

Saket Asthana

List of Publications by Year in descending order

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90
papers

2,123
citations

218677

26
h-index

254184

43
g-index

91
all docs

91
docs citations

91
times ranked

2220
citing authors

#	ARTICLE	IF	CITATIONS
1	Theoretical and experimental investigation of Raman modes, ferroelectric and dielectric properties of relaxor Na _{0.5} Bi _{0.5} TiO ₃ . Journal of Applied Physics, 2013, 113, .	2.5	183
2	Effect of poling process on piezoelectric properties of sol-gel derived BZT-BCT ceramics. Journal of the European Ceramic Society, 2015, 35, 1785-1798.	5.7	154
3	Investigation of structural, magnetic and optical properties of rare earth substituted bismuth ferrite. Journal of Rare Earths, 2013, 31, 370-375.	4.8	118
4	A hybrid magnet with coexistence of ferromagnetism and photoinduced Fe(III) spin-crossover. Chemical Science, 2011, 2, 1121.	7.4	86
5	Large piezoelectric strain observed in sol-gel derived BZT-BCT ceramics. Current Applied Physics, 2014, 14, 396-402.	2.4	84
6	Photomagnetism of a <i>trans</i> -[Dithiocyanato Iron(II) Complex with a Tetradentate <i>N,N</i> -bis(2-pyridylmethyl)1,2-ethanediamine Ligand. Chemistry - A European Journal, 2012, 18, 35924-5934.		65
7	Observation of direct and indirect magnetoelectricity in lead free ferroelectric (Na _{0.5} Bi _{0.5} TiO ₃) _{1-x} (CoFe ₂ O ₄) _x particulate composite. Applied Physics Letters, 2012, 101, 082902.	3.3	56
8	Evidence of improved ferroelectric phase stabilization in Nd and Sc co-substituted BiFeO ₃ . Journal of Applied Physics, 2014, 116, .	2.5	54
9	Study of structural effect on Eu-substituted LSMO manganite for high temperature coefficient of resistance. Physica B: Condensed Matter, 2014, 448, 277-280.	2.7	54
10	Enhanced magnetization and improved insulating character in Eu substituted BiFeO ₃ . Journal of Applied Physics, 2014, 115, .	2.5	54
11	Ferroelectric, piezoelectric and mechanical properties in lead free (0.5)Ba(Zr _{0.2} Ti _{0.8})O ₃ -(0.5)(Ba _{0.7} Ca _{0.3})TiO ₃ electroceramics. Ceramics International, 2015, 41, 1980-1985.	4.8	54
12	Study of structural, magnetic and electrical properties on Ho-substituted BiFeO ₃ . Solid State Communications, 2012, 152, 2071-2077.	1.9	52
13	Synthesis of capped nanosized Mn ^{1-x} Zn ^x Fe ₂ O ₄ (0 ≤ x ≤ 0.8) by microwave refluxing for bio-medical applications. Journal of Magnetism and Magnetic Materials, 2005, 293, 55-61.	2.3	50
14	Effect of CoFe ₂ O ₄ mole percentage on multiferroic and magnetoelectric properties of Na _{0.5} Bi _{0.5} TiO ₃ /CoFe ₂ O ₄ particulate composites. Ceramics International, 2014, 40, 7799-7804.	4.8	46
15	Control over relaxor, piezo-photocatalytic and energy storage properties in Na _{0.5} Bi _{0.5} TiO ₃ via processing methodologies. Journal of Alloys and Compounds, 2019, 798, 540-552.	5.5	43
16	Light-Induced Stored Information in Nanoparticles. European Journal of Inorganic Chemistry, 2010, 2010, 282-288.	2.0	41
17	First principles study of lead free piezoelectric AgNbO ₃ and (Ag ^{1-x} K ^x)NbO ₃ solid solutions. Solid State Communications, 2012, 152, 1707-1710.	1.9	40
18	Enhancement of magnetic and electrical properties in Sc substituted BiFeO ₃ multiferroic. Physica B: Condensed Matter, 2014, 448, 267-272.	2.7	40

