

# Chris Lynch

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2389474/publications.pdf>

Version: 2024-02-01

190  
papers

5,273  
citations

117571

34  
h-index

98753

67  
g-index

197  
all docs

197  
docs citations

197  
times ranked

2970  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic state switching in FeGa microstructures. Smart Materials and Structures, 2022, 31, 035005.	1.8	5
2	Effect of interfacial and edge roughness on magnetoelectric control of Co/Ni microdisks on PMN-PT(011). Scientific Reports, 2022, 12, 3919.	1.6	1
3	A review of ferroelectric materials for high power devices. Journal of Materiomics, 2022, 8, 739-752.	2.8	31
4	Micro-magnetoelastic modeling of Terfenol-D for spintronics. Journal of Applied Physics, 2022, 131, 234101.	1.1	1
5	Phase transition by nanoindentation in a relaxor ferroelectric single crystal PMN-0.3PT: A phase-field investigation. Journal of Applied Physics, 2022, 131, .	1.1	4
6	Giant power density produced by PINâ€“PMNâ€“PT ferroelectric single crystals due to a pressure induced polar-to-nonpolar phase transformation. Journal of Materials Chemistry A, 2021, 9, 12307-12319.	5.2	11
7	Bounded ACh unification. Mathematical Structures in Computer Science, 2020, 30, 664-682.	0.5	1
8	Strong electric field tuning of magnetism in self-biased multiferroic structures. Scientific Reports, 2020, 10, 21148.	1.6	3
9	Thickness-dependence of magnetic anisotropy and domain structure in Ni thin films grown on a PMN-PT substrate. Smart Materials and Structures, 2020, 29, 095019.	1.8	7
10	Capturing magnetic bead-based arrays using perpendicular magnetic anisotropy. Applied Physics Letters, 2019, 115, 082402.	1.5	12
11	Effects of compressive stress on electric-field-induced phase transition of antiferroelectric ceramics. Journal of Applied Physics, 2019, 125, 204104.	1.1	5
12	Fracture fatigue properties of Inconel 718 manufactured with Selective Laser Melting. , 2019, , .		2
13	Reviving Basic Narrowing Modulo. Lecture Notes in Computer Science, 2019, , 313-329.	1.0	3
14	On Asymmetric Unification for the Theory of XOR with a Homomorphism. Lecture Notes in Computer Science, 2019, , 297-312.	1.0	0
15	Finding Intruder Knowledge with Cap-Matching. Lecture Notes in Computer Science, 2019, , 39-53.	1.0	0
16	Capturing magnetic bead-based arrays using perpendicular magnetic anisotropy. Applied Physics Letters, 2019, 115, .	1.5	1
17	Effect of CoFe dusting layer and annealing on the magnetic properties of sputtered Ta/W/CoFeB/CoFe/MgO layer structures. Journal Physics D: Applied Physics, 2019, 53, .	1.3	0
18	Complete stress-induced depolarization of relaxor ferroelectric crystals without transition through a non-polar phase. Applied Physics Letters, 2018, 112, .	1.5	28

