

# Feng Pan

## List of Publications by Year in descending order

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114  
papers

5,660  
citations

81900

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114  
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114  
docs citations

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times ranked

6103  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fully Room-Temperature-Fabricated Nonvolatile Resistive Memory for Ultrafast and High-Density Memory Application. <i>Nano Letters</i> , 2009, 9, 1636-1643.	9.1	805
2	Recent progress in voltage control of magnetism: Materials, mechanisms, and performance. <i>Progress in Materials Science</i> , 2017, 87, 33-82.	32.8	357
3	Resistive Switching and Magnetic Modulation in Cobalt-Doped ZnO. <i>Advanced Materials</i> , 2012, 24, 3515-3520.	21.0	252
4	Synaptic plasticity and learning behaviours mimicked through Ag interface movement in an Ag/conducting polymer/Ta memristive system. <i>Journal of Materials Chemistry C</i> , 2013, 1, 5292.	5.5	237
5	Dynamic Processes of Resistive Switching in Metallic Filament-Based Organic Memory Devices. <i>Journal of Physical Chemistry C</i> , 2012, 116, 17955-17959.	3.1	190
6	Adaptive Crystallite Kinetics in Homogenous Bilayer Oxide Memristor for Emulating Diverse Synaptic Plasticity. <i>Advanced Functional Materials</i> , 2018, 28, 1706927.	14.9	140
7	Voltage and Power-Controlled Regimes in the Progressive Unipolar RESET Transition of HfO <sub>2</sub> -Based RRAM. <i>Scientific Reports</i> , 2013, 3, 2929.	3.3	135
8	Electric field control of Néel spin-orbit torque in an antiferromagnet. <i>Nature Materials</i> , 2019, 18, 931-935.	27.5	132
9	Spin-orbit torques: Materials, mechanisms, performances, and potential applications. <i>Progress in Materials Science</i> , 2021, 118, 100761.	32.8	127
10	Correlation of oxygen vacancy variations to band gap changes in epitaxial ZnO thin films. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	125
11	Nonvolatile resistive switching in single crystalline ZnO nanowires. <i>Nanoscale</i> , 2011, 3, 1917.	5.6	120
12	Competition between Metallic and Vacancy Defect Conductive Filaments in a CH <sub>3</sub> NH <sub>3</sub> Pb <sub>3</sub> -Based Memory Device. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6431-6436.	3.1	115
13	Observation of the antiferromagnetic spin Hall effect. <i>Nature Materials</i> , 2021, 20, 800-804.	27.5	113
14	Electrical Manipulation of Orbital Occupancy and Magnetic Anisotropy in Manganites. <i>Advanced Functional Materials</i> , 2015, 25, 864-870.	14.9	105
15	Lateral 2D WSe <sub>2</sub> p-n Homojunction Formed by Efficient Charge-Carrier Type Modulation for High-Performance Optoelectronics. <i>Advanced Materials</i> , 2020, 32, e1906499.	21.0	103
16	A new type of glucose biosensor based on surface acoustic wave resonator using Mn-doped ZnO multilayer structure. <i>Biosensors and Bioelectronics</i> , 2013, 49, 512-518.	10.1	99
17	Resistive Switching Induced by Metallic Filaments Formation through Poly(3,4-ethylene-dioxythiophene):Poly(styrenesulfonate). <i>ACS Applied Materials &amp; Interfaces</i> , 2012, 4, 447-453.	8.0	98
18	Electrical Control of the Exchange Spring in Antiferromagnetic Metals. <i>Advanced Materials</i> , 2015, 27, 3196-3201.	21.0	98

