# Turab Lookman

List of Publications by Year
in descending order



| 140 | 6,792 | 76326 40 | 66911 78 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 141 | 141 | 141 | 5547 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Accelerated search for materials with targeted properties by adaptive design. Nature Communications, 2016, 7, 11241. | 12.8 | 504 |
| 2 | Machine learning assisted design of high entropy alloys with desired property. Acta Materialia, 2019, 170, 109-117. | 7.9 | 445 |
| 3 | Active learning in materials science with emphasis on adaptive sampling using uncertainties for targeted design. Npj Computational Materials, 2019, 5, . | 8.7 | 315 |
| 4 | Machine Learning Strategy for Accelerated Design of Polymer Dielectrics. Scientific Reports, 2016, 6, 20952. | 3.3 | 279 |
| 5 | Accelerated Discovery of Large Electrostrains in BaTiO<sub>3</sub>â€Based Piezoelectrics Using Active Learning. Advanced Materials, 2018, 30, 1702884. | 21.0 | 254 |
| 6 | Elastic, piezoelectric, and dielectric properties of Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-50(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub>Pb-free ceramic at the morphotropic phase boundary. Journal of Applied Physics, 2011, 109, 054110. | 2.5 | 242 |
| 7 | Phase prediction in high entropy alloys with a rational selection of materials descriptors and machine learning models. Acta Materialia, 2020, 185, 528-539. | 7.9 | 206 |
| 8 | Experimental search for high-temperature ferroelectric perovskites guided by two-step machine learning. Nature Communications, 2018, 9, 1668. | 12.8 | 189 |
| 9 | Surface phase transitions in polymer systems. Reviews of Modern Physics, 1993, 65, 87-113. | 45.6 | 179 |
| 10 | Adaptive Strategies for Materials Design using Uncertainties. Scientific Reports, 2016, 6, 19660. | 3.3 | 172 |
| 11 | An informatics approach to transformation temperatures of NiTi-based shape memory alloys. Acta Materialia, 2017, 125, 532-541. | 7.9 | 168 |
| 12 | Thermodynamic theory of dislocation-mediated plasticity. Acta Materialia, 2010, 58, 3718-3732. | 7.9 | 139 |
| 13 | Onset of irreversibility and chaos in amorphous solids under periodic shear. Physical Review E, 2013, 88, 062401. | 2.1 | 138 |
| 14 | Reversibility and criticality in amorphous solids. Nature Communications, 2015, 6, 8805. | 12.8 | 127 |
| 15 | Predictions of new <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="italic">AB</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> perovskite compounds by combining machine learning and density functional theory. Physical Review Materials, 2018, 2, . | 2.4 | 127 |
| 16 | Strain glass in doped Ti50(Ni50â^'xDx) (D=Co, Cr, Mn) alloys: Implication for the generality of strain glass in defect-containing ferroelastic systems. Acta Materialia, 2010, 58, 5433-5442. | 7.9 | 120 |
| 17 | Accelerated search for BaTiO <sub>3</sub> -based piezoelectrics with vertical morphotropic phase boundary using Bayesian learning. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13301-13306. | 7.1 | 114 |
| 18 | Superelasticity in bcc nanowires by a reversible twinning mechanism. Physical Review B, 2010, 82, . | 3.2 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The climate attractor over short timescales. Nature, 1987, 326, 64-66. | 27.8 | 96 |
| 20 | Multi-objective Optimization for Materials Discovery via Adaptive Design. Scientific Reports, 2018, 8, 3738. | 3.3 | 94 |
| 21 | Modeling solid solution strengthening in high entropy alloys using machine learning. Acta Materialia, 2021, 212, 116917. | 7.9 | 87 |
| 22 | Statistical inference and adaptive design for materials discovery. Current Opinion in Solid State and Materials Science, 2017, 21, 121-128. | 11.5 | 85 |
| 23 | Machine-Learning-Based Predictive Modeling of Glass Transition Temperatures: A Case of Polyhydroxyalkanoate Homopolymers and Copolymers. Journal of Chemical Information and Modeling, 2019, 59, 5013-5025. | 5.4 | 85 |
