Ashok Kumar

List of Publications by Year in descending order

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78	1,929	279798	265206
papers	citations	23 h-index	42 g-index

80	80	80	1869
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Applications of Strain-Coupled Magnetoelectric Composites. , 2022, , 229-238.		1
2	Improved energy storage density and energy efficiency of Samarium modified PMNT electroceramic. Ceramics International, 2022, 48, 18278-18285.	4.8	1
3	Electric field modulated photoluminescence in ferroelectric ceramics for photosensitive device applications. Materials Research Bulletin, 2022, 152, 111831.	5.2	0
4	Asymmetric resistive switching by anion out-diffusion mechanism in transparent Al/ZnO/ITO heterostructure for memristor applications. Surfaces and Interfaces, 2022, , 101950.	3.0	7
5	Improved humidity sensitivity and possible energy harvesters in lithium modified potassium niobium tantalate oxide. Materials Chemistry and Physics, 2022, 288, 126384.	4.0	2
6	Resistive switching in emerging materials and their characteristics for neuromorphic computing. , 2022, 1, 100004.		19
7	Recent progress in the fabrication and applications of flexible capacitive and resistive pressure sensors. Sensors and Actuators A: Physical, 2022, 344, 113770.	4.1	24
8	Oscillometric Waveform Evaluation for Blood Pressure Devices. Biomedical Engineering Advances, 2022, 4, 100046.	3.8	15
9	Effect of bismuth substitution on piezoelectric coefficients and temperature and pressure-dependent dielectric and impedance properties of lead zirconate titanate ceramics. Materials Today Communications, 2021, 26, 101846.	1.9	5
10	Spontaneous anion-exchange synthesis of optically active mixed-valence Cs₂Au₂I₆ perovskites from layered CsAuCl₄ perovskites. Chemical Communications, 2021, 57, 1478-1481.	4.1	18
11	Energy density and storage capacity of La³⁺ and Sc³⁺ co-substituted Pb(Zr_{0.53}Ti_{0.47})O₃ thin films. Nano Express, 2021, 2, 020007.	2.4	3
12	Evaluation of effective area of air piston gauge with limitations in pistonâ€“cylinder dimension measurements. Metrologia, 2021, 58, 035004.	1.2	5
13	Process and Insight of Pascal Traceability. Mapan - Journal of Metrology Society of India, 2021, 36, 691-708.	1.5	3
14	Tuning of superconducting phase transition and magnetic properties of ferroelectric-superconducting PbZr0.48Ti0.52O3/YBa2Cu3O7-Î´ heterostructure. Journal of Magnetism and Magnetic Materials, 2021, 527, 167753.	2.3	2
15	Flexible and wearable capacitive pressure sensor for blood pressure monitoring. Sensing and Bio-Sensing Research, 2021, 33, 100434.	4.2	48
16	Flexible microhyperboloids facets giant sensitive ultra-low pressure sensor. Sensors and Actuators A: Physical, 2021, 328, 112767.	4.1	20
17	Ferroic phase transitions and magnetoelectric coupling in cobalt doped BaTiO₃. Journal of Materials Chemistry C, 2021, 9, 12694-12711.	5.5	13
18	Room-temperature large magnetoelectricity in a transition metal doped ferroelectric perovskite. Physical Review B, 2021, 104, .	3.2	8

