

# Robert Dittmer

## List of Publications by Year in descending order

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23  
papers

3,228  
citations

361413  
20  
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642732  
23  
g-index

24  
all docs

24  
docs citations

24  
times ranked

2229  
citing authors

#	ARTICLE	IF	CITATIONS
1	Transferring lead-free piezoelectric ceramics into application. <i>Journal of the European Ceramic Society</i> , 2015, 35, 1659-1681.	5.7	1,050
2	Visualization of polar nanoregions in lead-free relaxors via piezoresponse force microscopy in torsional dual AC resonance tracking mode. <i>Nanoscale</i> , 2015, 7, 11787-11796.	5.6	30
3	Macroscopic and Nanoscopic Polarization Relaxation Kinetics in Lead-Free Relaxors <math>\langle \text{Bi} \rangle_{\text{Na}_1/2\text{TiO}_3}></math> Journal of the American Ceramic Society, 2014, 97, 3904-3912.	3.8	40
4	Nanoscale phase quantification in lead-free<math>\langle \text{Bi} \rangle_{\text{Na}_1/2\text{TiO}_3}></math> Physical Review B, 2014, 90, .	1.3	24
5	Peculiar Bi-ion dynamics in Na<sub>1/2</sub>Bi<sub>1/2</sub>TiO<sub>3</sub> from terahertz and microwave dielectric spectroscopy. <i>Phase Transitions</i> , 2014, 87, 953-965.	1.3	24
6	Local structure change evidenced by temperature-dependent elastic measurements: Case study on Bi<sub>1/2</sub>Na<sub>1/2</sub>TiO<sub>3</sub>-based lead-free relaxor piezoceramics. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	15
7	Ergodicity reflected in macroscopic and microscopic field-dependent behavior of BNT-based relaxors. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	71
8	Investigation of the depolarisation transition in Bi-based relaxor ferroelectrics. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	25
9	Electric-field-induced polarization and strain in 0.94(Bi<sub>1/2</sub>Na<sub>1/2</sub>)TiO<sub>3</sub>-0.06BaTiO<sub>3</sub> under uniaxial stress. <i>Acta Materialia</i> , 2013, 61, 1350-1358.	7.9	61
10	Optimal working regime of lead-zirconate-titanate for actuation applications. <i>Sensors and Actuators A: Physical</i> , 2013, 189, 187-194.	4.1	36
11	A novel method to determine the electric, piezoelectric and elastic coefficients of fine scale piezoceramic fibers. , 2013, , .	0	0
12	Temperature-Dependent Phase Transitions in the Lead-Free Piezoceramics (1-x)Bi<sub>1/2</sub>Na<sub>1/2</sub>TiO<sub>3</sub> Observed by <i>in situ</i> Transmission Electron Microscopy and Dielectric Measurements. <i>Journal of the American Ceramic Society</i> , 2013, 96, 3312-3324.	3.8	37
13	Structure and properties of La-modified Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub> at ambient and elevated temperatures. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	44
14	Frequency-dependence of large-signal properties in lead-free piezoceramics. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	35
15	Nanoscale Insight Into Lead-Free BNT-CBT-KNN. <i>Advanced Functional Materials</i> , 2012, 22, 4208-4215.	14.9	225
16	Giant electric-field-induced strains in lead-free ceramics for actuator applications - status and perspective. <i>Journal of Electroceramics</i> , 2012, 29, 71-93.	2.0	813
17	A High-Temperature Capacitor Dielectric Based on <math>\langle \text{K} \rangle_{\text{Na}_1/2\text{TiO}_3}></math> Journal of the American Ceramic Society, 2012, 95, 3519-3524.	3.8	121
18	Large blocking force in Bi<sub>1/2</sub>Na<sub>1/2</sub>TiO<sub>3</sub>-based lead-free piezoceramics. <i>Scripta Materialia</i> , 2012, 67, 100-103.	5.2	29

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19	Bipolar and Unipolar Fatigue of Ferroelectric BNT-Based Lead-Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 529-535.	3.8	83
20	Relaxor Characteristics of Morphotropic Phase Boundary $\langle\text{scp}\rangle(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3\langle/\text{sub}\rangle\text{--}(\text{Bi}_{1/2}\text{K}_{1/2})\text{TiO}_3\langle/\text{sub}\rangle_{120}$ Modified with $\langle\text{scp}\rangle\text{Bi}(\text{Zn}_{1/2}\text{Ti}_{1/2})\text{O}_3\langle/\text{sub}\rangle\langle/\text{scp}\rangle$ . Journal of the American Ceramic Society, 2011, 94, 4283-4290.	3.8	120
21	Lead-free high-temperature dielectrics with wide operational range. Journal of Applied Physics, 2011, 109, .	2.5	176
22	Electric-field-induced strain mechanisms in lead-free 94% $(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3\text{--}6\%\text{BaTiO}_3$ . Applied Physics Letters, 2011, 98, .	3.3	143
23	Microstructural Analysis and Mechanical Properties of $\text{Pb}(\text{Zr},\text{Ti})\text{O}_3$ Fibers Derived by Different Processing Routes. Journal of the American Ceramic Society, 2010, 93, 2403-2410.	3.8	11