

Anoop R Damodaran

List of Publications by Year in descending order

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46
papers

3,478
citations

126858

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214721

47
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47
all docs

47
docs citations

47
times ranked

3781
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical creation of a supercrystal with three-dimensional nanoscale periodicity. <i>Nature Materials</i> , 2019, 18, 377-383.	13.3	105
2	Epitaxial Strain Control of Relaxor Ferroelectric Phase Evolution. <i>Advanced Materials</i> , 2019, 31, e1901060.	11.1	29
3	Reducing Coercive-Field Scaling in Ferroelectric Thin Films <i>via</i> Orientation Control. <i>ACS Nano</i> , 2018, 12, 4736-4743.	7.3	47
4	Emergent chirality in the electric polarization texture of titanate superlattices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 915-920.	3.3	121
5	Voltage control of unidirectional anisotropy in ferromagnet-multiferroic system. <i>Science Advances</i> , 2018, 4, eaat4229.	4.7	52
6	Perspective: Emergent topologies in oxide superlattices. <i>APL Materials</i> , 2018, 6, 100901.	2.2	28
7	Phase Coexistence of Ferroelectric Vortices and Classical a_1/a_2 Domains in $\text{PbTiO}_3/\text{SrTiO}_3$ Superlattices.. <i>Microscopy and Microanalysis</i> , 2018, 24, 1638-1639.	0.2	2
8	Nonstoichiometry, structure, and properties of $\text{Ba}_{1-x}\text{Ti}_y$ thin films. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10751-10759.	2.7	16
9	Resonant domain-wall-enhanced tunable microwave ferroelectrics. <i>Nature</i> , 2018, 560, 622-627.	13.7	82
10	Stability of Polar Vortex Lattice in Ferroelectric Superlattices. <i>Nano Letters</i> , 2017, 17, 2246-2252.	4.5	131
11	Large polarization gradients and temperature-stable responses in compositionally-graded ferroelectrics. <i>Nature Communications</i> , 2017, 8, 14961.	5.8	60
12	Direct Measurement of Pyroelectric and Electrocaloric Effects in Thin Films. <i>Physical Review Applied</i> , 2017, 7, .	1.5	54
13	Three- ϵ -State Ferroelastic Switching and Large Electromechanical Responses in PbTiO_3 Thin Films. <i>Advanced Materials</i> , 2017, 29, 1702069.	11.1	74
14	Phase coexistence and electric-field control of toroidal order in oxide superlattices. <i>Nature Materials</i> , 2017, 16, 1003-1009.	13.3	159
15	Quantification of flexoelectricity in $\text{PbTiO}_3/\text{SrTiO}_3$ superlattice polar vortices using machine learning and phase-field modeling. <i>Nature Communications</i> , 2017, 8, 1468.	5.8	93
16	Structural imaging of nanoscale phonon transport in ferroelectrics excited by metamaterial-enhanced terahertz fields. <i>Physical Review Materials</i> , 2017, 1, .	0.9	5
17	New modalities of strain-control of ferroelectric thin films. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 263001.	0.7	86
18	Enhanced Electrical Resistivity and Properties via Ion Bombardment of Ferroelectric Thin Films. <i>Advanced Materials</i> , 2016, 28, 10750-10756.	11.1	52