#	ARTICLE	IF	CITATIONS
19	Enhanced Electrocaloric Effect and Energy Storage Density of Nd ³⁺ -Substituted 0.92NBT-0.08BT Lead Free Ceramic. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700915.	1.8	40
20	Cyanocarbanion-Based Spin-Crossover Materials: Photocrystallographic and Photomagnetic Studies of a New Iron(II) Neutral Chain. <i>Inorganic Chemistry</i> , 2010, 49, 9358-9368.	4.0	38
21	Thermal and light-induced spin-transitions in iron(ii) complexes of 2,6-bis(4-halopyrazolyl)pyridines: the influence of polymorphism on a spin-crossover compound. <i>Dalton Transactions</i> , 2009, , 6656.	3.3	37
22	Enhanced mechanical and ferroelectric properties through grain size refinement in site specific substituted lead free Na _{0.5-x} K _x Bi _{0.5} TiO ₃ (x = 0-0.10) ceramics. <i>Materials Letters</i> , 2017, 190, 273-275.	2.6	36
23	Magnetocaloric effect and critical field analysis in Eu substituted La _{0.7-x} Eu _x Sr _{0.3} MnO ₃ (x = 0.0, 0.1, 0.2). <i>Tj ETQq1 1 0.784314 rgBT /Overlock</i>	2.3	35
24	A variable temperature EPR study of the manganites (La _{1/3} Sm _{2/3}) _{2/3} Sr _x Ba _{0.33-x} MnO ₃ (x=0.0, 0.1, 0.2). <i>Tj ETQq0 0 0 rgBT /Overlock</i>	2.3	35
25	Multifunctional Nd ³⁺ substituted Na _{0.5-x} Bi _{0.5-x} TiO ₃ as lead-free ceramics with enhanced luminescence, ferroelectric and energy harvesting properties. <i>RSC Advances</i> , 2018, 8, 15282-15289.	3.6	35
26	Structural, thermal and photomagnetic properties of spin crossover [Fe(bpp) ₂] ²⁺ salts bearing [Cr(L)(ox) ₂] ⁻ anions. <i>Dalton Transactions</i> , 2009, , 8087.	3.3	27
27	Investigation of structural, vibrational and ferroic properties of AgNbO ₃ at room temperature using neutron diffraction, Raman scattering and density-functional theory. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 215303.	2.8	25
28	Investigation of near room temperature magnetocaloric, magnetoresistance and bolometric properties of Nd _{0.5} La _{0.2} Sr _{0.3} MnO ₃ : Ag ₂ O manganites. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 6156-6165.	2.2	25
29	Polarization extension mechanism revealed through dynamic ferroelectric hysteresis and electric field driven structural distortions in lead free Na _{0.5-x} Bi _{0.5-x} TiO ₃ ceramic. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 385601.	2.8	25
30	Evidence for the suppression of intermediate anti-ferroelectric ordering and observation of hardening mechanism in Na _{1/2} Bi _{1/2} TiO ₃ ceramics through cobalt substitution. <i>AIP Advances</i> , 2014, 4, 017111.	1.3	24
31	Correlation between structural, ferroelectric and luminescence properties through compositional dependence of Nd ³⁺ ion in lead free Na _{0.5} Bi _{0.5} TiO ₃ . <i>Journal of Alloys and Compounds</i> , 2018, 732, 233-239.	5.5	23
32	Mono-aqua-bridged dinuclear complexes of Cu(II) containing NNO donor Schiff base ligand: Hydrogen-bond-mediated exchange coupling. <i>Journal of Molecular Structure</i> , 2010, 965, 39-44.	3.6	22
33	Structural and microstructural correlation with ferroelectric and dielectric properties of nanostructured Na _{0.5} Bi _{0.5} TiO ₃ ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 9741-9746.	2.2	22
34	Improved magnetization and reduced leakage current in Sm and Sc co-substituted BiFeO ₃ . <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	22
35	Investigation on the discharge energy storage density of the Rb substituted Na _{0.5-x} Bi _{0.5-x} TiO ₃ relaxor ferroelectric and its suitability for the orthopedic application. <i>Journal of the American Ceramic Society</i> , 2019, 102, 6802-6816.	3.8	21
36	Influence of A-site cation disorder on structural and magnetocaloric properties of Nd _{0.7-x} La _x Sr _{0.3} MnO ₃ (x=0.0, 0.1, 0.2 & 0.3). <i>Journal of Rare Earths</i> , 2015, 33, 1072-1080.	4.8	19

