

# Ichiro Takeuchi

## List of Publications by Year in descending order

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243  
papers

13,456  
citations

25423

59  
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28425

109  
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247  
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247  
docs citations

247  
times ranked

14077  
citing authors

#	ARTICLE	IF	CITATIONS
1	Applications of High Throughput (Combinatorial) Methodologies to Electronic, Magnetic, Structural, and Energy-Related Materials. , 2022, , 353-371.		5
2	Harnessing optoelectronic noises in a photonic generative network. Science Advances, 2022, 8, eabm2956.	4.7	24
3	Physics in the Machine: Integrating Physical Knowledge in Autonomous Phase-Mapping. Frontiers in Physics, 2022, 10, .	1.0	6
4	Scaling of the strange-metal scattering in unconventional superconductors. Nature, 2022, 602, 431-436.	13.7	42
5	Structure and interfaces of compositionally graded Li(Ni <sub>x</sub> Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td (Mn)<i><sub>x</sub></i> Philosophical Magazine, 2022, 102, 1547-1579.	0.7	0
6	Materials, physics and systems for multicaloric cooling. Nature Reviews Materials, 2022, 7, 633-652.	23.3	89
7	Hypothesis Learning in Automated Experiment: Application to Combinatorial Materials Libraries. Advanced Materials, 2022, 34, e2201345.	11.1	30
8	On-the-fly autonomous control of neutron diffraction via physics-informed Bayesian active learning. Applied Physics Reviews, 2022, 9, 021408.	5.5	25
9	Additively Manufactured High-Performance Elastocaloric Materials with Long Fatigue Life. , 2022, , .		0
10	Application of machine learning to reflection high-energy electron diffraction images for automated structural phase mapping. Physical Review Materials, 2022, 6, .	0.9	6
11	Benchmarking active learning strategies for materials optimization and discovery. Oxford Open Materials Science, 2022, 2, .	0.5	5
12	Programmable phase-change metasurfaces on waveguides for multimode photonic convolutional neural network. Nature Communications, 2021, 12, 96.	5.8	186
13	High-Throughput Methods in Superconductivity Research. , 2021, , 161-202.		0
14	Characterization data of an (AlFeNiTiVZr) <sub>1-x</sub> Cr <sub>x</sub> multi-principal element alloy continuous composition spread library. Data in Brief, 2021, 34, 106758.	0.5	1
15	Predictability as a probe of manifest and latent physics: The case of atomic scale structural, chemical, and polarization behaviors in multiferroic Sm-doped BiFeO <sub>3</sub> . Applied Physics Reviews, 2021, 8, .	5.5	7
16	Phase stabilization and oxidation of a continuous composition spread multi-principal element (AlFeNiTiVZr) <sub>1-<math>\hat{x}</math></sub> Cr <sub>x</sub> alloy. Journal of Alloys and Compounds, 2021, 861, 158565.	2.8	5
17	Combinatorial synthesis of non-stoichiometric SiO <sub>x</sub> thin films via high-throughput reactive sputtering. Journal of Applied Physics, 2021, 129, .	1.1	1
18	Ambient effect on the Curie temperatures and magnetic domains in metallic two-dimensional magnets. Npj 2D Materials and Applications, 2021, 5, .	3.9	13

