

# Yuanwen Gao

## List of Publications by Citations

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101  
papers

1,103  
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16  
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106  
ext. papers

1,339  
ext. citations

2.6  
avg, IF

5.34  
L-index

#	Paper	IF	Citations
101	Mechanical properties of monolayer graphene under tensile and compressive loading. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2009</b> , 41, 1561-1566	3	145
100	Small scale effects on the mechanical behaviors of protein microtubules based on the nonlocal elasticity theory. <i>Biochemical and Biophysical Research Communications</i> , <b>2009</b> , 387, 467-71	3.4	71
99	Numerical simulation on thermoelectric and mechanical performance of annular thermoelectric generator. <i>Energy</i> , <b>2018</b> , 150, 38-48	7.9	50
98	Estimation of thermoelectric and mechanical performances of segmented thermoelectric generators under optimal operating conditions. <i>Applied Thermal Engineering</i> , <b>2014</b> , 73, 335-342	5.8	41
97	Tunability of longitudinal wave band gaps in one dimensional phononic crystal with magnetostrictive material. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 074104	2.5	41
96	Impact of grain size on the Seebeck coefficient of bulk polycrystalline thermoelectric materials. <i>Science Bulletin</i> , <b>2010</b> , 55, 16-21		38
95	Numerical analysis on the segmented annular thermoelectric generator for waste heat recovery. <i>Energy</i> , <b>2019</b> , 183, 35-47	7.9	33
94	Effects of hysteresis and temperature on magnetoelectric effect in giant magnetostrictive/piezoelectric composites. <i>International Journal of Solids and Structures</i> , <b>2015</b> , 69-70, 291-304	3.1	29
93	Optimal design of a novel thermoelectric generator with linear-shaped structure under different operating temperature conditions. <i>Applied Thermal Engineering</i> , <b>2015</b> , 78, 533-542	5.8	28
92	Tunability of band structures in a two-dimensional magnetostrictive phononic crystal plate with stress and magnetic loadings. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2017</b> , 381, 1055-1066	2.3	27
91	A nonlocal elastic anisotropic shell model for microtubule buckling behaviors in cytoplasm. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2010</b> , 42, 2406-2415	3	27
90	Numerical models of delamination behavior in 2G HTS tapes under transverse tension and peel. <i>Physica C: Superconductivity and Its Applications</i> , <b>2018</b> , 545, 26-37	1.3	25
89	Theoretical study on nonlinear magnetoelectric effect and harmonic distortion behavior in laminated composite. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 646, 351-359	5.7	24
88	A nonlinear magnetoelectric model for magnetoelectric layered composite with coupling stress. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2014</b> , 360, 131-136	2.8	22
87	A coupling finite element model for analysis the nonlinear dynamic magnetoelectric response of tri-layer laminate composites. <i>Composite Structures</i> , <b>2017</b> , 166, 163-176	5.3	21
86	Buckling and post-buckling of a ferromagnetic beam-plate induced by magnetoelastic interactions. <i>International Journal of Non-Linear Mechanics</i> , <b>2000</b> , 35, 1059-1065	2.8	19
85	The winding mechanical behavior of conductor on round core cables. <i>Physica C: Superconductivity and Its Applications</i> , <b>2018</b> , 553, 65-71	1.3	16

