Rama K Vasudevan

List of Publications by Year
in descending order

186	5,304	92079	106894
papers	citations	37 h-index	65 g-index

205	205	205	10938
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Deep Learning of Atomically Resolved Scanning Transmission Electron Microscopy Images: Chemical Identification and Tracking Local Transformations. ACS Nano, 2017, 11, 12742-12752.	15.3	301
2	Green Electrospun Nanofibers and Their Application in Air Filtration. Macromolecular Materials and Engineering, 2018, 303, 1800336.	3.8	291
3	Ferroelectric or non-ferroelectric: Why so many materials exhibit â€œferroelectricityâ€• on the nanoscale. Applied Physics Reviews, 2017, 4, .	11.7	254
4	Subchondral bone changes in patients with early degenerative joint disease. Arthritis and Rheumatism, 1970, 13, 400-405.	6.8	199
5	Antecedents and Consequences of Creativity in Product Innovation Teams. Journal of Product Innovation Management, 2013, 30, 170-185.	9.4	169
6	Domain Wall Geometry Controls Conduction in Ferroelectrics. Nano Letters, 2012, 12, 5524-5531.	9.5	129
7	Materials science in the artificial intelligence age: high-throughput library generation, machine learning, and a pathway from correlations to the underpinning physics. MRS Communications, 2019, 9, 821-838.	1.8	118
8	Domain Wall Conduction and Polarizationâ€Mediated Transport in Ferroelectrics. Advanced Functional Materials, 2013, 23, 2592-2616.	16.5	117
9	Big, Deep, and Smart Data in Scanning Probe Microscopy. ACS Nano, 2016, 10, 9068-9086.	15.3	106
10	Mixed electrochemicalâ€“ferroelectric states in nanoscale ferroelectrics. Nature Physics, 2017, 13, 812-818.	11.8	102
11	Highly mobile ferroelastic domain walls in compositionally graded ferroelectric thin films. Nature Materials, 2016, 15, 549-556.	26.6	101
12	AhR controls redox homeostasis and shapes the tumor microenvironment in BRCA1-associated breast cancer. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3604-3613.	7.6	99
13	Single-domain multiferroic BiFeO3 films. Nature Communications, 2016, 7, 12712.	13.2	98
14	Topological Structures in Multiferroics â€“ Domain Walls, Skyrmions and Vortices. Advanced Electronic Materials, 2016, 2, 1500292.	5.4	84
15	Study of exclusive two-photon production of W+Wâ^’ in pp collisions at $ sqrt{s}=7 $ TeV and constraints on anomalous quartic gauge couplings. Journal of High Energy Physics, 2013, 2013, 1.	4.8	77
16	Dimensionality Controlled Octahedral Symmetry-Mismatch and Functionalities in Epitaxial LaCoO₃/SrTiO₃ Heterostructures. Nano Letters, 2015, 15, 4677-4684.	9.5	77
17	Threeâ€State Ferroelastic Switching and Large Electromechanical Responses in PbTiO₃ Thin Films. Advanced Materials, 2017, 29, 1702069.	24.3	77
18	Nanoscale Control of Phase Variants in Strain-Engineered BiFeO₃. Nano Letters, 2011, 11, 3346-3354.	9.5	76

#	Article	IF	Citations
19	Big data and deep data in scanning and electron microscopies: deriving functionality from multidimensional data sets. Advanced Structural and Chemical Imaging, 2015, 1, 6.	4.0	76
20	Building and exploring libraries of atomic defects in graphene: Scanning transmission electron and scanning tunneling microscopy study. Science Advances, 2019, 5, eaaw8989.	10.9	76
21	Scaling Behavior of Resistive Switching in Epitaxial Bismuth Ferrite Heterostructures. Advanced Functional Materials, 2014, 24, 3962-3969.	16.5	69
22	Anisotropic conductivity of uncharged domain walls in BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 86, .	3.3	64
23	Automated and Autonomous Experiments in Electron and Scanning Probe Microscopy. ACS Nano, 2021, 15, 12604-12627.	15.3	64