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19	Broadband, High-Frequency Permittivity Characterization for Epitaxial $\text{BaO}_3$ Composites Grown Thin Films. <i>Physical Review Applied</i> , 2021, 15, .		
20	An Open Combinatorial Diffraction Dataset Including Consensus Human and Machine Learning Labels with Quantified Uncertainty for Training New Machine Learning Models. <i>Integrating Materials and Manufacturing Innovation</i> , 2021, 10, 311-318.	1.2	5
21	Magnetoelastic Gilbert damping in magnetostrictive $\text{Fe}_{0.7}\text{Ga}_{0.3}$ thin films. <i>Physical Review B</i> , 2021, 103, .	1.1	5
22	Direct mapping of polarization fields from STEM images: A Deep Learning based exploration of ferroelectrics. <i>Microscopy and Microanalysis</i> , 2021, 27, 2990-2992.	0.2	0
23	Deep learning ferroelectric polarization distributions from STEM data via with and without atom finding. <i>Npj Computational Materials</i> , 2021, 7, .	3.5	5
24	Deep Learning for Rapid Analysis of Spectroscopic Ellipsometry Data. <i>Advanced Photonics Research</i> , 2021, 2, 2100147.	1.7	4
25	Artificial intelligence for search and discovery of quantum materials. <i>Communications Materials</i> , 2021, 2, .	2.9	29
26	High-speed analysis of spectroscopic ellipsometry data using deep learning methods. , 2021, , .		0
27	Nonvolatile multilevel switching in artificial synaptic transistors based on epitaxial $\text{LiCoO}_2$ thin films. <i>Physical Review Materials</i> , 2021, 5, .	0.9	2
28	Tuning the hysteresis of a metal-insulator transition via lattice compatibility. <i>Nature Communications</i> , 2020, 11, 3539.	5.8	38
29	On-the-fly closed-loop materials discovery via Bayesian active learning. <i>Nature Communications</i> , 2020, 11, 5966.	5.8	167
30	XPS group array analysis of a combinatorial Ni-Ti-Co thin film library. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	0.9	3
31	Combinatorial Exploration and Mapping of Phase Transformation in a $\text{NiTiCo}$ Thin Film Library. <i>ACS Combinatorial Science</i> , 2020, 22, 641-648.	3.8	10
32	Two-magnon frequency-pulling effect in ferromagnetic resonance. <i>Applied Physics Letters</i> , 2020, 117, 172401.	1.5	0
33	Causal analysis of competing atomistic mechanisms in ferroelectric materials from high-resolution scanning transmission electron microscopy data. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	21
34	Exploring physics of ferroelectric domain walls via Bayesian analysis of atomically resolved STEM data. <i>Nature Communications</i> , 2020, 11, 6361.	5.8	17
35	Unexpected trends in the enhanced $\text{Ce}^{3+}$ surface concentration in ceria-zirconia catalyst materials. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9850-9858.	5.2	12
36	Combinatorial Synthesis and High-Throughput Characterization of Microstructure and Phase Transformation in $\text{NiTiCuV}$ Quaternary Thin-Film Library. <i>Engineering</i> , 2020, 6, 637-643.	3.2	19

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37	Elastocaloric effect in vanadium (IV) oxide. Applied Physics Letters, 2020, 116, .	1.5	7
38	High-Throughput Exploration of Lithium-Alloy Protection Layers for High-Performance Lithium-Metal Batteries. ACS Applied Energy Materials, 2020, 3, 2547-2555.	2.5	4
39	Measurements of Nonlinear Polarization Dynamics in the Tens of Gigahertz. Physical Review Applied, 2020, 13, .	1.5	1
40	High-throughput, combinatorial synthesis of multimetallic nanoclusters. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6316-6322.	3.3	119
41	CRYSPNet: Crystal structure predictions via neural networks. Physical Review Materials, 2020, 4, .	0.9	26
42	The AFLOW Fleet for Materials Discovery. , 2020, , 1785-1812.		4
43	The 2019 materials by design roadmap. Journal Physics D: Applied Physics, 2019, 52, 013001.	1.3	236
44	Transmission Electron Microscopy Study of Epitaxial Li-Mn-O Films Grown by Pulsed Laser Deposition: The Effect of Temperature on Formation of Phases. Microscopy and Microanalysis, 2019, 25, 2160-2161.	0.2	0
45	Recent advances in high-throughput superconductivity research. Superconductor Science and Technology, 2019, 32, 123001.	1.8	19
46	Identification of advanced spin-driven thermoelectric materials via interpretable machine learning. Npj Computational Materials, 2019, 5, .	3.5	51
47	Perfect Andreev reflection due to the Klein paradox in a topological superconducting state. Nature, 2019, 570, 344-348.	13.7	38
48	An Inter-Laboratory Study of Znâ€“Snâ€“Tiâ€“O Thin Films using High-Throughput Experimental Methods. ACS Combinatorial Science, 2019, 21, 350-361.	3.8	11
49	The AFLOW Fleet for Materials Discovery. , 2019, , 1-28.		0
50	Machine-learning guided discovery of a new thermoelectric material. Scientific Reports, 2019, 9, 2751.	1.6	74
51	Fatigue-resistant high-performance elastocaloric materials made by additive manufacturing. Science, 2019, 366, 1116-1121.	6.0	229
52	Low-Loss Integrated Photonic Switch Using Subwavelength Patterned Phase Change Material. ACS Photonics, 2019, 6, 87-92.	3.2	124
53	Microwave Meissner screening properties of proximity-coupled topological-insulatorâ€“superconductor bilayers. Physical Review Materials, 2019, 3, .	0.9	3
54	Ultrafast terahertz spectroscopy study of a Kondo insulating thin-film $B_{1-x}Sm_xSb_2$ : Evidence for an emergent surface state. Physical Review B, 2018, 97, .	1.1	7

