

# Nian Sun

## List of Publications by Citations

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189  
papers

5,994  
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39  
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71  
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197  
ext. papers

6,972  
ext. citations

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avg, IF

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L-index

#	Paper	IF	Citations
189	Giant Electric Field Tuning of Magnetic Properties in Multiferroic Ferrite/Ferroelectric Heterostructures. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 1826-1831	15.6	349
188	Giant Electric Field Tuning of Magnetism in Novel Multiferroic FeGaB/Lead Zinc Niobate/Lead Titanate (PZN-PT) Heterostructures. <i>Advanced Materials</i> , <b>2009</b> , 21, 4711-4715	24	239
187	VOLTAGE CONTROL OF MAGNETISM IN MULTIFERROIC HETEROSTRUCTURES AND DEVICES. <i>Spin</i> , <b>2012</b> , 02, 1240004	1.3	218
186	Self-biased 215 MHz magnetoelectric NEMS resonator for ultra-sensitive DC magnetic field detection. <i>Scientific Reports</i> , <b>2013</b> , 3, 1985	4.9	189
185	Quantification of strain and charge co-mediated magnetoelectric coupling on ultra-thin Permalloy/PMN-PT interface. <i>Scientific Reports</i> , <b>2014</b> , 4, 3688	4.9	163
184	Voltage tuning of ferromagnetic resonance with bistable magnetization switching in energy-efficient magnetoelectric composites. <i>Advanced Materials</i> , <b>2013</b> , 25, 1435-9	24	162
183	Acoustically actuated ultra-compact NEMS magnetoelectric antennas. <i>Nature Communications</i> , <b>2017</b> , 8, 296	17.4	158
182	Ba-hexaferrite films for next generation microwave devices (invited). <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 08M911	2.5	147
181	E-Field Control of Exchange Bias and Deterministic Magnetization Switching in AFM/FM/FE Multiferroic Heterostructures. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 2593-2598	15.6	132
180	Comparison of spin-orbit torques and spin pumping across NiFe/Pt and NiFe/Cu/Pt interfaces. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	128
179	Electrostatically tunable magnetoelectric inductors with large inductance tunability. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 112508	3.4	127
178	Soft magnetism, magnetostriction, and microwave properties of FeGaB thin films. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 182504	3.4	121
177	Challenges and opportunities for multi-functional oxide thin films for voltage tunable radio frequency/microwave components. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 191301	2.5	111
176	Electrical tuning of magnetism in Fe <sub>3</sub> O <sub>4</sub> /PZNBT multiferroic heterostructures derived by reactive magnetron sputtering. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 073916	2.5	109
175	Small Ultra-Wideband (UWB) Bandpass Filter With Notched Band. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2008</b> , 18, 176-178	2.6	105
174	Voltage control of magnetism in multiferroic heterostructures. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2014</b> , 372, 20120439	3	102
173	Highly Sensitive Flexible Magnetic Sensor Based on Anisotropic Magnetoresistance Effect. <i>Advanced Materials</i> , <b>2016</b> , 28, 9370-9377	24	101