#	ARTICLE	IF	CITATIONS
19	360° deterministic magnetization rotation in a three-ellipse magnetoelectric heterostructure. Journal of Applied Physics, 2018, 123, 104105.	1.1	5
20	Ferroelectric and Ferromagnetic Phase Field Modeling. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2018, , 55-96.	0.3	1
21	Phase-field simulation of domain walls in rhombohedral ferroelectric single crystals. Acta Materialia, 2018, 155, 245-252.	3.8	10
22	Using the ferroelectric/ferroelastic effect at cryogenic temperatures for set-and-hold actuation. Smart Materials and Structures, 2018, 27, 065024.	1.8	3
23	Modeling the effects of strain profiles and defects on precessional magnetic switching in multiferroic heterostructures. , 2018, , .		0
24	Nanoscale magnetic ratchets based on shape anisotropy. Nanotechnology, 2017, 28, 08LT01.	1.3	14
25	Strain-mediated 180° switching in CoFeB and Terfenol-D nanodots with perpendicular magnetic anisotropy. Applied Physics Letters, 2017, 110, .	1.5	50
26	Ultrahigh energy density harvested from domain-engineered relaxor ferroelectric single crystals under high strain rate loading. Scientific Reports, 2017, 7, 46758.	1.6	32
27	Large barocaloric effect and pressure-mediated electrocaloric effect in $\text{Pb}_{0.99}\text{Nb}_{0.02}(\text{Zr}_{0.95}\text{Ti}_{0.05})_{0.08}\text{O}_{3.19}$ ceramics. Journal of the American Ceramic Society, 2017, 100, 4902-4911.		9
28	Welcome to Smart Materials and Structures 2017. Smart Materials and Structures, 2017, 26, 020401.	1.8	1
29	A phenomenological thermodynamic energy function for PIN-PMN-PT relaxor ferroelectric single crystals. Acta Materialia, 2017, 137, 93-102.	3.8	23
30	Spin wave generation by surface acoustic waves. Journal of Applied Physics, 2017, 122, .	1.1	51
31	Enhanced performance of ferroelectric materials under hydrostatic pressure. Journal of Applied Physics, 2017, 122, .	1.1	9
32	Energetics of domain engineered rhombohedral ferroelectric single crystals. , 2017, , .		0
33	Influence of internal geometry on magnetization reversal in asymmetric permalloy rings. Applied Physics Letters, 2016, 109, .	1.5	5
34	A high energy density relaxor antiferroelectric pulsed capacitor dielectric. Journal of Applied Physics, 2016, 119, .	1.1	123
35	Phase transformation based pyroelectric waste heat energy harvesting with improved practicality. Smart Materials and Structures, 2016, 25, 035009.	1.8	16
36	Welcome to Smart Materials and Structures 2016. Smart Materials and Structures, 2016, 25, 010201.	1.8	0

#	ARTICLE	IF	CITATIONS
37	Pressure, temperature, and electric field dependence of phase transformations in niobium modified 95/5 lead zirconate titanate. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	22
38	Generation of localized strain in a thin film piezoelectric to control individual magnetoelectric heterostructures. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	58
39	Strain-mediated 180° perpendicular magnetization switching of a single domain multiferroic structure. <i>Journal of Applied Physics</i> , 2015, 118, 014101.	1.1	35
40	Combining experiments and modeling to characterize field driven phase transformations in relaxor ferroelectric single crystals. <i>Acta Materialia</i> , 2015, 89, 41-49.	3.8	7
41	Welcome to <i>Smart Materials and Structures</i> 2015. <i>Smart Materials and Structures</i> , 2015, 24, 010201.	1.8	0
42	Stress and electric field gradient contributions to dielectric loss in ferroelectrics with interdigitated electrodes. <i>Journal of Intelligent Material Systems and Structures</i> , 2015, 26, 573-581.	1.4	0
43	Intermediate strain rate energy harvesting from the impact of PZT 52/48 and 95/5. <i>Journal of Composite Materials</i> , 2015, 49, 1863-1871.	1.2	3
44	The conductivity mechanism and an improved C~V model of ferroelectric PZT thin film. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	21
45	Mechanisms of depolarization of Pb(Zr<sub>0.52</sub>Ti<sub>0.48</sub>O<sub>3</sub> AND Pb(Zr<sub>0.95</sub>Ti<sub>0.05</sub>O<sub>3</sub>) ferroelectrics under transverse shock compression. . 2015, .		0
46	Phase Energy Determined from Stress and Electric-Field-Induced Phase Transformations in [011]C Cut 0.24PIN-PMN-PT Single Crystals. <i>Crystals</i> , 2014, 4, 377-389.	1.0	4
47	Large-field dielectric loss in relaxor ferroelectric PLZT. <i>Smart Materials and Structures</i> , 2014, 23, 035007.	1.8	2
48	Effects of composition and temperature on the large-field behavior of [001]C relaxor single crystals. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014, 61, 2153-2157.	1.7	6
49	Effects of composition and temperature on the large field behavior of [011]C relaxor ferroelectric single crystals. <i>Applied Physics Letters</i> , 2014, 105, 052909.	1.5	5
50	Efficient general AGH-unification. <i>Information and Computation</i> , 2014, 238, 128-156.	0.5	1
51	Effect of composition on the pressure-driven ferroelectric to antiferroelectric phase transformation behavior of (Pb <sub>0.97</sub> La <sub>0.02</sub> )(Zr <sub>1-x</sub> Y <sub>x</sub> Ti <sub>y</sub> )O <sub>3</sub> ceramics. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	20
52	Electrical control of a single magnetoelastic domain structure on a clamped piezoelectric thin film analysis. <i>Journal of Applied Physics</i> , 2014, 116, 123909.	1.1	48
53	Ideal energy harvesting cycle using a phase transformation in ferroelectric crystals. <i>Smart Materials and Structures</i> , 2014, 23, 125026.	1.8	6
54	Giant electric-field-induced magnetic anisotropy reorientation with patterned electrodes on a Ni thin film/lead zirconate titanate heterostructure. <i>Journal of Applied Physics</i> , 2014, 115, 17C711.	1.1	7

