Tao Wu

List of Publications by Year in descending order

75 papers	1,895 citations	346980 22 h-index	299063 42 g-index
76 all docs	76 docs citations	76 times ranked	1867 citing authors

#	Article	IF	Citations
1	Al_{0.78}Sc_{0.22}N Lamb Wave Contour Mode Resonators. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 3108-3116.	1.7	13
2	Ferromagnetic resonance properties of multilayer FeGaB/Ta/FeGaB structure. Journal of Materials Science: Materials in Electronics, 2022, 33, 3870.	1.1	1
3	Ferromagnetic resonance and spin-wave exchange stiffness of FeGaB/Al2O3 multilayer thin film stack for microwave applications. Materials Chemistry and Physics, 2022, 279, 125776.	2.0	5
4	Photoacoustic and Ultrosound Dual-Modality Endoscopic Imaging Based on ALN Pmut Array. , 2022, , .		16
5	High Quality Co-Sputtering AlScN Thin Films for Piezoelectric Lamb-Wave Resonators. Journal of Microelectromechanical Systems, 2022, 31, 328-337.	1.7	17
6	Extended topological valley-locked surface acoustic waves. Nature Communications, 2022, 13, 1324.	5.8	60
7	Dual-Axis MEMS Resonant Scanner Using 128â˚Y Lithium Niobate Thin-Film. Acoustics, 2022, 4, 313-328.	0.8	4
8	Low Loss Al_{0.7}Sc_{0.3}N Thin Film Acoustic Delay Lines. IEEE Electron Device Letters, 2022, 43, 647-650.	2.2	14
9	Al0.7Sc0.3N butterfly-shaped laterally vibrating resonator with a figure-of-merit (kt2·Qm) over 146. Applied Physics Letters, 2022, 120, .	1.5	9
10	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
11	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
12	Magnetodynamic properties on square patterned of FeGaB and Al2O3/FeGaB thin films. Journal of Materials Science: Materials in Electronics, 2022, 33, 15927-15935.	1.1	1
13	Wide Bandwidth Lorentz-Force Magnetometer Based on Lateral Overtone Bulk Acoustic Resonator. , 2021, , .		0
14	Optimization of AlN and AlScN Film ICP Etching. , 2021, , .		5
15	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
16	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
17	Increasing Ranging Accuracy of Aluminum Nitride Pmuts by Circuit Coupling. , 2021, , .		9
18	Characterization of AlN and AlScN film ICP etching for micro/nano fabrication. Microelectronic Engineering, 2021, 242-243, 111530.	1.1	18

#	Article	IF	Citations
19	AlN Hybrid-Coupled Resonator With Phononic Crystal Reflector. , 2021, , .		2
20	Optimization of S1 Lamb wave resonators with A10.8Sc0.2N. , 2021, , .		5
21	Design of Piezoelectric Micro-Actuators Based on LiNbO3 Thin Film. , 2021, , .		0
22	AlN Contour Mode Resonators with Half Circle Shaped Reflectors. , 2021, , .		1
23	Torsional MEMS Scanner Based on LiNbO3 Thin Film. , 2021, , .		0
24	Design and Fabrication of LAMB Wave Resonator Based on 15% Scandium-Doped Aluminum Nitride Thin Film. , 2021, , .		4
25	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
26	Solidly Mounted Longitudinally Excited Shear Wave Resonator (YBAR) Based on Lithium Niobate Thin-Film. Micromachines, 2021, 12, 1039.	1.4	5
27	High Figure-of-Merit Lamb Wave Resonators Based on Al0.7Sc0.3N Thin Film. IEEE Electron Device Letters, 2021, 42, 1378-1381.	2.2	40
28	Interleaved Capacitive Coupler for Wireless Power Transfer. IEEE Transactions on Power Electronics, 2021, 36, 13526-13535.	5.4	23
29	Topological Surface Acoustic Waves. Physical Review Applied, 2021, 16, .	1.5	27
30	Design and Analysis of Phononic Crystal Reflector for Surface Acoustic Wave Resonator. , 2021, , .		0
31	Multiferroic Magnetic Sensor Based on AlN and Al_{0.7}Sc_{0.3}N thin film S. , 2021, , .		3
32	Design and Analysis of High k_t ² Shear Horizontal Wave Resonators. , 2021, , .		3
33	Low-Loss SAW Devices with LiTaO₃ on Extremely High Resistance Substrate. , 2021, , .		8
34	Lamb Wave Resonators based on Co-sputtered Al0. 78Sc0.22N Thin Film. , 2021, , .		0
35	LiNbO₃ High Order Lamb Wave Resonators with Composite Plate Structure. , 2021, , .		1
36	Development and Characterization of High Temperature Plasma Nitridation Process for Advanced CMOS Technology Application. , 2021, , .		0