172	Giant microwave tunability in FeGaB/lead magnesium niobate-lead titanate multiferroic composites. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 262502	3.4	93
171	Electric field modulation of magnetoresistance in multiferroic heterostructures for ultralow power electronics. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 222509	3.4	89
170	Bias Field Effects on Microwave Frequency Behavior of PZT/YIG Magnetoelectric Bilayer. <i>IEEE Transactions on Magnetics</i> , <b>2007</b> , 43, 3343-3345	2	80
169	Probing electric field control of magnetism using ferromagnetic resonance. <i>Nature Communications</i> , <b>2015</b> , 6, 6082	17.4	77
168	Recent advances in multiferroic oxide heterostructures and devices. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 234-243	7.1	76
167	Deterministic Switching of Perpendicular Magnetic Anisotropy by Voltage Control of Spin Reorientation Transition in (Co/Pt)/Pb(MgNb)O-PbTiO Multiferroic Heterostructures. <i>ACS Nano</i> , <b>2017</b> , 11, 4337-4345	16.7	69
166	Voltage impulse induced bistable magnetization switching in multiferroic heterostructures. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 132409	3.4	69
165	Giant magnetoelectric coupling and E-field tunability in a laminated Ni <sub>2</sub> MnGa/lead-magnesium-niobate-lead titanate multiferroic heterostructure. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 112502	3.4	69
164	Ultra-sensitive NEMS magnetoelectric sensor for picotesla DC magnetic field detection. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 143510	3.4	60
163	Wide Band Low Noise Love Wave Magnetic Field Sensor System. <i>Scientific Reports</i> , <b>2018</b> , 8, 278	4.9	60
162	Voltage control of metal-insulator transition and non-volatile ferroelastic switching of resistance in VO <sub>x</sub> /PMN-PT heterostructures. <i>Scientific Reports</i> , <b>2014</b> , 4, 5931	4.9	60
161	High Resolution Magnetometer Based on a High Frequency Magnetoelectric MEMS-CMOS Oscillator. <i>Journal of Microelectromechanical Systems</i> , <b>2015</b> , 24, 134-143	2.5	58
160	Tunable Miniaturized Patch Antennas With Self-Biased Multilayer Magnetic Films. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2009</b> , 57, 2190-2193	4.9	58
159	Coexistence of Low Damping and Strong Magnetoelastic Coupling in Epitaxial Spinel Ferrite Thin Films. <i>Advanced Materials</i> , <b>2017</b> , 29, 1701130	24	56
158	Electrically induced enormous magnetic anisotropy in Terfenol-D/lead zinc niobate-lead titanate multiferroic heterostructures. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 063917	2.5	53
157	Pseudomorphic Yttrium Iron Garnet Thin Films With Low Damping and Inhomogeneous Linewidth Broadening. <i>IEEE Magnetics Letters</i> , <b>2015</b> , 6, 1-4	1.6	52
156	Electrostatic tuning of ferromagnetic resonance and magnetoelectric interactions in ferrite-piezoelectric heterostructures grown by chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 192502	3.4	52
155	Interfacial charge-mediated non-volatile magnetoelectric coupling in Co <sub>1-x</sub> Fe <sub>x</sub> Ba <sub>1-y</sub> Br <sub>2</sub> (Mg <sub>1-z</sub> Nb <sub>z</sub> O <sub>3</sub> )/Nb:SrTiO <sub>3</sub> multiferroic heterostructures. <i>Scientific Reports</i> , <b>2015</b> , 5, 7740	4.9	50