#	ARTICLE	IF	CITATIONS
55	Composition dependence of field induced phase transformations in [0 1 1]C PIN-PMN-PT relaxor ferroelectric single crystals with d322 piezoelectric mode. Acta Materialia, 2014, 81, 512-523.	3.8	17
56	Energy harvesting using the FER-FEO phase transformation in [011] cut single crystal PIN-PMN-PT. Journal of Intelligent Material Systems and Structures, 2014, 25, 1786-1799.	1.4	19
57	Depolarization mechanisms of PbZr <sub>0.52</sub> Ti <sub>0.48</sub> O <sub>3</sub> and PbZr <sub>0.95</sub> Ti <sub>0.05</sub> O <sub>3</sub> poled ferroelectrics under high strain rate loading. Applied Physics Letters, 2014, 104, .	1.5	43
58	Composition dependence of electro-mechanical properties and field induced phase transformations in [001]CPIN-PMN-PT single crystals. Smart Materials and Structures, 2014, 23, 095031.	1.8	6
59	SMELS: Satisfiability Modulo Equality with Lazy Superposition. Journal of Automated Reasoning, 2013, 51, 325-356.	1.1	0
60	Effect of field driven phase transformations on the loss tangent of relaxor ferroelectric single crystals. Journal of Applied Physics, 2013, 113, .	1.1	4
61	Field-Driven Phase Transformations in Relaxor Ferroelectric Single Crystals. , 2013, , .		0
62	Effects of compositional modification in lead lanthanum zirconate stannate titanate ceramics on electric energy storage properties. , 2013, , .		1
63	Thermal and mechanical effects on large field dielectric loss in lanthanum-doped lead zirconate titanate. , 2013, , .		0
64	Characterization of ferroelectric single crystals with field induced phase transformations. Smart Materials and Structures, 2013, 22, 094004.	1.8	0
65	A method to control magnetism in individual strain-mediated magnetoelectric islands. Applied Physics Letters, 2013, 103, .	1.5	129
66	Effects of electric field on the fracture toughness ( $K_{Ic}$ ) of ceramic PZT. Smart Materials and Structures, 2013, 22, 094014.	1.8	4
67	A novel thermally biased mechanical energy conversion cycle. Journal of Applied Physics, 2013, 114, 224111.	1.1	14
68	Pyroelectric energy conversion using PLZT ceramics and the ferroelectric-ergodic relaxor phase transition. Smart Materials and Structures, 2013, 22, 025038.	1.8	62
69	Coupled effects of hydrostatic pressure and bipolar electric field on the FE-AFE phase transformation in 95/5 PZT. Proceedings of SPIE, 2013, , .	0.8	1
70	Mechanical and thermal energy transduction utilizing phase transformations in 32 mode relaxor-ferroelectric single crystals. Proceedings of SPIE, 2013, , .	0.8	0
71	On Forward Closure and the Finite Variant Property. Lecture Notes in Computer Science, 2013, , 327-342.	1.0	17
72	Constructing Bachmair-Ganzinger Models. Lecture Notes in Computer Science, 2013, , 285-301.	1.0	2