84	A functionally graded composite cantilever to harvest energy from magnetic field. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 693, 989-999	5.7	16
83	Surface effect on band structure of flexural wave propagating in magneto-elastic phononic crystal nanobeam. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 445303	3	15
82	Buckling and post-buckling analysis for magneto-elastic/elastic ferromagnetic beam-plates with unmovable simple supports. <i>International Journal of Solids and Structures</i> , <b>2003</b> , 40, 2875-2887	3.1	15
81	Nonlinear magnetoelectric effect in PZT/Terfenol-D nanobilayer on a substrate with surface stress. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 024101	2.5	14
80	Nonlinear magneto-electric response of a giant magnetostrictive/piezoelectric composite cylinder. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2012</b> , 28, 385-392	2	14
79	Nonlinear magnetoelectric transient responses of a circular-shaped magnetoelectric layered structure. <i>Smart Materials and Structures</i> , <b>2013</b> , 22, 015015	3.4	14
78	Enhancement of the magnetoelectric coupling in an A-line shape magnetostrictive/piezoelectric structure. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2017</b> , 381, 1-9	2.3	13
77	Persistence Length of Microtubules Based on a Continuum Anisotropic Shell Model. <i>Journal of Computational and Theoretical Nanoscience</i> , <b>2010</b> , 7, 1227-1237	0.3	12
76	Effect of the twisting chirality configuration on the electromechanical behavior of multilayer superconducting tapes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2019</b> , 383, 949-956	3.3	12
75	A 2D mechanical-magneto-thermal model for direction-dependent magnetoelectric effect in laminates. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2017</b> , 428, 437-447	2.8	11
74	A Magnetic-Dependent Vibration Energy Harvester Based on the Tunable Point Defect in 2D Magneto-Elastic Phononic Crystals. <i>Crystals</i> , <b>2019</b> , 9, 261	2.3	11
73	A mechanical-magneto-thermal model for the tunability of band gaps of epoxy/Terfenol-D phononic crystals. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 034101	2.5	11
72	Numerical simulation of the electro-thermo-mechanical behaviors of a high-temperature superconducting cable. <i>Composite Structures</i> , <b>2018</b> , 192, 616-625	5.3	10
71	Nonlocal orthotropic shell model applied on wave propagation in microtubules. <i>Applied Mathematical Modelling</i> , <b>2016</b> , 40, 5731-5744	4.5	10
70	Mechanical behaviors of multi-filament twist superconducting strand under tensile and cyclic loading. <i>Cryogenics</i> , <b>2016</b> , 73, 14-24	1.8	10
69	Delamination and current-carrying degradation behavior of epoxy-impregnated superconducting coil winding with 2G HTS tape caused by thermal stress. <i>AIP Advances</i> , <b>2020</b> , 10, 025320	1.5	9
68	Effect of surfaces similarity on contact resistance of fractal rough surfaces under cyclic loading. <i>AIP Advances</i> , <b>2018</b> , 8, 035319	1.5	9
67	Surface roughness and size effects on the morphology of graphene on a substrate. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2013</b> , 54, 78-85	3	9

66	Gap evolution of Lamb wave propagation in magneto-elastic phononic plates with pillars and holes by modulating magnetic field and stress loadings. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 244102	2.5	9
65	Spring model for mechanical-electrical properties of CICC in cryogenic-electromagnetic environments. <i>Cryogenics</i> , <b>2014</b> , 62, 14-30	1.8	8
64	Electromagneto-thermo-mechanical behaviors of conductive circular plate subject to time-dependent magnetic fields. <i>Acta Mechanica</i> , <b>2010</b> , 210, 99-116	2.1	8
63	Three-dimensional multifilament finite element models of Bi-2212 high-temperature superconducting round wire under axial load. <i>Composite Structures</i> , <b>2019</b> , 211, 273-286	5.3	8
62	A quasistatic hysteresis model for magnetoelectric effect in multiferroic nanostructured films with surface effect. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 762, 706-718	5.7	8
61	Radial vibration of ultra-small nanoparticles with surface effects. <i>Journal of Physics and Chemistry of Solids</i> , <b>2015</b> , 85, 287-292	3.9	7
60	Transport current distribution on Nb <sub>3</sub> Sn strand for TARSIS. <i>Physica C: Superconductivity and Its Applications</i> , <b>2013</b> , 489, 25-31	1.3	7
59	Mechanical stress analysis during a quench in CLIQ protected 16 T dipole magnets designed for the future circular collider. <i>Physica C: Superconductivity and Its Applications</i> , <b>2018</b> , 550, 27-34	1.3	6
58	The effects of interface scattering on thermoelectric properties of film thermoelectric materials. <i>Science Bulletin</i> , <b>2014</b> , 59, 3098-3106		6
57	Thermoelectric Properties of Polycrystalline Thin Films Under an External Magnetic Field. <i>Journal of Electronic Materials</i> , <b>2012</b> , 41, 552-559	1.9	6
56	GLAG theory for superconducting property variations with A15 composition in NbSn wires. <i>Scientific Reports</i> , <b>2017</b> , 7, 1133	4.9	6
55	Mechanical Behavior of a 16-T FCC Dipole Magnet During a Quench. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2017</b> , 27, 1-7	1.8	6
54	The effective properties of three-dimensional giant magnetostrictive composites. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 114121	2.5	6
53	Tunability of band gaps and energy harvesting based on the point defect in a magneto-elastic acoustic metamaterial plate. <i>Applied Physics Express</i> , <b>2020</b> , 13, 015503	2.4	6
52	Scaling rules for critical current density in anisotropic biaxial superconductors. <i>Physica B: Condensed Matter</i> , <b>2016</b> , 491, 70-78	2.8	6
51	Electro-mechanical behaviors of composite superconducting strand with filament breakage. <i>Physica C: Superconductivity and Its Applications</i> , <b>2016</b> , 529, 26-35	1.3	6
50	A nonlinear magneto-mechanical-thermal-electric coupling model of Terfenol-D/PZT/Terfenol-D and Ni/PZT/Ni laminates. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2018</b> , 466, 200-211	2.8	6
49	Thermoelectric performance and stress analysis on wearable thermoelectric generator under bending load. <i>Renewable Energy</i> , <b>2021</b> , 173, 581-595	8.1	6

