

Yijun Liu

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5286102/yijun-liu-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

102
papers

3,804
citations

34
h-index

60
g-index

109
ext. papers

4,153
ext. citations

3.4
avg, IF

5.74
L-index

#	Paper	IF	Citations
102	Evaluations of the effective material properties of carbon nanotube-based composites using a nanoscale representative volume element. <i>Mechanics of Materials</i> , 2003 , 35, 69-81	3.3	332
101	Revolutionizing biodegradable metals. <i>Materials Today</i> , 2009 , 12, 22-32	21.8	272
100	Square representative volume elements for evaluating the effective material properties of carbon nanotube-based composites. <i>Computational Materials Science</i> , 2004 , 29, 1-11	3.2	215
99	Fast Multipole Boundary Element Method: Theory and Applications in Engineering 2009 ,		143
98	The fast multipole boundary element method for potential problems: A tutorial. <i>Engineering Analysis With Boundary Elements</i> , 2006 , 30, 371-381	2.6	139
97	Analysis of shell-like structures by the Boundary Element Method based on 3-D elasticity: formulation and verification. <i>International Journal for Numerical Methods in Engineering</i> , 1998 , 41, 541-558	2.4	129
96	A study on the tensile response and fracture in carbon nanotube-based composites using molecular mechanics. <i>Composites Science and Technology</i> , 2007 , 67, 530-540	8.6	113
95	A weakly singular form of the hypersingular boundary integral equation applied to 3-D acoustic wave problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1992 , 96, 271-287	5.7	111
94	An adaptive fast multipole boundary element method for three-dimensional acoustic wave problems based on the Burton-Miller formulation. <i>Computational Mechanics</i> , 2007 , 40, 461-472	4	105
93	Analysis of two-dimensional thin structures (from micro- to nano-scales) using the boundary element method. <i>Computational Mechanics</i> , 1998 , 22, 404-412	4	94
92	Large-scale modeling of carbon-nanotube composites by a fast multipole boundary element method. <i>Computational Materials Science</i> , 2005 , 34, 173-187	3.2	93
91	A Fast Boundary Element Method for the Analysis of Fiber-Reinforced Composites Based on a Rigid-Inclusion Model. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2005 , 72, 115-128	2.7	93
90	Recent Advances and Emerging Applications of the Boundary Element Method. <i>Applied Mechanics Reviews</i> , 2011 , 64,	8.6	91
89	Plasma deposition of Ultrathin polymer films on carbon nanotubes. <i>Applied Physics Letters</i> , 2002 , 81, 5216-5218	3.4	87
88	Some identities for fundamental solutions and their applications to weakly-singular boundary element formulations. <i>Engineering Analysis With Boundary Elements</i> , 1991 , 8, 301-311	2.6	85
87	Modeling of Interphases in Fiber-Reinforced Composites Under Transverse Loading Using the Boundary Element Method. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2000 , 67, 41-49	2.7	79
86	Boundary integral equations for thin bodies. <i>International Journal for Numerical Methods in Engineering</i> , 1994 , 37, 107-121	2.4	73