154	Electronically Tunable Miniaturized Antennas on Magnetolectric Substrates With Enhanced Performance. <i>IEEE Transactions on Magnetics</i> , <b>2008</b> , 44, 3091-3094	2	45
153	. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 648-655	4.9	44
152	Strong magnetolectric coupling in ferrite/ferroelectric multiferroic heterostructures derived by low temperature spin-spray deposition. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 045007	3	42
151	Significantly Enhanced Inductance and Quality Factor of GHz Integrated Magnetic Solenoid Inductors With FeGaB/ $\text{Al}_2\text{O}_3$ Multilayer Films. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 1470-1476	2.9	39
150	Tunable Bandpass Filter Using Partially Magnetized Ferrites With High Power Handling Capability. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2013</b> , 23, 184-186	2.6	39
149	Voltage control of magnetism in FeGaB/PIN-PMN-PT multiferroic heterostructures for high-power and high-temperature applications. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 022901	3.4	39
148	Electrically controlled non-volatile switching of magnetism in multiferroic heterostructures via engineered ferroelastic domain states. <i>NPG Asia Materials</i> , <b>2016</b> , 8, e316-e316	10.3	39
147	. <i>IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology</i> , <b>2019</b> , 3, 206-215	2.8	36
146	A Portable Very Low Frequency (VLF) Communication System Based on Acoustically Actuated Magnetolectric Antennas. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2020</b> , 19, 398-402	3.8	36
145	Highly Sensitive DC Magnetic Field Sensor Based on Nonlinear ME Effect <b>2017</b> , 1, 1-4		36
144	A Review of Thin-Film Magnetoelastic Materials for Magnetolectric Applications. <i>Sensors</i> , <b>2020</b> , 20,	3.8	35
143	Anisotropic spin-orbit torque generation in epitaxial SrIrO by symmetry design. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 16186-16191	11.5	35
142	Compact and Low Loss Phase Shifter With Low Bias Field Using Partially Magnetized Ferrite. <i>IEEE Transactions on Magnetics</i> , <b>2013</b> , 49, 3882-3885	2	35
141	High-Bandwidth Low-Insertion Loss Solenoid Transformers Using FeCoB Multilayers. <i>IEEE Transactions on Power Electronics</i> , <b>2013</b> , 28, 4395-4401	7.2	35
140	Characterization of magnetomechanical properties in FeGaB thin films. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 262401	3.4	35
139	Ultrawideband (UWB) Antennas With Multiresonant Split-Ring Loops. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2009</b> , 57, 256-260	4.9	32
138	. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2012</b> , 60, 3959-3968	4.1	31
137	Spin-spray deposited multiferroic composite $\text{Ni}_{0.23}\text{Fe}_{2.77}\text{O}_4\text{Bb}(\text{Zr,Ti})\text{O}_3$ with strong interface adhesion. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 152504	3.4	30

136	Mechanical-Resonance-Enhanced Thin-Film Magnetolectric Heterostructures for Magnetometers, Mechanical Antennas, Tunable RF Inductors, and Filters. <i>Materials</i> , <b>2019</b> , 12,	3.5	29
135	Voltage Tunable Magnetolectric Inductors With Improved Operational Frequency and Quality Factor for Power Electronics. <i>IEEE Transactions on Magnetics</i> , <b>2015</b> , 51, 1-5	2	29
134	Quantifying thickness-dependent charge mediated magnetolectric coupling in magnetic/dielectric thin film heterostructures. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 232906	3.4	29
133	RF Magnetic Properties of FeCoB/Al <sub>2</sub> O <sub>3</sub> /FeCoB Structure With Varied Al <sub>2</sub> O <sub>3</sub> Thickness. <i>IEEE Transactions on Magnetics</i> , <b>2011</b> , 47, 3104-3107	2	29
132	Inequivalence of direct and converse magnetolectric coupling at electromechanical resonance. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 182905	3.4	28
131	Ultra-compact dual-band smart NEMS magnetolectric antennas for simultaneous wireless energy harvesting and magnetic field sensing. <i>Nature Communications</i> , <b>2021</b> , 12, 3141	17.4	28
130	Voltage Control of Perpendicular Magnetic Anisotropy in Multiferroic (Co/Pt) <sub>3</sub> /PbMg <sub>1/3</sub> Nb <sub>2/3</sub> O <sub>3</sub> /PbTiO <sub>3</sub> Heterostructures. <i>Physical Review Applied</i> , <b>2017</b> , 8,	4.3	26
129	Voltage Tunable Multiferroic Phase Shifter With YIG/PMN-PT Heterostructure. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2014</b> , 24, 191-193	2.6	26
128	Equivalence of direct and converse magnetolectric coefficients in strain-coupled two-phase systems. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 102907	3.4	26
127	Magnetolectric materials and devices. <i>APL Materials</i> , <b>2021</b> , 9, 041114	5.7	26
126	Dual H- and E-Field Tunable Multiferroic Bandpass Filter at $\{K\}_U$ -Band Using Partially Magnetized Spinel Ferrites. <i>IEEE Transactions on Magnetics</i> , <b>2013</b> , 49, 5485-5488	2	25
125	Spin-spray deposited NiZn-Ferrite films exhibiting $\alpha > 50$ at GHz range. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 07E527	2.5	25
124	E-field Control of the RKKY Interaction in FeCoB/Ru/FeCoB/PMN-PT (011) Multiferroic Heterostructures. <i>Advanced Materials</i> , <b>2018</b> , 30, e1803612	24	24
123	Large E-field tunability of microwave ferromagnetic properties in Fe <sub>59.3</sub> Co <sub>28.0</sub> Hf <sub>12.7</sub> /PZN-PT multiferroic composites. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 17C723	2.5	24
122	A quantitative model for the nonlinear response of fluxgate magnetometers. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 08B316	2.5	24
121	Microwave tunability in a GaAs-based multiferroic heterostructure: Co <sub>2</sub> MnAl/GaAs/PMN-PT. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 07A510	2.5	23
120	Tunable magnetoresistance devices based on multiferroic heterostructures. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 07D913	2.5	23
119	Spin-orbit torque and spin pumping in YIG/Pt with interfacial insertion layers. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 182406	3.4	22