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19	Forming-free and self-rectifying resistive switching of the simple Pt/TaO <sub>x</sub> /n-Si structure for access device-free high-density memory application. <i>Nanoscale</i> , 2015, 7, 6031-6038.	5.6	97
20	Conductance quantization in a Ag filament-based polymer resistive memory. <i>Nanotechnology</i> , 2013, 24, 335201.	2.6	86
21	Implementation of Complete Boolean Logic Functions in Single Complementary Resistive Switch. <i>Scientific Reports</i> , 2015, 5, 15467.	3.3	84
22	Magnetoelectric Coupling Induced by Interfacial Orbital Reconstruction. <i>Advanced Materials</i> , 2015, 27, 6651-6656.	21.0	81
23	How to manipulate magnetic states of antiferromagnets. <i>Nanotechnology</i> , 2018, 29, 112001.	2.6	79
24	Reversible Ferromagnetic Phase Transition in Electrode-Gated Manganites. <i>Advanced Functional Materials</i> , 2014, 24, 7233-7240.	14.9	76
25	Bipolar resistance switching in high-performance Cu/ZnO:Mn/Pt nonvolatile memories: active region and influence of Joule heating. <i>New Journal of Physics</i> , 2010, 12, 023008.	2.9	74
26	Improving Unipolar Resistive Switching Uniformity with Cone-Shaped Conducting Filaments and Its Logic-In-Memory Application. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 6453-6462.	8.0	68
27	High-Performance Surface Acoustic Wave Devices Using LiNbO <sub>3</sub> /SiO <sub>2</sub> /SiC Multilayered Substrates. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2021, 69, 3693-3705.	4.6	67
28	Programmable complementary resistive switching behaviours of a plasma-oxidised titanium oxide nanolayer. <i>Nanoscale</i> , 2013, 5, 422-428.	5.6	66
29	Effect of Electrode Materials on AlN-Based Bipolar and Complementary Resistive Switching. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 1793-1799.	8.0	56
30	Performance-Enhancing Selector via Symmetrical Multilayer Design. <i>Advanced Functional Materials</i> , 2019, 29, 1808376.	14.9	56
31	Learning processes modulated by the interface effects in a Ti/conducting polymer/Ti resistive switching cell. <i>RSC Advances</i> , 2014, 4, 14822.	3.6	53
32	Manipulation of Electric Field Effect by Orbital Switch. <i>Advanced Functional Materials</i> , 2016, 26, 753-759.	14.9	49
33	Tuning the switching behavior of binary oxide-based resistive memory devices by inserting an ultra-thin chemically active metal nanolayer: a case study on the Ta <sub>2</sub> O <sub>5</sub> -Ta system. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 12849-12856.	2.8	47
34	Reducing Dzyaloshinskii-Moriya interaction and field-free spin-orbit torque switching in synthetic antiferromagnets. <i>Nature Communications</i> , 2021, 12, 3113.	12.8	47
35	High-Frequency Surface Acoustic Wave Devices Based on ZnO/SiC Layered Structure. <i>IEEE Electron Device Letters</i> , 2019, 40, 103-106.	3.9	45
36	Spin-Dependent Charge Transport in 1D Chiral Hybrid Lead-Bromide Perovskite with High Stability. <i>Advanced Functional Materials</i> , 2021, 31, 2104605.	14.9	44

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37	Design of a Controllable Redox-Dependent Diffusive Threshold Switching Memristor. <i>Advanced Electronic Materials</i> , 2020, 6, 2000695.	5.1	43
38	Highly Efficient Spin-Dependent Filtering Transport in Chiral Hybrid Copper Halides. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23578-23583.	13.8	43
39	Realization of Isolated and High-Density Skyrmions at Room Temperature in Uncompensated Synthetic Antiferromagnets. <i>Nano Letters</i> , 2020, 20, 3299-3305.	9.1	42
40	Enhancement of piezoelectric response of diluted Ta doped AlN. <i>Applied Surface Science</i> , 2013, 270, 225-230.	6.1	41
41	Role of Oxygen Ion Migration in the Electrical Control of Magnetism in Pt/Co/Ni/HfO <sub>2</sub> Films. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1633-1639.	3.1	41
42	Strong Electrical Manipulation of Spin-Orbit Torque in Ferromagnetic Heterostructures. <i>Advanced Electronic Materials</i> , 2016, 2, 1600219.	5.1	37
43	Quality-enhanced AlN epitaxial films grown on c-sapphire using ZnO buffer layer for SAW applications. <i>Applied Surface Science</i> , 2017, 402, 392-399.	6.1	37
44	Cu-Embedded AlN-Based Nonpolar Nonvolatile Resistive Switching Memory. <i>IEEE Electron Device Letters</i> , 2012, 33, 1711-1713.	3.9	36
45	Anti-Ferromagnet Controlled Tunneling Magnetoresistance. <i>Advanced Functional Materials</i> , 2014, 24, 6806-6810.	14.9	35
46	Charge Transfer and Orbital Reconstruction in Strain-Engineered (La,Sr)MnO <sub>3</sub> /LaNiO <sub>3</sub> Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 17700-17706.	8.0	35
47	Cluster magnetic octupole induced out-of-plane spin polarization in antiperovskite antiferromagnet. <i>Nature Communications</i> , 2021, 12, 6524.	12.8	34
48	Realization of the Meminductor. <i>ACS Nano</i> , 2014, 8, 10043-10047.	14.6	30
49	Giant piezoresponse and promising application of environmental friendly small-ion-doped ZnO. <i>Science China Technological Sciences</i> , 2012, 55, 421-436.	4.0	27
50	Evolution of microstructures and mechanical properties during solution treatment of a Ti-V-Mo-containing high-manganese cryogenic steel. <i>Materials Characterization</i> , 2018, 135, 287-294.	4.4	26
51	Orientation-dependent THz emission in non-collinear antiferromagnetic Mn <sub>3</sub> Sn and Mn <sub>3</sub> Sn-based heterostructures. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	25
52	Phase-change nanoclusters embedded in a memristor for simulating synaptic learning. <i>Nanoscale</i> , 2019, 11, 5684-5692.	5.6	25
53	Contributions of magnetic properties in epitaxial copper-doped ZnO. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13153.	2.8	23
54	Realisation of all 16 Boolean logic functions in a single magnetoresistance memory cell. <i>Nanoscale</i> , 2016, 8, 12819-12825.	5.6	23

