

Nitish Kumar

List of Publications by Year in descending order

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papers

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566801

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#	ARTICLE	IF	CITATIONS
1	Multilayer ceramic capacitors based on relaxor BaTiO ₃ -Bi(Zn _{1/2} Ti _{1/2})O ₃ for temperature stable and high energy density capacitor applications. Applied Physics Letters, 2015, 106, .	1.5	106
2	Current Understanding of Structureâ€“Processingâ€“Property Relationships in BaTiO ₃ -Bi(Mg)O ₃ Dielectrics. Journal of the American Ceramic Society, 2016, 99, 2849-2870.	1.9	99
3	Large electric field-induced strain and large improvement in energy density of bismuth sodium potassium titanate-based piezoelectric ceramics. Journal of Alloys and Compounds, 2018, 739, 457-467.	2.8	55
4	Defectâ€“Driven Structural Distortions at the Surface of Relaxor Ferroelectrics. Advanced Functional Materials, 2019, 29, 1900344.	7.8	35
5	Conduction Mechanisms in BaTiO ₃ -Bi(Zn _{1/2} Ti _{1/2})O ₃ Ceramics. Journal of the American Ceramic Society, 2016, 99, 3047-3054.	1.9	33
6	Leadâ€“Free (Ba _{0.70} Sr _{0.30})TiO ₃ -Modified Bi _{0.5} (Na _{0.80} K _{0.20}) _{0.5} TiO ₃ Ceramics with Large Electric Fieldâ€“Induced Strains. Journal of the American Ceramic Society, 2016, 99, 1615-1624.	1.9	30
7	Defect mechanisms in BaTiO ₃ -Bi(Mg)O ₃ ceramics. Journal of the American Ceramic Society, 2018, 101, 2376-2390.	1.9	30
8	Electromechanical strain and bipolar fatigue in Bi(Mg _{1/2} Ti _{1/2})O ₃ -(Bi _{1/2} K _{1/2})TiO ₃ -(Bi _{1/2} Na _{1/2})TiO ₃ ceramics. Journal of Applied Physics, 2013, 114, .	1.1	28
9	Large strain in lead-free piezoelectric (1-x)yBi _{0.5} Na _{0.5} TiO ₃ -xBi _{0.5} K _{0.5} TiO ₃ -yBi _{0.5} Li _{0.5} TiO ₃ system near MPB prepared via the combustion technique. Ceramics International, 2015, 41, S127-S135.	2.3	28
10	Investigation of a new lead-free (1-x)yBNT-xBKT-yBZT piezoelectric ceramics. Ceramics International, 2017, 43, S102-S109.	2.3	24
11	Electric fieldâ€“temperature phase diagrams for (Bi _{1/2} Na _{1/2})TiO ₃ -BaTiO ₃ -(K _{1/2} Na _{1/2})NbO ₃ relaxor ceramics. Journal of Materials Chemistry C, 2018, 6, 12224-12233.		
12	Role of point defects in bipolar fatigue behavior of Bi(Mg _{1/2} Ti _{1/2})O ₃ modified (Bi _{1/2} K _{1/2})TiO ₃ -(Bi _{1/2} Na _{1/2})TiO ₃ relaxor ceramics. Journal of Applied Physics, 2014, 115, .	1.1	20
13	DC-bias dependent impedance spectroscopy of BaTiO ₃ -Bi(Zn _{1/2} Ti _{1/2})O ₃ ceramics. Journal of Materials Chemistry C, 2016, 4, 1782-1786.	2.7	19
14	Resistivity Enhancement and Transport Mechanisms in (1-x)BaTiO ₃ -xBi(Zn _{1/2} Ti _{1/2})O ₃ and (1-x)SrTiO ₃ -xBi(Zn _{1/2} Ti _{1/2})O ₃ . Journal of the American Ceramic Society, 2015, 98, 2548-2555.	1.9	18
15	Synthesis and electrical properties of BaBiO ₃ and high resistivity BaTiO ₃ -BaBiO ₃ ceramics. Journal of Advanced Dielectrics, 2016, 06, 1650032.	1.5	16
16	Electrical fatigue behavior of NBT-BT-xKNN ferroelectrics: effect of ferroelectric phase transformations and oxygen vacancies. Journal of Materials Chemistry C, 2020, 8, 3887-3896.	2.7	16
17	Electric-Field-Induced Phase Transformation and Frequency-Dependent Behavior of Bismuth Sodium Titanateâ€“Barium Titanate. Materials, 2020, 13, 1054.	1.3	14
18	Large electric field-induced strain and piezoelectric responses of lead-free Bi _{0.5} (Na _{0.80} K _{0.20}) _{0.5} TiO ₃ -Ba(Ti _{0.90} Sn _{0.10})O ₃ ceramics near morphotropic phase boundary. Electronic Materials Letters, 2015, 11, 828-835.	1.0	13