85	A new boundary meshfree method with distributed sources. <i>Engineering Analysis With Boundary Elements</i> , 2010 , 34, 914-919	2.6	69
84	New identities for fundamental solutions and their applications to non-singular boundary element formulations. <i>Computational Mechanics</i> , 1999 , 24, 286-292	4	69
83	A new fast multipole boundary element method for solving large-scale two-dimensional elastostatic problems. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 65, 863-881	2.4	53
82	Interfacial stress analysis for multi-coating systems using an advanced boundary element method. <i>Computational Mechanics</i> , 2000 , 24, 448-455	4	52
81	Adaptive fast multipole boundary element method for three-dimensional half-space acoustic wave problems. <i>Engineering Analysis With Boundary Elements</i> , 2009 , 33, 1113-1123	2.6	46
80	An Adaptive Fast Multipole Boundary Element Method for Three-dimensional Potential Problems. <i>Computational Mechanics</i> , 2007 , 39, 681-691	4	46
79	A fast multipole accelerated method of fundamental solutions for potential problems. <i>Engineering Analysis With Boundary Elements</i> , 2005 , 29, 1016-1024	2.6	46
78	The effect of a convection vortex on sock formation in the floating catalyst method for carbon nanotube synthesis. <i>Carbon</i> , 2016 , 102, 513-519	10.4	45
77	Modeling of interface cracks in fiber-reinforced composites with the presence of interphases using the boundary element method. <i>Mechanics of Materials</i> , 2000 , 32, 769-783	3.3	45
76	On the simple-solution method and non-singular nature of the BIE/BEM \square review and some new results. <i>Engineering Analysis With Boundary Elements</i> , 2000 , 24, 789-795	2.6	44
75	Hypersingular boundary integral equations for radiation and scattering of elastic waves in three dimensions. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1993 , 107, 131-144	5.7	44
74	Thermal analysis of carbon-nanotube composites using a rigid-line inclusion model by the boundary integral equation method. <i>Computational Mechanics</i> , 2004 , 35, 1-10	4	42
73	A new form of the hypersingular boundary integral equation for 3-D acoustics and its implementation with C0 boundary elements. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1999 , 173, 375-386	5.7	40
72	Multiple-cell modeling of fiber-reinforced composites with the presence of interphases using the boundary element method. <i>Computational Materials Science</i> , 2001 , 21, 86-94	3.2	38
71	Analysis of thin piezoelectric solids by the boundary element method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2002 , 191, 2297-2315	5.7	37
70	Scattering of elastic waves from thin shapes in three dimensions using the composite boundary integral equation formulation. <i>Journal of the Acoustical Society of America</i> , 1997 , 102, 926-932	2.2	36
69	On the conventional boundary integral equation formulation for piezoelectric solids with defects or of thin shapes. <i>Engineering Analysis With Boundary Elements</i> , 2001 , 25, 77-91	2.6	36
68	A boundary element method for the analysis of CNT/polymer composites with a cohesive interface model based on molecular dynamics. <i>Engineering Analysis With Boundary Elements</i> , 2008 , 32, 299-308	2.6	34

67	Finite deflection analysis of elastic plate by the boundary element method. <i>Applied Mathematical Modelling</i> , 1985 , 9, 183-188	4.5	34
66	An advanced 3D boundary element method for characterizations of composite materials. <i>Engineering Analysis With Boundary Elements</i> , 2005 , 29, 513-523	2.6	32
65	A fast multipole boundary element method for 2D multi-domain elastostatic problems based on a dual BIE formulation. <i>Computational Mechanics</i> , 2008 , 42, 761-773	4	28
64	A new fast multipole boundary element method for solving 2-D Stokes flow problems based on a dual BIE formulation. <i>Engineering Analysis With Boundary Elements</i> , 2008 , 32, 139-151	2.6	28
63	A dual BIE approach for large-scale modelling of 3-D electrostatic problems with the fast multipole boundary element method. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 71, 837-855 ^{2.4}	2.4	27
62	Finite Element Modeling and Simulation with ANSYS Workbench		26
61	Gas phase pyrolysis synthesis of carbon nanotubes at high temperature. <i>Materials and Design</i> , 2017 , 132, 112-118	8.1	25
60	A unified boundary element method for the analysis of sound and shell-like structure interactions. I. Formulation and verification. <i>Journal of the Acoustical Society of America</i> , 1999 , 106, 1247-1254	2.2	25
59	A fast multipole boundary element method for 3D multi-domain acoustic scattering problems based on the Burton-Miller formulation. <i>Engineering Analysis With Boundary Elements</i> , 2012 , 36, 779-788	2.6	23
58	Modeling of multiple crack propagation in 2-D elastic solids by the fast multipole boundary element method. <i>Engineering Fracture Mechanics</i> , 2017 , 172, 1-16	4.2	22
57	Regularized integral equations and curvilinear boundary elements for electromagnetic wave scattering in three dimensions. <i>IEEE Transactions on Antennas and Propagation</i> , 1995 , 43, 1416-1422	4.9	22
56	Analysis of the shear stress transferred from a partially electroded piezoelectric actuator to an elastic substrate. <i>Smart Materials and Structures</i> , 2000 , 9, 248-254	3.4	21
55	Micromechanism of oxygen transport during initial stage oxidation in Si(100) surface: A ReaxFF molecular dynamics simulation study. <i>Applied Surface Science</i> , 2017 , 406, 178-185	6.7	20
54	General formulation for light scattering by a dielectric body near a perfectly conducting surface. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 1996 , 13, 338	1.8	20
53	On the BEM for acoustic wave problems. <i>Engineering Analysis With Boundary Elements</i> , 2019 , 107, 53-62	2.6	19
52	Analytical integration of the moments in the diagonal form fast multipole boundary element method for 3-D acoustic wave problems. <i>Engineering Analysis With Boundary Elements</i> , 2012 , 36, 248-254 ^{2.6}	2.6	18
51	A low-frequency fast multipole boundary element method based on analytical integration of the hypersingular integral for 3D acoustic problems. <i>Engineering Analysis With Boundary Elements</i> , 2013 , 37, 309-318	2.6	18
50	An Internet-based computing platform for the boundary element method. <i>Advances in Engineering Software</i> , 2003 , 34, 261-269	3.6	17