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55	Overcoming fatigue through compression for advanced elastocaloric cooling. MRS Bulletin, 2018, 43, 285-290.	1.7	55
56	Exceptional power density and stability at intermediate temperatures in protonic ceramic fuel cells. Nature Energy, 2018, 3, 202-210.	19.8	587
57	Accurate prediction of work and coefficient of performance of elastocaloric materials with phase transformation kinetics. Science and Technology for the Built Environment, 2018, 24, 673-684.	0.8	28
58	Dynamic Determination of Phase Diagrams by Active Machine Learning. Microscopy and Microanalysis, 2018, 24, 544-545.	0.2	1
59	Frequency- and Electric Field-Dependent Physical Model of Ferroelectric Materials in the Tens of GHz. , 2018, , .		0
60	The AFLOW Fleet for Materials Discovery. , 2018, , 1-28.		9
61	High-throughput research on superconductivity. Chinese Physics B, 2018, 27, 127402.	0.7	10
62	Ultra-low-field magneto-elastocaloric cooling in a multiferroic composite device. Nature Communications, 2018, 9, 4075.	5.8	48
63	Assessing Substitution Effects on Surface Chemistry by in Situ Ambient Pressure X-ray Photoelectron Spectroscopy on Perovskite Thin Films, BaCe <sub>x</sub> Zr <sub>0.9-x</sub> Y <sub>0.1</sub> O <sub>2.95-x</sub> (x = 0); TJ ETQq1 1 0.784314 rg	4.9	19
64	AFLOW-CHULL: Cloud-Oriented Platform for Autonomous Phase Stability Analysis. Journal of Chemical Information and Modeling, 2018, 58, 2477-2490.	2.5	69
65	Out-of-Plane Ionic Conductivity Measurement Configuration for High-Throughput Experiments. ACS Combinatorial Science, 2018, 20, 443-450.	3.8	4
66	Machine learning modeling of superconducting critical temperature. Npj Computational Materials, 2018, 4, .	3.5	274
67	Unsupervised phase mapping of X-ray diffraction data by nonnegative matrix factorization integrated with custom clustering. Npj Computational Materials, 2018, 4, .	3.5	70
68	Electric-Field Induced Reversible Switching of the Magnetic Easy Axis in Co/BiFeO <sub>3</sub> on SrTiO <sub>3</sub> . Nano Letters, 2017, 17, 2825-2832.	4.5	33
69	Chemical pressure effect in Sm and La substituted ferroelectric BiFeO <sub>3</sub> thin films: Insights from infrared spectroscopy. Journal of Applied Physics, 2017, 121, 144103.	1.1	13
70	Combinatorial study of Fe-Co-V hard magnetic thin films. Science and Technology of Advanced Materials, 2017, 18, 231-238.	2.8	22
71	Focus on materials genome and informatics. Science and Technology of Advanced Materials, 2017, 18, 1-2.	2.8	13
72	Fulfilling the promise of the materials genome initiative with high-throughput experimental methodologies. Applied Physics Reviews, 2017, 4, .	5.5	224

