

Satyanarayan Patel

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4390002/satyanarayan-patel-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

94
papers

1,881
citations

20
h-index

41
g-index

99
ext. papers

2,246
ext. citations

2.9
avg, IF

5.34
L-index

#	Paper	IF	Citations
94	Enhanced Energy Conversion and Storage Properties of Sn-Doped BaTiO ₃ Bulk Ceramics Using Compressive Stresses. <i>Journal of Electronic Materials</i> , 2022 , 51, 1297-1310	1.9	0
93	Effect of Stress on Ferroelectric, Energy Storage and Harvesting Properties of 0.4BZT-0.6BCT Ceramics. <i>Smart Innovation, Systems and Technologies</i> , 2022 , 57-65	0.5	
92	Effect of porous auxetic structures on low-frequency piezoelectric energy harvesting systems: a finite element study. <i>Applied Physics A: Materials Science and Processing</i> , 2022 , 128, 1	2.6	3
91	Energy and exergy analysis of pebble bed thermal energy storage system for diesel engine exhaust. <i>Thermal Science</i> , 2022 , 72-72	1.2	
90	Flexo/elasto-caloric effects in 0.66Pb(Mg ^{1/3} Nb ^{2/3})O ₃ -0.34PbTiO ₃ single crystal. <i>Materials Letters</i> , 2021 , 287, 129301	3.3	
89	Effect of uniaxial stress on energy harvesting, storage and electrocaloric performance of BZT ceramics. <i>Journal of the Korean Ceramic Society</i> , 2021 , 58, 437-444	2.2	3
88	Flexocaloric effect in ferroelectric materials: methods of indirect evaluation. <i>Applied Physics A: Materials Science and Processing</i> , 2021 , 127, 1	2.6	0
87	Elastocaloric effect in zinc oxide nanowire. <i>Functional Materials Letters</i> , 2021 , 14, 2150021	1.2	0
86	Thermo-mechanical energy harvesting and storage analysis in 0.6BZT-0.4BCT ceramics. <i>EPJ Applied Physics</i> , 2021 , 95, 20901	1.1	1
85	Thermomechanical analysis of 0.94Na ^{1/2} Bi ^{1/2} TiO ₃ -0.06BaTiO ₃ /ZnO composites using finite element method. <i>Journal of Alloys and Compounds</i> , 2021 , 854, 157161	5.7	1
84	Impedance and modulus analysis of barium calcium titanate ferroelectric ceramics. <i>Journal of the Korean Ceramic Society</i> , 2021 , 58, 337-350	2.2	1
83	The pyroelectric energy harvesting and storage performance around the ferroelectric/antiferroelectric transition in PNZST. <i>Journal of Materials Science</i> , 2021 , 56, 1133-1146	4.3	2
82	Pyroelectric Energy Harvesting Potential in Lead-Free BZT-BST Ceramics. <i>Smart Innovation, Systems and Technologies</i> , 2021 , 175-183	0.5	
81	Nonstoichiometric effect on electrocaloric, pyroelectric and energy storage properties of 0.94Na _x Bi _y TiO ₃ 0.06BaTiO ₃ bulk ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 26871	2.1	0
80	Thermal Energy Harvesting Capabilities in Lead-Free Ba _{0.85} Ca _{0.15} Ti _{0.9} Sn _x Zr _{0.1} O ₃ Ferroelectric Ceramics. <i>Journal of Electronic Materials</i> , 2020 , 49, 1194-1203	1.9	3
79	Influence of grain size on the electrocaloric and pyroelectric properties in non-reducible BaTiO ₃ ceramics. <i>AIP Advances</i> , 2020 , 10, 085302	1.5	9
78	Electrocaloric properties of Sr and Sn doped BCZT lead-free ceramics. <i>EPJ Applied Physics</i> , 2020 , 91, 209051		1