118	Strong non-volatile voltage control of magnetism in magnetic/antiferroelectric magnetoelectric heterostructures. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 012905	3.4	22
117	Large E-field tunability of magnetic anisotropy and ferromagnetic resonance frequency of co-sputtered Fe <sub>50</sub> Co <sub>50</sub> -B film. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 17D702	2.5	22
116	A new highly sensitive broadband ferromagnetic resonance measurement system with lock-in detection. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 07A503	2.5	22
115	Effects of boron addition to the atomic structure and soft magnetic properties of FeCoB films. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 07E736	2.5	22
114	Determination of magnetic anisotropies, interlayer coupling, and magnetization relaxation in FeCoB/Cr/FeCoB. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 063916	2.5	21
113	Non-Volatile Ferroelectric Switching of Ferromagnetic Resonance in NiFe/PLZT Multiferroic Thin Film Heterostructures. <i>Scientific Reports</i> , <b>2016</b> , 6, 32408	4.9	20
112	Compact Slot Antenna With Low Dispersion for Ground Penetrating Radar Application. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2016</b> , 15, 638-641	3.8	20
111	Electric field induced reversible 180° magnetization switching through tuning of interfacial exchange bias along magnetic easy-axis in multiferroic laminates. <i>Scientific Reports</i> , <b>2015</b> , 5, 16480	4.9	20
110	Controlling the magnetic anisotropy in epitaxial Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> films by manganese doping. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	19
109	Ultra-compact mechanical antennas. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 170501	3.4	19
108	A Strain-Mediated Magnetolectric-Spin-Torque Hybrid Structure. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1806371	15.6	19
107	Competition between pumping and damping in microwave-assisted magnetization reversal in magnetic films. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	18
106	Microwave Frequency Performance and High Magnetic Anisotropy of $\text{Fe}_{70}\text{Co}_{30}\text{-B}$ Films Prepared by a Modified Composition Gradient Sputtering. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 4313-4316	2	18
105	A low-power and high-sensitivity magnetic field sensor based on converse magnetoelectric effect. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 162901	3.4	17
104	Low moment NiCr radio frequency magnetic films for multiferroic heterostructures with strong magnetoelectric coupling. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 103915	2.5	17
103	Large E-field tunability of microwave ferromagnetic properties in Fe <sub>50</sub> Co <sub>50</sub> -Hf/lead zinc niobate/lead titanate multiferroic laminates. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 17C727	2.5	17
102	Miniaturized Antennas and Planar Bandpass Filters With Self-Biased NiCo-Ferrite Films. <i>IEEE Transactions on Magnetics</i> , <b>2009</b> , 45, 4191-4194	2	17
101	Giant electric field control of magnetism and narrow ferromagnetic resonance linewidth in FeCoSiB/Si/SiO <sub>2</sub> /PMN-PT multiferroic heterostructures. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 232903	3.4	17