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73	Stability of the oxygen vacancy induced conductivity in BaSnO <sub>3</sub> thin films on SrTiO <sub>3</sub> . Applied Physics Letters, 2017, 111, .	1.5	50
74	Systematic Band Gap Tuning of BaSnO <sub>3</sub> via Chemical Substitutions: The Role of Clustering in Mixed-Valence Perovskites. Chemistry of Materials, 2017, 29, 9378-9385.	3.2	27
75	Comparison of dissimilarity measures for cluster analysis of X-ray diffraction data from combinatorial libraries. Npj Computational Materials, 2017, 3, .	3.5	75
76	Transmission electron microscopy study of epitaxial Li-Mn-O films grown by pulsed laser deposition: The effect of temperature on formation of phases. Thin Solid Films, 2017, 638, 282-290.	0.8	4
77	Elastocaloric cooling of additive manufactured shape memory alloys with large latent heat. Journal Physics D: Applied Physics, 2017, 50, 404001.	1.3	70
78	A computational high-throughput search for new ternary superalloys. Acta Materialia, 2017, 122, 438-447.	3.8	70
79	Thermoelectric properties of bismuth-substituted calcium manganite Ca <sub>1-x</sub> Bi <sub>x</sub> MnO <sub>3</sub> prepared via the electrostatic spray deposition method. Journal of the Ceramic Society of Japan, 2017, 125, 308-312.	0.5	9
80	Elastocaloric effect in CuAlZn and CuAlMn shape memory alloys under compression. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150309.	1.6	50
81	Design of a hydraulically driven compressive elastocaloric cooling system. Science and Technology for the Built Environment, 2016, 22, 500-506.	0.8	85
82	Structural study of epitaxial LiCoO <sub>2</sub> films grown by pulsed laser deposition on single crystal SrTiO <sub>3</sub> substrates. Thin Solid Films, 2016, 612, 472-482.	0.8	31
83	Effect of oxygen pressure on structure and ionic conductivity of epitaxial Li <sub>0.33</sub> La <sub>0.55</sub> TiO <sub>3</sub> solid electrolyte thin films produced by pulsed laser deposition. RSC Advances, 2016, 6, 61974-61983.	1.7	21
84	The Different Roles of Entropy and Solubility in High Entropy Alloy Stability. ACS Combinatorial Science, 2016, 18, 596-603.	3.8	26
85	Large energy product enhancement in perpendicularly coupled MnBi/CoFe magnetic bilayers. Physical Review B, 2016, 94, .	1.1	15
86	Enhancement of Dielectric Properties in Epitaxial Bismuth Ferrite/Bismuth Samarium Ferrite Superlattices. Advanced Electronic Materials, 2016, 2, 1600170.	2.6	8
87	Observation of the Superconducting Proximity Effect in the Surface State of SmB <sub>6</sub> Thin Films. Physical Review X, 2016, 6, .	2.8	19
88	Magnetic domains in H-mediated Zn <sub>0.9</sub> Co <sub>0.1</sub> O microdisk arrays. RSC Advances, 2016, 6, 57375-57379.	1.7	1
89	Evolution of electronic states in n-type copper oxide superconductor via electric double layer gating. Scientific Reports, 2016, 6, 26642.	1.6	21
90	Not-in-kind cooling technologies: A quantitative comparison of refrigerants and system performance. International Journal of Refrigeration, 2016, 62, 177-192.	1.8	136