#	ARTICLE	IF	CITATIONS
73	Modeling and Characterization of the Effects of Field Gradients on the Behavior of Ferroelectrics With Interdigitated Electrodes. , 2013, , .		0
74	Giant electro-mechanical energy conversion in [011] cut ferroelectric single crystals. Applied Physics Letters, 2012, 100, .	1.5	46
75	The effect of a hydrostatic pressure induced phase transformation on the unipolar electrical response of Nb modified 95/5 lead zirconate titanate. Journal of Applied Physics, 2012, 111, .	1.1	25
76	Direct thermal to electrical energy conversion using 9.5/65/35 PLZT ceramics in the ergodic relaxor phase. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 2373-2385.	1.7	16
77	Mechanical energy harvesting utilizing phase transition in 32 mode relaxor-ferroelectric PIN-PMN-PT single crystals. , 2012, , .		6
78	Pyroelectric Energy Harvesting Using the Olsen Cycle on Relaxor Ferroelectric 8/65/35 PLZT. , 2012, , .		2
79	A finite element based phase field model for ferroelectric domain evolution. Smart Materials and Structures, 2012, 21, 094014.	1.8	7
80	Pyroelectric waste heat energy harvesting using relaxor ferroelectric 8/65/35 PLZT and the Olsen cycle. Smart Materials and Structures, 2012, 21, 025021.	1.8	91
81	A relaxor ferroelectric single crystal cut resulting in large $d_{312}$ and zero $d_{311}$ for a shear mode accelerometer and related applications. Smart Materials and Structures, 2012, 21, 055005.	1.8	9
82	Stress dependence of thermally driven pyroelectric charge release during FER-FEO phase transformations in [011] cut relaxor ferroelectric crystals. Applied Physics Letters, 2012, 100, 262909.	1.5	14
83	Unification Modulo Homomorphic Encryption. Journal of Automated Reasoning, 2012, 48, 135-158.	1.1	1
84	Effective Symbolic Protocol Analysis via Equational Irreducibility Conditions. Lecture Notes in Computer Science, 2012, , 73-90.	1.0	14
85	Unification Modulo Synchronous Distributivity. Lecture Notes in Computer Science, 2012, , 14-29.	1.0	3
86	Characterization of Ferroelectric Single Crystals With Field Induced Phase Transformations. , 2012, , .		0
87	Giant electric-field-induced reversible and permanent magnetization reorientation on magnetoelectric Ni/(011) [Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> ](1-x)-[PbTiO <sub>3</sub> ]x heterostructure. Applied Physics Letters, 2011, 98, 012504.	1.5	236
88	Mechanical Properties of Ferro-Piezoceramics. Springer Series in Materials Science, 2011, , 469-542.	0.4	3
89	3-D effects of polarization switching on interdigitated electroded ferroelectrics. Proceedings of SPIE, 2011, , .	0.8	0
90	Domain engineered switchable strain states in ferroelectric (011) [Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> ](1-x)-[PbTiO <sub>3</sub> ]x (PMN-PT, x=0.32) single crystals. Journal of Applied Physics, 2011, 109, .	1.1	157

#	ARTICLE	IF	CITATIONS
91	Automatic decidability and combinability. Information and Computation, 2011, 209, 1026-1047.	0.5	9
92	The effect of temperature on the large field electromechanical response of relaxor ferroelectric 8/65/35 PLZT. Acta Materialia, 2011, 59, 2713-2722.	3.8	68
93	Electrical tuning of metastable dielectric constant of ferroelectric single crystals for low-power electronics. Applied Physics Letters, 2011, 99, .	1.5	6
94	Piezoelectric strain sensor/actuator rosettes. Smart Materials and Structures, 2011, 20, 102002.	1.8	10
95	Electrical control of reversible and permanent magnetization reorientation for magnetoelectric memory devices. Applied Physics Letters, 2011, 98, .	1.5	153
96	The strength of PIN $\hat{=}$ PMN $\hat{=}$ PT single crystals under bending with a longitudinal electric field. Smart Materials and Structures, 2011, 20, 055006.	1.8	7
97	Discrete phase model of domain walls in ferroelectric crystals. Proceedings of SPIE, 2011, , .	0.8	0
98	Effects of Electric Field on the Fracture Toughness (KIC) of PZT Ceramics. , 2011, , .		0
99	Protocol analysis in Maude-NPA using unification modulo homomorphic encryption. , 2011, , .		6
100	Efficient General Unification for XOR with Homomorphism. Lecture Notes in Computer Science, 2011, , 407-421.	1.0	5
101	Adaptive and active materials: Selected papers from the ASME 2009 Conference on Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS 09) (Oxnard, CA, USA, 21 $\hat{=}$ 23 September 2009). Smart Materials and Structures, 2010, 19, 090201.	1.8	0
102	LARGE FIELD ELECTRO-MECHANICAL MEASUREMENT TECHNIQUES FOR FERROELECTRIC MATERIALS. Integrated Ferroelectrics, 2010, 111, 59-67.	0.3	4
103	Analysis of poling induced cracking in thick walled cylinders. Proceedings of SPIE, 2010, , .	0.8	0
104	Cap unification. , 2010, , .		9
105	An examination of the structure and the gradient terms used in phase field modeling. Proceedings of SPIE, 2010, , .	0.8	0
106	PZT 52/48 Depolarization: Quasi-Static Thermal Heating Versus Longitudinal Explosive Shock. IEEE Transactions on Plasma Science, 2010, 38, 1856-1863.	0.6	18
107	Purified and porous poly(vinylidene fluoride-trifluoroethylene) thin films for pyroelectric infrared sensing and energy harvesting. Smart Materials and Structures, 2010, 19, 055006.	1.8	79
108	Challenges associated with three dimensional phase field modeling of ferroelectric single crystal phase transformations. Proceedings of SPIE, 2009, , .	0.8	0

