

# Tao Wu

## List of Publications by Year in descending order

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75  
papers

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Giant electric-field-induced reversible and permanent magnetization reorientation on magnetoelectric Ni/(011) [Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> ](1-x)[PbTiO <sub>3</sub> ] <sub>x</sub> heterostructure. Applied Physics Letters, 2011, 98, 012504.	1.5	236
2	Single Domain Spin Manipulation by Electric Fields in Strain Coupled Artificial Multiferroic Nanostructures. Physical Review Letters, 2013, 111, 027204.	2.9	189
3	Domain engineered switchable strain states in ferroelectric (011) [Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> ](1-x)-[PbTiO <sub>3</sub> ] <sub>x</sub> (PMN-PT, x=0.32) single crystals. Journal of Applied Physics, 2011, 109, .	1.1	157
4	Electrical control of reversible and permanent magnetization reorientation for magnetoelectric memory devices. Applied Physics Letters, 2011, 98, .	1.5	153
5	Electric-field-induced spin wave generation using multiferroic magnetoelectric cells. Applied Physics Letters, 2014, 104, 082403.	1.5	144
6	Electric field induced magnetization rotation in patterned Ni ring/Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> ](1-x)-[PbTiO <sub>3</sub> ] <sub>0.32</sub> heterostructures. Applied Physics Letters, 2012, 100, .	1.5	73
7	Electric-poling-induced magnetic anisotropy and electric-field-induced magnetization reorientation in magnetoelectric Ni/(011) [Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> ](1-x)-[PbTiO <sub>3</sub> ] <sub>x</sub> heterostructure. Journal of Applied Physics, 2011, 109, 07D732.	1.1	67
8	Extended topological valley-locked surface acoustic waves. Nature Communications, 2022, 13, 1324.	5.8	60
9	AlN MEMS filters with extremely high bandwidth widening capability. Microsystems and Nanoengineering, 2020, 6, 74.	3.4	54
10	Voltage bias influence on the converse magnetoelectric effect of PZT/terfenol-D/PZT laminates. Journal of Applied Physics, 2011, 109, .	1.1	46
11	Comparison of Effective Direct and Converse Magnetoelectric Effects in Laminate Composites. IEEE Transactions on Magnetics, 2009, 45, 4333-4336.	1.2	40
12	High Figure-of-Merit Lamb Wave Resonators Based on Al <sub>0.7</sub> Sc <sub>0.3</sub> N Thin Film. IEEE Electron Device Letters, 2021, 42, 1378-1381.	2.2	40
13	A Preclinical System Prototype for Focused Microwave Breast Hyperthermia Guided by Compressive Thermoacoustic Tomography. IEEE Transactions on Biomedical Engineering, 2021, 68, 2289-2300.	2.5	37
14	Influence of electric voltage bias on converse magnetoelectric coefficient in piezofiber/Metglas bilayer laminate composites. Journal of Applied Physics, 2009, 106, 054114.	1.1	36
15	Strain-induced magnetization change in patterned ferromagnetic nickel nanostructures. Journal of Applied Physics, 2011, 109, 123903.	1.1	36
16	Electrically controlled reversible and hysteretic magnetic domain evolution in nickel film/Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> ] <sub>0.68</sub> -[PbTiO <sub>3</sub> ] <sub>0.32</sub> (011) heterostructure. Applied Physics Letters, 2013, 102, .	1.5	33
17	Electrical and Mechanical Manipulation of Ferromagnetic Properties in Polycrystalline Nickel Thin Film. IEEE Magnetics Letters, 2011, 2, 6000104-6000104.	0.6	30
18	Magneto-electric tuning of the phase of propagating spin waves. Applied Physics Letters, 2012, 101, .	1.5	28