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91	First principles thermodynamical modeling of the binodal and spinodal curves in lead chalcogenides. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 5005-5011.	1.3	13
92	Microscopy Study of Structural Evolution in Epitaxial $\text{LiCoO}_2$ Positive Electrode Films during Electrochemical Cycling. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 6727-6735.	4.0	37
93	A review of elastocaloric cooling: Materials, cycles and system integrations. <i>International Journal of Refrigeration</i> , 2016, 64, 1-19.	1.8	237
94	Fabrication of organic-inorganic perovskite thin films for planar solar cells via pulsed laser deposition. <i>AIP Advances</i> , 2016, 6, 015001.	0.6	32
95	Colossal magnetoelectric effect induced by parametric amplification. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	8
96	Solid-state cooling with caloric materials. <i>Physics Today</i> , 2015, 68, 48-54.	0.3	149
97	Magnetotransport in nanocrystalline $\text{SmB}_6$ thin films. <i>AIP Advances</i> , 2015, 5, .	0.6	12
98	Ultrafast Terahertz Gating of the Polarization and Giant Nonlinear Optical Response in $\text{BiFeO}_3$ Thin Films. <i>Advanced Materials</i> , 2015, 27, 6371-6375.	11.1	47
99	Structural Evolution During Electrochemical Cycling of Epitaxial $\text{LiCoO}_2$ Films Studied by S/TEM. <i>Microscopy and Microanalysis</i> , 2015, 21, 139-140.	0.2	0
100	Anomalous magnetoresistance in the spinel superconductor $\text{LiTi}_2\text{O}_4$ . <i>Nature Communications</i> , 2015, 6, 7183.	5.8	54
101	Performance enhancement of a compressive thermoelastic cooling system using multi-objective optimization and novel designs. <i>International Journal of Refrigeration</i> , 2015, 57, 62-76.	1.8	79
102	Multiferroic Heterostructures: Multiferroic Operation of Dynamic Memory Based on Heterostructured Cantilevers ( <i>Adv. Mater.</i> 2/2015). <i>Advanced Materials</i> , 2015, 27, 201-201.	11.1	0
103	High-throughput determination of structural phase diagram and constituent phases using GRENDL. <i>Nanotechnology</i> , 2015, 26, 444002.	1.3	60
104	Composition- and pressure-induced ferroelectric to antiferroelectric phase transitions in Sm-doped $\text{BiFeO}_3$ system. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	49
105	Thermodynamics cycle analysis and numerical modeling of thermoelastic cooling systems. <i>International Journal of Refrigeration</i> , 2015, 56, 65-80.	1.8	112
106	Utilizing Pulsed Laser Deposition Lateral Inhomogeneity as a Tool in Combinatorial Material Science. <i>ACS Combinatorial Science</i> , 2015, 17, 209-216.	3.8	22
107	Epitaxial $\text{LiCoO}_2$ Films as a Model System for Fundamental Electrochemical Studies of Positive Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7901-7911.	4.0	64
108	Probing the reaction pathway in $(\text{La}_{0.8}\text{Sr}_{0.2})_{0.95}\text{MnO}_{3+\delta}$ using libraries of thin film microelectrodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19330-19345.	5.2	22

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109	Multiferroic Operation of Dynamic Memory Based on Heterostructured Cantilevers. <i>Advanced Materials</i> , 2015, 27, 202-206.	11.1	26
110	Robust topological surface state in Kondo insulator $\text{SmB}_6$ thin films. <i>Applied Physics Letters</i> , 2014, 105, 222403.	1.5	42
111	Interface control of a morphotropic phase boundary in epitaxial samarium modified bismuth ferrite superlattices. <i>Physical Review B</i> , 2014, 90, .	1.1	19
112	Local control of magnetic anisotropy in transcritical permalloy thin films using ferroelectric $\text{BaTiO}_3$ domains. <i>Applied Physics Letters</i> , 2014, 105, 212905.	1.5	21
113	Change in the magnetic structure of $(\text{Bi,Sm})\text{FeO}_3$ thin films at the morphotropic phase boundary probed by neutron diffraction. <i>APL Materials</i> , 2014, 2, .	2.2	15
114	Hydrogen lithography for nanomagnetic domain on Co-doped ZnO using an anodic aluminum oxide template. <i>Applied Physics Letters</i> , 2014, 104, 052405.	1.5	7
115	Texture control in lead zirconate titanate multilayer thin films. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014, 61, 654-661.	1.7	6
116	Simultaneous imaging of the ferromagnetic and ferroelectric structure in multiferroic heterostructures. <i>APL Materials</i> , 2014, 2, 076109.	2.2	19
117	Geometry Dependence of Magnetization Reversal in Nanocomposite Alloys. <i>Jom</i> , 2014, 66, 1144-1150.	0.9	9
118	On-the-fly machine-learning for high-throughput experiments: search for rare-earth-free permanent magnets. <i>Scientific Reports</i> , 2014, 4, 6367.	1.6	212
119	Exploiting dimensionality and defect mitigation to create tunable microwave dielectrics. <i>Nature</i> , 2013, 502, 532-536.	13.7	204
120	Combinatorial exploration of rare-earth-free permanent magnets: Magnetic and microstructural properties of Fe-Co-W thin films. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	39
121	Applications of high throughput (combinatorial) methodologies to electronic, magnetic, optical, and energy-related materials. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	202
122	Optimization of $\text{PbTiO}_3$ seed layers and Pt metallization for PZT-based piezoMEMS actuators. <i>Journal of Materials Research</i> , 2013, 28, 1920-1931.	1.2	55
123	Electric-field-controlled antiferromagnetic domains in epitaxial $\text{BiFeO}_3$ thin films probed by neutron diffraction. <i>Physical Review B</i> , 2013, 87, .	1.1	29
124	Combinatorial search of superconductivity in Fe-B composition spreads. <i>APL Materials</i> , 2013, 1, .	2.2	20
125	Dynamic state switching in nonlinear multiferroic cantilevers. <i>Applied Physics Letters</i> , 2012, 101, 043506.	1.5	8
126	Demonstration of high efficiency elastocaloric cooling with large $\Delta T$ using NiTi wires. <i>Applied Physics Letters</i> , 2012, 101, 073904.	1.5	350