24	Revelations About Carotid Body Function Through its Pathological Role in Resistant Hypertension. Current Hypertension Reports, 2013, 15, 273-280.	3.4	63
25	Soft skills and dental education. European Journal of Dental Education, 2013, 17, 73-82.	2.1	60
26	Machine learningâ€“enabled identification of material phase transitions based on experimental data: Exploring collective dynamics in ferroelectric relaxors. Science Advances, 2018, 4, eaap8672.	10.9	57
27	Electrical Control of Multiferroic Orderings in Mixedâ€Phase BiFeO₃ Films. Advanced Materials, 2012, 24, 3070-3075.	24.3	54
28	A bridge for accelerating materials by design. Npj Computational Materials, 2015, 1, .	9.1	51
29	Machine learning for materials design and discovery. Journal of Applied Physics, 2021, 129, .	2.3	47
30	Deep data analysis via physically constrained linear unmixing: universal framework, domain examples, and a community-wide platform. Advanced Structural and Chemical Imaging, 2018, 4, 6.	4.0	46
31	Controlling magnetoelectric coupling by nanoscale phase transformation in strain engineered bismuth ferrite. Nanoscale, 2012, 4, 3175.	5.8	45
32	Giant elastic tunability in strained BiFeO3 near an electrically induced phase transition. Nature Communications, 2015, 6, 8985.	13.2	45
33	Mycâ€nick promotes efferocytosis through M2 macrophage polarization during resolution of inflammation. FASEB Journal, 2018, 32, 5312-5325.	0.5	44
34	Phases and Interfaces from Real Space Atomically Resolved Data: Physics-Based Deep Data Image Analysis. Nano Letters, 2016, 16, 5574-5581.	9.5	43
35	Extracting the Redox Orbitals in Li Battery Materials with High-Resolution X-Ray Compton Scattering Spectroscopy. Physical Review Letters, 2015, 114, 087401.	8.0	42
36	Anisotropic epitaxial stabilization of a low-symmetry ferroelectric with enhanced electromechanical response. Nature Materials, 2022, 21, 74-80.	26.6	41

#	Article	IF	Citations
37	Big-Data Reflection High Energy Electron Diffraction Analysis for Understanding Epitaxial Film Growth Processes. ACS Nano, 2014, 8, 10899-10908.	15.3	39
38	Revealing ferroelectric switching character using deep recurrent neural networks. Nature Communications, 2019, 10, 4809.	13.2	38
39	Bayesian Active Learning for Scanning Probe Microscopy: From Gaussian Processes to Hypothesis Learning. ACS Nano, 2022, 16, 13492-13512.	15.3	37
40	Spectroscopic imaging in piezoresponse force microscopy: New opportunities for studying polarization dynamics in ferroelectrics and multiferroics. MRS Communications, 2012, 2, 61-73.	1.8	36
41	Deterministic arbitrary switching of polarization in a ferroelectric thin film. Nature Communications, 2014, 5, 4971.	13.2	36
42	Big data in reciprocal space: Sliding fast Fourier transforms for determining periodicity. Applied Physics Letters, 2015, 106, .	3.2	36
43	Field enhancement of electronic conductance at ferroelectric domain walls. Nature Communications, 2017, 8, 1318.	13.2	33
44	Off-the-shelf deep learning is not enough, and requires parsimony, Bayesianity, and causality. Npj Computational Materials, 2021, 7, .	9.1	33
45	Knowledge Extraction from Atomically Resolved Images. ACS Nano, 2017, 11, 10313-10320.	15.3	32
46	mPEGylated solanesol micelles as redox-responsive nanocarriers with synergistic anticancer effect. Acta Biomaterialia, 2017, 64, 211-222.	8.8	31
47	Data mining for better material synthesis: The case of pulsed laser deposition of complex oxides. Journal of Applied Physics, 2018, 123, .	2.3	31
48	Mapping mesoscopic phase evolution during E-beam induced transformations via deep learning of atomically resolved images. Npj Computational Materials, 2018, 4, .	9.1	31
