

Venkatraman Gopalan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/893105/publications.pdf>

Version: 2024-02-01

208
papers

11,192
citations

34016

52
h-index

32761

100
g-index

213
all docs

213
docs citations

213
times ranked

10992
citing authors

#	ARTICLE	IF	CITATIONS
1	Giant Non-Resonant Infrared Second Order Nonlinearity in $\text{In}_2\text{NaAsSe}_2$. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	16
2	Tunable Nanoscale Evolution and Topological Phase Transitions of a Polar Vortex Supercrystal. <i>Advanced Materials</i> , 2022, 34, e2106401.	11.1	9
3	Ultrasensitive electrode-free and co-catalyst-free detection of nanomoles per hour hydrogen evolution for the discovery of new photocatalysts. <i>Review of Scientific Instruments</i> , 2022, 93, 025002.	0.6	1
4	A topological kagome magnet in high entropy form. <i>Communications Physics</i> , 2022, 5, .	2.0	8
5	Interlayer magnetophononic coupling in MnBi_2Te_4 . <i>Nature Communications</i> , 2022, 13, 1929.	5.8	22
6	Homogenization of Optical Field in Nanocrystal-Embedded Perovskite Composites. <i>ACS Energy Letters</i> , 2022, 7, 1657-1671.	8.8	4
7	SnP_2S_6 : A Promising Infrared Nonlinear Optical Crystal with Strong Nonresonant Second Harmonic Generation and Phase-Matchability. <i>ACS Photonics</i> , 2022, 9, 1724-1732.	3.2	11
8	$\text{Fe}_3\text{InSn}_x\text{O}_6$ ($x = 0, 0.25, \text{ or } 0.5$): A Family of Corundum Derivatives with Sn-Induced Polarization and Above Room Temperature Antiferromagnetic Ordering. <i>Chemistry of Materials</i> , 2022, 34, 5020-5029.	3.2	2
9	Interplay between Oxygen Octahedral Rotation and Deformation in the Acentric TiO_4 Series toward Negative Thermal Expansion. <i>Chemistry of Materials</i> , 2022, 34, 6492-6504.	3.2	5
10	Shear-induced unidirectional deposition of bacterial cellulose microfibrils using rising bubble stream cultivation. <i>Carbohydrate Polymers</i> , 2021, 255, 117328.	5.1	7
11	Aluminosilicate glasses for zinc selenide tunable fiber laser cladding. <i>Journal of the American Ceramic Society</i> , 2021, 104, 691-696.	1.9	5
12	Electric Field-Induced Polarization Responses of Noncentrosymmetric Crystalline Biopolymers in Different Frequency Regimes – A Case Study on Unidirectionally Aligned I^2 -Chitin Crystals. <i>Biomacromolecules</i> , 2021, 22, 1901-1909.	2.6	4
13	Comprehensive anisotropic linear optical properties of the Weyl semimetals TaAs and NbAs. <i>Physical Review B</i> , 2021, 103, .	1.1	11
14	Subterahertz collective dynamics of polar vortices. <i>Nature</i> , 2021, 592, 376-380.	13.7	66
15	Relativistic spacetime crystals. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2021, 77, 242-256.	0.0	1
16	Nano-imaging of strain-tuned stripe textures in a Mott crystal. <i>Npj Quantum Materials</i> , 2021, 6, .	1.8	12
17	Spin-valley locking and bulk quantum Hall effect in a noncentrosymmetric Dirac semimetal BaMnSb_2 . <i>Nature Communications</i> , 2021, 12, 4062.	5.8	32
18	Extreme Ultraviolet Second Harmonic Generation Spectroscopy in a Polar Metal. <i>Nano Letters</i> , 2021, 21, 6095-6101.	4.5	17