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55	Emerging opportunities for voltage-driven magneto-ionic control in ferroic heterostructures. APL Materials, 2021, 9, .	5.1	22
56	Observation of negative capacitance in antiferroelectric PbZrO <sub>3</sub> Films. Nature Communications, 2021, 12, 4215.	12.8	22
57	Frequency Selectivity in Pulse Responses of Pt/Poly(3-Hexylthiophene-2,5-Diyl)/Polyethylene Oxide + Li+/Pt Hetero-Junction. PLoS ONE, 2014, 9, e108316.	2.5	21
58	Facile access to shape-controlled growth of WS <sub>2</sub> monolayer via environment-friendly method. 2D Materials, 2019, 6, 015007.	4.4	18
59	Functional antiferromagnets for potential applications on high-density storage and high frequency. Journal of Applied Physics, 2020, 128, .	2.5	18
60	Noble-Metal-Assisted Fast Interfacial Oxygen Migration with Topotactic Phase Transition in Perovskite Oxides. Advanced Functional Materials, 2021, 31, 2106765.	14.9	18
61	Enhanced Performance of ZnO/SiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> Surface Acoustic Wave Devices with Embedded Electrodes. ACS Applied Materials & Interfaces, 2020, 12, 42378-42385.	8.0	17
62	Room Temperature Ferromagnetism in Cobalt-Doped LiNbO <sub>3</sub> Single Crystalline Films. Crystal Growth and Design, 2009, 9, 1235-1239.	3.0	16
63	3D Layout of Interdigital Transducers for High Frequency Surface Acoustic Wave Devices. IEEE Access, 2020, 8, 123262-123271.	4.2	16
64	An overview of SrRuO <sub>3</sub> -based heterostructures for spintronic and topological phenomena. Journal Physics D: Applied Physics, 2022, 55, 233001.	2.8	15
65	Enhanced SAW characteristics of a-plane AlN epitaxial films using ZnO buffer layer. Journal of Materials Science: Materials in Electronics, 2018, 29, 3912-3919.	2.2	14
66	Efficient orbital torque in polycrystalline ferromagnetic O <sub>3</sub> stacks: Theory and experiment. Physical Review B, 2022, 105, .	3.2	14
67	Microstructure and interfacial strength of SiC fiber-reinforced Ti7 alloy composites with different consolidation temperatures. Rare Metals, 2018, 37, 759-768.	7.1	13
68	Controllable oxygen vacancies, orbital occupancy and magnetic ordering in SrCoO <sub>3-<math>\delta</math></sub> films. Journal of Magnetism and Magnetic Materials, 2018, 454, 228-236.	2.3	13
69	Interface-Enhanced Ferromagnetism with Long-Distance Effect in van der Waals Semiconductor. Advanced Functional Materials, 2022, 32, 2108953.	14.9	13
70	Reply to "Comment on "Dynamic Processes of Resistive Switching in Metallic Filament-Based Organic Memory Devices". Journal of Physical Chemistry C, 2013, 117, 11881-11882.	3.1	12
71	Photon-Gated Spin Transistor. Advanced Materials, 2017, 29, 1604052.	21.0	12
72	Characteristics of one-port surface acoustic wave resonator fabricated on ZnO/6H-SiC layered structure. Journal Physics D: Applied Physics, 2018, 51, 145305.	2.8	12