100	Integrated magnetoelectric devices: Filters, pico-Tesla magnetometers, and ultracompact acoustic antennas. <i>MRS Bulletin</i> , <b>2018</b> , 43, 841-847	3.2	17
99	The memory effect of magnetoelectric coupling in FeGaB/NiTi/PMN-PT multiferroic heterostructure. <i>Scientific Reports</i> , <b>2016</b> , 6, 20450	4.9	16
98	Compact, Low-Loss, Wideband, and High-Power Handling Phase Shifters With Piezoelectric Transducer-Controlled Metallic Perturber. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2012</b> , 60, 1587-1594	4.1	16
97	Novel Compact and Low-Loss Phase Shifters With Magnetodielectric Disturber. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2011</b> , 21, 240-242	2.6	16
96	Subterahertz ferrimagnetic spin-transfer torque oscillator. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	15
95	E-field tuning microwave frequency performance of Co <sub>2</sub> FeSi/lead zinc niobate/lead titanate magnetoelectric coupling composites. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 07C705	2.5	15
94	. <i>IEEE Magnetics Letters</i> , <b>2019</b> , 10, 1-5	1.6	15
93	Highly sensitive integrated flexible tactile sensors with piezoresistive Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> thin films. <i>Npj Flexible Electronics</i> , <b>2018</b> , 2,	10.7	14
92	Growth behavior and RF/microwave properties of low temperature spin-sprayed NiZn ferrite. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2015</b> , 26, 1890-1894	2.1	14
91	Stress competition and vortex magnetic anisotropy in FeCoAlO high-frequency soft magnetic films with gradient Al-O contents. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 17A332	2.5	14
90	Design of Tunable Bandpass Filters With Ferrite Sandwich Materials by Using a Piezoelectric Transducer. <i>IEEE Transactions on Magnetics</i> , <b>2011</b> , 47, 3732-3735	2	13
89	Giant nonreciprocity of surface acoustic waves enabled by the magnetoelastic interaction. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	12
88	Low-temperature spin spray deposited ferrite/piezoelectric thin film magnetoelectric heterostructures with strong magnetoelectric coupling. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2014</b> , 25, 1188-1192	2.1	12
87	High quality factor integrated gigahertz magnetic transformers with FeGaB/Al <sub>2</sub> O <sub>3</sub> multilayer films for radio frequency integrated circuits applications. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 17E714	2.5	12
86	Soft magnetism and microwave magnetic properties of Fe-Co-Hf films deposited by composition gradient sputtering. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 07A315	2.5	12
85	A passive isolator realized by magnetoelectric laminate composites. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 262904	3.4	12
84	A novel NiZn ferrite integrated magnetic solenoid inductor with a high quality factor at 0.78 GHz. <i>AIP Advances</i> , <b>2017</b> , 7, 056606	1.5	11
83	Experimental Characterization of Microfabricated Thermoelectric Energy Harvesters for Smart Sensor and Wearable Applications. <i>Advanced Materials Technologies</i> , <b>2018</b> , 3, 1700383	6.8	11