#	ARTICLE	IF	CITATIONS
19	Dynamics of voltage-driven oscillating insulator-metal transitions. <i>Physical Review B</i> , 2021, 104, .	1.1	10
20	Evidence for a Magnetic-Field-Induced Ideal Type-II Weyl State in Antiferromagnetic Topological Insulator MnBi	2.8	30
21	A Polar Magnetic and Insulating Double Corundum Oxide: $\text{Mn}_2\text{MnSbO}_6$ with Ordered Mn(II) and Mn(III) Ions. <i>Chemistry of Materials</i> , 2021, 33, 6522-6529.	3.2	9
22	Cocrystalline Polymer Films Exhibiting Second-Order Nonlinear Optical Properties. <i>ACS Macro Letters</i> , 2021, 10, 1216-1222.	2.3	3
23	Optimizing accuracy and efficacy in data-driven materials discovery for the solar production of hydrogen. <i>Energy and Environmental Science</i> , 2021, 14, 2335-2348.	15.6	23
24	In-plane quasi-single-domain BaTiO_3 via interfacial symmetry engineering. <i>Nature Communications</i> , 2021, 12, 6784.	5.8	16
25	Designing Optimal Perovskite Structure for High Ionic Conduction. <i>Advanced Materials</i> , 2020, 32, e1905178.	11.1	30
26	$\text{Ir}_6\text{In}_{32}\text{S}_{21}$, a polar, metal-rich semiconducting subchalcogenide. <i>Chemical Science</i> , 2020, 11, 870-878.	3.7	7
27	Searching for New Ferroelectric Materials Using High-Throughput Databases: An Experimental Perspective on BiAlO_3 and BiInO_3 . <i>Chemistry of Materials</i> , 2020, 32, 7274-7283.	3.2	16
28	Making EuO multiferroic by epitaxial strain engineering. <i>Communications Materials</i> , 2020, 1, .	2.9	21
29	Chirality-Dependent Second Harmonic Generation of MoS_2 Nanoscroll with Enhanced Efficiency. <i>ACS Nano</i> , 2020, 14, 13333-13342.	7.3	34
30	Nanoengineering room temperature ferroelectricity into orthorhombic SmMnO_3 films. <i>Nature Communications</i> , 2020, 11, 2207.	5.8	17
31	Wedge reversion antisymmetry and 41 types of physical quantities in arbitrary dimensions. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020, 76, 318-327.	0.0	2
32	SrNbO_3 as a transparent conductor in the visible and ultraviolet spectra. <i>Communications Physics</i> , 2020, 3, .	2.0	48
33	Achieving Minimal Heat Conductivity by Ballistic Confinement in Phononic Metalattices. <i>ACS Nano</i> , 2020, 14, 4235-4243.	7.3	14
34	Antisymmetry: Fundamentals and Applications. <i>Annual Review of Materials Research</i> , 2020, 50, 255-281.	4.3	9
35	High-Pressure, High-Temperature Synthesis and Characterization of Polar and Magnetic LuCrWO_6 . <i>Inorganic Chemistry</i> , 2020, 59, 3579-3584.	1.9	9
36	Nondestructive Measurements of the Mechanical and Structural Properties of Nanostructured Metalattices. <i>Nano Letters</i> , 2020, 20, 3306-3312.	4.5	10

#	ARTICLE	IF	CITATIONS
37	Atomic-scale measurement of polar entropy. Physical Review B, 2019, 100, .	1.1	7
38	Multidimensional thermal analysis of an ultrawide bandgap AlGaIn channel high electron mobility transistor. Applied Physics Letters, 2019, 115, .	1.5	30
39	High-Pressure Synthesis and Ferrimagnetism of Ni ₃ TeO ₆ -Type Mn ₂ ScMO ₆ (M = Nb, Ta). Inorganic Chemistry, 2019, 58, 15953-15961.	1.9	6
40	Atomic and electronic structure of domains walls in a polar metal. Physical Review B, 2019, 99, .	1.1	19
41	MnFe _{0.5} Ru _{0.5} O ₃ : an above-room-temperature antiferromagnetic semiconductor. Journal of Materials Chemistry C, 2019, 7, 509-522.	2.7	5
42	Emergent room temperature polar phase in CaTiO ₃ nanoparticles and single crystals. APL Materials, 2019, 7, .	2.2	10
43	Large tetragonality and room temperature ferroelectricity in compressively strained CaTiO ₃ thin films. APL Materials, 2019, 7, .	2.2	10
44	Comprehensive magnetic phase diagrams of the polar metal C		