48	3D simulation of AC loss in a twisted multi-filamentary superconducting wire. <i>Cryogenics</i> , <b>2017</b> , 84, 60-68	8.8	5
47	Experimental Investigation of the Magnetoelectric Effect in NdFeB-Driven A-Line Shape Terfenol-D/PZT-5A Structures. <i>Materials</i> , <b>2019</b> , 12,	3.5	5
46	Electromagnetic-Mechanical Coupling Analysis of Nb <sub>3</sub> Sn Superconducting Strand. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2016</b> , 26, 1-5	1.8	5
45	Effect of substrate thickness on interfacial adhesive strength and thermal residual stress of second-generation high-temperature superconducting tape using peel test modeling. <i>Cryogenics</i> , <b>2018</b> , 94, 89-94	1.8	5
44	Prediction for I <sub>c</sub> degradation of superconducting strand under bending. <i>Cryogenics</i> , <b>2013</b> , 58, 20-25	1.8	5
43	Study on magnetoelastic-plastic deformation characteristics of ferromagnetic rectangular plate with simple supports. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2009</b> , 25, 139-147	2	5
42	Mechanical analysis of a flexible cable battery using the finite element model. <i>AIP Advances</i> , <b>2019</b> , 9, 015013	1.5	5
41	Tunability of Band Gaps in Two-Dimensional Phononic Crystals with Magnetorheological and Electrorheological Composites. <i>Acta Mechanica Solida Sinica</i> , <b>2021</b> , 34, 40-52	2	5
40	Flexural wave band structure of magneto-elastic phononic crystal nanobeams based on the nonlocal theory. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2021</b> , 390, 127090	2.3	5
39	Effect of magnetic-field orientation on dual-peak phenomenon of magnetoelectric coupling in Ni/PZT/Terfenol-D composites. <i>AIP Advances</i> , <b>2019</b> , 9, 045216	1.5	4
38	A 3D Model on the Electromechanical Behavior of a Multifilament Twisted Nb <sub>3</sub> Sn Superconducting Strand. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2015</b> , 28, 2683-2695	1.5	4
37	A mechanical-thermo-magneto model for self-biased magnetoelectric effect in laminated composite. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2016</b> , 401, 1046-1053	2.8	4
36	Tensile Behavior Analysis of the Nb <sub>3</sub> Sn Superconducting Strand With Damage of the Filaments. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2016</b> , 26, 1-4	1.8	4
35	The effect of electric charge on the mechanical properties of graphene. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2013</b> , 56, 1148-1156	3.6	4
34	Mechanics behavior of microtubules based on nonlocal anisotropic shell theory. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2010</b> , 10, 012181	0.4	4
33	Analytical and Numerical Methods to Estimate the Effective Mechanical Properties of Rutherford Cables. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2020</b> , 30, 1-8	1.8	3
32	Finite element analysis of current flowing patterns and AC loss in the multifilament strand. <i>Physica C: Superconductivity and Its Applications</i> , <b>2013</b> , 495, 118-125	1.3	3
31	Magneto-elastic coupling model of deformable anisotropic superconductors. <i>Europhysics Letters</i> , <b>2017</b> , 118, 27006	1.6	3