49	Thickness and strain dependence of piezoelectric coefficient in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BaTiO</mml:mi><mml:mn>3</mml:mn></mml:msub><m thin films. Physical Review Materials, 2020, 4, .	2.5	31
50	On the reactions of Î²-ketoesters with 2,3-diaminopyridine and its derivatives. Journal of Heterocyclic Chemistry, 1973, 10, 201-207.	2.4	30
51	Scientific Instruments, 1983, 54, 118-120.	1.4	30
52	Differential Differences in Methylation Status of Putative Imprinted Genes among Cloned Swine Genomes. PLoS ONE, 2012, 7, e32812.	2.5	29
53	Unraveling the origins of electromechanical response in mixed-phase bismuth ferrite. Physical Review B, 2013, 88, .	3.3	29
54	Surface Control of Epitaxial Manganite Films via Oxygen Pressure. ACS Nano, 2015, 9, 4316-4327.	15.3	28

#	Article	IF	Citations
55	Acoustic Detection of Phase Transitions at the Nanoscale. Advanced Functional Materials, 2016, 26, 478-486.	16.5	28
56	The assessment of the systemic effects of inhaled glucocorticosteroids. European Journal of Clinical Pharmacology, 1991, 41, 11-16.	1.9	27
57	Solid-state electrochemistry on the nanometer and atomic scales: the scanning probe microscopy approach. Nanoscale, 2016, 8, 13838-13858.	5.8	27
58	Prime numbers with Beatty sequences. Colloquium Mathematicum, 2009, 115, 147-157.	0.3	27
59	Effect of surface ionic screening on the polarization reversal scenario in ferroelectric thin films: Crossover from ferroionic to antiferroionic states. Physical Review B, 2017, 96, .	3.3	26
60	Learning from Imperfections: Predicting Structure and Thermodynamics from Atomic Imaging of Fluctuations. ACS Nano, 2019, 13, 718-727.	15.3	26
61	Autonomous Experiments in Scanning Probe Microscopy and Spectroscopy: Choosing Where to Explore Polarization Dynamics in Ferroelectrics. ACS Nano, 2021, 15, 11253-11262.	15.3	26
62	Machine Detection of Enhanced Electromechanical Energy Conversion in PbZr_{0.2}Ti_{0.8}O₃ Thin Films. Advanced Materials, 2018, 30, e1800701.	24.3	24
63	Polarization Dynamics in Ferroelectric Capacitors: Local Perspective on Emergent Collective Behavior and Memory Effects. Advanced Functional Materials, 2013, 23, 2490-2508.	16.5	22
64	Building ferroelectric from the bottom up: The machine learning analysis of the atomic-scale ferroelectric distortions. Applied Physics Letters, 2019, 115, .	3.2	22
65	Nanoscale Origins of Nonlinear Behavior in Ferroic Thin Films. Advanced Functional Materials, 2013, 23, 81-90.	16.5	21
66	Controlling the primary particle evolution process towards silica monoliths with tunable hierarchical structure. Journal of Colloid and Interface Science, 2011, 364, 594-604.	9.6	20
67	Surface Chemistry Controls Anomalous Ferroelectric Behavior in Lithium Niobate. ACS Applied Materials & Interfaces, 2018, 10, 29153-29160.	8.3	20
68	Probing atomic-scale symmetry breaking by rotationally invariant machine learning of multidimensional electron scattering. Npj Computational Materials, 2021, 7, .	9.1	19
69	Higher order harmonic detection for exploring nonlinear interactions with nanoscale resolution. Scientific Reports, 2013, 3, 2677.	3.4	18
70	Production cross sections of hyperons and charmed baryons from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>e</mml:mi></mml:mrow><mml:mrow><mml:mo>+</mml:mo></mml annihilation near <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msqrt><mml:mrow><mml:mi>s</mml:mi>. Physical Review D, 2018, 97, .	4.8	18
71	A case of anaphylactic shock possibly caused by intravesical Hexvixï¿½. Acta Anaesthesiologica Scandinavica, 2006, 50, 1165-1167.	1.7	17
72	Multidimensional dynamic piezoresponse measurements: Unraveling local relaxation behavior in relaxor-ferroelectrics via big data. Journal of Applied Physics, 2015, 118, .	2.3	17