#	ARTICLE	IF	CITATIONS
109	Adaptive and Active Materials: Selected Papers from the ASME 2008 Conference on Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS 08) (Maryland, USA, 28â€“30 October 2008). Smart Materials and Structures, 2009, 18, 100201.	1.8	0
110	On Deciding Satisfiability by DPLL( $\Gamma$ ) and Unsound Theorem Proving. Lecture Notes in Computer Science, 2009, , 35-50.	1.0	15
111	Combining Instance Generation and Resolution. Lecture Notes in Computer Science, 2009, , 304-318.	1.0	3
112	Unification Modulo Homomorphic Encryption. Lecture Notes in Computer Science, 2009, , 100-116.	1.0	2
113	Rewriting Interpolants. Electronic Notes in Theoretical Computer Science, 2008, 212, 163-176.	0.9	0
114	Encoding First Order Proofs in SMT. Electronic Notes in Theoretical Computer Science, 2008, 198, 71-84.	0.9	2
115	Ceramic and single-crystal (1-x)PMN-xPT constitutive behavior under combined stress and electric field loading. Acta Materialia, 2008, 56, 1219-1227.	3.8	42
116	A distributed step-like switching model of the continuous field-driven phase transformations observed in PMN-xPT relaxor ferroelectric single crystals. Acta Materialia, 2008, 56, 2744-2749.	3.8	21
117	FINITE ELEMENT ANALYSIS WITH A FERROELECTRIC AND FERROELASTIC MATERIAL MODEL. Integrated Ferroelectrics, 2008, 101, 164-173.	0.3	2
118	Micromechanical model of nonlinear relaxor ferroelectric phase transformation. , 2008, , .		0
119	Compositional dependence of single-crystal PMN- x PT phase transformations. Proceedings of SPIE, 2008, , .	0.8	0
120	SMELS: Satisfiability Modulo Equality with Lazy Superposition. Lecture Notes in Computer Science, 2008, , 186-200.	1.0	3
121	Thermodynamics of Stress and Electric Field Induced Phase Transition in Relaxor Ferroelectric Crystals. Journal of Intelligent Material Systems and Structures, 2007, 18, 409-415.	1.4	21
122	Mechanism of electric fatigue crack growth in lead zirconate titanate. Acta Materialia, 2007, 55, 301-312.	3.8	37
123	Encoding First Order Proofs in SAT. Lecture Notes in Computer Science, 2007, , 476-491.	1.0	6
124	Orientation Dependence of Nonlinearity and Hysteresis in PZN-4.5%PT Single Crystals II: Bipolar Electromechanical Response. Journal of Intelligent Material Systems and Structures, 2006, 17, 931-937.	1.4	9
125	Orientation Dependence of Nonlinearity and Hysteresis in PZN-4.5%PT Single Crystals I: Unipolar Response. Journal of Intelligent Material Systems and Structures, 2006, 17, 953-957.	1.4	10
126	Micromechanical modeling of PMN-32%PT ceramic based on single crystal properties. , 2006, 6170, 21.		0