#	ARTICLE	IF	CITATIONS
55	Continuously Tuning Epitaxial Strains by Thermal Mismatch. ACS Nano, 2018, 12, 1306-1312.	7.3	44
56	YCrWO ₆ : Polar and Magnetic Oxide with CaTa ₂ O ₆ -Related Structure. Chemistry of Materials, 2018, 30, 1045-1054.	3.2	22
57	Conformal coating of amorphous silicon and germanium by high pressure chemical vapor deposition for photovoltaic fabrics. APL Materials, 2018, 6, 046105.	2.2	11
58	Rotomagnetic coupling in fine-grained multiferroic BiFeO_3 : Theory and experiment. Physical Review B, 2018, 97, .	1.1	22
59	Terahertz Emission: Terahertz Emission from Hybrid Perovskites Driven by Ultrafast Charge Separation and Strong Electron-Phonon Coupling (Adv. Mater. 11/2018). Advanced Materials, 2018, 30, 1870079.	11.1	2
60	Three-dimensional atomic scale electron density reconstruction of octahedral tilt epitaxy in functional perovskites. Nature Communications, 2018, 9, 5220.	5.8	32
61	Linear and nonlinear optical probe of the ferroelectric-like phase transition in a polar metal, LiOsO ₃ . Applied Physics Letters, 2018, 113, .	1.5	26
62	4D-STEM Differential Phase Contrast Microscopy Across Ferroelectric Domain Walls. Microscopy and Microanalysis, 2018, 24, 228-229.	0.2	0
63	Hybrid Improper Ferroelectricity in (Sr,Ca) ₃ Sn ₂ O ₇ and Beyond: Universal Relationship between Ferroelectric Transition Temperature and Tolerance Factor in $n = 2$ Ruddlesden-Popper Phases. Journal of the American Chemical Society, 2018, 140, 15690-15700.	6.6	74
64	Ferroelectric Sr ₃ Zr ₂ O ₇ : Competition between Hybrid Improper Ferroelectric and Antiferroelectric Mechanisms. Advanced Functional Materials, 2018, 28, 1801856.	7.8	89
65	Theory-Guided Synthesis of a Metastable Lead-Free Piezoelectric Polymorph. Advanced Materials, 2018, 30, 1800559.	11.1	6
66	Discovering minimum energy pathways via distortion symmetry groups. Physical Review B, 2018, 98, .	1.1	14
67	Spatio-temporal symmetry " crystallographic point groups with time translations and time inversion. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, 399-402.	0.0	6
68	Strain-induced ferroelectricity and spin-lattice coupling in SrMnO_3 thin films. Physical Review B, 2018, 97, .	1.1	51
69	Sub-wavelength modulation of $\chi^{(2)}$ optical nonlinearity in organic thin films. Nature Communications, 2017, 8, 14269.	5.8	11
70	Polar Oxides without Inversion Symmetry through Vacancy and Chemical Order. Journal of the American Chemical Society, 2017, 139, 2833-2841.	6.6	34
71	Emergent Low-Symmetry Phases and Large Property Enhancements in Ferroelectric KNbO ₃ Bulk Crystals. Advanced Materials, 2017, 29, 1700530.	11.1	26
72	Thermodynamic potential and phase diagram for multiferroic bismuth ferrite (BiFeO ₃). Npj Computational Materials, 2017, 3, .	3.5	62