#	Article	IF	Citations
73	Atomic-scale electrochemistry on the surface of a manganite by scanning tunneling microscopy. Applied Physics Letters, 2015, 106, .	3.2	17
74	Auxiliary diagnosis of lymph node metastasis in early gastric cancer using quantitative evaluation of sentinel node radioactivity. Gastric Cancer, 2016, 19, 1080-1087.	5.5	17
75	Reconstructing phase diagrams from local measurements via Gaussian processes: mapping the temperature-composition space to confidence. Npj Computational Materials, 2018, 4, .	9.1	17
76	Room temperature multiferroicity and magnetodielectric coupling in 0â€“3 composite thin films. Journal of Applied Physics, 2020, 127, .	2.3	17
77	Glycosylation of thyroglobulin secreted by porcine cells cultured in chamber system: thyrotropin controls the number of oligosaccharides and their anionic residues.. Endocrinology, 1994, 134, 1676-1684.	2.8	16
78	Dynamic Manipulation in Piezoresponse Force Microscopy: Creating Nonequilibrium Phases with Large Electromechanical Response. ACS Nano, 2020, 14, 10569-10577.	15.3	15
79	Separating Physically Distinct Mechanisms in Complex Infrared Plasmonic Nanostructures via Machine Learning Enhanced Electron Energy Loss Spectroscopy. Advanced Optical Materials, 2021, 9, 2001808.	7.9	15
80	Deep Bayesian local crystallography. Npj Computational Materials, 2021, 7, .	9.1	15
81	Diabetes Affects Antibody Response to SARS-CoV-2 Vaccination in Older Residents of Long-term Care Facilities: Data From the GeroCovid Vax Study. Diabetes Care, 2022, 45, 2935-2942.	9.1	15
82	Real-time insight into the multistage mechanism of nanoparticle exsolution from a perovskite host surface. Nature Communications, 2023, 14, .	13.2	15
83	Consistent Integration of Experimental and Ab Initio Data into Effective Physical Models. Journal of Chemical Theory and Computation, 2017, 13, 5179-5194.	5.6	14
84	Ultrafast current imaging by Bayesian inversion. Nature Communications, 2018, 9, 513.	13.2	14
85	Growth Mode Transition in Complex Oxide Heteroepitaxy: Atomically Resolved Studies. Crystal Growth and Design, 2016, 16, 2708-2716.	3.2	13
86	Studies on dielectric, optical, magnetic, magnetic domain structure, and resistance switching characteristics of highly c-axis oriented NZFO thin films. Journal of Applied Physics, 2017, 122, .	2.3	13
87	Naringenin improve hepatitis C virus infection induced insulin resistance by increase PTEN expression via p53-dependent manner. Biomedicine and Pharmacotherapy, 2018, 103, 746-754.	5.8	13
88	Exploring the Relationship of Microstructure and Conductivity in Metal Halide Perovskites via Active Learning-Driven Automated Scanning Probe Microscopy. Journal of Physical Chemistry Letters, 2023, 14, 3352-3359.	4.9	13
89	Perceptions of risk and influences of choice in pregnant women with obesity. An evidence synthesis of qualitative research. PLoS ONE, 2020, 15, e0227325.	2.5	12
90	Ferroelectric and electrical characterization of multiferroic BiFeO3 at the single nanoparticle level. Applied Physics Letters, 2011, 99, 252905.	3.2	11

#	Article	IF	Citations
91	Observation of Enhanced Double Parton Scattering in Proton-Lead Collisions at sNN=8.16â€‰â€‰TeV. Physical Review Letters, 2020, 125, 212001.	8.0	11
92	Towards automating structural discovery in scanning transmission electron microscopy [*]. Machine Learning: Science and Technology, 2022, 3, 015024.	5.2	11
93	Gyrokinetic full-f particle-in-cell simulations on open field lines with PICLS. Physics of Plasmas, 2019, 26, 122302.	1.9	10
94	Glycine-Histidine-Lysine (GHK) Alleviates Astrocytes Injury of Intracerebral Hemorrhage via the Akt/miR-146a-3p/AQP4 Pathway. Frontiers in Neuroscience, 2020, 14, 576389.	2.9	10