77	Pyroelectric figures of merit and energy harvesting potential in ferroelectric cement composites. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 16708-16719	2.1	2
76	Flexo/electro-caloric performance of BaTi _{0.87} Sn _{0.13} O ₃ ceramics. <i>Applied Physics Letters</i> , 2020 , 117, 092904	3.4	5
75	Pyroelectric energy harvesting for dye decolorization using Ba _{0.9} Ca _{0.1} TiO ₃ ceramics. <i>Journal of Applied Physics</i> , 2020 , 128, 095108	2.5	5
74	Electrical conduction properties of the BZT/BST ceramics. <i>Journal of Advanced Dielectrics</i> , 2020 , 10, 2050026	2.6	0
73	Pyroelectric performance of [Bi _{0.48} Na _{0.4032} K _{0.0768}]Sr _{0.04} (Ti _{0.975} Nb _{0.025})O ₃ ceramics. <i>Journal of the Australian Ceramic Society</i> , 2020 , 56, 395-402	1.5	0
72	Vibration induced refrigeration using ferroelectric materials. <i>Scientific Reports</i> , 2019 , 9, 3922	4.9	1
71	Pyroelectric energy conversion using Ba _{0.85} Sr _{0.15} Zr _{0.1} Ti _{0.9} O ₃ ceramics and its cement-based composites. <i>Journal of Intelligent Material Systems and Structures</i> , 2019 , 30, 869-877	2.3	10
70	Enhanced Energy Harvesting Using Multilayer Piezoelectric Ceramics. <i>Journal of Electronic Materials</i> , 2019 , 48, 6964-6971	1.9	4
69	Temperature dependent dynamics hysteresis scaling of Ba _{0.85} Ca _{0.15} Ti _{0.9} Sn _x Zr _{0.1} O ₃ bulk ferroelectric ceramics. <i>Phase Transitions</i> , 2019 , 92, 960-973	1.3	2
68	Candle soot: Journey from a pollutant to a functional material. <i>Carbon</i> , 2019 , 144, 684-712	10.4	57
67	Melting of dxy Orbital Ordering Accompanied by Suppression of Giant Tetragonal Distortion and Insulator-to-Metal Transition in Cr-Substituted PbVO ₃ . <i>Chemistry of Materials</i> , 2019 , 31, 1352-1358	9.6	12
66	Functional Cementitious Composites for Pyroelectric Applications. <i>Journal of Electronic Materials</i> , 2018 , 47, 2378-2385	1.9	9
65	Electrocaloric behavior and temperature dependent scaling of dynamic hysteresis of Ba _x Sr _{1-x} TiO ₃ (x = 0.7, 0.8 and 0.9) bulk ceramics. <i>Journal of the Australian Ceramic Society</i> , 2018 , 54, 439-450	1.5	8
64	Interplay of conventional with inverse electrocaloric response in (Pb,Nb)(Zr,Sn,Ti)O ₃ antiferroelectric materials. <i>Physical Review B</i> , 2018 , 97,	3.3	26
63	Tunable Pyroelectricity around the Ferroelectric/Antiferroelectric Transition. <i>Energy Technology</i> , 2018 , 6, 865-871	3.5	9
62	Pyroelectric performance of BaTi _{1-x} Sn _x O ₃ ceramics. <i>International Journal of Applied Ceramic Technology</i> , 2018 , 15, 546-553	2	13
61	Pyroelectric signals in (Ba,Ca)TiO _{3-x} Ba(Sn,Ti)O ₃ ceramics: A viable alternative for lead-based ceramics. <i>Scripta Materialia</i> , 2018 , 146, 146-149	5.6	13
60	Thermomechanical Energy Conversion Potential of Lead-Free 0.50Ba(Zr _{0.2} Ti _{0.8})O ₃ 0.50(Ba _{0.7} Ca _{0.3})TiO ₃ Bulk Ceramics. <i>Energy Technology</i> , 2018 , 6, 872-882	3.5	12