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37	Magneto-transport studies on $(\text{Pr}_{1/3}\text{Sm}_{2/3})_2\text{A}_{1/3}\text{MnO}_3$ (A = Ca, Sr and Ba) compounds. Journal of Physics Condensed Matter, 2004, 16, 5297-5307.	1.8	18
38	Observation of coexistence of ferroelectric and antiferroelectric phases in Sc substituted BiFeO_3 . Journal of Alloys and Compounds, 2015, 642, 192-199.	5.5	18
39	Optimum discharge energy density at room temperature in relaxor $\text{K}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$ for green energy harvesting. Journal Physics D: Applied Physics, 2018, 51, 115501.	2.8	17
40	Effect of deposition temperature on structural, microstructural and magnetic properties of CoFe_2O_4 thin films deposited by pulsed laser deposition. Journal of Materials Science: Materials in Electronics, 2017, 28, 446-453.	2.2	15
41	Monoclinic Ca -phase stabilization in magnetically diluted lead free $\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$ "Evolution of spin glass like behavior with enhanced ferroelectric and dielectric properties. Materials Research Express, 2015, 2, 096301.	1.6	14
42	Nature of electric field driven ferroelectric phase transition in lead-free $\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$: In-situ temperature dependent ferroelectric hysteresis and Raman scattering studies. Journal of Alloys and Compounds, 2018, 732, 945-951.	5.5	14
43	Resolution of ambiguity between the depolarization and ferroelectric relaxor transition temperature through dielectric studies in lead-free perovskite $\text{K}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$. Materials Chemistry and Physics, 2019, 231, 344-350.	4.0	14
44	Lattice effect on the magnetic and magneto-transport properties of $(\text{La}_{1/3}\text{Sm}_{2/3})_{0.67}\text{Ba}_{0.33-x}\text{Sr}_x\text{MnO}_3$ ($x=0.0, 0.1, 0.2$ and 0.33) compounds. Journal of Alloys and Compounds, 2008, 450, 136-141.	5.5	13
45	Structural, ferroelectric and piezoelectric properties of chemically processed, low temperature sintered piezoelectric BZT "BCT ceramics. Materials Research Express, 2016, 3, 035702	1.6	12
46	Effect of Cr substitution on transport and magnetic ordering in $\text{Ca}_{1-x}\text{Sr}_x\text{MnO}_3$ overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/table/dtd" Electronic structure, vibrational and thermoelectric properties of AgTaO_3 : A first-principles study. Journal of Alloys and Compounds, 2017, 696, 1168-1173.	2.3	11
47	Enhanced electrical and photocatalytic activities in $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ through structural modulation by using anatase and rutile phases of TiO_2 . Journal of Materiomics, 2022, 8, 18-29.	5.5	11
48	Enhanced electrical and photocatalytic activities in $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ through structural modulation by using anatase and rutile phases of TiO_2 . Journal of Materiomics, 2022, 8, 18-29.	5.7	11
49	Electronic phase separation in $(\text{La}_{1-x}\text{Sm}_{2x})_2\text{A}_{1-x}\text{MnO}_3$ (A=Ca, Sr and Ba) compounds. Journal of Applied Physics, 2005, 97, 10H711.	2.5	10
50	Investigation of Raman Modes and Born Effective Charges in $\text{AgNb}_{1/2}\text{Ta}_{1/2}\text{O}_3$: A Density Functional and Raman Scattering Study. Journal of the American Ceramic Society, 2016, 99, 332-339.	3.8	10
51	Nd^{3+} and Nb^{5+} Co-Substitution Inducing a Large Electrocaloric Response in $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ Lead-Free Ceramics. Physica Status Solidi (B): Basic Research, 2019, 256, 1900001.	1.5	10
52	Enhancement in electrical and optical properties by substitution of lanthanides (Nd^{3+} and Eu^{3+}) in lead free $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ ceramics. Ferroelectrics, 2017, 518, 23-30.	0.6	9
53	Effect of W/Co co-substitution on structural, microstructural, magnetic and electrical properties of $\text{Bi}_4\text{NdFeTi}_3\text{O}_{15}$ aurivillius compound. Journal of Materials Science: Materials in Electronics, 2020, 31, 874-884.	2.2	9
54	Effect of local strain fields on the structural, Néel transition temperature and long range ferroelectric ordering in rare earth substituted $\text{Bi}_{0.9}\text{R}_{0.1}\text{FeO}_3$ multiferroic ceramics (where, $\text{R}=\text{Gd}^{3+}$), Tj ETQq0 0.0 rgBT / Overlock 10		