| 24 | Adaptive ferroelectric state at morphotropic phase boundary: Coexisting tetragonal and rhombohedral phases. Acta Materialia, 2014, 71, 176-184. | 7.9 | 77 |
| 25 | Learning from data to design functional materials without inversion symmetry. Nature Communications, 2017, 8, 14282. | 12.8 | 76 |
| 26 | Heterogeneities and strain glass behavior: Role of nanoscale precipitates in low-temperature-aged Ti<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>48.7</mml:mn></mml:mrow></mml:msub></mml:math>Ni<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>51.3</mml:mn></mml:mrow></mml:msub></mml:math>alloys. Physical Review | 3.2 | 71 |
| 27 | High temperature strain glass in Ti50(Pd50â^’xCrx) alloy and the associated shape memory effect and superelasticity. Applied Physics Letters, 2009, 95, . | 3.3 | 70 |
| 28 | Materials Prediction via Classification Learning. Scientific Reports, 2015, 5, 13285. | 3.3 | 68 |
| 29 | Ab initio calculations of the uraniumâ€“hydrogen system: Thermodynamics, hydrogen saturation of Î±-U and phase-transformation to UH3. Acta Materialia, 2010, 58, 1045-1055. | 7.9 | 60 |
| 30 | Anisotropic shock response of titanium: Reorientation and transformation mechanisms. Acta Materialia, 2014, 65, 10-18. | 7.9 | 57 |
| 31 | Effects of Long- and Short-Range Ferroelectric Order on the Electrocaloric Effect in Relaxor Ferroelectric Ceramics. Physical Review Applied, 2019, 11, . | 3.8 | 57 |
| 32 | Dynamic strain loading of cubic to tetragonal martensites. Acta Materialia, 2006, 54, 2109-2120. | 7.9 | 55 |
| 33 | Optimal experimental design for materials discovery. Computational Materials Science, 2017, 129, 311-322. | 3.0 | 54 |
| 34 | Effects of Hydrodynamics on Phase Transition Kinetics in Two-Dimensional Binary Fluids. Physical Review Letters, 1995, 74, 3852-3855. | 7.8 | 53 |
| 35 | Strain-induced martensitic transformation in stainless steels: A three-dimensional phase-field study. Acta Materialia, 2013, 61, 6972-6982. | 7.9 | 49 |
| 36 | Effects of tricritical points and morphotropic phase boundaries on the piezoelectric properties of ferroelectrics. Physical Review B, 2011, 83, . | 3.2 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Nonhysteretic Superelasticity of Shape Memory Alloys at the Nanoscale. Physical Review Letters, 2013, 111, 145701. | 7.8 | 48 |
| 38 | Accelerated Search for BaTiO<sub>3</sub>â€Based Ceramics with Large Energy Storage at Low Fields Using Machine Learning and Experimental Design. Advanced Science, 2019, 6, 1901395. | 11.2 | 44 |
| 39 | Optimisation of GaN LEDs and the reduction of efficiency droop using active machine learning. Scientific Reports, 2016, 6, 24862. | 3.3 | 43 |
| 40 | Anomalous dislocation core structure in shock compressed bcc high-entropy alloys. Acta Materialia, 2021, 209, 116801. | 7.9 | 42 |
| 41 | Effects of disorder in ferroelastics: A spin model for strain glass. Physical Review B, 2010, 81, . | 3.2 | 41 |
| 42 | Machine learning assisted multi-objective optimization for materials processing parameters: A case study in Mg alloy. Journal of Alloys and Compounds, 2020, 844, 156159. | 5.5 | 41 |
| 43 | The kinetics of the Ï‰ to Î± phase transformation in Zr, Ti: Analysis of data from shock-recovered samples and atomistic simulations. Acta Materialia, 2014, 77, 191-199. | 7.9 | 40 |
| 44 | Collective nature of plasticity in mediating phase transformation under shock compression. Physical Review B, 2014, 89, . | 3.2 | 40 |
| 45 | Structureâ€"Curie temperature relationships in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BaTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></m ferroelectric perovskites: Anomalous behavior of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mi>Ba</mml:mi><mml:mo>,</mml:mo><mml:mi>C DFT, statistical inference, and experiments. Physical Review B, 2016, 93, . | 3.2 | 39 |