59	Na _{1/2} Bi _{1/2} VO ₃ and K _{1/2} Bi _{1/2} VO ₃ : New Lead-Free Tetragonal Perovskites with Moderate c/a Ratios. <i>Chemistry of Materials</i> , 2018 , 30, 6728-6736	9.6	4
58	Pyroelectric and impedance studies of the 0.5Ba(Zr _{0.2} Ti _{0.8})O ₃ -0.5(Ba _{0.7} Sr _{0.3})TiO ₃ ceramics. <i>Ceramics International</i> , 2018 , 44, 21976-21981	5.1	10
57	Flexoelectric Induced Caloric Effect in Truncated Pyramid Shaped Ba _{0.67} Sr _{0.33} TiO ₃ Ferroelectric Material. <i>Journal of Electronic Materials</i> , 2017 , 46, 4166-4171	1.9	6
56	Large barocaloric effect and pressure-mediated electrocaloric effect in Pb _{0.99} Nb _{0.02} (Zr _{0.95} Ti _{0.05}) _{0.08} O ₃ ceramics. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 4902-4911	3.8	5
55	Pyro-paraelectric effect in ferroelectric materials: A device perspective for transcending Curie limitation. <i>Materials Today Communications</i> , 2017 , 12, 146-151	2.5	5
54	Enhanced performance of ferroelectric materials under hydrostatic pressure. <i>Journal of Applied Physics</i> , 2017 , 122, 224105	2.5	4
53	Engineered microstructure for tailoring the pyroelectric performance of Ba _{0.85} Sr _{0.15} Zr _{0.1} Ti _{0.9} O ₃ ceramics by 3BaO-3TiO ₂ -B ₂ O ₃ glass addition. <i>Applied Physics Letters</i> , 2017 , 110, 232901	3.4	9
52	Enhanced electrocaloric effect in glass-added 0.94Bi _{0.5} Na _{0.5} TiO ₃ -0.06BaTiO ₃ ceramics. <i>Journal of the Australian Ceramic Society</i> , 2017 , 53, 523-529	1.5	6
51	Effect of sintering temperature and dwell time on electrocaloric properties of Ba _{0.85} Ca _{0.075} Sr _{0.075} Ti _{0.90} Zr _{0.10} O ₃ ceramics. <i>Phase Transitions</i> , 2017 , 90, 465-474	1.3	14
50	BaTiO ₃ -based piezoelectrics: Fundamentals, current status, and perspectives. <i>Applied Physics Reviews</i> , 2017 , 4, 041305	17.3	487
49	Large-Temperature-Invariant and Electrocaloric Performance of Modified Barium Titanate for Solid-State Refrigeration. <i>Energy Technology</i> , 2016 , 4, 1097-1105	3.5	4
48	Thermal energy conversion and temperature-dependent dynamic hysteresis analysis for Ba _{0.85} Ca _{0.15} Ti _{0.9} FexZr _{0.1} O ₃ ceramics Peer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society. View all notes. <i>Journal of Asian Ceramic Societies</i> , 2016 , 4, 102-111	2.4	18
47	Large pyroelectric figure of merits for Sr-modified Ba _{0.85} Ca _{0.15} Zr _{0.1} Ti _{0.9} O ₃ ceramics. <i>Solid State Sciences</i> , 2016 , 52, 10-18	3.4	51
46	Enhanced thermal energy conversion and dynamic hysteresis behavior of Sr-added Ba _{0.85} Ca _{0.15} Ti _{0.9} Zr _{0.1} O ₃ ferroelectric ceramics. <i>Journal of Materiomics</i> , 2016 , 2, 75-86	6.7	21
45	Enhanced mechanical energy conversion potential in ferroelectric single crystals. <i>Materials Technology</i> , 2016 , 31, 274-280	2.1	3
44	Enhanced electrocaloric effect in Ba _{0.85} Ca _{0.15} Zr _{0.1} Ti _{0.9} SnxO ₃ ferroelectric ceramics. <i>Phase Transitions</i> , 2016 , 89, 1062-1073	1.3	16
43	Large room temperature electrocaloric strength in bulk ferroelectric ceramics: an optimum solution. <i>Phase Transitions</i> , 2016 , 89, 1019-1028	1.3	9
42	Electric-Field-Driven Caloric Effects in Ferroelectric Materials for Solid-State Refrigeration. <i>Energy Technology</i> , 2016 , 4, 417-423	3.5	5