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127	Combinatorial search of structural transitions: Systematic investigation of morphotropic phase boundaries in chemically substituted $\text{BiFeO}_3$ . <i>Journal of Materials Research</i> , 2012, 27, 2691-2704.	1.2	43
128	Doping $\text{BiFeO}_3$ : approaches and enhanced functionality. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 15953.	1.3	344
129	Probing the order parameter of superconducting $\text{LiFeAs}$ using $\text{Pb/LiFeAs}$ and $\text{Au/LiFeAs}$ point-contact spectroscopy. <i>Physical Review B</i> , 2012, 85, .	1.1	11
130	Atomic-scale evolution of modulated phases at the ferroelectric-antiferroelectric morphotropic phase boundary controlled by flexoelectric interaction. <i>Nature Communications</i> , 2012, 3, 775.	5.8	145
131	Energy harvesting properties of all-thin-film multiferroic cantilevers. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	94
132	Combinatorial and High-Throughput Screening of Materials Libraries: Review of State of the Art. <i>ACS Combinatorial Science</i> , 2011, 13, 579-633.	3.8	403
133	Active microcantilevers based on piezoresistive ferromagnetic thin films. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	19
134	A Compact Variable-Temperature Broadband Series-Resistor Calibration. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2011, 59, 188-195.	2.9	35
135	Giant magnetostriction in annealed $\text{Co}_{1-x}\text{Fe}_x$ thin-films. <i>Nature Communications</i> , 2011, 2, 518.	5.8	188
136	Experimental evidence of dipolar interaction in bilayer nanocomposite magnets. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 103, 1183-1187.	1.1	2
137	Neutron Diffraction Investigations of Magnetism in $\text{BiFeO}_3$ Epitaxial Films. <i>Advanced Functional Materials</i> , 2011, 21, 1567-1574.	7.8	42
138	Chemical Substitution-Induced Ferroelectric Polarization Rotation in $\text{BiFeO}_3$ . <i>Advanced Materials</i> , 2011, 23, 1765-1769.	11.1	65
139	Transmission electron microscopy study on Co/Fe interdiffusion in $\text{SmCo}_5/\text{Fe}$ and $\text{Sm}_2\text{Co}_7/\text{Fe}/\text{Sm}_2\text{Co}_7$ thin films. <i>Journal of Applied Physics</i> , 2011, 110, 053914.	1.1	10
140	Composition and temperature-induced structural evolution in La, Sm, and Dy substituted $\text{BiFeO}_3$ epitaxial thin films at morphotropic phase boundaries. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	48
141	Atomic resolution imaging at 2.5 GHz using near-field microwave microscopy. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	47
142	Nanoscale Structural and Chemical Properties of Antipolar Clusters in Sm-Doped $\text{BiFeO}_3$ Ferroelectric Epitaxial Thin Films. <i>Chemistry of Materials</i> , 2010, 22, 2588-2596.	3.2	73
143	Universal Behavior and Electric-Field-Induced Structural Transition in Rare-Earth-Substituted $\text{BiFeO}_3$ . <i>Advanced Functional Materials</i> , 2010, 20, 1108-1115.	7.8	364
144	Identification of Quaternary Shape Memory Alloys with Near-Zero Thermal Hysteresis and Unprecedented Functional Stability. <i>Advanced Functional Materials</i> , 2010, 20, 1917-1923.	7.8	304

