

# Huadong Yong

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2540165/publications.pdf>

Version: 2024-02-01

91  
papers

1,166  
citations

430874

18  
h-index

526287

27  
g-index

91  
all docs

91  
docs citations

91  
times ranked

473  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stress and strain analysis of a REBCO high field coil based on the distribution of shielding current. Superconductor Science and Technology, 2019, 32, 095005.	3.5	69
2	Dynamics of a thick-walled dielectric elastomer spherical shell. International Journal of Engineering Science, 2011, 49, 792-800.	5.0	66
3	Thermal stability and mechanical behavior in no-insulation high-temperature superconducting pancake coils. Superconductor Science and Technology, 2018, 31, 085010.	3.5	44
4	Numerical analysis of thermal stability and mechanical response in a no-insulation high-temperature superconducting layer-wound coil. Superconductor Science and Technology, 2019, 32, 044001.	3.5	37
5	Electromagnetic-thermal-mechanical behaviors of a no-insulation double-pancake coil induced by a quench in the self field and the high field. Superconductor Science and Technology, 2021, 34, 025014.	3.5	36
6	Dendritic flux avalanches and the accompanied thermal strain in type-II superconducting films: effect of magnetic field ramp rate. Superconductor Science and Technology, 2015, 28, 075012.	3.5	32
7	Numerical analysis of the electromechanical behavior of high-field REBCO coils in all-superconducting magnets. Superconductor Science and Technology, 2021, 34, 115005.	3.5	32
8	Electromechanical instability in anisotropic dielectric elastomers. International Journal of Engineering Science, 2012, 50, 144-150.	5.0	29
9	Numerical Simulation of Superconducting Generator Based on the $T \propto A$ Formulation. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-11.	1.7	29
10	Influences of non-uniformities and anisotropies on the flux avalanche behaviors of type-II superconducting films. Superconductor Science and Technology, 2016, 29, 105001.	3.5	27
11	Analysis of delamination and heat conductivity of epoxy impregnated pancake coils using a cohesive zone model. Engineering Fracture Mechanics, 2021, 245, 107555.	4.3	25
12	Stress distribution in a flat superconducting strip with transport current. Journal of Applied Physics, 2011, 109, 073902.	2.5	23
13	Stress analysis in high-temperature superconductors under pulsed field magnetization. Superconductor Science and Technology, 2018, 31, 045008.	3.5	23
14	Crack Problem for Thin Superconducting Strip in a Perpendicular Magnetic Field. IEEE Transactions on Applied Superconductivity, 2012, 22, 8400905-8400905.	1.7	21
15	Fracture analysis of bulk superconductors under electromagnetic force. Engineering Fracture Mechanics, 2018, 199, 257-273.	4.3	21
16	The Effects of Ferromagnetic Disks on AC Losses in HTS Pancake Coils with Nonmagnetic and Magnetic Substrates. Journal of Superconductivity and Novel Magnetism, 2019, 32, 499-510.	1.8	21
17	Finite element modeling of single-lap joint between GdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> -coated conductors using cohesive elements. Physica C: Superconductivity and Its Applications, 2020, 570, 1353600.	1.2	21
18	Magneto-elastic behaviour of thin type-II superconducting strip with field-dependent critical current. Journal of Applied Physics, 2013, 113, 023901.	2.5	18