41	Caloric Effects in Bulk Lead-Free Ferroelectric Ceramics for Solid-State Refrigeration. <i>Energy Technology</i> , 2016 , 4, 244-248	3.5	12
40	Elastocaloric and Piezocaloric Effects in Lead Zirconate Titanate Ceramics. <i>Energy Technology</i> , 2016 , 4, 647-652	3.5	10
39	Effect of sintering temperature and dwell time dependent dynamic hysteresis scaling behavior of (Ba _{0.85} Ca _{0.075} Sr _{0.075})(Ti _{0.90} Zr _{0.10})O ₃ ceramics. <i>Ferroelectrics</i> , 2016 , 505, 52-66	0.6	9
38	Effect of sintering parameters on the dynamic hysteresis scaling behavior of Ba _{0.85} Sr _{0.15} Zr _{0.1} Ti _{0.9} O ₃ ceramics. <i>Integrated Ferroelectrics</i> , 2016 , 176, 95-108	0.8	7
37	Pyro-paraelectric and flexocaloric effects in barium strontium titanate: A first principles approach. <i>Applied Physics Letters</i> , 2016 , 108, 162901	3.4	18
36	Elastocaloric and barocaloric effects in polyvinylidene di-fluoride-based polymers. <i>Applied Physics Letters</i> , 2016 , 108, 072903	3.4	33
35	An insight into thermal and vibration cyclic energy harvesting using ferroelectric ceramics. <i>Integrated Ferroelectrics</i> , 2016 , 168, 69-84	0.8	4
34	Composition dependent electrocaloric behavior of (Sr _x Ba _{1-x})Nb ₂ O ₆ ceramics. <i>Integrated Ferroelectrics</i> , 2016 , 168, 163-169	0.8	1
33	Elastocaloric Effect in Carbon Nanotubes and Graphene. <i>Nano Letters</i> , 2016 , 16, 7008-7012	11.5	16
32	Multicaloric effect in Pb(Mn _{1/3} Nb _{2/3})O ₃ -32PbTiO ₃ single crystals. <i>Acta Materialia</i> , 2015 , 89, 384-395	8.4	56
31	Elastocaloric effect in ferroelectric ceramics. <i>Applied Physics Letters</i> , 2015 , 106, 172901	3.4	49
30	Multicaloric effect in Pb(Mn _{1/3} Nb _{2/3})O ₃ -32PbTiO ₃ single crystals: Modes of measurement. <i>Acta Materialia</i> , 2015 , 97, 17-28	8.4	20
29	Giant Electro-Mechanical Energy Conversion in Lead-Free Ferroelectric Materials. <i>Ferroelectrics, Letters Section</i> , 2015 , 42, 35-42	0.5	2
28	Microstructural Finite Element Modeling and Simulation on Al/MgO Composites. <i>International Journal of Computational Methods</i> , 2015 , 12, 1550030	1.1	3
27	Mechanical confinement for tuning ferroelectric response in PMN-PT single crystal. <i>Journal of Applied Physics</i> , 2015 , 117, 084102	2.5	17
26	Effect of Directional Mechanical Confinement on the Electrical Energy Storage Density in 68Pb(Mn _{1/3} Nb _{2/3})O ₃ -32PbTiO ₃ Single Crystals. <i>Ferroelectrics</i> , 2015 , 478, 40-53	0.6	7
25	Cyclic Piezoelectric Energy Harvesting in PMN-PT Single Crystals. <i>Ferroelectrics</i> , 2015 , 481, 138-145	0.6	6
24	Tuning of dielectric, pyroelectric and ferroelectric properties of 0.715Bi _{0.5} Na _{0.5} TiO ₃ -0.065BaTiO ₃ -0.22SrTiO ₃ ceramic by internal clamping. <i>AIP Advances</i> , 2015 , 5, 087145	1.5	46