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19	Topological Surface Acoustic Waves. Physical Review Applied, 2021, 16, .	1.5	27
20	Atomic layer deposition of Pb(Zr,Ti)Ox on 4H-SiC for metal-ferroelectric-insulator-semiconductor diodes. Journal of Applied Physics, 2011, 109, .	1.1	26
21	Design and fabrication of silicon-tessellated structures for monocentric imagers. Microsystems and Nanoengineering, 2016, 2, 16019.	3.4	23
22	Interleaved Capacitive Coupler for Wireless Power Transfer. IEEE Transactions on Power Electronics, 2021, 36, 13526-13535.	5.4	23
23	Strain-mediated magnetoelectric storage, transmission, and processing: Putting the squeeze on data. MRS Bulletin, 2018, 43, 848-853.	1.7	21
24	Characterization of AlN and AlScN film ICP etching for micro/nano fabrication. Microelectronic Engineering, 2021, 242-243, 111530.	1.1	18
25	Temperature Stability Analysis of Thin-Film Lithium Niobate SHO Plate Wave Resonators. Journal of Microelectromechanical Systems, 2019, 28, 799-809.	1.7	17
26	High Quality Co-Sputtering AlScN Thin Films for Piezoelectric Lamb-Wave Resonators. Journal of Microelectromechanical Systems, 2022, 31, 328-337.	1.7	17
27	Photoacoustic and Ultrasound Dual-Modality Endoscopic Imaging Based on ALN Pmut Array. , 2022, , .		16
28	Exploring Low-Loss Surface Acoustic Wave Devices on Heterogeneous Substrates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 2579-2584.	1.7	16
29	Reliably Probing the Conductance of a Molecule in a Cavity via van der Waals Contacts. Journal of Physical Chemistry C, 2020, 124, 16143-16148.	1.5	15
30	Influence of mechanical load bias on converse magnetoelectric laminate composites. Journal of Applied Physics, 2010, 107, 09D912.	1.1	14
31	Design and fabrication of AlN RF MEMS switch for near-zero power RF wake-up receivers. , 2017, , .		14
32	Low Loss Al <sub>0.7</sub> Sc <sub>0.3</sub> N Thin Film Acoustic Delay Lines. IEEE Electron Device Letters, 2022, 43, 647-650.	2.2	14
33	Al <sub>0.78</sub> Sc <sub>0.22</sub> N Lamb Wave Contour Mode Resonators. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 3108-3116.	1.7	13
34	Ultra-low power electrically reconfigurable magnetoelectric microwave devices. Journal of Applied Physics, 2012, 112, 073915.	1.1	11
35	The thickness of buffer layer and temperature dependent magneto dynamic properties of Ta/FeGaB/Ta tri-layer. Journal of Magnetism and Magnetic Materials, 2020, 515, 167277.	1.0	11
36	A microelectromechanical AlN resoswitch for RF receiver application. , 2017, , .		10

#	ARTICLE	IF	CITATIONS
37	Increasing Ranging Accuracy of Aluminum Nitride Pmuts by Circuit Coupling. , 2021, , .		9
38	Al <sub>0.7</sub> Sc <sub>0.3</sub> N butterfly-shaped laterally vibrating resonator with a figure-of-merit ( $\frac{Q}{\Delta Q}$ ) over 146. Applied Physics Letters, 2022, 120, .	1.5	9
39	Design and Fabrication of an Electrostatic AlN RF MEMS Switch for Near-Zero Power RF Wake-Up Receivers. IEEE Sensors Journal, 2018, 18, 9902-9909.	2.4	8
40	Low-Loss SAW Devices with LiTaO <sub>3</sub> on Extremely High Resistance Substrate. , 2021, , .		8
41	The strength of PIN $\epsilon$ -PMN $\epsilon$ -PT single crystals under bending with a longitudinal electric field. Smart Materials and Structures, 2011, 20, 055006.	1.8	7
42	Temperature-Dependent Exchange Stiffness of Spin-Wave in Ta/CoFeB by Ferromagnetic Resonance Spectroscopy. IEEE Transactions on Magnetics, 2021, 57, 1-7.	1.2	7
43	A New Class of High-Overtone Bulk Acoustic Resonators Using Lithium Niobate on Conductive Silicon Carbide. IEEE Electron Device Letters, 2021, 42, 1061-1064.	2.2	7
44	Electrical tuning of metastable dielectric constant of ferroelectric single crystals for low-power electronics. Applied Physics Letters, 2011, 99, .	1.5	6
45	Giant electrical control of magnetic anisotropy in magnetoelectric heterostructures using (011) PMN-PT single crystal. , 2011, , .		6
46	Optimization and Fabrication of an MOEMS Gyroscope Based on a WGM Resonator. Sensors, 2020, 20, 7264.	2.1	6
47	Design and fabrication of curved silicon image planes for miniature monocentric imagers. , 2015, , .		5
48	A Chip-Scale RF MEMS Gyrotator via Hybridizing Lorentz-Force and Piezoelectric Transductions. , 2019, , .		5
49	Optimization of AlN and AlScN Film ICP Etching. , 2021, , .		5
50	Optimization of S <sub>1</sub> Lamb wave resonators with Al <sub>0.8</sub> Sc <sub>0.2</sub> N. , 2021, , .		5
51	Solidly Mounted Longitudinally Excited Shear Wave Resonator (YBAR) Based on Lithium Niobate Thin-Film. Micromachines, 2021, 12, 1039.	1.4	5
52	Ferromagnetic resonance and spin-wave exchange stiffness of FeGaB/Al <sub>2</sub> O <sub>3</sub> multilayer thin film stack for microwave applications. Materials Chemistry and Physics, 2022, 279, 125776.	2.0	5
53	Design and Fabrication of LAMB Wave Resonator Based on 15% Scandium-Doped Aluminum Nitride Thin Film. , 2021, , .		4
54	Dual-Axis MEMS Resonant Scanner Using 128 $\mu$ m Lithium Niobate Thin-Film. Acoustics, 2022, 4, 313-328.	0.8	4