#	ARTICLE	IF	CITATIONS
19	Analysis of charging and sudden-discharging characteristics of no-insulation REBCO coil using an electromagnetic coupling model. AIP Advances, 2017, 7, .	1.3	18
20	Magnetostriction and magnetization in deformable superconductors. Physica C: Superconductivity and Its Applications, 2012, 483, 51-54.	1.2	17
21	Estimation of critical current distribution in $\text{Bi}_{22}\text{Sr}_{22}\text{CaCuO}_{x/i}$ cables and coils using a self-consistent model. Superconductor Science and Technology, 2016, 29, 065020.	3.5	17
22	Numerical simulation of dynamic fracture behavior in bulk superconductors with an electromagnetic-thermal model. Superconductor Science and Technology, 2019, 32, 074001.	3.5	17
23	Quench characteristics and mechanical responses during quench propagation in rare earth barium copper oxide pancake coils. Applied Mathematics and Mechanics (English Edition), 2021, 42, 235-250.	3.6	17
24	Analysis of a mode III crack problem in a functionally graded coating-substrate system with finite thickness. International Journal of Fracture, 2006, 141, 459-467.	2.2	16
25	Strain distributions in superconducting strands with twisted filaments. Composite Structures, 2017, 174, 158-165.	5.8	15
26	XFEM analysis of the fracture behavior of bulk superconductor in high magnetic field. Journal of Applied Physics, 2019, 125, .	2.5	15
27	3D modelling of coupled electromagnetic-mechanical responses in REBCO coils involving tape inhomogeneity. Superconductor Science and Technology, 2022, 35, 054009.	3.5	15
28	Shear and transverse stress in a thin superconducting layer in simplified coated conductor architecture with a pre-existing detachment. Journal of Applied Physics, 2013, 114, .	2.5	14
29	Numerical simulation on the flux avalanche behaviors of microstructured superconducting thin films. Journal of Applied Physics, 2017, 121, .	2.5	14
30	Mechanical response induced by flux jump in a cylindrical superconductor. AIP Advances, 2020, 10, .	1.3	14
31	Inclined crack problem in a rectangular slab of superconductor under an electromagnetic force. Journal of Applied Physics, 2013, 114, .	2.5	13
32	Theoretical Modeling for the Effect of Twisting on the Properties of Multifilamentary $\text{Nb}_3\text{Sn}$ Superconducting Strand. IEEE Transactions on Applied Superconductivity, 2013, 23, 6000307-6000307.	1.7	13
33	Flux pinning induced stress and magnetostriction in a long elliptical cylindrical superconductor. Journal of Applied Physics, 2013, 114, 023902.	2.5	13
34	Interface crack between superconducting film and substrate. Journal of Applied Physics, 2011, 110, .	2.5	12
35	The characteristics and stability of a dielectric elastomer spherical shell with a thick wall. Smart Materials and Structures, 2011, 20, 055016.	3.5	12
36	Effect of soft ferromagnetic substrate on ac loss in 2G HTS power transmission cables consisting of coated conductors. Superconductor Science and Technology, 2014, 27, 025004.	3.5	12

#	ARTICLE	IF	CITATIONS
37	Fracture behavior of filament in Nb3Sn strands with crack-bridging model. Fusion Engineering and Design, 2016, 102, 66-73.	1.9	12
38	Thermal coupling effect on the vortex dynamics of superconducting thin films: time-dependent Ginzburg-Landau simulations. Superconductor Science and Technology, 2018, 31, 055007.	3.5	12
39	Three-dimensional peridynamic modeling of crack initiation and propagation in bulk superconductor during field cooling magnetization. Superconductor Science and Technology, 2021, 34, 085020.	3.5	12
40	Analytical solutions of the Ginzburg-Landau equations for deformable superconductors in a weak magnetic field. Applied Physics Letters, 2010, 97, .	3.3	11
41	Controllable rectification of the axial expansion in the thermally driven artificial muscle. Applied Physics Letters, 2015, 107, .	3.3	11
42	Analysis of mechanical behavior in inhomogeneous high-temperature superconductors under pulsed field magnetization. Superconductor Science and Technology, 2020, 33, 124002.	3.5	11
43	Electro-mechanical behavior in arrays of superconducting tapes. Journal of Applied Physics, 2018, 124, .	2.5	10
44	Optically Triggered Chaotic Vortex Avalanches in Superconducting $YBa_2CuO_7$ Physical Review Applied, 2020, 13, .	3.8	10
45	Numerical simulations of the alternating current loss in round high-temperature superconducting wire with a hole defect. Journal of Applied Physics, 2013, 114, .	2.5	9
46	Mechanical Stress in the Superconducting Film Under External Magnetic Field. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-8.	1.7	9
47	Mechanical behavior in superconducting composite wires. European Journal of Mechanics, A/Solids, 2018, 70, 191-202.	3.7	9
48	Field-dependent critical state of high-Tc superconducting strip simultaneously exposed to transport current and perpendicular magnetic field. AIP Advances, 2013, 3, .	1.3	8
49	Flux avalanche in a superconducting film with non-uniform critical current density. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2016, 472, 20160469.	2.1	8
50	Flux avalanche in thin superconducting film with internal crack. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	8
51	A concurrent multiscale framework based on self-consistent clustering analysis for cylinder structure under uniaxial loading condition. Composite Structures, 2021, 266, 113827.	5.8	8
52	Dynamic analysis and active control of hard-magnetic soft materials. International Journal of Smart and Nano Materials, 2021, 12, 429-449.	4.2	8
53	Effect of strain on depairing current density in deformable superconducting thin films. Journal of Applied Physics, 2011, 110, 033905.	2.5	7
54	Flux-pinning-induced interfacial shearing and transverse normal stress in a superconducting coated conductor long strip. Journal of Applied Physics, 2012, 112, 043908.	2.5	7