95	Guided search for desired functional responses via Bayesian optimization of generative model: Hysteresis loop shape engineering in ferroelectrics. Journal of Applied Physics, 2020, 128, .	2.3	10
96	Visualizing Charge Transport and Nanoscale Electrochemistry by Hyperspectral Kelvin Probe Force Microscopy. ACS Applied Materials & Interfaces, 2020, 12, 33361-33369.	8.3	10
97	Assessing knowledge of and attitudes towards plagiarism and ability to recognize plagiaristic writing among university students in Rwanda. Higher Education, 2023, 85, 247-263.	4.6	10
98	Mesoscopic harmonic mapping of electromechanical response in a relaxor ferroelectric. Applied Physics Letters, 2015, 106, 222901.	3.2	9
99	Analysis of citation networks as a new tool for scientific research. MRS Bulletin, 2016, 41, 1009-1016.	4.2	9
100	Contradictory nature of Co doping in ferroelectric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 94, .	3.3	9
101	Nanoscale Probing of Elasticâ€“Electronic Response to Vacancy Motion in NiO Nanocrystals. ACS Nano, 2017, 11, 8387-8394.	15.3	9
102	Dynamics of Transformation from Platinum Icosahedral Nanoparticles to Larger FCC Crystal at Millisecond Time Resolution. Scientific Reports, 2017, 7, 17243.	3.4	9
103	Bayesian inference in band excitation scanning probe microscopy for optimal dynamic model selection in imaging. Journal of Applied Physics, 2020, 128, 054105.	2.3	9
104	Bayesian Learning of Adatom Interactions from Atomically Resolved Imaging Data. ACS Nano, 2021, 15, 9649-9657.	15.3	9
105	Decoding the shift-invariant data: applications for band-excitation scanning probe microscopy [*]. Machine Learning: Science and Technology, 2021, 2, 045028.	5.2	9
106	From atomically resolved imaging to generative and causal models. Nature Physics, 2022, 18, 1152-1160.	11.8	9
107	Probe microscopy is all you need [*]. Machine Learning: Science and Technology, 2023, 4, 023001.	5.2	9
108	Data required for testicular dose calculation during radiotherapy of seminoma. Medical Physics, 2006, 33, 2391-2395.	2.9	8

#	Article	IF	Citations
109	Report of a New Case With Pentasomy X and Novel Clinical Findings. Balkan Journal of Medical Genetics, 2015, 18, 85-92.	0.5	8
110	The Ehrlichâ€“Schwoebel barrier on an oxide surface: a combined Monte-Carlo andin situscanning tunneling microscopy approach. Nanotechnology, 2015, 26, 455705.	2.7	8
111	Localised nanoscale resistive switching in GaP thin films with low power consumption. Journal of Materials Chemistry C, 2017, 5, 2153-2159.	5.6	8
112	Exploring phase transitions and magnetoelectric coupling of epitaxial asymmetric multilayer heterostructures. Journal of Materials Chemistry C, 2020, 8, 12113-12122.	5.6	8
113	Predictability as a probe of manifest and latent physics: The case of atomic scale structural, chemical, and polarization behaviors in multiferroic Sm-doped BiFeO3. Applied Physics Reviews, 2021, 8, .	11.7	8
114	Exploration of lattice Hamiltonians for functional and structural discovery via Gaussian process-based explorationâ€“exploitation. Journal of Applied Physics, 2020, 128, .	2.3	8
115	Bias in Reinforcement Learning: A Review in Healthcare Applications. ACM Computing Surveys, 2024, 56, 1-17.	24.3	8
116	Direct Imaging of the Relaxation of Individual Ferroelectric Interfaces in a Tensileâ€Strained Film. Advanced Electronic Materials, 2017, 3, 1600508.	5.4	7
117	Multi-level emulation of complex climate model responses to boundary forcing data. Climate Dynamics, 2019, 52, 1505-1531.	3.8	7
118	Enhancing hyperspectral EELS analysis of complex plasmonic nanostructures with pan-sharpening. Journal of Chemical Physics, 2021, 154, 014202.	3.1	7