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55	Randomly arranged cation-ordered nanoregions in lead-free relaxor ferroelectric K1/2Bi1/2TiO3: Prediction from first-principles study. Journal of Applied Physics, 2018, 123, .	2.5	8
56	Effect of cobalt substitution on magneto-transport properties of Nd0.7Sr0.3Mn1-xCoxO3 (0.0 ≤ x ≤ 1). Journal of Applied Physics, 2005, 97, 10C101.	2.5	7
57	The electrical properties and relaxation behavior of AgNb1/2Ta1/2O3 ceramic. Physica B: Condensed Matter, 2017, 506, 42-47.	2.7	7
58	Influence of Nd Substitution by La in on Structural and Transport Properties for Sensing Applications. ISRN Materials Science, 2013, 2013, 1-10.	1.0	6
59	Microstructural studies of AgNbO3 ceramic by using complex impedance spectroscopy. AIP Conference Proceedings, 2015, , .	0.4	6
60	Small polarons as charge carriers in the transport of (La1/3Sm2/3)0.67Ba0.33-xSrxMnO3 (x=0, 0.1, 0.2) Tj ETQq0,0,0 rgBT /Overlock 1	2.7	5
61	Weak charge-ordering behavior in phase separated (Ln1/3Sm2/3)2/3Ca1/3MnO3 (Ln=Pr and La) manganites. Solid State Communications, 2007, 143, 522-526.	1.9	5
62	Predicting High Magneto-€Electric Coupling in Gd Substituted BiFeO 3. Physica Status Solidi (B): Basic Research, 2019, 256, 1900097.	1.5	5
63	Effect of La³⁺-donor substitution on structural, micro structural, dielectric and ferroelectric characteristics of BLNT-BZT solid solutions. Phase Transitions, 2019, 92, 1-12.	1.3	5
64	The effect of A-site cation on ferroelectric properties in Na0.5Bi0.5TiO3-based materials: Correlation between Burns temperature and remanent polarization. Journal of Applied Physics, 2020, 127, .	2.5	5
65	Scaling behavior of different shapes of hysteresis loops and recoverable energy storage density in Na0.5Bi0.5TiO3, K0.5Bi0.5TiO3, and Na0.25K0.25Bi0.5TiO3 ferroelectrics. Journal of Materiomics, 2022, 8, 918-927.	5.7	5
66	Magnetic and photomagnetic studies in Nd0.7Sr0.3CoO3. Solid State Communications, 2007, 142, 132-136.	1.9	4
67	Effects of A-site ionic size variation on the magnetic and transport properties of (PrxSm1-x)2/3Sr1/3MnO3 (0 ≤ x ≤ 1). Physica Status Solidi (B): Basic Research, 2007, 244, 4542-4545.	1.5	4
68	Effect of cobalt substitution on magnetic and transport properties of Nd0.5Sr0.5Mn1-x Co x O3 (x =) Tj ETQq0,0,0 rgBT /Overlock 1	1.7	4
69	Origin of enhanced piezoelectric properties revealed through electric field driven studies in 0.94(Na0.5Bi0.5TiO3)0.06(Ba0.85Ca0.15Ti0.9Zr0.1O3) ceramics. Journal of Applied Physics, 2020, 127, .	2.5	4
70	Investigation on energy storage properties and thermally stable dielectric constant for high temperature electronic device applications in the holmium substituted Na0.5Bi0.5TiO3. Journal of Materials Science: Materials in Electronics, 2021, 32, 20225-20239.	2.2	4
71	Magnetic and magnetotransport properties in (LaxSm1-x)2/3Sr1/3MnO3 (x = 1/3, 1/2 and 2/3) manganites. Physica Status Solidi (B): Basic Research, 2006, 243, 1922-1928.	1.5	3
72	Structural, magnetic and magneto-transport studies on the (La2/3Sm1/3)0.67Ba0.33-xSrxMnO3(x= 0, 0.1,) Tj ETQq0 0 0 rgBT /Overlock 1	2.8	3