49	THE BOUNDARY ELEMENT METHOD. <i>International Journal of Computational Methods</i> , 2013 , 10, 13500371.1	1.1	16
48	A fast multipole boundary element method for modeling 2-D multiple crack problems with constant elements. <i>Engineering Analysis With Boundary Elements</i> , 2014 , 47, 1-9	2.6	15
47	A fast directional BEM for large-scale acoustic problems based on the Burton-Miller formulation. <i>Engineering Analysis With Boundary Elements</i> , 2015 , 50, 47-58	2.6	14
46	On the displacement discontinuity method and the boundary element method for solving 3-D crack problems. <i>Engineering Fracture Mechanics</i> , 2016 , 164, 35-45	4.2	13
45	Revisit of the equivalence of the displacement discontinuity method and boundary element method for solving crack problems. <i>Engineering Analysis With Boundary Elements</i> , 2014 , 47, 64-67	2.6	13
44	Efficient solution of multiple cracks in great number using eigen COD boundary integral equations with iteration procedure. <i>Engineering Analysis With Boundary Elements</i> , 2013 , 37, 487-500	2.6	13
43	Analyzing Acoustic Radiation Modes of Baffled Plates With a Fast Multipole Boundary Element Method. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2013 , 135,	1.6	13
42	A fast multipole boundary element method for 2D viscoelastic problems. <i>Engineering Analysis With Boundary Elements</i> , 2011 , 35, 170-178	2.6	13
41	Boundary effect on the elastic field of a semi-infinite solid containing inhomogeneities. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015 , 471, 20150174	2.4	12
40	Equivalent Inclusion Method for the Stokes Flow of Drops Moving in a Viscous Fluid. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2014 , 81,	2.7	11
39	Equivalent inclusion method-based simulation of particle sedimentation toward functionally graded material manufacturing. <i>Acta Mechanica</i> , 2014 , 225, 1429-1445	2.1	10
38	A fast multipole boundary element method for solving the thin plate bending problem. <i>Engineering Analysis With Boundary Elements</i> , 2013 , 37, 967-976	2.6	10
37	Fast multipole boundary element analysis of 2D viscoelastic composites with imperfect interfaces. <i>Science China Technological Sciences</i> , 2010 , 53, 2160-2171	3.5	10
36	A unified boundary element method for the analysis of sound and shell-like structure interactions. II. Efficient solution techniques. <i>Journal of the Acoustical Society of America</i> , 2000 , 108, 2738-2745	2.2	10
35	An adaptive model order reduction method for boundary element-based multi-frequency acoustic wave problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021 , 373, 113532	5.7	9
34	ReaxFF molecular dynamics study on oxidation behavior of 3C-SiC: Polar face effects. <i>Chinese Physics B</i> , 2015 , 24, 096203	1.2	8
33	A coupled ES-BEM and FM-BEM for structural acoustic problems. <i>Noise Control Engineering Journal</i> , 2014 , 62, 196-209	0.6	8
32	Stress Concentration of a Microvoid Embedded in an Adhesive Layer during Stress Transfer. <i>Journal of Engineering Mechanics - ASCE</i> , 2014 , 140, 04014075	2.4	8