#	ARTICLE	IF	CITATIONS
73	A silicon microwire under a three-dimensional anisotropic tensile stress. Applied Physics Letters, 2017, 110, 091911.	1.5	0
74	High-Quality LaVO ₃ Films as Solar Energy Conversion Material. ACS Applied Materials & Interfaces, 2017, 9, 12556-12562.	4.0	26
75	Competing Structural Instabilities in the Ruddlesden-Popper Derivatives RRTiO ₄ (R = Rare) Tj ETQq1 1 0.784314 rgBT Centrosymmetry. Chemistry of Materials, 2017, 29, 656-665.	3.2	22
76	Optoelectronic Fibers: Single-Crystal Germanium Core Optoelectronic Fibers (Advanced Optical) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50	3.6	0
77	A(II)GeTeO ₆ (A = Mn, Cd, Pb): Non-Centrosymmetric Layered Tellurates with PbSb ₂ O ₆ -Related Structure. Inorganic Chemistry, 2017, 56, 9019-9024.	1.9	18
78	Magnetostriction-polarization coupling in multiferroic Mn ₂ MnWO ₆ . Nature Communications, 2017, 8, 2037.	5.8	40
79	Single-Crystal Germanium Core Optoelectronic Fibers. Advanced Optical Materials, 2017, 5, 1600592.	3.6	35
80	Spatio-Temporal Symmetry Point Groups with Time Translations. Symmetry, 2017, 9, 187.	1.1	5
81	Aberration Corrected STEM Imaging of Domain Walls in Congruent LiNbO ₃ . Microscopy and Microanalysis, 2016, 22, 914-915.	0.2	5
82	Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. Angewandte Chemie, 2016, 128, 10016-10021.	1.6	3
83	Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. Angewandte Chemie - International Edition, 2016, 55, 9862-9867.	7.2	20
84	Emergent Noncentrosymmetry and Piezoelectricity Driven by Oxygen Octahedral Rotations in $R_{2-x}Dy_xTi_{2-x}O_{10}$ = 2 Dion-Jacobson Phase Layer Perovskites. Advanced Functional Materials, 2016, 26, 1930-1937.	7.8	33
85	Frontispiz: Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. Angewandte Chemie, 2016, 128, .	1.6	0
86	Chemistry, growth kinetics, and epitaxial stabilization of Sn ²⁺ in Sn-doped SrTiO ₃ using (CH ₃) ₆ Sn ₂ tin precursor. APL Materials, 2016, 4, .	2.2	15
87	Atomic scale imaging of competing polar states in a Ruddlesden-Popper layered oxide. Nature Communications, 2016, 7, 12572.	5.8	26
88	Stoichiometry as key to ferroelectricity in compressively strained SrTiO ₃ films. Applied Physics Letters, 2016, 109, .	1.5	23
89	Improper Inversion Symmetry Breaking and Piezoelectricity through Oxygen Octahedral Rotations in Layered Perovskite Family, Li _{1-x} R _x TiO ₄ (R = Rare Earths). Advanced Electronic Materials, 2016, 2, 1500196.	2.6	28
90	Interfacial Octahedral Rotation Mismatch Control of the Symmetry and Properties of SrRuO ₃ . ACS Applied Materials & Interfaces, 2016, 8, 14871-14878.	4.0	59

#	ARTICLE	IF	CITATIONS
91	Polar metals by geometric design. Nature, 2016, 533, 68-72.	13.7	262
92	Unleashing Strain Induced Ferroelectricity in Complex Oxide Thin Films via Precise Stoichiometry Control. Advanced Functional Materials, 2016, 26, 7271-7279.	7.8	30
93	Frontispiece: Low-Temperature Cationic Rearrangement in a Bulk Metal Oxide. Angewandte Chemie - International Edition, 2016, 55, .	7.2	0
94	Imprinting of Local Metallic States into VO ₂ with Ultraviolet Light. Advanced Functional Materials, 2016, 26, 6612-6618.	7.8	43
95	Creative tension in layered crystals. Nature Materials, 2016, 15, 928-930.	13.3	6
96	PbMn(IV)TeO ₆ : A New Noncentrosymmetric Layered Honeycomb Magnetic Oxide. Inorganic Chemistry, 2016, 55, 1333-1338.	1.9	22
97	Correlated metals as transparent conductors. Nature Materials, 2016, 15, 204-210.	13.3	291
98	Fast Magnetic Domain-Wall Motion in a Ring-Shaped Nanowire Driven by a Voltage. Nano Letters, 2016, 16, 2341-2348.	4.5	55
99	Linear antiferrodistortive-antiferromagnetic effect in multiferroics: Physical manifestations. Physical Review B, 2015, 92, .	1.1	14
100	Mn ₂ FeWO ₆ : A New Ni ₃ TeO ₆ -Type Polar and Magnetic Oxide. Advanced Materials, 2015, 27, 2177-2181.	11.1	53
101	The affine and Euclidean normalizers of the subperiodic groups. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, 150-160.	0.0	0
102	A labile hydride strategy for the synthesis of heavily nitridized BaTiO ₃ . Nature Chemistry, 2015, 7, 1017-1023.	6.6	118
103	The antisymmetry of distortions. Nature Communications, 2015, 6, 8818.	5.8	8
104	Reply to "Comment on "Origin of piezoelectric response under a biased scanning probe microscopy tip across a 180° ferroelectric domain wall". Physical Review B, 2014, 89, .	1.1	3
105	Piezoelectric enhancement of PbTiO_3 superlattices through domain. Physical Review B, 2014, 90, .		
106	Double antisymmetry and the rotation-reversal space groups. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, 24-38.	0.0	13
107	Elastic strain engineering of ferroic oxides. MRS Bulletin, 2014, 39, 118-130.	1.7	379
108	Inversion Symmetry Breaking by Oxygen Octahedral Rotations in the Ruddlesden-Popper $\text{Na}_x\text{R}_{1-x}\text{TiO}_3$. Physical Review Letters, 2014, 112, 187602.	2.9	60