#	ARTICLE	IF	CITATIONS
55	The guidance of kinematic vortices in a mesoscopic superconducting strip with artificial defects. <i>Superconductor Science and Technology</i> , 2016, 29, 065014.	3.5	7
56	Mechanical Analysis of a No-insulation Pancake Coil with the Overband During a Quench. <i>Acta Mechanica Solida Sinica</i> , 2022, 35, 357-366.	1.9	7
57	Three-dimensional simulation of single-lap and bridge joints of coated conductor under tension and bending tests. <i>Composite Structures</i> , 2022, 284, 115146.	5.8	7
58	Crack detection in bulk superconductor using Genetic Algorithm. <i>Engineering Fracture Mechanics</i> , 2022, 265, 108372.	4.3	7
59	Calculations of the AC losses in superconducting cables and coils: Neumann boundary conditions of the Tâ€™A formulation. <i>Superconductor Science and Technology</i> , 2022, 35, 065013.	3.5	7
60	Effect of prestrain on coherence length and order parameter. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	6
61	The critical current density in superconducting cylinder with different cross sections. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	6
62	A Structural Mechanics Model for the 2-D Mechanical Characteristics of ITER Cable-In-Conduit Conductor Cable Under Transverse Loads. <i>IEEE Transactions on Applied Superconductivity</i> , 2013, 23, 8401209-8401209.	1.7	6
63	Effect of shear stress on electromagnetic behaviors in superconductor-ferromagnetic bilayer structure. <i>Journal of Applied Physics</i> , 2014, 116, 123911.	2.5	6
64	Numerical analysis of quench in coated conductors with defects. <i>AIP Advances</i> , 2016, 6, .	1.3	6
65	Analysis of Critical Current Density in Bi2Sr2CaCu2O8+x Round Wire with Filament Fracture. <i>Journal of Superconductivity and Novel Magnetism</i> , 2016, 29, 2299-2309.	1.8	6
66	Effect of pinning on the vortex motion in superconducting strip. <i>Physica C: Superconductivity and Its Applications</i> , 2018, 552, 22-26.	1.2	6
67	The Effect of Termination Resistances on the Quench and Mechanical Response in High-Temperature Superconducting Cables. <i>Journal of Superconductivity and Novel Magnetism</i> , 2019, 32, 877-884.	1.8	6
68	Fluorescent paint for determination on the effective thermal conductivity of YBCO coated conductor. <i>Superconductor Science and Technology</i> , 2021, 34, 035029.	3.5	6
69	Ramping loss and mechanical response in a no-insulation high-temperature superconducting layer-wound coil and intra-layers no-insulation coil. <i>Science China Technological Sciences</i> , 2022, 65, 115-130.	4.0	6
70	Analysis of Strain Effect on Critical Current Density in Superconductors With a Modified Semiempirical Kim Model. <i>IEEE Transactions on Applied Superconductivity</i> , 2013, 23, 8002806-8002806.	1.7	5
71	Vortex structures and magnetic domain patterns in the superconductor/ferromagnet hybrid bilayer. <i>Superconductor Science and Technology</i> , 2014, 27, 105005.	3.5	5
72	Modeling effects of gas bubbles on the mechanical behaviors of Ag/Bi-2212 round wires using a double cantilever beam bridge model. <i>Cryogenics</i> , 2016, 77, 65-73.	1.7	5