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73	Effect of A-site ionic size variation on TCR and electrical transport properties of $(\text{Nd}_{0.7-x}\text{La}_x)_{0.7}\text{Sr}_{0.3}\text{MnO}_{3-\delta}$ with $x=0.1$ and 0.2 . IOP Conference Series: Materials Science and Engineering, 2015, 73, 012047.		
74	The effect on electrical and luminescent properties in nanocrystalline $\text{Na}_{0.5}\text{Bi}_{0.5}\text{Nd}_x\text{TiO}_3$. Materials Research Express, 2017, 4, 095019.	1.6	3
75	Investigations of electrical properties of Nd substituted BiFeO_3 multiferroic ceramics. AIP Conference Proceedings, 2013, , .	0.4	2
76	Global and local structural variations near the antiferroelectric regime in $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$. AIP Conference Proceedings, 2015, , .	0.4	2
77	Observation of bond enthalpy dependence of insulating character in rare earth substituted BiFeO_3 . Materials Research Express, 2017, 4, 126305.	1.6	2
78	Enhanced energy storage density in lead free $(\text{Na}_{0.5}\text{Bi}_{0.48}\text{Eu}_{0.02})\text{Ti}_{1-x}\text{Nb}_x\text{O}_3$ ($x=0.00, 0.01$ & 0.02) ceramics. AIP Conference Proceedings, 2018, , .	0.4	2
79	Nature of correlated polaron hopping mechanism in A-site cation disorder $\text{Nd}_{0.7-x}\text{La}_x\text{Sr}_{0.3}\text{MnO}_3$ ($x=0.0, 0.1, 0.2$ and 0.3) manganites. Applied Physics A: Materials Science and Processing, 2020, 126, 1. 2.3		2
80	Structural and magnetic properties of Ba and Sn co-substituted bismuth ferrite. Materials Today: Proceedings, 2021, 39, 1515-1518.	1.8	2
81	The structural and electronic properties of cubic AgMO_3 ($M=\text{Nb}, \text{Ta}$) by first principles calculations. AIP Conference Proceedings, 2016, , .	0.4	2
82	Role of B-site disorder in the properties of lead-free $\text{Na}_{0.5}\text{Bi}_{0.5}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ ceramic: A possible electrocaloric material with low leakage current. Journal of Physics and Chemistry of Solids, 2022, 163, 110579.	4.0	2
83	Electrical switching to probe complex phases in a frustrated manganite. Solid State Communications, 2014, 187, 64-67.	1.9	1
84	Evolution of multifunctional behavior in site specific cation substituted $\text{Na}_{0.5}\text{Bi}_{0.45}\text{Gd}_{0.05}\text{Ti}_{0.95}\text{Mn}_{0.05}\text{O}_3$ ceramics. Journal of the Korean Physical Society, 2013, 62, 1979-1984.	0.7	0
85	A lead free $0.96(\text{Na}_{0.5}\text{Bi}_{0.49}\text{Nd}_{0.01}\text{TiO}_3)_{-0.04}\text{BaTiO}_3$ piezoceramic for possible optoelectronic device applications. AIP Conference Proceedings, 2018, , .	0.4	0
86	Improved ferroelectric and photoluminescence properties in Pr^{3+} substituted $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ synthesized using hydrothermal route. AIP Conference Proceedings, 2018, , .	0.4	0
87	Evidence of suppressed oxygen vacancies in Sm and Sc co-substituted BiFeO_3 . AIP Conference Proceedings, 2018, , .	0.4	0
88	Particle size dependent properties of $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ synthesized using hydrothermal technique. AIP Conference Proceedings, 2019, , .	0.4	0
89	Improved insulating and dielectric properties in Ho and Sc doped BiFeO_3 . AIP Conference Proceedings, 2020, , .	0.4	0
90	Effect of A-site ionic radii on the magneto-transport properties in $(\text{La}_x\text{Sm}_{1-x})_{2/3}\text{Sr}_{1/3}\text{MnO}_3$ ($x = 1/3, 1/2$) T_j ETQq0 0 0 rgBT /Qoverlock 1		