119	Exotic Long-Range Surface Reconstruction on La_{0.7}Sr_{0.3}MnO₃ Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 9166-9173.	8.3	7
120	Investigating phase transitions from local crystallographic analysis based on statistical learning of atomic environments in 2D MoS2-ReS2. Applied Physics Reviews, 2021, 8, 011409.	11.7	7
121	Deep learning of interface structures from simulated 4D STEM data: cation intermixing vs. roughening ^{^{â^—}}. Machine Learning: Science and Technology, 2020, 1, 04LT01.	5.2	7
122	Effect of silver doping on the surface of La5/8Ca3/8MnO3 epitaxial films. Applied Physics Letters, 2014, 105, .	3.2	6
123	Electrocatalysis-induced elasticity modulation in a superionic proton conductor probed by band-excitation atomic force microscopy. Nanoscale, 2015, 7, 20089-20094.	5.8	6
124	Gaussian process analysis of electron energy loss spectroscopy data: multivariate reconstruction and kernel control. Npj Computational Materials, 2021, 7, .	9.1	6
125	Probing Metastable Domain Dynamics via Automated Experimentation in Piezoresponse Force Microscopy. ACS Nano, 2021, 15, 15096-15103.	15.3	6
126	Transcriptomic analysis of the Myxococcus xanthus FruA regulon, and comparative developmental transcriptomic analysis of two fruiting body forming species, Myxococcus xanthus and Myxococcus stipitatus. BMC Genomics, 2021, 22, 784.	2.9	6

#	Article	IF	Citations
127	Learning the right channel in multimodal imaging: automated experiment in piezoresponse force microscopy. Npj Computational Materials, 2023, 9, .	9.1	6
128	High-speed mapping of surface charge dynamics using sparse scanning Kelvin probe force microscopy. Nature Communications, 2023, 14, .	13.2	6
129	A dynamic Bayesian optimized active recommender system for curiosity-driven partially Human-in-the-loop automated experiments. Npj Computational Materials, 2024, 10, .	9.1	6
130	The Unexpected Mechanism Underlying the Highâ€Valent Monoâ€Oxoâ€Rhenium(V) Hydride Catalyzed Hydrosilylation of Cï£¾N Functionalities: Insights from a DFT Study. ChemPhysChem, 2015, 16, 1052-1060.	2.3	5
131	Selfâ€Assembled NiO Nanocrystal Arrays as Memristive Elements. Advanced Electronic Materials, 2020, 6, 1901153.	5.4	5
132	Domains and Topological Defects in Layered Ferrielectric Materials: Implications for Nanoelectronics. ACS Applied Nano Materials, 2020, 3, 8161-8166.	5.2	5
133	Strain-driven autonomous control of cation distribution for artificial ferroelectrics. Science Advances, 2021, 7, .	10.9	5
134	Probing polarization dynamics at specific domain configurations: Computer-vision based automated experiment in piezoresponse force microscopy. Applied Physics Letters, 2021, 119, .	3.2	5
135	Electronic switching by metastable polarization states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BiFe</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> thin films. Physical Review Materials, 2018, 2, .	2.5	5
136	Optimizing training trajectories in variational autoencoders via latent Bayesian optimization approach [*]. Machine Learning: Science and Technology, 2023, 4, 015011.	5.2	5
137	Deep learning for exploring ultra-thin ferroelectrics with highly improved sensitivity of piezoresponse force microscopy. Npj Computational Materials, 2023, 9, .	9.1	5
138	SERUM IMMUNOREACTIVE SOMATOMEDIN-C LEVELS IN GROWTH FAILURE AND DELAYED PUBERTY ASSOCIATED WITH CHRONIC HEPATOSPLENIC SCHISTOSOMIASIS. Clinical Endocrinology, 1986, 24, 617-626.	2.6	4
139	Piezoelectric response enhancement in the proximity of grain boundaries of relaxor-ferroelectric thin films. Applied Physics Letters, 2016, 108, 242908.	3.2	4