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73	High-frequency and high-temperature stable surface acoustic wave devices on ZnO/SiO <sub>2</sub> /SiC structure. Journal Physics D: Applied Physics, 2020, 53, 305102.	2.8	12
74	Novel cobalt base superalloy and its high-temperature flow behavior. Rare Metals, 2008, 27, 292-298.	7.1	11
75	Microstructure and nanoindentation hardness of Ag/Fe multilayers. Transactions of Nonferrous Metals Society of China, 2010, 20, 110-114.	4.2	11
76	Improved resistive switching stability of Pt/ZnO/CoO x /ZnO/Pt structure for nonvolatile memory devices. Rare Metals, 2013, 32, 544-549.	7.1	11
77	Texture-enhanced Al-Cu electrodes on ultrathin Ti buffer layers for high-power durable 2.6 GHz SAW filters. AIP Advances, 2018, 8, 045212.	1.3	11
78	Growth and Characterization of Polyimide-Supported AlN Films for Flexible Surface Acoustic Wave Devices. Journal of Electronic Materials, 2016, 45, 2702-2709.	2.2	10
79	Enhanced power durability of surface acoustic wave filter with Al/Ti/Cu/Ti electrodes. Journal of Alloys and Compounds, 2018, 740, 222-228.	5.5	10
80	Enhanced Coupling Coefficient in Dual-Mode ZnO/SiC Surface Acoustic Wave Devices with Partially Etched Piezoelectric Layer. Applied Sciences (Switzerland), 2021, 11, 6383.	2.5	10
81	SAW Filters With Excellent Temperature Stability and High Power Handling Using LiTaO <sub>3</sub> /SiC Bonded Wafers. Journal of Microelectromechanical Systems, 2022, 31, 186-193.	2.5	10
82	Significant enhancement in electromigration resistance and texture of aluminum films using an ultrathin titanium underlayer. Acta Materialia, 2013, 61, 4619-4624.	7.9	9
83	Damage morphology change condition and thermal accumulation effect on high-reflection coatings at 1064nm. Optics Express, 2014, 22, 10151.	3.4	8
84	Facilitating room-temperature oxygen ion migration via Co-O bond activation in cobaltite films. Nanoscale, 2021, 13, 18256-18266.	5.6	8
85	Skew Ion-Bombardment-Induced Microstructure and Magnetic Anisotropy Evolutions in the Immiscible Co-Cu System during Deposition Process. Japanese Journal of Applied Physics, 2003, 42, 6869-6874.	1.5	7
86	Simultaneous detection of the spin Hall magnetoresistance and Joule heating-induced spin Seebeck effect in Gd <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> /Pt bilayers. Journal of Applied Physics, 2019, 126, .	2.5	7
87	Simulation of temperature compensated waveguiding layer acoustic wave devices. Journal Physics D: Applied Physics, 2019, 52, 075105.	2.8	7
88	Insight into interlayer magnetic coupling in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mi} \rangle T \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -type transition metal dichalcogenides based on the stacking of nonmagnetic atoms. Physical Review B, 2021, 103, .	3.2	7
89	A Multilayered Structure for Packageless Acoustic- Wave Devices With Ultra-Small Sizes. Journal of Microelectromechanical Systems, 2021, 30, 589-596.	2.5	7
90	Terahertz pulse-induced Néel vector switching in $\hat{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> /Pt heterostructures. Applied Physics Letters, 2021, 119, 212401.	3.3	7