82	Interfacial orbital preferential occupation induced controllable uniaxial magnetic anisotropy observed in Ni/NiO(110) heterostructures. <i>Npj Quantum Materials</i> , <b>2017</b> , 2,	5	11
81	Permittivity and Permeability Measurement of Spin-Spray Deposited Ni-Zn-Ferrite Thin Film Sample. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 4085-4088	2	11
80	Ferromagnetic resonance studies of surface and bulk spin-wave modes in a CoFePtMnOFe multilayer film. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 07B525	2.5	11
79	BaTiO <sub>3</sub> /PVDF-g-PSSA composite proton exchange membranes for vanadium redox flow battery. <i>Ceramics International</i> , <b>2015</b> , 41, S758-S762	5.1	10
78	All-Optical Helicity-Dependent Switching in Hybrid Metal/Ferromagnet Thin Films. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2000379	8.1	10
77	Advances in Magnetics Epitaxial Multiferroic Heterostructures and Applications. <i>IEEE Transactions on Magnetics</i> , <b>2017</b> , 53, 1-16	2	10
76	Fabrication and Characterization of Bi <sub>2</sub> Te <sub>3</sub> -Based Chip-Scale Thermoelectric Energy Harvesting Devices. <i>Journal of Electronic Materials</i> , <b>2017</b> , 46, 2844-2846	1.9	10
75	Tunable Ultrawideband Phase Shifters With Magnetodielectric Disturber Controlled by a Piezoelectric Transducer. <i>IEEE Transactions on Magnetics</i> , <b>2014</b> , 50, 1-4	2	10
74	Optimum design of magnetic inductive energy harvester and its AC-DC converter <b>2012</b> ,		10
73	Electric-field control of spin dynamics during magnetic phase transitions. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	10
72	All-Optical Manipulation of Magnetization in Ferromagnetic Thin Films Enhanced by Plasmonic Resonances. <i>Nano Letters</i> , <b>2020</b> , 20, 6437-6443	11.5	10
71	Magnetostriction, Soft Magnetism, and Microwave Properties in CoFe <sub>2</sub> Alloy Films. <i>Physical Review Applied</i> , <b>2019</b> , 12,	4.3	9
70	Voltage Tuning of Ferromagnetic Resonance and Linewidth in Spinel Ferrite/Ferroelectric Multiferroic Heterostructures. <i>IEEE Magnetics Letters</i> , <b>2015</b> , 6, 1-4	1.6	9
69	Controllable synthesis and upconversion luminescence of NaYF <sub>4</sub> :Yb <sup>3+</sup> , Er <sup>3+</sup> nanocrystals. <i>Ceramics International</i> , <b>2015</b> , 41, S713-S718	5.1	9
68	Electric field modulation of surface anisotropy and magneto-dynamics in multiferroic heterostructures. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 07D731	2.5	9
67	Voltage-Driven Nonlinearity in Magnetoelectric Heterostructures. <i>Physical Review Applied</i> , <b>2019</b> , 12,	4.3	8
66	Scanning Microwave Microscopy Characterization of Spin-Spray-Deposited Ferrite/Nonmagnetic Films. <i>Journal of Electronic Materials</i> , <b>2012</b> , 41, 530-534	1.9	8
65	Integrated non-reciprocal dual H- and E-Field tunable bandpass filter with ultra-wideband isolation <b>2015</b> ,		8