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19	Exploring phase transitions and magnetoelectric coupling of epitaxial asymmetric multilayer heterostructures. Journal of Materials Chemistry C, 2020, 8, 12113-12122.	5.5	8
20	Origin of High Nonradiative Recombination and Relevant Optoelectronic Properties of Ba 2 Bi 1+ x Nb 1â^' x O 6 : Candidate for Photo(electro)catalysis and Photovoltaic Applications?. Advanced Optical Materials, 2020, 8, 2000901.	7.3	3
21	Enhanced ferroelectric polarization in epitaxial superconductingâ€“ferroelectric heterostructure for non-volatile memory cell. AIP Advances, 2020, 10, .	1.3	3
22	Lowâ€Pressure Mechanical Switching of Ferroelectric Domains in PbZr_{0.48}Ti_{0.52}O₃. Advanced Electronic Materials, 2020, 6, 2000523.	5.1	12
23	Room temperature multiferroicity and magnetodielectric coupling in 0â€“3 composite thin films. Journal of Applied Physics, 2020, 127, .	2.5	16
24	Giant pressure sensitivity in piezo/ferro-electric ceramics. RSC Advances, 2020, 10, 9140-9145.	3.6	17
25	On long-term stability of an air piston gauge maintained at National Physical Laboratory, India. Vacuum, 2020, 176, 109357.	3.5	7
26	Tin titanateâ€”the hunt for a new ferroelectric perovskite. Reports on Progress in Physics, 2019, 82, 092501.	20.1	15
27	Ferroelectric-dielectric composite pressure sensor. Sensors and Actuators A: Physical, 2019, 297, 111536.	4.1	20
28	Evaluation of Uncertainty in the Effective Area and Distortion Coefficients of Air Piston Gauge Using Monte Carlo Method. Mapan - Journal of Metrology Society of India, 2019, 34, 371-377.	1.5	9
29	Uncertainty evaluation and phase variation of ultrasonic interferometer manometer: A primary pressure and vacuum standard. Vacuum, 2019, 165, 232-238.	3.5	10
30	Effects of light on ferroelectric polarization and leakage current. Vacuum, 2018, 153, 91-95.	3.5	10
31	Impedance spectroscopic study on microwave sintered (1â€‰â^'â€‰x) Na0.5Bi0.5TiO3â€“x BaTiO3 ceramics. Journal of Materials Science: Materials in Electronics, 2018, 29, 6966-6977.	2.2	67
32	Negative-capacitance and bulk photovoltaic phenomena in gallium nitride nanorods network. RSC Advances, 2018, 8, 32794-32798.	3.6	3
33	Exploring the Magnetoelectric Coupling at the Composite Interfaces of FE/FM/FE Heterostructures. Scientific Reports, 2018, 8, 17381.	3.3	26
34	Experimental evidence of electronic polarization in a family of photo-ferroelectrics. RSC Advances, 2017, 7, 12842-12855.	3.6	39
35	Evidence of strong magneto-dielectric coupling and enhanced electrical insulation at room temperature in Nd and Mn co-doped bismuth ferrite. Journal of Applied Physics, 2017, 122, .	2.5	22
36	Studies on dielectric, optical, magnetic, magnetic domain structure, and resistance switching characteristics of highly c-axis oriented NZFO thin films. Journal of Applied Physics, 2017, 122, 033902.	2.5	13

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37	Palladium-based ferroelectrics and multiferroics: Theory and experiment. Physical Review B, 2017, 95, .	3.2	23
38	Ferroelectric capped magnetization in multiferroic PZT/LSMO tunnel junctions. Applied Physics Letters, 2015, 106, .	3.3	9
39	Anomalous change in leakage and displacement currents after electrical poling on lead-free ferroelectric ceramics. Applied Physics Letters, 2015, 107, .	3.3	39
40	The Nature of Magnetoelectric Coupling in Pb(Zr,Ti)O₃â€“Pb(Fe,Ta)O₃. Advanced Materials, 2015, 27, 6068-6073.	21.0	58
41	Magnetoelectric Characterization of Multiferroic Nanostructure Materials. Ferroelectrics, 2014, 473, 137-153.	0.6	9
42	Properties of the new electronic device material LaGdO3(Phys. Status Solidi B 1/2014). Physica Status Solidi (B): Basic Research, 2014, 251, n/a-n/a.	1.5	0
43	Properties of the new electronic device material La<scp>G</scp>dO₃. Physica Status Solidi (B): Basic Research, 2014, 251, 131-139.	1.5	13
44	Compositional engineering of BaTiO3/(Ba,Sr)TiO3 ferroelectric superlattices. Journal of Applied Physics, 2013, 114, .	2.5	37
45	Microstructure and surface morphology evolution of pulsed laser deposited piezoelectric BaTiO3 films. Journal of Materials Chemistry C, 2013, 1, 6308.	5.5	8
46	Analysis of Leakage Currents through PLD Grown Ultrathin a-LaGdO3 Based High-k Metal Gate Devices. Materials Research Society Symposia Proceedings, 2013, 1561, 1.	0.1	0
47	Establishing a Continuous Chain of Traceability for Pressure Measurements up to 40 MPa. NCSL International Measure, 2013, 8, 56-65.	0.1	6
48	Ferroelectric and Dielectric Properties of BaTiO₃/Ba_{0.30}Sr_{0.70}TiO₃ Superlattices. Integrated Ferroelectrics, 2012, 134, 139-145.	0.7	3
49	Effect of electrode resistance on dielectric and transport properties of multiferroic superlattice: A Impedance spectroscopy study. AIP Advances, 2012, 2, .	1.3	51
50	Magnon Raman spectroscopy and in-plane dielectric response in BiFeO3: Relation to the Polomska transition. Physical Review B, 2012, 85, .	3.2	31
51	Microstructure-Relaxor Property Relationship of		