#	ARTICLE	IF	CITATIONS
109	Thermotropic phase boundaries in classic ferroelectrics. Nature Communications, 2014, 5, 3172.	5.8	123
110	Electric-field induced ferromagnetic phase in paraelectric antiferromagnets. Physical Review B, 2014, 89, .	1.1	22
111	Crystallographic data of double antisymmetry space groups. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, 373-381.	0.0	6
112	Flexoelectricity and ferroelectric domain wall structures: Phase-field modeling and DFT calculations. Physical Review B, 2014, 89, .	1.1	101
113	Synchronized charge oscillations in correlated electron systems. Scientific Reports, 2014, 4, .	1.6	155
114	Large nonlinear optical coefficients in pseudo-tetragonal BiFeO ₃ thin films. Applied Physics Letters, 2013, 103, .	1.5	32
115	Exploiting dimensionality and defect mitigation to create tunable microwave dielectrics. Nature, 2013, 502, 532-536.	13.7	204
116	Quantification of octahedral rotations in strained LaAlO ₃ films via synchrotron x-ray diffraction. Physical Review B, 2013, 88, .	1.1	38
117	Universal emergence of spatially modulated structures induced by flexoantiferrodistortive coupling in multiferroics. Physical Review B, 2013, 88, .	1.1	37
118	Effect of stoichiometry on the dielectric properties and soft mode behavior of strained epitaxial SrTiO ₃ thin films on DyScO ₃ substrates. Applied Physics Letters, 2013, 102, .	1.5	39
119	Low-symmetry monoclinic ferroelectric phase stabilized by oxygen octahedra rotations in strained Eu _x Sr _{1-x} TiO ₃ thin films. Physical Review B, 2013, 87, .	1.1	16
120	Templated Chemically Deposited Semiconductor Optical Fiber Materials. Annual Review of Materials Research, 2013, 43, 527-557.	4.3	33
121	Nanoscale structural evolution of electrically driven insulator to metal transition in vanadium dioxide. Applied Physics Letters, 2013, 103, .	1.5	31
122	Structural and electronic recovery pathways of a photoexcited ultrathin VO ₂ film. Physical Review B, 2013, 88, .	1.1	43
123	Silicon-p-n Junction Fibers (Adv. Mater. 10/2013). Advanced Materials, 2013, 25, 1460-1460.	11.1	3
124	Surface polar states and pyroelectricity in ferroelastics induced by flexo-rotational field. Applied Physics Letters, 2012, 100, .	1.5	38
125	Origin of piezoelectric response under a biased scanning probe microscopy tip across a 180° ferroelectric domain wall. Physical Review B, 2012, 86, .	1.1	26
126	A magnifying fiber element with an array of sub-wavelength Ge/ZnSe pixel waveguides for infrared imaging. Applied Physics Letters, 2012, 101, .	1.5	9