#	ARTICLE	IF	CITATIONS
127	Domain Engineered Relaxor Ferroelectric Single Crystals. Continuum Mechanics and Thermodynamics, 2006, 18, 119-135.	1.4	40
128	Phase field simulation of ferroelectric and antiferroelectric single crystals. , 2006, 6170, 30.		0
129	Application of a Classical Lamination Theory Model to the Design of Piezoelectric Composite Unimorph Actuators. Journal of Intelligent Material Systems and Structures, 2006, 17, 29-34.	1.4	15
130	ORIENTATION EFFECTS IN SINGLE CRYSTAL RELAXOR RHOMBOHEDRAL FERROELECTRIC PZN-4.5%PT. Integrated Ferroelectrics, 2006, 83, 149-153.	0.3	0
131	Phase-Field Simulation of Rhombohedral and Tetragonal Phases in Ferroelectric Single Crystals. , 2006, , .		0
132	Local fracture properties in ferroelectric relaxor PZN-4.5%PT single crystals. , 2005, , .		0
133	Orientation dependence of the properties of PZN-4.5%PT relaxor single crystals. , 2005, 5761, 244.		0
134	Low frequency bending piezoelectric actuator with integrated ultrasonic NDE functionality. NDT and E International, 2005, 38, 582-588.	1.7	3
135	Low frequency bending piezoelectric actuator with integrated ultrasonic NDE functionality. NDT and E International, 2005, 38, 627-633.	1.7	3
136	Relaxor ferroelectric PMN-32%PT crystals under stress, electric field and temperature loading: II-33-mode measurements. Acta Materialia, 2005, 53, 4001-4008.	3.8	95
137	On the Relative Soundness of the Free Algebra Model for Public Key Encryption. Electronic Notes in Theoretical Computer Science, 2005, 125, 43-54.	0.9	11
138	Anisotropic Fracture Behavior in Ferroelectric Relaxor PZN-4.5%PT Single Crystals. Journal of the American Ceramic Society, 2005, 88, 1838-1844.	1.9	15
139	Development of miniaturized piezo-hydraulic pumps. , 2005, , .		8
140	A Stress Gradient-enhanced Piezoelectric Actuator Composite (GEPAC) with Integrated Ultrasonic NDE Capability for Continuous Health Monitoring. Journal of Intelligent Material Systems and Structures, 2005, 16, 85-93.	1.4	2
141	CHARACTERIZATION AND MODELING OF RELAXOR SINGLE CRYSTALS. Integrated Ferroelectrics, 2005, 71, 173-179.	0.3	6
142	Crack Initiation at Electrode Edges in PZN-4.5%PT Single Crystals. Journal of Intelligent Material Systems and Structures, 2005, 16, 373-379.	1.4	16
143	Analysis of the Non-Linear Behavior of ECLIPSE Actuators. , 2005, , .		0
144	Phase Field Simulation of Ferroelectric Single Crystals. , 2005, , .		1

#	ARTICLE	IF	CITATIONS
145	Characterization and modeling of domain engineered relaxor ferroelectric single crystals. European Physical Journal Special Topics, 2004, 115, 59-66.	0.2	4
146	Phase field modeling of domain structures in ferroelectric materials. , 2004, , .		0
147	New Approach to Solving Crack Tip Stress Fields for Piezoelectric Materials. Journal of Intelligent Material Systems and Structures, 2004, 15, 557-563.	1.4	1
148	Subcritical Crack Growth in Lead Zirconate Titanate. Journal of the American Ceramic Society, 2004, 87, 1362-1364.	1.9	32
149	Orthotropic rescaling for crack tip fields in linear piezoelectric materials. International Journal of Solids and Structures, 2004, 41, 2899-2917.	1.3	2
150	Relaxor ferroelectric PMN-32%PT crystals under stress and electric field loading: I-32 mode measurements. Acta Materialia, 2004, 52, 3849-3857.	3.8	131
151	Unsound Theorem Proving. Lecture Notes in Computer Science, 2004, , 473-487.	1.0	6
152	Ferroelectric properties of [110], [001] and [111] poled relaxor single crystals: measurements and modeling. Acta Materialia, 2003, 51, 407-416.	3.8	134
153	R-curves of lead zirconate titanate (PZT). Journal of the European Ceramic Society, 2003, 23, 1401-1408.	2.8	24
154	A micro-electromechanical model of ferroelectric materials with thermal and rate effects. , 2003, 5053, 357.		0
155	Crystal-variant-based modeling of relaxor single crystals. , 2003, , .		2
156	New approach to solving crack tip stress fields for piezoelectric materials. , 2003, 5053, 376.		0
157	<title>System dynamic modeling of a piezoelectric hydraulic pump</title>. , 2002, , .		6
158	<title>Behavior of relaxor single crystals</title>. , 2002, , .		1
159	Orthotropy Rescaling for the Fracture Problem in Anisotropic Piezoelectric Materials. , 2002, , 97.		1
160	Basic Syntactic Mutation. Lecture Notes in Computer Science, 2002, , 471-485.	1.0	13
161	Optimization of Relaxor Single Crystals for Bending Mode Applications. , 2002, , .		0
162	Resolution Theorem Proving. , 2001, , 19-99.		258