| 46 | STATISTICAL ERROR IN A CHORD ESTIMATOR OF CORRELATION DIMENSION: THE â€œRULE OF FIVEâ€. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1993, 03, 765-771. | 1.7 | 35 |
| 47 | Phase transitions and phase diagram of Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>-<i>x</i>(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> Pb-free system by anelastic measurement. Journal of Applied Physics, 2015, 117, 124107. | 2.5 | 35 |
| 48 | Dynamical heterogeneity in the Ising spin glass. Physical Review E, 1998, 57, 7350-7353. | 2.1 | 31 |
| 49 | Aging effect in paraelectric state of ferroelectrics: Implication for a microscopic explanation of ferroelectric deaging. Applied Physics Letters, 2009, 94, . | 3.3 | 31 |
| 50 | Multi-objective optimization techniques to design the Pareto front of organic dielectric polymers. Computational Materials Science, 2016, 125, 92-99. | 3.0 | 31 |
| 51 | Interfaces in ferroelastics: Fringing fields, microstructure, and size and shape effects. Physical Review B, 2009, 79, . | 3.2 | 30 |
| 52 | Inverse martensitic transformation in Zr nanowires. Physical Review B, 2010, 81, . | 3.2 | 28 |
| 53 | Reverse phase transformation of martensite to austenite in stainless steels: a 3D phase-field study. Journal of Materials Science, 2014, 49, 3642-3651. | 3.7 | 28 |
| 54 | Uniaxial stress-driven coupled grain boundary motion in hexagonal close-packed metals: A molecular dynamics study. Acta Materialia, 2015, 82, 295-303. | 7.9 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Twin boundary activated Î±Ââ†'ÂÏ‰ phase transformation in titanium under shock compression. Acta Materialia, 2016, 115, 1-9. | 7.9 | 28 |
| 56 | Effects of criticality and disorder on piezoelectric properties of ferroelectrics. Journal of Physics Condensed Matter, 2010, 22, 345902. | 1.8 | 27 |
| 57 | Design of High Temperature Ti-Pd-Cr Shape Memory Alloys with Small Thermal Hysteresis. Scientific Reports, 2016, 6, 28244. | 3.3 | 27 |
| 58 | Ferroic glasses. Npj Computational Materials, 2017, 3, . | 8.7 | 27 |
| 59 | Phase diagram of ferroelastic systems in the presence of disorder: Analytical model and experimental verification. Physical Review B, 2012, 86, . | 3.2 | 26 |
| 60 | Automated pipeline for superalloy data by text mining. Npj Computational Materials, 2022, 8, . | 8.7 | 25 |
| 61 | Microscopic mechanism of martensitic stabilization in shape-memory alloys: Atomic-level processes. Physical Review B, 2010, 81, . | 3.2 | 24 |
| 62 | Role of uncertainty estimation in accelerating materials development via active learning. Journal of Applied Physics, 2020, 128, . | 2.5 | 24 |
| 63 | Crossover behavior for self-avoiding walks interacting with a surface. Physical Review A, 1990, 42, 4591-4600. | 2.5 | 23 |
| 64 | High temperature strain glass transition in defect doped Tiâ€"Pd martensitic alloys. Physica Status Solidi (B): Basic Research, 2014, 251, 2027-2033. | 1.5 | 23 |
| 65 | Spatial adaptive sampling in multiscale simulation. Computer Physics Communications, 2014, 185, 1857-1864. | 7.5 | 23 |
| 66 | The Search for BaTiO<sub>3</sub>-Based Piezoelectrics With Large Piezoelectric Coefficient Using Machine Learning. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 394-401. | 3.0 | 23 |
| 67 | Determining Multiâ€Component Phase Diagrams with Desired Characteristics Using Active Learning. Advanced Science, 2021, 8, 2003165. | 11.2 | 23 |
| 68 | Accelerated discovery of high-performance piezocatalyst in BaTiO3-based ceramics via machine learning. Nano Energy, 2022, 97, 107218. | 16.0 | 23 |
| 69 | Origin of large electrostrain in Sn4+ doped Ba(Zr0.2Ti0.8)O3-x(Ba0.7Ca0.3)TiO3 ceramics. Acta Materialia, 2018, 157, 155-164. | 7.9 | 22 |
| 70 | Hydrodynamic Self-Consistent Field Theory for Inhomogeneous Polymer Melts. Physical Review Letters, 2006, 97, 114501. | 7.8 | 21 |