30	Electromagnetic behaviors of superconducting Nb3Sn wire under a time-dependent current injection. <i>AIP Advances</i> , <b>2014</b> , 4, 087131	1.5	3
29	Dynamic behaviors of conductive circular plate in time-varying magnetic fields. <i>Acta Mechanica Solida Sinica</i> , <b>2010</b> , 23, 66-76	2	3
28	Tunability of hysteresis-dependent band gaps in a two-dimensional magneto-elastic phononic crystal using magnetic and stress loadings. <i>Applied Physics Express</i> , <b>2019</b> , 12, 027001	2.4	3
27	Simulation of transport properties in Nb3Sn strand under bending. <i>Cryogenics</i> , <b>2015</b> , 71, 1-6	1.8	2
26	The Contact Behavior of the CORC Wires Under Stretching Process. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2020</b> , 30, 1-5	1.8	2
25	The morphology of graphene on an elastic graded substrate. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2014</b> , 63, 293-298	3	2
24	Angular Dependence of Transport AC Losses in Superconducting Wire with Position-Dependent Critical Current Density in a DC Magnetic Field. <i>Journal of Low Temperature Physics</i> , <b>2013</b> , 172, 154-161	1.3	2
23	Magneto-Elastic-Plastic Dynamic Characteristic Analysis of Ferromagnetic Beam-Plate under the Pulse Magnetic Field. <i>Key Engineering Materials</i> , <b>2004</b> , 274-276, 1131-1136	0.4	2
22	Nonlinear contact behavior of HTS tapes during pancake coiling and CORC cabling. <i>Superconductor Science and Technology</i> , <b>2021</b> , 34, 075003	3.1	2
21	Ginzburg-Landau Theory for Magneto-Elastic Interaction and Magnetization in Type-II Superconductors. <i>Annalen Der Physik</i> , <b>2018</b> , 530, 1800266	2.6	2
20	A FRACTAL MODEL OF PERMEABILITY FOR THE LIQUID HELIUM FLOW IN CABLE-IN-CONDUIT CONDUCTORS. <i>Fractals</i> , <b>2019</b> , 27, 1950064	3.2	1
19	Comparison study of cable geometries and superconducting tape layouts for high-temperature superconductor cables. <i>Cryogenics</i> , <b>2018</b> , 91, 96-102	1.8	1
18	A nonlinear model for magnetocapacitance effect in PZT-ring/Terfenol-D-strip magnetoelectric composites. <i>AIP Advances</i> , <b>2016</b> , 6, 065318	1.5	1
17	Analysis on the magneto-elastic-plastic buckling/snapping of cantilever rectangular ferromagnetic plates. <i>Acta Mechanica Solida Sinica</i> , <b>2007</b> , 20, 180-188	2	1
16	Vortex-lattice pinning and critical current density in anisotropic high-temperature superconductors. <i>Superconductor Science and Technology</i> , <b>2016</b> , 29, 104009	3.1	1
15	Experimental Research on Electromechanical Properties of Multiple Contact Surfaces Copper Bulks under Normal Cyclic Loading and Variable Temperature. <i>Materials</i> , <b>2019</b> , 12,	3.5	1
14	Volumetric contact theory to electrical contact between random rough surfaces. <i>Tribology International</i> , <b>2021</b> , 160, 107007	4.9	1
13	Topological design and magnetic tunability of a novel cross-like holes phononic crystal with low frequency. <i>Mechanics of Advanced Materials and Structures</i> , 1-10	1.8	1

12	Investigation on the tunability of the band structure of two-dimensional magnetorheological elastomers phononic crystals plate. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2022</b> , 544, 168704	2.8	o
11	Analysis of the strain dependence of the superconducting critical properties of single-crystal and polycrystalline Nb3Sn. <i>Superconductor Science and Technology</i> , <b>2021</b> , 34, 075006	3.1	o
10	A Pressure Drop Model for Helium Flow in CIC Conductors Based on Porous Media Analogy. <i>IEEE Transactions on Applied Superconductivity</i> , <b>2019</b> , 29, 1-7	1.8	o
9	Geometrical modeling and mechanical behavior analysis of Nb3Sn Rutherford cable. <i>Cryogenics</i> , <b>2021</b> , 119, 103361	1.8	o
8	First-order pinning interaction in type-II superconductors with Ginzburg-Landau descriptions. <i>European Physical Journal B</i> , <b>2019</b> , 92, 1	1.2	
7	A Review of Magneto-Elastic Interaction and Its Theoretical Descriptions in Type-II Superconductors. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2019</b> , 32, 797-803	1.5	
6	Self-field calculation of CICC with fast direct Biot-Savart integration. <i>Fusion Engineering and Design</i> , <b>2014</b> , 89, 473-486	1.7	
5	Theoretical study on functionally graded cylindrical magnetoelectric composites using d15 shear-mode response. <i>AIP Advances</i> , <b>2017</b> , 7, 085202	1.5	
4	COMPUTATIONAL METHOD FOR ELASTIC-PLASTIC AND ANISOTROPIC SUPERCONDUCTING CABLE UNDER SIMPLE LOAD. <i>International Journal of Computational Methods</i> , <b>2014</b> , 11, 1344006	1.1	
3	NUMERICAL ANALYSIS ON MAGNETIC-ELASTO-PLASTIC BUCKLING AND BENDING OF FERROMAGNETIC RECTANGULAR PLATE. <i>International Journal of Modern Physics B</i> , <b>2008</b> , 22, 6212-6217 <sup>1.1</sup>		
2	A CONTINUUM MODEL FOR MECHANICS PROPERTIES OF PROTEIN MICROTUBULES(1A2 Micro & Nano Biomechanics II). <i>The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics</i> , <b>2007</b> , 2007.3, S14		
1	MECHANICAL-ELECTRIC BEHAVIORS OF MULTI-STAGE TWISTED SUPERCONDUCTING WIRES AND CABLES <b>2015</b> , 23-24		