#	ARTICLE	IF	CITATIONS
73	Mechanical behavior of Nb <sub>3</sub> Sn strands under transverse electromagnetic loads. <i>Fusion Engineering and Design</i> , 2016, 112, 393-403.	1.9	5
74	Mechanical Behaviours in Bi2223/Ag/Ag Alloy Composite Tape with Different Volume Fractions. <i>Journal of Superconductivity and Novel Magnetism</i> , 2016, 29, 329-336.	1.8	5
75	Efficient two-scale analysis with thermal residual stresses and strains based on self-consistent clustering analysis. <i>European Journal of Mechanics, A/Solids</i> , 2022, 92, 104477.	3.7	5
76	Thermomagnetic instability and correlated deformation in the type-II superconducting films. <i>AIP Conference Proceedings</i> , 2015, , .	0.4	3
77	Contact force and mechanical loss of multistage cable under tension and bending. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2016, 32, 891-904.	3.4	3
78	Simulation of magnetization and levitation properties of arrays of ring-shaped type-II superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2017, 534, 55-60.	1.2	3
79	Degradation of critical current in Bi2212 composite wire under compression load. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2017, 38, 1773-1784.	3.6	3
80	Numerical estimation of AC losses in Bi2212/Ag wire and coil. <i>Physica C: Superconductivity and Its Applications</i> , 2019, 564, 22-28.	1.2	3
81	Modified FFT-based method for the calculations of the thin superconductors with transport current. <i>AIP Advances</i> , 2021, 11, 035103.	1.3	3
82	Nonlinear dynamic behaviors and PID control of viscoelastic dielectric elastomer balloons. <i>Journal of Intelligent Material Systems and Structures</i> , 2022, 33, 1449-1464.	2.5	3
83	A modified model to estimate the screening current-induced magnetic field of the REBCO magnet. <i>Superconductor Science and Technology</i> , 0, , .	3.5	3
84	Numerical Simulations of AC Losses in Multifilamentary Superconducting Tapes Under Bending Strain. <i>IEEE Transactions on Applied Superconductivity</i> , 2017, 27, 1-10.	1.7	2
85	Damage Analysis of Superconducting Composite Wire with Bridging Model. <i>Acta Mechanica Solida Sinica</i> , 2018, 31, 19-31.	1.9	2
86	Two-step homogenization for the effective thermal conductivities of twisted multi-filamentary superconducting strand. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2022, 43, 689-708.	3.6	2
87	A 3-D Numerical Model to Estimate the Critical Current in MgB <sub>2</sub> Wire and Cable with Twisted Structure. <i>Journal of Superconductivity and Novel Magnetism</i> , 2017, 30, 1757-1765.	1.8	1
88	Dendritic Flux Avalanches of the Nonhomogeneous/Granular Superconducting Thin Films: Numerical Simulations. <i>IEEE Transactions on Applied Superconductivity</i> , 2017, 27, 1-7.	1.7	1
89	The heat dissipations and vortices motion in the open superconducting square tube. <i>Physica C: Superconductivity and Its Applications</i> , 2020, 574, 1353659.	1.2	1
90	Effect of strain on critical magnetic field in type-II superconductors. <i>Journal of Applied Physics</i> , 2012, 112, 053913.	2.5	0

#	ARTICLE	IF	CITATIONS
91	Manipulation of vortex arrays with thermal gradients by applying dynamic heat sources. Superconductor Science and Technology, 2021, 34, 045005.	3.5	0