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91	Bipolar Resistance Switching Characteristics in TiN/ZnO:Mn/Pt Junctions Developed for Nonvolatile Resistive Memory Application. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 7370-7373.	0.9	6
92	The effect of modulated matrix microstructure on the deformation behavior in SiC /Ti17 composites. <i>Materials Letters</i> , 2019, 242, 123-126.	2.6	6
93	Structural and Magnetic Characterization of Evaporated Fe/Zr Multilayers. <i>Japanese Journal of Applied Physics</i> , 1999, 38, 1383-1387.	1.5	5
94	Amorphization in the Niâ€“Nb System upon Ion-Beam-Assisted Deposition. <i>Japanese Journal of Applied Physics</i> , 2001, 40, 5369-5372.	1.5	5
95	Micro-structure, nano-property and nano-tribological behaviour of the permalloy/copper multilayers. <i>Surface and Coatings Technology</i> , 2007, 201, 5988-5993.	4.8	5
96	Transition Metal-Doped Magnetic Oxides. <i>Semiconductors and Semimetals</i> , 2013, , 227-259.	0.7	5
97	Spin-Hall-Effect-Assisted Electroresistance in Antiferromagnets via $10^5$ A/cm <sup>2</sup> dc Current. <i>Scientific Reports</i> , 2016, 6, 31966.	3.3	5
98	Diverse Synaptic Plasticity Induced by the Interplay of Ionic Polarization and Doping at Salt-Doped Electrolyte/Semiconducting Polymer Interface. <i>ACS Omega</i> , 2017, 2, 746-754.	3.5	5
99	Magnetic Properties of Fe/Ho Multilayers Prepared by Electron-Beam Evaporation. <i>Journal of the Physical Society of Japan</i> , 2006, 75, 084701.	1.6	4
100	Structural transition and magnetic properties of evaporated Fe/Gd multilayers. <i>Rare Metals</i> , 2008, 27, 484-489.	7.1	4
101	Magnetoresistive sensors with hybrid Co/insulator/ZnO:Co junctions. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2013, 20, 160-165.	4.9	4
102	Spinâ€“orbit torque switching in MgO/CoFeB/Ta/CoFeB/MgO heterostructures with a critical current density of $10^5$ A/cm <sup>2</sup> . <i>Japanese Journal of Applied Physics</i> , 2017, 56, 100303.	1.5	4
103	Ultrafast electron transport in metallic antiferromagnetic Mn <sub>2</sub> Au thin films probed by terahertz spectroscopy. <i>Physical Review B</i> , 2020, 102, .	3.2	4
104	Growth of epitaxial c-plane ZnO film on a-plane sapphire by radio frequency reactive magnetron sputtering. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013, 7, 587-589.	2.4	3
105	Sliding threshold of spike-rate dependent plasticity of a semiconducting polymer/electrolyte cell. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 2412-2417.	2.1	3
106	Creep rate sensitivities of materials by a depth-sensing indentation technique. <i>International Journal of Minerals, Metallurgy, and Materials</i> , 2006, 13, 308-312.	0.2	2
107	Amorphous phase and anisotropy induced by glancing incident ion beams in Coâ€“Nb films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2008, 266, 3545-3551.	1.4	2
108	Adaptive laser conditioning of reflective thin film based on photo thermal lens probe. <i>Review of Scientific Instruments</i> , 2017, 88, 124901.	1.3	2

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109	Tuning the magnetotransport behavior of topological insulator with a transition-metal oxide layer. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 405001.	1.8	2
110	Power Durability Enhancement and Failure Analysis of TC-SAW Filter With Ti/Cu/Ti/Cu/Ti Electrodes. <i>IEEE Transactions on Device and Materials Reliability</i> , 2021, 21, 365-371.	2.0	2
111	Investigation of Temperature-Dependent Magnetic Properties and Coefficient of Thermal Expansion in Invar Alloys. <i>Materials</i> , 2022, 15, 1504.	2.9	2
112	Interface diffusion of sputtered CoZrNb films on silicon substrate. <i>Rare Metals</i> , 2006, 25, 36-40.	7.1	1
113	Irradiation damage simulation of Zircaloy-4 using argon ions bombardment. <i>International Journal of Minerals, Metallurgy, and Materials</i> , 2008, 15, 285-289.	0.2	1
114	Magnetic Transition and Structural Evolution in NiCo/Ag Multilayers. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 4035-4039.	1.5	0