140	Correlation between piezoresponse nonlinearity and hysteresis in ferroelectric crystals at the nanoscale. Applied Physics Letters, 2016, 108, .	3.2	4
141	Evaluation of the impact of different neural network structure and data input on fault detection. , 2017, , .		4
142	Exploring electron beam induced atomic assembly via reinforcement learning in a molecular dynamics environment. Nanotechnology, 2021, , .	2.7	4
143	A Processing and Analytics System for Microscopy Data Workflows: The Pycroscopy Ecosystem of Packages. Advanced Theory and Simulations, 2023, 6, .	2.9	4
144	Human-in-the-Loop: The Future of Machine Learning in Automated Electron Microscopy. Microscopy Today, 2024, 32, 35-41.	0.5	4

#	Article	IF	Citations
145	Interatrial septal motion as a novel index to predict left atrial pressure. Heart and Vessels, 2018, 33, 762-769.	1.2	3
146	Polarization-dependent local conductivity and activation energy in KTiOPO4. Applied Physics Letters, 2019, 114, .	3.2	3
147	Predominant Tâ€helper 17 skewing in elephantiasis nostras verrucosa. Journal of Dermatology, 2019, 46, e288-e290.	1.3	3
148	Optimizing Patient-Specific Medication Regimen Policies Using Wearable Sensors in Parkinsonâ€™s Disease. Management Science, 2023, 69, 5964-5982.	4.2	3
149	Automated piezoresponse force microscopy domain tracking during fast thermally stimulated phase transition in CuInP₂S₆ [*]. Nanotechnology, 2023, 34, 325703.	2.7	3
150	Automatic recording of flea activity. Medical and Veterinary Entomology, 1991, 5, 93-100.	1.6	2
151	Readout characteristics of a non-circular aperture mounted on an optical head slider flying above a medium having sub-100-nm-long patterns. Microsystem Technologies, 2007, 13, 1077-1084.	2.1	2
152	Formation of cobalt clusters in Layered Double Hydroxide. Journal of the Ceramic Society of Japan, 2021, 129, 175-180.	1.3	2
153	Propagation of priors for more accurate and efficient spectroscopic functional fits and their application to ferroelectric hysteresis. Machine Learning: Science and Technology, 2021, 2, 045002.	5.2	2
154	Reconstruction and uncertainty quantification of lattice Hamiltonian model parameters from observations of microscopic degrees of freedom. Journal of Applied Physics, 2020, 128, 214103.	2.3	2
155	Adapting Reinforcement Learning Treatment Policies Using Limited Data to Personalize Critical Care. INFORMS Journal on Data Science, 2022, 1, 27-49.	1.8	2
156	Autonomous continuous flow reactor synthesis for scalable atom-precision. Carbon Trends, 2023, 10, 100234.	3.1	2
157	Adaptive sampling for accelerating neutron diffraction-based strain mapping [*]. Machine Learning: Science and Technology, 2023, 4, 025001.	5.2	2
158	Deformation Behavior of Cordierite Ceramics Obtained by Densification/Crystallization of Glass Compacts at High Temperatures.. Journal of the Ceramic Society of Japan, 1999, 107, 134-139.	1.3	1
159	Bias assisted scanning probe microscopy direct write lithography enables local oxygen enrichment of lanthanum cuprates thin films. Nanotechnology, 2015, 26, 325302.	2.7	1
160	Thermodynamics of order and randomness in dopant distributions inferred from atomically resolved imaging. Npj Computational Materials, 2021, 7, .	9.1	1
161	Quantum Teleportation of Unknown Seven-Qubit Entangled State Using Four-Qubit Entangled State. International Journal of Theoretical Physics, 2022, 61, 1.	1.2	1
162	Discovering mechanisms for materials microstructure optimization via reinforcement learning of a generative model. Machine Learning: Science and Technology, 2022, 3, 04LT03.	5.2	1

#	Article	IF	Citations
163	More light components and less light damage on ratsâ€™ eyes: evidence for the photobiomodulation and spectral opponency. Photochemical and Photobiological Sciences, 2023, 22, 809-824.	2.9	1