| 71 | Microstructure from ferroelastic transitions using strain pseudospin clock models in two and three dimensions: A local mean-field analysis. Physical Review B, 2010, 82, . | 3.2 | 21 |
| 72 | Perspective: Codesign for materials science: An optimal learning approach. APL Materials, 2016, 4, 053501. | 5.1 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Enhanced Energy Storage with Polar Vortices in Ferroelectric Nanocomposites. Physical Review Applied, 2017, 8, . | 3.8 | 20 |
| 74 | Learning from superelasticity data to search for Ti-Ni alloys with large elastocaloric effect. Acta Materialia, 2021, 218, 117200. | 7.9 | 20 |
| 75 | Phase-field modeling of the beta to omega phase transformation in Zrâ€"Nb alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 634, 46-54. | 5.6 | 19 |
| 76 | Alpha â€" omega and omega â€" alpha phase transformations in zirconium under hydrostatic pressure: A 3D mesoscale study. Acta Materialia, 2016, 102, 97-107. | 7.9 | 19 |
| 77 | Alkali-deficiency driven charged out-of-phase boundaries for giant electromechanical response. Nature Communications, 2021, 12, 2841. | 12.8 | 19 |
| 78 | Energy minimization related to the nonlinear SchrÃ¶dinger equation. Journal of Computational Physics, 2009, 228, 2572-2577. | 3.8 | 17 |
| 79 | hcp â†' Ï‰ phase transition mechanisms in shocked zirconium: A machine learning based atomic simulation study. Acta Materialia, 2019, 162, 126-135. | 7.9 | 17 |
| 80 | Efficient estimation of material property curves and surfaces via active learning. Physical Review Materials, 2021, 5, . | 2.4 | 17 |
| 81 | Low-fatigue and large room-temperature elastocaloric effect in a bulk Ti<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si16.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>49.2</mml:mn></mml:mrow></mml:msub></mml:math>Ni<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si17.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>40.8</mml:mn></mml:mrow></mml:msub></mml:math>Cu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si18.svg"><mml:msub><mml:mrow /><mml: | 7.9 | 17 |
| 82 | Evolution analysis of Î³' precipitate coarsening in Co-based superalloys using kinetic theory and machine learning. Acta Materialia, 2022, 235, 118101. | 7.9 | 17 |
| 83 | Martensite aging effects on the dynamic properties of Auâ€"Cd shape memory alloys: Characteristics and modeling. Acta Materialia, 2011, 59, 4999-5011. | 7.9 | 16 |
| 84 | Aging and deaging effects in shape memory alloys. Physical Review B, 2012, 86, . | 3.2 | 16 |
| 85 | Direct observation of hierarchical nucleation of martensite and size-dependent superelasticity in shape memory alloys. Nanoscale, 2014, 6, 2067. | 5.6 | 16 |
| 86 | The simultaneous occurrence of martensitic transformation and reversion of martensite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 594, 48-51. | 5.6 | 16 |
| 87 | Metastable phase transformation and hcp-<i> <b>Ï‰</b> </i> transformation pathways in Ti and Zr under high hydrostatic pressures. Applied Physics Letters, 2016, 109, . | 3.3 | 16 |
| 88 | Ferroelectric, elastic, piezoelectric, and dielectric properties of Ba(Ti0.7Zr0.3)O3-<i>x</i>(Ba0.82Ca0.18)TiO3 Pb-free ceramics. Journal of Applied Physics, 2017, 122, . | 2.5 | 16 |
| 89 | Numerical method for hydrodynamic transport of inhomogeneous polymer melts. Journal of Computational Physics, 2007, 224, 681-698. | 3.8 | 14 |
| 90 | Nanoscale Heterogeneity in Functional Materials. MRS Bulletin, 2009, 34, 822-831. | 3.5 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Anionic structure and biaxial strain in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">RbHgF</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>perovskite and hybrid improper ferroelectricity in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mtext>Na</mml:mtext><mml:mo>,</mml:mo><m mathvariant="normal">Hg</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvaria | 3.2 | 14 |