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19	Electrical fatigue failure in $(\text{Na}_{1/2}\text{Bi}_{1/2})\text{TiO}_3$ \leftrightarrow BaTiO_3 relaxor ceramics. Journal of the American Ceramic Society, 2019, 102, 5997-6007.	1.9	11
20	Spontaneous relaxor to ferroelectric transition in lead-free relaxor piezoceramics and the role of point defects. Journal of the European Ceramic Society, 2020, 40, 2323-2330.	2.8	11
21	Tailoring transport properties through nonstoichiometry in BaTiO_3 \leftrightarrow BiScO_3 and SrTiO_3 \leftrightarrow $\text{Bi}(\text{Zn}_{1/2}\text{Ti}_{1/2})\text{O}_3$ for capacitor applications. Journal of Materials Science, 2016, 51, 9404-9414.	1.7	10
22	The complex structural mechanisms behind strain curves in bismuth sodium titanate \leftrightarrow barium titanate. Applied Physics Letters, 2020, 116, .	1.5	7
23	The Influence of Firing Temperatures on the Crystal Structure, Microstructure and Dielectric Properties of $0.68\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3 - 0.22\text{Bi}_{0.5}\text{K}_{0.5}\text{TiO}_3 - 0.10\text{Bi}_{0.5}\text{Ca}_{0.5}\text{TiO}_3$ Prepared Via the Combustion Technique. Ferroelectrics, 2016, 490, 51-59.	0.3	6
24	Conduction properties of acceptor-doped BaTiO_3 \leftrightarrow $\text{Bi}(\text{Zn}_{1/2}\text{Ti}_{1/2})\text{O}_3$ -based ceramics. Journal of Materials Science, 2020, 55, 16290-16299.	1.7	6
25	Functional surface layers in relaxor ferroelectrics. Journal of Materials Chemistry C, 2020, 8, 7663-7671.	2.7	5
26	Fabrication of $(1-x)\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3 - x(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ ceramics saving energy by molten-salt synthetic method. Materials Today: Proceedings, 2018, 5, 14840-14846.	0.9	4
27	Pyroelectric material property considerations for x-ray generation. Journal of Applied Physics, 2022, 131, 114503.	1.1	3
28	Impedance spectroscopy of lead-free $(1-x-y)\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ \leftrightarrow $(1-x)\text{Bi}_{0.5}\text{K}_{0.5}\text{TiO}_3$ piezoelectric ceramics. Integrated Ferroelectrics, 2017, 177, 79-89.	0.7	2
29	Electrical fatigue in $0.94\text{Na}_0.5\text{Bi}_0.5\text{TiO}_3$ \leftrightarrow 0.06BaTiO_3 : Influence of the surface layer. Applied Physics Letters, 2020, 117, .	1.5	2
30	Fracture and electric field induced crack growth behavior in NBT \leftrightarrow BT relaxor ferroelectrics. Journal of the American Ceramic Society, 2021, 104, 2158-2169.	1.9	2