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55	anomalies and phonon-spin coupling in oriented PbFe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>Nb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>	3.2	54
56	Symmetries and multiferroic properties of novel room-temperature magnetoelectrics: Lead iron tantalate â€“ lead zirconate titanate (PFT/PZT). AIP Advances, 2011, 1, .	1.3	110
57	Magneto-Electric Coupling in PbZr0.53Ti0.47O3/CoFe2O4 Layered Thin Films. Integrated Ferroelectrics, 2011, 124, 33-40.	0.7	2
58	Investigation on Room Temperature Multiferroic Bi-Relaxor. Integrated Ferroelectrics, 2011, 131, 110-118.	0.7	7
59	Investigation on (Sr,Co)Bi₂Nb₂O₉ thin films: A leadâ€free room temperature multiferroics. Physica Status Solidi - Rapid Research Letters, 2010, 4, 25-27.	2.4	7
60	Fabrication and characterization of the multiferroic birelaxor leadâ€“ironâ€“tungstate/leadâ€“zirconateâ€“titanate. Journal of Applied Physics, 2010, 108, .	2.5	32
61	Novel room temperature multiferroics for random access memory elements. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 2237-2242.	3.0	10
62	Magnetic effects on dielectric and polarization behavior of multiferroic heterostructures. Applied Physics Letters, 2010, 96, 072904.	3.3	51
63	Positive temperature coefficient of resistivity and negative differential resistivity in lead iron tunstate-lead zirconate titate. Applied Physics Letters, 2009, 94, 212903.	3.3	16
64	Temperature-Dependent Structural Disintegration of Delafossite CuFeO2. Materials Research Society Symposia Proceedings, 2009, 1183, 55.	0.1	1
65	Fabrication and Characterization of Artificially Designed PZT/LSMO Multiferroics Heterostructure. Materials Research Society Symposia Proceedings, 2009, 1199, 48.	0.1	1
66	Investigation of local structure of leadâ€free relaxor Ba(Ti_{0.70}Sn_{0.30})O₃ by Raman spectroscopy. Journal of Raman Spectroscopy, 2009, 40, 459-462.	2.5	32
67	Strain-induced artificial multiferroicity in Pb(Zr0.53Ti0.47)O3/Pb(Fe0.66W0.33)O3 layered nanostructure at ambient temperature. Journal of Materials Science, 2009, 44, 5113-5119.	3.7	22
68	Dynamic magneto-electric multiferroics PZT/CFO multilayered nanostructure. Journal of Materials Science, 2009, 44, 5127-5142.	3.7	62
69	Magnetic control of large room-temperature polarization. Journal of Physics Condensed Matter, 2009, 21, 382204.	1.8	77
70	Probing the ferroelectric phase transition in solâ€“gelâ€derived polycrystalline bismuth ferrite thin films. Journal of Raman Spectroscopy, 2008, 39, 1262-1267.	2.5	21
71	Strain-Induced Relaxor Behavior in PbSc0.50Nb0.25Ta0.25O3Thin Films: A Comparison with Nanoceramics. Journal of the American Ceramic Society, 2008, 91, 1788-1795.	3.8	15
72	SIZE AND STRAIN EFFECTS ON RELAXOR FERROELECTRIC PROPERTIES OF PBSC0.5NB(1 â^'x)/2TAx/2O3 THIN FILMS AND NANOCERAMICS. Integrated Ferroelectrics, 2008, 100, 297-307.	0.7	2

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73	Multiferroic Pb(Fe0.66W0.33)0.80Ti0.20O3 thin films: A room-temperature relaxor ferroelectric and weak ferromagnetic. Applied Physics Letters, 2008, 92, .	3.3	81
74	Impedance spectroscopy of multiferroic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Pb</mml:mi><mml:msub><mml:mi mathvariant="normal">Zr</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="normal">Ti</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mo>â^•</mml:mo><mml:mi ma	3.2	360
75	Observation of magnetoelectric coupling in glassy epitaxial PbFe0.5Nb0.5O3 thin films. Applied Physics Letters, 2008, 93, .	3.3	30
76	Glasslike state in PbFe1/2Nb1/2O3 single crystal. Applied Physics Letters, 2008, 93, .	3.3	37
77	Observation of one magnon and magnon-phonon-electric dipole coupling in multiferroics bismuth ferrite thin films. Applied Physics Letters, 2008, 92, .	3.3	31
78	Probing the ferroelectric phase transition through Raman spectroscopy in Pb(Fe2â^•3W1â^•3)1â^•2Ti1â^•2O3 thin films. Applied Physics Letters, 2007, 90, 262907.	3.3	26