| 92 | Material descriptors for morphotropic phase boundary curvature in lead-free piezoelectrics. Applied Physics Letters, 2017, 111, 032907. | 3.3 | 14 |
| 93 | Machine learning combined with feature engineering to search for BaTiO3 based ceramics with large piezoelectric constant. Journal of Alloys and Compounds, 2022, 908, 164468. | 5.5 | 14 |
| 94 | Magnetic symmetry of low-dimensional multiferroics and ferroelastics. Phase Transitions, 2011, 84, 421-437. | 1.3 | 13 |
| 95 | Heterogeneity and phase transformation in materials: Energy minimization, iterative methods and geometric nonlinearity. Acta Materialia, 2013, 61, 5311-5340. | 7.9 | 13 |
| 96 | Origin of low thermal hysteresis in shape memory alloy ultrathin films. Acta Materialia, 2016, 103, 407-415. | 7.9 | 13 |
| 97 | Doping effects of point defects in shape memory alloys. Acta Materialia, 2019, 176, 177-188. | 7.9 | 13 |
| 98 | Ambient-temperature high damping capacity in TiPd-based martensitic alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 632, 110-119. | 5.6 | 12 |
| 99 | Symbolic regression in materials science via dimension-synchronous-computation. Journal of Materials Science and Technology, 2022, 122, 77-83. | 10.7 | 12 |
| 100 | Sandwichlike strain glass phase diagram of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ti</mml:mi><mml:mn>4 </mml:mn></mml: Physical Review B, 2016, 94, . | 3.2 | 11 |
| 101 | Thermal Stability of Strained Nanowires. Physical Review Letters, 2009, 102, 245504. | 7.8 | 10 |
| 102 | Non-equilibrium particle-field simulations of polymer-nanocomposite dynamics. Chemical Engineering Science, 2009, 64, 4754-4757. | 3.8 | 10 |
| 103 | Thermally Induced Local Failures in Quasi-One-Dimensional Systems: Collapse in Carbon Nanotubes, Necking in Nanowires, and Opening of Bubbles in DNA. Physical Review Letters, 2010, 104, 025503. | 7.8 | 10 |
| 104 | Modeling the paraelectric aging effect in the acceptor doped perovskite ferroelectrics: role of oxygen vacancy. Journal of Physics Condensed Matter, 2013, 25, 435901. | 1.8 | 10 |
| 105 | Asymptotic analysis of hierarchical martensitic microstructure. Journal of the Mechanics and Physics of Solids, 2014, 72, 174-192. | 4.8 | 10 |
| 106 | Critical diffusivity in the reversibilityâ€“irreversibility transition of amorphous solids under oscillatory shear. Journal of Physics Condensed Matter, 2019, 31, 045101. | 1.8 | 10 |
| 107 | Diffuse scattering as an indicator for martensitic variant selection. Acta Materialia, 2014, 66, 69-78. | 7.9 | 9 |
| 108 | A quantitative model for stabilization effect induced by ferroelectric aging. Journal of Applied Physics, 2011, 109, 124103. | 2.5 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Effect of misfit strain on ferroelectric domain formation at the morphotropic phase boundary. Physical Review B, 2016, 94, . | 3.2 | 7 |
| 110 | Knowledge-Based Descriptor for the Compositional Dependence of the Phase Transition in BaTiO<sub>3</sub>-Based Ferroelectrics. ACS Applied Materials & Interfaces, 2020, 12, 44970-44980. | 8.0 | 7 |
| 111 | Enhanced magnetocaloric performance in manganite bilayers. Journal of Applied Physics, 2020, 127, . | 2.5 | 7 |
| 112 | Temperature-field history dependence of the elastocaloric effect for a strain glass alloy. Journal of Materials Science and Technology, 2022, 103, 8-14. | 10.7 | 7 |
| 113 | In situobservation of thermally activated domain memory and polarization memory in an aged K+-doped (Ba, Sr)TiO3single crystal. Journal of Physics Condensed Matter, 2011, 23, 275902. | 1.8 | 6 |
| 114 | Modelling magnetostructural textures in magnetic shapeâ€memory alloys: Strain and magnetic glass behaviour. Physica Status Solidi (B): Basic Research, 2014, 251, 2080-2087. | 1.5 | 6 |
| 115 | Martensite formation in stainless steels under transient loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 608, 101-105. | 5.6 | 6 |