#	ARTICLE	IF	CITATIONS
19	Nonstoichiometry, Structure, and Properties of BiFeO ₃ Films. Chemistry of Materials, 2016, 28, 5952-5961.	3.2	54
20	Strain-induced growth instability and nanoscale surface patterning in perovskite thin films. Scientific Reports, 2016, 6, 26075.	1.6	24
21	Observation of polar vortices in oxide superlattices. Nature, 2016, 530, 198-201.	13.7	682
22	Highly mobile ferroelastic domain walls in compositionally graded ferroelectric thin films. Nature Materials, 2016, 15, 549-556.	13.3	98
23	Asymmetric Response of Ferroelastic Domain-Wall Motion under Applied Bias. ACS Applied Materials & Interfaces, 2016, 8, 2935-2941.	4.0	11
24	Ultrafast Terahertz Gating of the Polarization and Giant Nonlinear Optical Response in BiFeO ₃ Thin Films. Advanced Materials, 2015, 27, 6371-6375.	11.1	47
25	Complex Evolution of Built-in Potential in Compositionally-Graded PbZr _{1-x} Ti _x O ₃ Thin Films. ACS Nano, 2015, 9, 7332-7342.	7.3	39
26	Polarization screening-induced magnetic phase gradients at complex oxide interfaces. Nature Communications, 2015, 6, 6735.	5.8	71
27	Ferroelectric polarization reversal via successive ferroelastic transitions. Nature Materials, 2015, 14, 79-86.	13.3	216
28	High-frequency thermal-electrical cycles for pyroelectric energy conversion. Journal of Applied Physics, 2014, 116, .	1.1	37
29	Effect of asymmetry mismatch on the domain structure of rhombohedral BiFeO ₃ thin films. Applied Physics Letters, 2014, 104, .	1.5	62
30	Tuning Susceptibility via Misfit Strain in Relaxed Morphotropic Phase Boundary PbZr _{1-x} Ti _x O ₃ Epitaxial Thin Films. Advanced Materials Interfaces, 2014, 1, 1400098.	1.9	16
31	Stationary domain wall contribution to enhanced ferroelectric susceptibility. Nature Communications, 2014, 5, 3120.	5.8	85
32	Understanding order in compositionally graded ferroelectrics: Flexoelectricity, gradient, and depolarization field effects. Physical Review B, 2014, 89, .	1.1	22
33	X-ray diffraction studies of stripelike ferroelectric domains in thin films of BiFeO_3 . Physical Review B, 2014, 89, .		
34	Thickness-Dependent Crossover from Charge- to Strain-Mediated Magnetoelectric Coupling in Ferromagnetic/Piezoelectric Oxide Heterostructures. ACS Nano, 2014, 8, 894-903.	7.3	61
35	Enhancement of Ferroelectric Curie Temperature in BaTiO ₃ Films via Strain-Induced Defect Dipole Alignment. Advanced Materials, 2014, 26, 6341-6347.	11.1	134
36	Real-Time Observation of Local Strain Effects on Nonvolatile Ferroelectric Memory Storage Mechanisms. Nano Letters, 2014, 14, 3617-3622.	4.5	15

#	ARTICLE	IF	CITATIONS
37	Unexpected Crystal and Domain Structures and Properties in Compositionally Graded $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. <i>Advanced Materials</i> , 2013, 25, 1761-1767.	11.1	73
38	Improved Pyroelectric Figures of Merit in Compositionally Graded $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 13235-13241.	4.0	76
39	Stabilization of mixed-phase structures in highly strained BiFeO_3 thin films via chemical-alloying. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	16
40	Effect of 90° Domain Walls and Thermal Expansion Mismatch on the Pyroelectric Properties of Epitaxial $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ Thin Films. <i>Physical Review Letters</i> , 2012, 108, 167601.	1.1	13
41	Briefcase of 90° Domain Walls for the Low-Field Permittivity of $\text{PbZr}_{0.2}\text{Ti}_{0.8}\text{O}_3$ Thin Films. <i>Physical Review Letters</i> , 2012, 108, 167601.	1.1	13
42	Temperature and thickness evolution and epitaxial breakdown in highly strained BiFeO_3 thin films. <i>Physical Review B</i> , 2012, 85, .	1.1	65
43	Accessing intermediate ferroelectric switching regimes with time-resolved transmission electron microscopy. <i>Journal of Applied Physics</i> , 2012, 112, 052013.	1.1	21
44	Direct observation of ferroelectric domain switching in varying electric field regimes using in situ TEM. <i>Micron</i> , 2012, 43, 1121-1126.	1.1	40
45	Epitaxial Ferroelectric Heterostructures Fabricated by Selective Area Epitaxy of SrRuO_3 Using an MgO Mask. <i>Advanced Materials</i> , 2012, 24, 1610-1615.	11.1	65
46	Nanoscale Structure and Mechanism for Enhanced Electromechanical Response of Highly Strained BiFeO_3 Thin Films. <i>Advanced Materials</i> , 2011, 23, 3170-3175.	11.1	138