2 doped Ba0.985Ca0.005Ti0.98Sn0.02O3 lead-free ceramics. Journal of Materials Science: Materials in Electronics, 2019, 30, 18950-18958. | 1.1 | 5 |
| 65 | Defect dynamics in clusters of self-propelled rods in circular confinement. European Physical Journal E, 2019, 42, 150. | 0.7 | 5 |
| 66 | Comparative study on durability of different composite modified asphalt mixtures. Road Materials and Pavement Design, 2021, 22, 1369-1388. | 2.0 | 5 |
| 67 | Influence of MoO3 on electrical properties and thermal depolarization of Bi0.5Na0.5TiO3-BaTiO3 lead-free piezoceramics. Journal of Applied Physics, 2020, 127, 234102. | 1.1 | 4 |
| 68 | Optimized piezoelectric properties and temperature stability in PSN-PMN-PT by adjusting the phase structure and grain size. Journal of the American Ceramic Society, 2021, 104, 6254-6265. | 1.9 | 4 |
| 69 | Microstructure and Electric Properties of Bi2O3-Doped (K0.5Na0.5)NbO3 Lead-Free Ceramics. Coatings, 2022, 12, 526. | 1.2 | 4 |
| 70 | Investigation on optical properties of Bi2.85La0.15TiNbO9 thin films by prism coupling technique. Applied Physics A: Materials Science and Processing, 2009, 97, 741-744. | 1.1 | 3 |
| 71 | Temperature- and <i>E</i> -field-dependent domain configuration and electrical properties in (K, Na) Tj ETQq1 1 0.784314 rgBT 3973-3981. | 1.9 | 3 |
| 72 | Temperature Dependence of Normalized Sensitivity of Love Wave Sensor of Unidirectional Carbon Fiber Epoxy Composite on Mn-Doped 0.24PIN-0.46PMN-0.30PT Single Crystal Substrate. Applied Sciences (Switzerland), 2020, 10, 8442. | 1.3 | 3 |

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|----|--|-----|-----------|
| 73 | A broadband low-frequency muffler based on neural network method and Helmholtz resonator with helical neck. JVC/Journal of Vibration and Control, 2023, 29, 3942-3951. | 1.5 | 3 |
| 74 | Enhanced electrocaloric effect in a Si-doped PbZr _{0.95} Ti _{0.05} O ₃ film deposited on FTO substrate. Applied Physics Letters, 2019, 115, 053901. | 1.5 | 2 |
| 75 | Ferroelectric properties of Ag doped PbZr _{0.53} Ti _{0.47} O ₃ thin film deposited by sol-gel process. Journal of Materials Science: Materials in Electronics, 2019, 30, 2592-2599. | 1.1 | 2 |
| 76 | Phase field simulation of de-aging process in acceptor-doped ferroelectrics. Journal of Alloys and Compounds, 2020, 816, 152503. | 2.8 | 2 |
| 77 | Microstructure, ferroelectric and piezoelectric properties of MnO ₂ -modified Ba _{0.70} Ca _{0.30} TiO ₃ lead-free ceramics. Journal of Materials Science: Materials in Electronics, 2020, 31, 9352-9365. | 1.1 | 2 |
| 78 | Aging and thermal stability of [001]c- and [111]c-poled 0.63Pb(Mg _{1/3} Nb _{2/3})O ₃ -0.37PbTiO ₃ single crystals. Journal of Materials Science: Materials in Electronics, 2018, 29, 16207-16214. | 1.1 | 1 |
| 79 | Effect of sintering temperature on the electric properties of KNLNT ceramics. Ferroelectrics, 2020, 562, 1-9. | 0.3 | 1 |
| 80 | NIR Photocatalysis: Plasmonic Enhanced Reactive Oxygen Species Activation on Low-Work-Function Tungsten Nitride for Direct Near-Infrared Driven Photocatalysis (Small 45/2020). Small, 2020, 16, 2070247. | 5.2 | 1 |
| 81 | Enhancing directed collective motion of self-propelled particles in confined channel. Journal of Physics Condensed Matter, 2021, 33, 415101. | 0.7 | 1 |
| 82 | The ferromagnetic and ferroelectric properties of (Bi _{0.9} La _{0.1})(Fe _{0.95} Co _{0.05})O ₃ . , 2010, , . | | 0 |
| 83 | The ferromagnetic and ferroelectric properties of (Bi _{0.9} La _{0.1})(Fe _{0.95} Co _{0.05})O ₃ . Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 133-136. | 0.8 | 0 |
| 84 | Temperature and frequency dependent defect dipole kinematics in "hard" piezoelectric ceramics. Sensors and Actuators A: Physical, 2022, 344, 113712. | 2.0 | 0 |