#	ARTICLE	IF	CITATIONS
127	Confined High-Pressure Chemical Deposition of Hydrogenated Amorphous Silicon. Journal of the American Chemical Society, 2012, 134, 19-22.	6.6	56
128	Impact of Free Charges on Polarization and Pyroelectricity in Antiferrodistortive Structures and Surfaces Induced by a Flexoelectric Effect. Ferroelectrics, 2012, 438, 32-44.	0.3	9
129	Conductivity of twin-domain-wall/surface junctions in ferroelastics: Interplay of deformation potential, octahedral rotations, improper ferroelectricity, and flexoelectric coupling. Physical Review B, 2012, 86, .	1.1	74
130	Phenomenological thermodynamic potential for CaTiO ₃ single crystals. Physical Review B, 2012, 85, .	1.1	46
131	Interfacial polarization and pyroelectricity in antiferrodistortive structures induced by a flexoelectric effect and rotostriction. Physical Review B, 2012, 85, .	1.1	100
132	Dipole spring ferroelectrics in superlattice SrTiO ₃ /BaTiO ₃ thin films exhibiting constricted hysteresis loops. Applied Physics Letters, 2012, 100, .	1.5	26
133	Probing Ferroelectrics Using Optical Second Harmonic Generation. Journal of the American Ceramic Society, 2011, 94, 2699-2727.	1.9	244
134	Rotation-reversal symmetries in crystals and handed structures. Nature Materials, 2011, 10, 376-381.	13.3	88
135	Static conductivity of charged domain walls in uniaxial ferroelectric semiconductors. Physical Review B, 2011, 83, .	1.1	214
136	Domain walls in Lithium Niobate and Lithium Tantalate: Local structure and properties. , 2011, , .		0
137	Shape of ferroelectric domains in LiNbO ₃ and LiTaO ₃ from defect/domain-wall interactions. Applied Physics Letters, 2011, 98, .	1.5	19
138	High-Pressure Chemical Deposition for Void-Free Filling of Extreme Aspect Ratio Templates. Advanced Materials, 2010, 22, 4605-4611.	11.1	26
139	Phase Transition in Weberite-Type Gd ₃ NbO ₇ . Journal of the American Ceramic Society, 2010, 93, 875-880.	1.9	15
140	A strong ferroelectric ferromagnet created by means of spin-lattice coupling. Nature, 2010, 466, 954-958.	13.7	668
141	Phase transitions and domain stabilities in biaxially strained (001) SrTiO ₃ epitaxial thin films. Journal of Applied Physics, 2010, 108, 084113.	1.1	25
142	Correlated polarization switching in the proximity of a domain wall. Physical Review B, 2010, 82, .	1.1	65
143	A modified Landau-Devonshire thermodynamic potential for strontium titanate. Applied Physics Letters, 2010, 96, .	1.5	38
144	Mid-infrared transmission properties of amorphous germanium optical fibers. Applied Physics Letters, 2010, 97, .	1.5	40

#	ARTICLE	IF	CITATIONS
145	Tunable band gap in Bi(Fe $_{1-x}$ Mn $_x$)O $_3$ films. Applied Physics Letters, 2010, 96, .	1.5	70
146	Structure and energetics of ferroelectric domain walls in LiNbO_3 atomic-level simulations. Physical Review B, 2010, 82, .	1.1	45
147	Probing mixed tetragonal/rhombohedral-like monoclinic phases in strained bismuth ferrite films by optical second harmonic generation. Applied Physics Letters, 2010, 97, 112903.	1.5	41
148	Phase diagram and domain splitting in thin ferroelectric films with incommensurate phase. Physical Review B, 2010, 81, .	1.1	23
149	Co-casting and optical characteristics of transparent segmented composite Er:YAG laser ceramics. Journal of Materials Research, 2010, 25, 476-483.	1.2	58
150	Stability and charge transfer levels of extrinsic defects in LiNbO_3 . Physical Review B, 2010, 82, .	1.1	41
151	Optical properties of quasi-tetragonal BiFeO $_3$ thin films. Applied Physics Letters, 2010, 96, .	1.5	153
152	Ferroelectricity in Strain-Free SrTiO_3 Thin Films. Physical Review Letters, 2010, 104, 197601.	2.9	233
153	Magnon sidebands and spin-charge coupling in bismuth ferrite probed by nonlinear optical spectroscopy. Physical Review B, 2009, 79, .	1.1	82
154	Optical properties and magnetochromism in multiferroic BiFeO_3 . Physical Review B, 2009, 79, .	1.1	149
155	Structure and energetics of Er defects in LiNbO_3 first-principles and thermodynamic calculations. Physical Review B, 2009, 80, .	1.1	35
156	Mixed Bloch-Néel-Ising character of 180° ferroelectric domain walls. Physical Review B, 2009, 80, .	1.1	146
157	Spin-charge-lattice coupling through resonant multimagnon excitations in multiferroic BiFeO $_3$. Applied Physics Letters, 2009, 94, 161905.	1.5	43
158	Electro-optic laser beam shaping by patterned ferroelectric domains. Applied Physics Letters, 2009, 95, 202902.	1.5	1
159	Surface effect on domain wall width in ferroelectrics. Journal of Applied Physics, 2009, 106, .	1.1	59
160	Stripe domain structure in epitaxial (001) BiFeO $_3$ thin films on orthorhombic TbScO $_3$ substrate. Applied Physics Letters, 2009, 94, .	1.5	76
161	Thermodynamics of nanodomain formation and breakdown in scanning probe microscopy: Landau-Ginzburg-Devonshire approach. Physical Review B, 2009, 80, .	1.1	63
162	Solitons and critical breakup fields in lithium niobate type uniaxial ferroelectrics. European Physical Journal B, 2008, 65, 525-531.	0.6	15