31	Dual BIE approaches for modeling electrostatic MEMS problems with thin beams and accelerated by the fast multipole method. <i>Engineering Analysis With Boundary Elements</i> , 2006 , 30, 940-948	2.6	8
30	A new fast direct solver for the boundary element method. <i>Computational Mechanics</i> , 2017 , 60, 379-392	4	7
29	A Fast Multipole Boundary Element Method for Three-Dimensional Half-Space Acoustic Wave Problems Over an Impedance Plane. <i>International Journal of Computational Methods</i> , 2015 , 12, 1350090	1.1	7
28	Elastic stability analysis of thin plate by the boundary element method—new formulation. <i>Engineering Analysis</i> , 1987 , 4, 160-164		7
27	A fast multipole boundary element method for solving two-dimensional thermoelasticity problems. <i>Computational Mechanics</i> , 2014 , 54, 821-831	4	6
26	Slow convergence of the BEM with constant elements in solving beam bending problems. <i>Engineering Analysis With Boundary Elements</i> , 2014 , 39, 1-4	2.6	6
25	Multifunctional smart composites with integrated carbon nanotube yarn and sheet 2017 ,		5
24	Multiscale Modeling of Carbon Nanotube Bundle Agglomeration inside a Gas Phase Pyrolysis Reactor. <i>MRS Advances</i> , 2017 , 2, 2621-2626	0.7	5
23	Analysis of 3-D frictional contact mechanics problems by a boundary element method. <i>Tsinghua Science and Technology</i> , 2005 , 10, 16-29	3.4	5
22	Identities for the fundamental solution of thin plate bending problems and the nonuniqueness of the hypersingular BIE solution for multi-connected domains. <i>Engineering Analysis With Boundary Elements</i> , 2013 , 37, 594-602	2.6	4
21	Analysis of numerical integration error for Bessel integral identity in fast multipole method for 2D Helmholtz equation. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2010 , 15, 690-693	0.6	4
20	Boundary formulation and numerical analysis of elastic bodies with surface-bonded piezoelectric films. <i>Smart Materials and Structures</i> , 2002 , 11, 308-311	3.4	4
19	A new boundary element method for modeling wave propagation in functionally graded materials. <i>European Journal of Mechanics, A/Solids</i> , 2020 , 80, 103897	3.7	4
18	A new simple multidomain fast multipole boundary element method. <i>Computational Mechanics</i> , 2016 , 58, 533-548	4	4
17	Numerical and Experimental Investigation of Carbon Nanotube Sock Formation. <i>MRS Advances</i> , 2017 , 2, 21-26	0.7	3
16	Boundary Element Solver for Coupled Conduction-Radiation Heat Transfer in Nonhomogeneous Media. <i>Journal of Thermophysics and Heat Transfer</i> , 2018 , 32, 975-983	1.3	3
15	Scattering of SH-waves by an interface cavity. <i>Acta Mechanica</i> , 2004 , 170, 47	2.1	3
14	New Applications and Techniques for Nanotube Superfiber Development 2014 , 33-59		2

13	Development of the Fast Multipole Boundary Element Method for Acoustic Wave Problems 2009 , 287-303	2
12	Efficient multi-frequency solutions of FEBE coupled structural-acoustic problems using Arnoldi-based dimension reduction approach. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021 , 386, 114126	5.7 2
11	Eddy Current Analysis for 3-D Problems Using the Boundary Element Method 1993 , 235-242	2
10	A dual interpolation Galerkin boundary face method for potential problems. <i>Engineering Analysis With Boundary Elements</i> , 2020 , 117, 157-166	2.6 1
9	On the Identities for Elastostatic Fundamental Solution and Nonuniqueness of the Traction BIE Solution for Multiconnected Domains. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013 , 80,	2.7 1
8	Diagonal form fast multipole boundary element method for 2D acoustic problems based on Burton-Miller boundary integral equation formulation and its applications. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2011 , 32, 981-996	3.2 1
7	Determining the defect locations and sizes in elastic plates by using the artificial neural network and boundary element method. <i>Engineering Analysis With Boundary Elements</i> , 2022 , 139, 232-245	2.6 0
6	Multiscale Modeling of CNT Composites using Molecular Dynamics and the Boundary Element Method 2014 , 569-594	
5	Linkage Between Learning Styles and Design Engineering Perceptions of Undergraduate Students 2006 , 307	
4	The Boundary Element Method for Piezoelectric Materials. <i>Advances in Mechanics and Mathematics</i> , 2003 , 143-161	0.2
3	Some advances in boundary integral methods for wave-scattering from cracks 1992 , 55-65	
2	ReaxFF Molecular Dynamics Simulation on Oxidation Behaviors of 3C-SiC: Uniaxial Strain Effect 721-725	
1	Finite Deflection Analysis of Heated Elastic Plates by the Boundary Element Method 1986 , 367-374	