| 116 | Physics-based statistical learning approach to mesoscopic model selection. Physical Review E, 2015, 92, 053301. | 2.1 | 6 |
| 117 | First-principles study of theÎ±-Ï‰phase transformation in Ti and Zr coupled to slip modes. Journal of Applied Physics, 2018, 123, 045903. | 2.5 | 6 |
| 118 | Data-Based Methods for Materials Design and Discovery: Basic Ideas and General Methods. Synthesis Lectures on Materials and Optics, 2020, 1, 1-188. | 0.2 | 6 |
| 119 | Enhanced Energy-Storage Density by Reversible Domain Switching in Acceptor-Doped Ferroelectrics. Physical Review Applied, 2021, 15, . | 3.8 | 6 |
| 120 | Long-time behavior of the Ï‰â†’Î± transition in shocked zirconium: Interplay of nucleation and plastic deformation. Acta Materialia, 2016, 108, 138-142. | 7.9 | 5 |
| 121 | Role of cadmium on the phase transitions and electrical properties of BaTiO3 ceramics. Ceramics International, 2017, 43, 1114-1120. | 4.8 | 5 |
| 122 | Influence of Finite Size on the Electrocaloric Response in PbTiO<sub>3</sub> Ceramics Near Room Temperature Using Landau Theory. Physica Status Solidi (B): Basic Research, 2018, 255, 1700469. | 1.5 | 5 |
| 123 | Machine-Learning-Enabled Prediction of Adiabatic Temperature Change in Lead-Free BaTiO<sub>3</sub>-Based Electrocaloric Ceramics. ACS Applied Materials & Interfaces, 2021, 13, 53475-53484. | 8.0 | 5 |
| 124 | Electric hysteresis and validity of indirect electrocaloric characterization in antiferroelectric ceramics. Scripta Materialia, 2022, 216, 114763. | 5.2 | 5 |
| 125 | Evidence for short-time limit of martensite deaging in shape-memory alloys: Experiment and atomistic simulation. Applied Physics Letters, 2010, 97, 171902. | 3.3 | 4 |
| 126 | Origin of ultrafast annihilation effect of martensite aging: Atomistic simulations. Physical Review B, 2010, 82, . | 3.2 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Aging Effect in Acceptor-Donor Co-Doped Ferroelectrics. Ferroelectrics, 2010, 404, 141-146. | 0.6 | 4 |
| 128 | Phase transformations in Titanium: Anisotropic deformation of Ï‰ phase. Journal of Physics: Conference Series, 2014, 500, 112042. | 0.4 | 4 |
| 129 | On glassy behavior in ferroics. Physica Status Solidi (B): Basic Research, 2014, 251, 2003-2009. | 1.5 | 4 |
| 130 | Efficient sampling for decision making in materials discovery*. Chinese Physics B, 2021, 30, 050705. | 1.4 | 4 |
| 131 | Molecular dynamics simulations of ultralow hysteretic behavior in super-elastic shape memory alloys. Acta Materialia, 2022, 232, 117973. | 7.9 | 4 |
| 132 | Control of Ferroelectric Aging by Manipulating Point Defects. Ferroelectrics, 2010, 401, 45-50. | 0.6 | 3 |
| 133 | The Irreversibility Transition in Amorphous Solids Under Periodic Shear. Understanding Complex Systems, 2017, , 227-259. | 0.6 | 3 |
| 134 | Bayesian Global Optimization applied to the design of shape-memory alloys. , 2020, , 519-537. | | 3 |
| 135 | Spin Models for Ferroelastics: towards a Spin Glass Description of Strain Glass. Solid State Phenomena, 0, 172-174, 1078-1083. | 0.3 | 2 |
| 136 | Athermal Martensites, Temperature-Time-Transformation Diagrams and Thermal Hysteresis: Monte Carlo Simulations of Strain Pseudospins. Solid State Phenomena, 2012, 185, 31-33. | 0.3 | 1 |
| 137 | Disentangling the effect of doping chemistry on the energy storage property of barium titanate ferroelectrics via data science tools. Journal of Materials Chemistry C, 0, , . | 5.5 | 1 |
| 138 | Influence of Dislocations on the Spatial Variation of Microstructure in Martensites. Key Engineering Materials, 0, 465, 77-80. | 0.4 | 0 |
| 139 | Quasi-one-dimensional thermal breakage. Physical Review E, 2013, 88, 042409. | 2.1 | 0 |
| 140 | Effects of thermal and electrical hysteresis on phase transitions and electrocaloric effect in ferroelectrics: A computational study. Acta Materialia, 2022, 228, 117784. | 7.9 | 0 |