#	ARTICLE	IF	CITATIONS
163	Effect of the intrinsic width on the piezoelectric force microscopy of a single ferroelectric domain wall. Journal of Applied Physics, 2008, 103, 124110.	1.1	21
164	Linear and nonlinear optical properties of BiFeO ₃ . Applied Physics Letters, 2008, 92, .	1.5	213
165	Stability of intrinsic defects and defect clusters in LiNbO_3 from density functional theory calculations. Physical Review B, 2008, 78, .	1.1	109
166	Design and simulation of planar electro-optic switches in ferroelectrics. Applied Physics Letters, 2008, 93, 052912.	1.5	11
167	Linear and nonlinear optical properties of multifunctional PbVO ₃ thin films. Applied Physics Letters, 2008, 92, .	1.5	24
168	Nanoscale polarization profile across a 180° ferroelectric domain wall extracted by quantitative piezoelectric force microscopy. Journal of Applied Physics, 2008, 104, 074110.	1.1	43
169	The influence of 180° ferroelectric domain wall width on the threshold field for wall motion. Journal of Applied Physics, 2008, 104, 084107.	1.1	53
170	Two-phonon coupling to the antiferromagnetic phase transition in multiferroic BiFeO ₃ . Applied Physics Letters, 2008, 92, .	1.5	116
171	Interaction of a 180° ferroelectric domain wall with a biased scanning probe microscopy tip: Effective wall geometry and thermodynamics in Ginzburg-Landau-Devonshire theory. Physical Review B, 2008, 78, .	1.1	43
172	Chemical fluid deposition of semiconductors inside a microstructured optical fiber for optoelectronic applications. , 2008, , .		0
173	Two dimensional dynamic focusing and optical switching of laser light by ferroelectric devices. , 2008, , .		0
174	Natural focusing of x rays from ferroelectric lithium niobate wafers. Applied Physics Letters, 2007, 91, 142909.	1.5	0
175	Polar and magnetic properties of PbVO ₃ thin films. Physical Review B, 2007, 75, .	1.1	36
176	Confocal Micro-Fluorescence and Raman Spectroscopy across Grain Boundaries in Transparent Nd ³⁺ :YAG Ceramic Laser Gain Media. , 2007, , .		0
177	Defect-Driven Domain Wall Interactions in Trigonal Ferroelectrics. Annual Review of Materials Research, 2007, 37, 449-489.	4.3	229
178	c-axis oriented epitaxial BaTiO ₃ films on (001) Si. Journal of Applied Physics, 2006, 100, 024108.	1.1	106
179	Microstructured Optical Fibers as New Nanotemplates for High Pressure CVD. Materials Research Society Symposia Proceedings, 2006, 988, 1.	0.1	0
180	Phase transitions and domain structures in strained pseudocubic (100)SrTiO ₃ thin films. Physical Review B, 2006, 73, .	1.1	160