64	Effect of rapid thermal annealing on microstructural, magnetic, and microwave properties of FeGaB alloy films. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 09D909	2.5	8
63	Excessive grain boundary conductivity of spin-spray deposited ferrite/non-magnetic multilayer. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 07A512	2.5	8
62	Novel electrostatically tunable FeGaB/(Si)/PMN-PT multiferroic heterostructures for microwave application <b>2009</b> ,		8
61	Control of magnetic relaxation by electric-field-induced ferroelectric phase transition and inhomogeneous domain switching. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 012406	3.4	8
60	. <i>IEEE Transactions on Magnetics</i> , <b>2021</b> , 57, 1-57	2	8
59	Spin-orbital coupling induced four-fold anisotropy distribution during spin reorientation in ultrathin Co/Pt multilayers. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 022403	3.4	7
58	A Molecularly Imprinted Polymer-Graphene Sensor Antenna Hybrid for Ultra Sensitive Chemical Detection. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 6571-6577	4	7
57	Enhancing ground plane immunity of dipole antennas with spin-spray-deposited lossy ferrite films. <i>Microwave and Optical Technology Letters</i> , <b>2012</b> , 54, 230-233	1.2	7
56	Ferrite-Coupled Line Circulator Simulations For Application at X-Band Frequency. <i>IEEE Transactions on Magnetics</i> , <b>2007</b> , 43, 2639-2641	2	7
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42	Tunable RF band-pass filters based on NEMS magnetoelectric resonators <b>2016</b> ,		5
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39	Growth behaviors and characteristics of low temperature spin-sprayed ZnO and Al-doped ZnO microstructures. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2013</b> , 24, 2058-2066	2.1	4
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28	Chip-scale thermal energy harvester using Bi <sub>2</sub> Te <sub>3</sub> <b>2015</b> ,		3
27	E-Field Tuned Rotation of Magnetic Anisotropy and Enhanced Microwave Performance in FeCoAlO/PZNT Multiferroic Composite Prepared by Composition Gradient Sputtering. <i>IEEE Transactions on Magnetics</i> , <b>2014</b> , 50, 1-4	2	3
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22	Band-notched ultrawide band antenna loaded with ferrite slab. <i>AIP Advances</i> , <b>2017</b> , 7, 056408	1.5	2
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18	Power-efficient voltage tunable RF integrated magnetolectric inductors with FeGaB/Al <sub>2</sub> O <sub>3</sub> multilayer films <b>2014</b> ,		2
17	Non-reciprocal tunable low-loss bandpass filters with ultra-wideband isolation based on magnetostatic surface wave <b>2012</b> ,		2
16	Design of a magnetization gradient ferrite substrate integrated waveguide isolator to mitigate higher order mode effects <b>2013</b> ,		2
15	Large Field-Induced Magnetocaloric Effect in Ni <sub>43</sub> Mn <sub>46-x</sub> V <sub>x</sub> Sn <sub>11</sub> Heusler Alloys. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 3985-3988	2	2
14	Voltage-impulse-induced dual-range nonvolatile magnetization modulation in metglas/PZT heterostructure. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 202903	3.4	2
13	Integrated ferroics for sensing, power, RF, and $\mu$ -wave electronics. <i>Journal of Materials Research</i> , <b>2018</b> , 33, 4007-4017	2.5	2
12	Thin Film Magnetolectric Sensors Toward Biomagnetism: Materials, Devices, and Applications. <i>Advanced Electronic Materials</i> , <b>2020</b> , 13	6.4	2
11	Self-biased microwave ferromagnetic performance of patterned Ni <sub>80</sub> Fe <sub>20</sub> thin films. <i>AIP Advances</i> , <b>2017</b> , 7, 056301	1.5	1

10	Novel Miniaturized Antenna Designs for In-traffic Air-coupled Ground Penetrating Radar Systems. <i>Journal of Environmental and Engineering Geophysics</i> , <b>2015</b> , 20, 71-79	1	1
9	Strong Electric Field Tuning of Magnetism in Multiferroic Heterostructures. <i>Ceramic Engineering and Science Proceedings</i> , 53-66	0.1	1
8	Planar circular loop antennas with self-biased magnetic film loading <b>2008</b> ,		1
7	Multiferroic Composites <b>2021</b> , 225-240		1
6	Thermal annealing on the soft magnetism, microwave properties, and magnetostriction in Co-Fe-C alloy films. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 874, 159783	5.7	1
5	Integrated Magnetics and Magnetoelectrics for Sensing, Power, RF, and Microwave Electronics. <i>IEEE Journal of Microwaves</i> , <b>2021</b> , 1-22		1
4	Small global positioning system patch antennas with self-biased NiCo-ferrite films. <i>Microwave and Optical Technology Letters</i> , <b>2011</b> , 53, 1162-1165	1.2	0
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2	Magnetoelectric Antenna for Miniaturized Acoustic Noise Dosimetry Applications <b>2021</b> , 5, 1-4		0
1	Magnetoelectric (ME) Antenna for On-chip Implantable Energy Harvesting. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2021</b> , 2021, 6167-6170	0.9	