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37	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
38	AlN MEMS filters with extremely high bandwidth widening capability. Microsystems and Nanoengineering, 2020, 6, 74.	3.4	54
39	Optimization and Fabrication of an MOEMS Gyroscope Based on a WGM Resonator. Sensors, 2020, 20, 7264.	2.1	6
40	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
41	AlN Hybrid-Coupled Resonators With High Acoustic Velocity Layer. , 2020, , .		3
42	Induced Voltage Source Model for Capacitive Power Transfer Using Vertical Coupler. , 2020, , .		0
43	A Chip-Scale RF MEMS Gyrator via Hybridizing Lorentz-Force and Piezoelectric Transductions. , 2019, , .		5
44	Temperature Stability Analysis of Thin-Film Lithium Niobate SH0 Plate Wave Resonators. Journal of Microelectromechanical Systems, 2019, 28, 799-809.	1.7	17
45	Narrowband Impedance Transformer With Extremely High Transformation Ratio of 200. IEEE Electron Device Letters, 2019, 40, 1820-1823.	2.2	2
46	Silicon-Based Micromachining Process for Flexible Electronics. , 2019, , .		1
47	Strain-mediated magnetoelectric storage, transmission, and processing: Putting the squeeze on data. MRS Bulletin, 2018, 43, 848-853.	1.7	21
48	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
49	Design and fabrication of AlN RF MEMS switch for near-zero power RF wake-up receivers. , 2017, , .		14
50	A microelectromechanical AlN resoswitch for RF receiver application. , 2017, , .		10
51	Design and fabrication of silicon-tessellated structures for monocentric imagers. Microsystems and Nanoengineering, 2016, 2, 16019.	3.4	23
52	Design and fabrication of curved silicon image planes for miniature monocentric imagers. , 2015, , .		5
53	Electric-field-induced spin wave generation using multiferroic magnetoelectric cells. Applied Physics Letters, 2014, 104, 082403.	1.5	144
54	Single Domain Spin Manipulation by Electric Fields in Strain Coupled Artificial Multiferroic Nanostructures. Physical Review Letters, 2013, 111, 027204.	2.9	189

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55	Electrically controlled reversible and hysteretic magnetic domain evolution in nickel film/Pb(Mg1/3Nb2/3)O3]0.68-[PbTiO3]0.32 (011) heterostructure. Applied Physics Letters, 2013, 102, .	1.5	33
56	Electric field induced magnetization rotation in patterned Ni ring/Pb(Mg1/3Nb2/3)O3](1â^'0.32)-[PbTiO3]0.32 heterostructures. Applied Physics Letters, 2012, 100, .	1.5	73
57	Ultra-low power electrically reconfigurable magnetoelectric microwave devices. Journal of Applied Physics, 2012, 112, 073915.	1.1	11
58	Magneto-electric tuning of the phase of propagating spin waves. Applied Physics Letters, 2012, 101, .	1.5	28
59	Giant electric-field-induced reversible and permanent magnetization reorientation on magnetoelectric Ni/(011) [Pb(Mg1/3Nb2/3)O3](1â^'x)â€"[PbTiO3]x heterostructure. Applied Physics Letters, 2011, 98, 012504.	1.5	236
60	Electric-poling-induced magnetic anisotropy and electric-field-induced magnetization reorientation in magnetoelectric Ni/(011) [Pb(Mg1/3Nb2/3)O3](1-x)-[PbTiO3]x heterostructure. Journal of Applied Physics, 2011, 109, 07D732.	1.1	67
61	Electrical and Mechanical Manipulation of Ferromagnetic Properties in Polycrystalline Nickel Thin Film. IEEE Magnetics Letters, 2011, 2, 6000104-6000104.	0.6	30
62	Domain engineered switchable strain states in ferroelectric (011) [Pb(Mg1/3Nb2/3)O3](1â^'x)-[PbTiO3]x (PMN-PT, xâ‰ˆ0.32) single crystals. Journal of Applied Physics, 2011, 109, .	1.1	157
63	Strain-induced magnetization change in patterned ferromagnetic nickel nanostructures. Journal of Applied Physics, 2011, 109, 123903.	1.1	36
64	Electrical tuning of metastable dielectric constant of ferroelectric single crystals for low-power electronics. Applied Physics Letters, 2011, 99, .	1.5	6
65	Voltage bias influence on the converse magnetoelectric effect of PZT/terfenol-D/PZT laminates. Journal of Applied Physics, 2011, 109, .	1.1	46
66	Giant electrical control of magnetic anisotropy in magnetoelectric heterostructures using (011) PMN-PT single crystal. , 2011, , .		6
67	Electrical control of reversible and permanent magnetization reorientation for magnetoelectric memory devices. Applied Physics Letters, 2011, 98, .	1.5	153
68	The strength of PINâ€"PMNâ€"PT single crystals under bending with a longitudinal electric field. Smart Materials and Structures, 2011, 20, 055006.	1.8	7
69	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
70	Influence of mechanical load bias on converse magnetoelectric laminate composites. Journal of Applied Physics, 2010, 107, 09D912.	1.1	14
71	Magnetoelectric laminate composites with prestress consideration. Proceedings of SPIE, 2010, , .	0.8	0
72	Comparison of Effective Direct and Converse Magnetoelectric Effects in Laminate Composites. IEEE Transactions on Magnetics, 2009, 45, 4333-4336.	1.2	40

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73	Electrical Tuning of Converse Magnetoelectric Effect in Piezo-Fiber/Metglas Laminates. , 2009, , .		0
74	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
75	Magnetic Fieldâ€Oriented Electrical Transport Properties in Antiperovskite Mn 3 SnC. Physica Status Solidi - Rapid Research Letters, 0, , 2100614.	1.2	0