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55	Multiferroic Magnetic Sensor Based on AlN and Al <sub>0.7</sub> Sc <sub>0.3</sub> N thin film \$\$\$ , 2021, , .		3
56	Design and Analysis of High k <sub>t</sub> <sup>2</sup> Shear Horizontal Wave Resonators. , 2021, , .		3
57	AlN Hybrid-Coupled Resonators With High Acoustic Velocity Layer. , 2020, , .		3
58	Narrowband Impedance Transformer With Extremely High Transformation Ratio of 200. IEEE Electron Device Letters, 2019, 40, 1820-1823.	2.2	2
59	AlN Hybrid-Coupled Resonator With Phononic Crystal Reflector. , 2021, , .		2
60	Silicon-Based Micromachining Process for Flexible Electronics. , 2019, , .		1
61	AlN Contour Mode Resonators with Half Circle Shaped Reflectors. , 2021, , .		1
62	LiNbO <sub>3</sub> High Order Lamb Wave Resonators with Composite Plate Structure. , 2021, , .		1
63	Ferromagnetic resonance properties of multilayer FeGaB/Ta/FeGaB structure. Journal of Materials Science: Materials in Electronics, 2022, 33, 3870.	1.1	1
64	Nonlinearity of Piezoelectric Micromachined Ultrasonic Transducer Using AlN Thin Film. IEEE Open Journal of Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 2, 96-104.	0.9	1
65	Magnetodynamic properties on square patterned of FeGaB and Al <sub>2</sub> O <sub>3</sub> /FeGaB thin films. Journal of Materials Science: Materials in Electronics, 2022, 33, 15927-15935.	1.1	1
66	Electrical Tuning of Converse Magnetolectric Effect in Piezo-Fiber/Metglas Laminates. , 2009, , .		0
67	Magnetolectric laminate composites with prestress consideration. Proceedings of SPIE, 2010, , .	0.8	0
68	Wide Bandwidth Lorentz-Force Magnetometer Based on Lateral Overtone Bulk Acoustic Resonator. , 2021, , .		0
69	Design of Piezoelectric Micro-Actuators Based on LiNbO <sub>3</sub> Thin Film. , 2021, , .		0
70	Torsional MEMS Scanner Based on LiNbO <sub>3</sub> Thin Film. , 2021, , .		0
71	Design and Analysis of Phononic Crystal Reflector for Surface Acoustic Wave Resonator. , 2021, , .		0
72	Lamb Wave Resonators based on Co-sputtered Al <sub>0.78</sub> Sc <sub>0.22</sub> N Thin Film. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
73	Induced Voltage Source Model for Capacitive Power Transfer Using Vertical Coupler. , 2020, , .		0
74	Development and Characterization of High Temperature Plasma Nitridation Process for Advanced CMOS Technology Application. , 2021, , .		0
75	Magnetic Fieldâ€œOriented Electrical Transport Properties in Antiperovskite Mn <sub>3</sub> SnC. Physica Status Solidi - Rapid Research Letters, 0, , 2100614.	1.2	0