164	Deep learning with plasma plume image sequences for anomaly detection and prediction of growth kinetics during pulsed laser deposition. Npj Computational Materials, 2024, 10, .	9.1	1
165	Use of the kerr magnetooptical effect to study the magnetic properties of hematite single crystals. Soviet Physics Journal (English Translation of Izvestiia Vysshykh Uchebnykh Zavedenii, Fizika), 1968, 11, 28-31.	0.0	0
166	Designing an Ontology to Convert Factory Dust into Nanocomposites. Refractories and Industrial Ceramics, 2015, 56, 107-110.	0.6	0
167	Phase determination from atomically resolved images: physics-constrained deep data analysis through an unmixing approach. Microscopy and Microanalysis, 2016, 22, 1452-1453.	0.4	0
168	Seasonal and spatial variation in biodegradability of organic carbon along the Red River, Vietnam. Carbon Management, 0, , 1-9.	2.6	0
169	Strategic asset allocation using quadratic programming with case based reasoning and intelligent agents. WIT Transactions on Modelling and Simulation, 2006, , .	0.0	0
170	15. Clicker Lessons: Assessing and Addressing Student Responses to Audience Response Systems. Collected Essays on Learning and Teaching, 0, 1, 85.	0.0	0
171	Kulturentwicklung und -verÃnderung. , 2017, , 245-293.		0
172	Spatial distribution of chemical elements in the lens volume during lens transparency alterations. Point of View East â€“ West, 2018, , 53-56.	0.1	0
173	Gastrointestinal Bleeding With Rare Etiology: A Case Report of Primary Aorto-Enteric Fistula. American Journal of Gastroenterology, 2018, 113, S1140-S1141.	0.4	0
174	Pygmy Villages Discovered in the Interior of Surinam, Guiana. Science, 1896, 4, 171-171.	20.9	0
175	Image Quality Improvement of SENSE Parallel Imaging MRI Post-Acquisition Using Denoising Non-Local Mean Filter Technique. Applied Mechanics and Materials, 0, 913, 89-99.	0.1	0
176	The effects of endoscope placement in the hypopharynx on swallowing-related measures in healthy adults. European Archives of Oto-Rhino-Laryngology, 0, , .	1.8	0
177	Digital twins and deep learning segmentation of defects in monolayer MX2 phases. Applied Physics Letters, 2024, 124, .	3.2	0
178	Deep kernel methods learn better: from cards to process optimization. Machine Learning: Science and Technology, 2024, 5, 015012.	5.2	0
179	Physics-informed models of domain wall dynamics as a route for autonomous domain wall design via reinforcement learning. Digital Discovery, 2024, 3, 456-466.	5.7	0
180	Autonomous convergence of STM control parameters using Bayesian optimization. , 2024, 2, .		0

#	Article	IF	Citations
181	Comparative evaluation of strawberry cultivars under Subhash Palekar natural farming and conventional farming regimes in Doaba region of Punjab conditions. Journal of Applied and Natural Science, 2024, 16, 282-288.	0.4	0
182	MacCAT-T zwischen Anspruch und Praxis â€“ Herausforderungen bei der Beurteilung von EinwilligungsfÃ¤higkeit bei Demenz. Fortschritte Der Neurologie Psychiatrie, 0, , .	0.2	0
183	Synergizing human expertise and AI efficiency with language model for microscopy operation and automated experiment design [*]. Machine Learning: Science and Technology, 2024, 5, 02LT01.	5.2	0
184	Psychological state at the time of psychiatric genetic counseling impacts patient empowerment: A preâ€“post analysis. Journal of Genetic Counseling, 0, , .	1.7	0
185	Bayesian Conavigation: Dynamic Designing of the Material Digital Twins via Active Learning. ACS Nano, 0, , .	15.3	0
186	On-demand nanoengineering of in-plane ferroelectric topologies. Nature Nanotechnology, 0, , .	30.5	0