23	Multiple caloric effects in (Ba _{0.865} Ca _{0.135} Zr _{0.1089} Ti _{0.8811} Fe _{0.01})O ₃ ferroelectric ceramic. <i>Applied Physics Letters</i> , 2015 , 107, 042902	3.4	38
22	Enhanced electrocaloric effect in Fe-doped (Ba _{0.85} Ca _{0.15} Zr _{0.1} Ti _{0.9})O ₃ ferroelectric ceramics. <i>Applied Materials Today</i> , 2015 , 1, 37-44	6.6	15
21	Design of PZT/Pt functionally graded piezoelectric material for low-frequency actuation applications. <i>Journal of Intelligent Material Systems and Structures</i> , 2015 , 26, 321-327	2.3	5
20	A review and analysis of the elasto-caloric effect for solidstate refrigeration devices: Challenges and opportunities. <i>MRS Energy & Sustainability</i> , 2015 , 2, 1	2.2	36
19	Electrocaloric Behavior and Temperature-Dependent Scaling of Dynamic Hysteresis of Ba _{0.85} Ca _{0.15} Ti _{0.9} Zr _{0.1} O ₃ Ceramics. <i>International Journal of Applied Ceramic Technology</i> , 2015 , 12, 899-907	3.0	32
18	Cyclic Electrical Energy Harvesting Using Mechanical Confinement in Ferroelectric Ceramics. <i>International Journal of Applied Ceramic Technology</i> , 2015 , 12, 765-770	2	13
17	Anti-Ferroelectric Ceramics for High Energy Density Capacitors. <i>Materials</i> , 2015 , 8, 8009-8031	3.5	194
16	Effect of Stress on Energy Conversion and Storage Characteristics of (1-x-y)PIN-xPMN-yPT Single Crystals. <i>Ferroelectrics, Letters Section</i> , 2015 , 42, 107-114	0.5	7
15	Enhanced energy storage performance of glass added 0.715Bi _{0.5} Na _{0.5} TiO ₃ -0.065BaTiO ₃ -0.22SrTiO ₃ ferroelectric ceramicsPeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. <i>Journal of Asian Ceramic Societies</i> , 2015 , 3, 383-389	2.4	16
14	Enhanced Electrical Energy Storage Density in Mechanical Confined Antiferroelectric Ceramic. <i>Ferroelectrics</i> , 2015 , 486, 114-125	0.6	9
13	Improved Electrical Energy Storage Density in Vanadium-Doped BaTiO ₃ Bulk Ceramics by Addition of 3BaO/B ₂ O ₃ Glass. <i>Energy Technology</i> , 2015 , 3, 70-76	3.5	23
12	Temperature dependence scaling behavior of the dynamic hysteresis in 0.715Bi _{0.5} Na _{0.5} TiO ₃ -0.065BaTiO ₃ -0.22SrTiO ₃ ferroelectric ceramics. <i>Materials Research Express</i> , 2015 , 2, 035501	1.7	18
11	Enhanced Electrocaloric Effect in Pre-stressed Ferroelectric Materials. <i>Energy Technology</i> , 2015 , 3, 177-186	3.5	13
10	Analysis of High-Field Energy Harvesting using Ferroelectric Materials. <i>Energy Technology</i> , 2014 , 2, 480-485	3.5	28
9	A technique for giant mechanical energy harvesting using ferroelectric/antiferroelectric materials. <i>Journal of Applied Physics</i> , 2014 , 115, 084908	2.5	45
8	Pressure-induced spin state transition in BiFeO ₃ : an ab initio electronic structure calculation. <i>EPJ Applied Physics</i> , 2014 , 67, 20602	1.1	1
7	Finite element analysis of WC/Al ₂ O ₃ composites. <i>International Journal of Computational Materials Science and Engineering</i> , 2014 , 03, 1450002	0.3	0
6	Enhanced Thermal Energy Harvesting Using Li, K-Doped Bi _{0.5} Na _{0.5} TiO ₃ Lead-Free Ferroelectric Ceramics. <i>Energy Technology</i> , 2014 , 2, 205-209	3.5	40

5	Enhanced energy harvesting in commercial ferroelectric materials. <i>Materials Research Express</i> , 2014 , 1, 025504	1.7	33
4	Enhancing electrical energy storage density in anti-ferroelectric ceramics using ferroelastic domain switching. <i>Materials Research Express</i> , 2014 , 1, 045502	1.7	39
3	Mechanical confinement for improved energy storage density in BNT-BT-KNN lead-free ceramic capacitors. <i>AIP Advances</i> , 2014 , 4, 087106	1.5	60
2	Finite Element Analysis of the Microstructure of AlN/iN Composites. <i>Strain</i> , 2014 , 50, 250-261	1.7	4
1	Effects of preconditioning on the accuracy and efficiency of incompressible flows. <i>International Journal for Numerical Methods in Fluids</i> , 2005 , 47, 963-970	1.9	7