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145	Phase coexistence near a morphotropic phase boundary in Sm-doped BiFeO <sub>3</sub> films. Applied Physics Letters, 2010, 97, .	1.5	77
146	Physical and chemical characterization of combinatorial metal gate electrode Ta <sub>1-x</sub> Ca <sub>x</sub> N library film. Applied Physics Letters, 2010, 96, 192114.	1.5	6
147	Evidence of a universal and isotropic $\chi$ in 122-type iron pnictide superconductors over a wide doping range. Physical Review B, 2010, 82, .	1.5	7
148	Microstructure-electromechanical property correlations in rare-earth-substituted BiFeO <sub>3</sub> epitaxial thin films at morphotropic phase boundaries. Applied Physics Letters, 2010, 97, .	1.5	73
149	Effect of substrate orientation on lattice relaxation of epitaxial BiFeO <sub>3</sub> thin films. Journal of Applied Physics, 2010, 108, .	1.1	48
150	COMBINATORIAL INVESTIGATION OF STRUCTURAL AND FERROELECTRIC PROPERTIES OF A- AND B-SITE CO-DOPED BiFeO <sub>3</sub> THIN FILMS. Integrated Ferroelectrics, 2010, 111, 116-124.	0.3	16
151	Broadband dielectric spectroscopy of Ruddlesden-Popper Sr <sub>n+1</sub> Ti <sub>n</sub> O <sub>3n+1</sub> (n=1,2,3) thin films. Applied Physics Letters, 2009, 94, 042908.	1.5	27
152	An infrared imaging method for high-throughput combinatorial investigation of hydrogenation-dehydrogenation and new phase formation of thin films. Review of Scientific Instruments, 2009, 80, 073707.	0.6	14
153	Observation of the Josephson Effect in Pb <sub>1-x</sub> Ba <sub>x</sub> K <sub>2</sub> Fe <sub>2</sub> O <sub>8</sub> Crystal Junctions. Physical Review Letters, 2009, 102, 147002.	1.1	89
154	Josephson effect between electron-doped and hole-doped iron pnictide single crystals. Applied Physics Letters, 2009, 95, 062510.	1.5	34
155	The effect of CoPt crystallinity and grain texturing on properties of exchange-coupled Fe/CoPt systems. Journal of Applied Physics, 2009, 105, .	1.1	5
156	Anomalous ferromagnetism in TbMnO <sub>3</sub> thin films. Journal of Applied Physics, 2009, 105, .	1.1	42
157	Labile Ferroelastic Nanodomains in Bilayered Ferroelectric Thin Films. Advanced Materials, 2009, 21, 3497-3502.	11.1	58
158	Structural transitions and complex domain structures across a ferroelectric-to-antiferroelectric phase boundary in epitaxial Sm-doped BiFeO <sub>3</sub> films. Physical Review B, 2009, 80, .	1.1	170
159	Rapid identification of structural phases in combinatorial thin-film libraries using x-ray diffraction and non-negative matrix factorization. Review of Scientific Instruments, 2009, 80, 103902.	0.6	81
160	Fabrication and characterization of all-thin-film magnetoelectric sensors. Applied Physics Letters, 2009, 94, .	1.5	142
161	Data Analysis in Combinatorial Experiments: Applying Supervised Principal Component Technique to Investigate the Relationship Between ToF-SIMS Spectra and the Composition Distribution of Ternary Metallic Alloy Thin Films. QSAR and Combinatorial Science, 2008, 27, 171-178.	1.5	7
162	Determination of Work Functions in the Ta <sub>1-x</sub> Al <sub>x</sub> N <sub>y</sub> /HfO <sub>2</sub> Advanced Gate Stack Using Combinatorial Methodology. IEEE Transactions on Electron Devices, 2008, 55, 2641-2647.	1.6	8

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