#	ARTICLE	IF	CITATIONS
181	High pressure CVD inside microstructured optical fibres. , 2006, , .		2
182	Bismuth manganite: A multiferroic with a large nonlinear optical response. Physical Review B, 2004, 69, .	1.1	97
183	Coupled displacive and order-disorder dynamics in LiNbO3 by molecular-dynamics simulation. Applied Physics Letters, 2004, 84, 1916-1918.	1.5	42
184	Long-range strains and the effects of applied field at 180° ferroelectric domain walls in lithium niobate. Physical Review B, 2004, 69, .	1.1	67
185	Local electromechanical response at a single ferroelectric domain wall in lithium niobate. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 2287-2290.	1.1	3
186	Enhancement of Ferroelectricity in Strained BaTiO3 Thin Films. Science, 2004, 306, 1005-1009.	6.0	1,676
187	Electro-optic control of the superprism effect in photonic crystals. Applied Physics Letters, 2003, 82, 3176-3178.	1.5	65
188	Anomalous electro-optic effect in Sr0.6Ba0.4Nb2O6 single crystals and its application in two-dimensional laser scanning. Applied Physics Letters, 2003, 83, 4375-4377.	1.5	18
189	Rearrangement of Rare Earth Defects Under Domain Inversion in LiNbO3. Radiation Effects and Defects in Solids, 2003, 158, 247-250.	0.4	6
190	In-Situ Probing of Domain Poling in Bi4Ti3O12 Thin Films by Optical Second Harmonic Generation. Integrated Ferroelectrics, 2002, 44, 19-24.	0.3	4
191	On Domain Wall Broadening in Ferroelectric Lithium Niobate and Tantalate. AIP Conference Proceedings, 2002, , .	0.3	2
192	Coercive fields in ferroelectrics: A case study in lithium niobate and lithium tantalate. Applied Physics Letters, 2002, 80, 2740-2742.	1.5	122
193	Multichannel /spl plusmn/ 1.1-kV arbitrary waveform generator for beam steering using ferroelectric device. IEEE Photonics Technology Letters, 2002, 14, 1605-1607.	1.3	5
194	Probing domain microstructure in ferroelectric Bi4Ti3O12 thin films by optical second harmonic generation. Journal of Applied Physics, 2001, 89, 1387-1392.	1.1	45
195	Non-stoichiometric control of LiNbO3 and LiTaO3 in ferroelectric domain engineering for optical devices. Ferroelectrics, 2001, 257, 235-243.	0.3	27
196	Crystal ion slicing of domain microengineered electro-optic devices on lithium niobate. Integrated Ferroelectrics, 2001, 41, 35-42.	0.3	4
197	Strain-tunable photonic band gap crystals. Applied Physics Letters, 2001, 78, 3015-3017.	1.5	118
198	Domain rearrangement in ferroelectric Bi4Ti3O12 thin films studied by in situ optical second harmonic generation. Journal of Applied Physics, 2001, 90, 3497-3503.	1.1	12

#	ARTICLE	IF	CITATIONS
199	Domain reversal and wall structure of 180° ferroelectric domains in LiTaO ₃ crystals. AIP Conference Proceedings, 2000, , .	0.3	1
200	Direct Observation of Pinning and Bowing of a Single Ferroelectric Domain Wall. Physical Review Letters, 1999, 82, 4106-4109.	2.9	231
201	Ferroelectric domain kinetics in congruent LiTaO ₃ . Integrated Ferroelectrics, 1999, 27, 137-146.	0.3	0
202	Integration of electro-optic lenses and scanners on ferroelectric LiTaO ₃ . Integrated Ferroelectrics, 1999, 25, 31-36.	0.3	2
203	Electric field induced domain rearrangement in potassium niobate thin films studied by in situ second harmonic generation measurements. Journal of Applied Physics, 1997, 81, 865-875.	1.1	37
204	In-situ X-ray diffraction study of phase transitions in epitaxial KNbO ₃ thin films. Ferroelectrics, 1997, 200, 343-351.	0.3	1
205	Domain structure and phase transitions in epitaxial KNbO ₃ thin films studied by in situ second harmonic generation measurements. Applied Physics Letters, 1996, 68, 1323-1325.	1.5	67
206	Structure-Optical Property Correlation of Epitaxial Potassium Niobate Thin Films Deposited on Magnesium Oxide (100) Substrates Using a Strontium Titanate Transition Layer. Journal of the American Ceramic Society, 1995, 78, 1825-1833.	1.9	29
207	Orientation control of KNbO ₃ thin films deposited by laser ablation on MgO (100) using SrTiO ₃ transition layers. Ferroelectrics, 1994, 152, 55-60.	0.3	5
208	Tunable nonlinear liquid-crystal photonic crystals. , 0, , .		0