#	ARTICLE	IF	CITATIONS
163	Crack growth of PZN crystals under cyclic electric field. , 2001, , .		2
164	Constraint-induced crack initiation at electrode edges in piezoelectric ceramics. Acta Materialia, 2001, 49, 2751-2759.	3.8	94
165	Short Crack <i>R</i> -Curves in Ferroelectric and Electrostrictive PLZT. Journal of the American Ceramic Society, 2001, 84, 593-597.	1.9	27
166	<i>Piezoelectric hydraulic pump performance</i> . , 2001, 4332, 246.		9
167	Multiaxial Constitutive Behavior of Ferroelectric Materials. Journal of Engineering Materials and Technology, Transactions of the ASME, 2001, 123, 169-175.	0.8	23
168	Piezoelectric Hydraulic Pump System Dynamic Model. Journal of Intelligent Material Systems and Structures, 2001, 12, 737-744.	1.4	44
169	Effect of grain size on the R-curve behavior of lead zirconate titanate (PZT). , 2001, 4333, 38.		4
170	Liquid-crystal display of stress fields in ferroelectrics. Applied Physics Letters, 2001, 78, 2554-2556.	1.5	15
171	Piezoelectric Hydraulic Pump Development. Journal of Intelligent Material Systems and Structures, 2000, 11, 758-764.	1.4	95
172	Piezoelectric Hydraulic Pump Development. Journal of Intelligent Material Systems and Structures, 2000, 11, 758-764.	1.4	38
173	Basic Completion with E-cycle Simplification. Fundamenta Informaticae, 1999, 39, 145-165.	0.3	0
174	Nonlinear constitutive behavior of soft and hard PZT: experiments and modeling. Acta Materialia, 1999, 47, 4415-4425.	3.8	64
175	Fracture behavior of ferroelectric ceramics. , 1999, , .		1
176	<i>Piezoelectric hydraulic pump</i> . , 1999, , .		22
177	Strain Measurement. , 1999, , .		1
178	Fracture of ferroelectric and relaxor electro-ceramics: influence of electric field. Acta Materialia, 1998, 46, 599-608.	3.8	90
179	A micro-electro-mechanical model for polarization switching of ferroelectric materials. Acta Materialia, 1998, 46, 5303-5311.	3.8	173
180	On the Development of Multiaxial Phenomenological Constitutive Laws for Ferroelectric Ceramics. Journal of Intelligent Material Systems and Structures, 1998, 9, 555-563.	1.4	32

#	ARTICLE	IF	CITATIONS
181	A Model for Simulating Polarization Switching and AF-F Phase Changes in Ferroelectric Ceramics. Journal of Intelligent Material Systems and Structures, 1998, 9, 427-431.	1.4	29
182	Effects of Off-Axis Loading on the Tensile Behavior of a Ceramic-Matrix Composite. Journal of the American Ceramic Society, 1996, 79, 3113-3123.	1.9	23
183	The effect of uniaxial stress on the electro-mechanical response of 8/65/35 PLZT. Acta Materialia, 1996, 44, 4137-4148.	3.8	413
184	Strain compensated thin film stress gauges for stress wave measurements in the presence of lateral strain. Review of Scientific Instruments, 1995, 66, 5582-5589.	0.6	9
185	Electric field induced cracking in ferroelectric ceramics. Ferroelectrics, 1995, 166, 11-30.	0.3	173
186	Crack Growth in Ferroelectric Ceramics Driven by Cyclic Polarization Switching. Journal of Intelligent Material Systems and Structures, 1995, 6, 191-198.	1.4	70
187	Ferroelectric/ferroelastic interactions and a polarization switching model. Acta Metallurgica Et Materialia, 1995, 43, 2073-2084.	1.9	619
188	Finite strain ferroelectric constitutive laws. Ferroelectrics, 1994, 160, 177-184.	0.3	13
189	Polyvinylidene fluoride (PVDF) elastic, piezoelectric, pyroelectric, and dielectric coefficients and their non-linearities. Ferroelectrics, 1993, 150, 331-342.	0.3	11
190	Basic paramodulation and superposition. Lecture Notes in Computer Science, 1992, , 462-476.	1.0	40