

Sofia G Mogilevskaya

List of Publications by Year in descending order

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64
papers

1,710
citations

361413
20
h-index

289244
40
g-index

64
all docs

64
docs citations

64
times ranked

461
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiple interacting circular nano-inhomogeneities with surface/interface effects. <i>Journal of the Mechanics and Physics of Solids</i> , 2008, 56, 2298-2327.	4.8	237
2	Equivalent inhomogeneity method for evaluating the effective elastic properties of unidirectional multi-phase composites with surface/interface effects. <i>International Journal of Solids and Structures</i> , 2010, 47, 407-418.	2.7	91
3	The effects of surface elasticity and surface tension on the transverse overall elastic behavior of unidirectional nano-composites. <i>Composites Science and Technology</i> , 2010, 70, 427-434.	7.8	85
4	Circular inhomogeneity with Steigmann–Ogden interface: Local fields, neutrality, and Maxwell’s type approximation formula. <i>International Journal of Solids and Structures</i> , 2018, 135, 85-98.	2.7	83
5	Complex hypersingular integrals and integral equations in plane elasticity. <i>Acta Mechanica</i> , 1994, 105, 189-205.	2.1	78
6	A Galerkin boundary integral method for multiple circular elastic inclusions. <i>International Journal for Numerical Methods in Engineering</i> , 2001, 52, 1069-1106.	2.8	71
7	Elastic interaction of spherical nanoinhomogeneities with Gurtin–Murdoch type interfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 2011, 59, 1702-1716.	4.8	69
8	Maxwell’s methodology of estimating effective properties: Alive and well. <i>International Journal of Engineering Science</i> , 2019, 140, 35-88.	5.0	66
9	A complex boundary integral method for multiple circular holes in an infinite plane. <i>Engineering Analysis With Boundary Elements</i> , 2003, 27, 789-802.	3.7	64
10	Multiple circular nano-inhomogeneities and/or nano-pores in one of two joined isotropic elastic half-planes. <i>Engineering Analysis With Boundary Elements</i> , 2009, 33, 233-248.	3.7	56
11	Complex fundamental solutions and complex variables boundary element method in elasticity. <i>Computational Mechanics</i> , 1998, 22, 88-92.	4.0	52
12	Local fields and overall transverse properties of unidirectional composite materials with multiple nanofibers and Steigmann–Ogden interfaces. <i>International Journal of Solids and Structures</i> , 2018, 147, 166-182.	2.7	49
13	Elastic fields and effective moduli of particulate nanocomposites with the Gurtin–Murdoch model of interfaces. <i>International Journal of Solids and Structures</i> , 2013, 50, 1141-1153.	2.7	48
14	On Spherical Inhomogeneity With Steigmann–Ogden Interface. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018, 85, .	2.2	44
15	On Maxwell's concept of equivalent inhomogeneity: When do the interactions matter?. <i>Journal of the Mechanics and Physics of Solids</i> , 2012, 60, 391-417.	4.8	42
16	Fiber- and Particle-Reinforced Composite Materials With the Gurtin–Murdoch and Steigmann–Ogden Surface Energy Endowed Interfaces. <i>Applied Mechanics Reviews</i> , 2021, 73, .	10.1	33
17	The universal algorithm based on complex hypersingular integral equation to solve plane elasticity problems. <i>Computational Mechanics</i> , 1996, 18, 127-138.	4.0	31
18	A boundary integral method for multiple circular inclusions in an elastic half-plane. <i>Engineering Analysis With Boundary Elements</i> , 2004, 28, 1083-1098.	3.7	28

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19	Evaluation of the effective elastic moduli of particulate composites based on Maxwell's concept of equivalent inhomogeneity: microstructure-induced anisotropy. <i>Journal of Mechanics of Materials and Structures</i> , 2013, 8, 283-303.	0.6	26
20	On the use of Somigliana's formula and Fourier series for elasticity problems with circular boundaries. <i>International Journal for Numerical Methods in Engineering</i> , 2003, 58, 537-578.	2.8	24
21	Displacements representations for the problems with spherical and circular material surfaces. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2019, 72, 449-471.	1.3	22
22	A time domain direct boundary integral method for a viscoelastic plane with circular holes and elastic inclusions. <i>Engineering Analysis With Boundary Elements</i> , 2005, 29, 725-737.	3.7	20
23	A boundary integral method for multiple circular holes in an elastic half-plane. <i>Engineering Analysis With Boundary Elements</i> , 2006, 30, 450-464.	3.7	19
24	Analysis of the Antiplane Problem with an Embedded Zero Thickness Layer Described by the Gurtin-Murdoch Model. <i>Journal of Elasticity</i> , 2020, 140, 171-195.	1.9	19
25	A fast and accurate algorithm for a Galerkin boundary integral method. <i>Computational Mechanics</i> , 2005, 37, 96-109.	4.0	18
26	Complex variable boundary integral method for linear viscoelasticity: Part I—basic formulations. <i>Engineering Analysis With Boundary Elements</i> , 2006, 30, 1049-1056.	3.7	17
27	Transient heat conduction in a medium with multiple spherical cavities. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 77, 751-775.	2.8	17
28	Evaluation of effective transverse mechanical properties of transversely isotropic viscoelastic composite materials. <i>Journal of Composite Materials</i> , 2011, 45, 2641-2658.	2.4	17
29	The use of complex integral representations for analytical evaluation of three-dimensional BEM integrals—potential and elasticity problems. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2014, 67, 505-523.	1.3	17
30	Transient thermal stresses in a medium with a circular cavity with surface effects. <i>International Journal of Solids and Structures</i> , 2009, 46, 1834-1848.	2.7	16
31	Combining Maxwell's methodology with the BEM for evaluating the two-dimensional effective properties of composite and micro-cracked materials. <i>Computational Mechanics</i> , 2013, 51, 377-389.	4.0	16
32	Evaluation of the effective elastic moduli of tetragonal fiber-reinforced composites based on Maxwell's concept of equivalent inhomogeneity. <i>International Journal of Solids and Structures</i> , 2013, 50, 4161-4172.	2.7	15
33	A lined hole in a viscoelastic rock under biaxial far-field stress. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2018, 106, 350-363.	5.8	15
34	Interaction between a circular opening and fractures originating from its boundary in a piecewise homogeneous plane. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , 2000, 24, 947-970.	3.3	14
35	The use of the Gurtin-Murdoch theory for modeling mechanical processes in composites with two-dimensional reinforcements. <i>Composites Science and Technology</i> , 2021, 210, 108751.	7.8	14
36	A numerical procedure for multiple circular holes and elastic inclusions in a finite domain with a circular boundary. <i>Computational Mechanics</i> , 2003, 32, 250-258.	4.0	12

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37	Interaction between a crack and a circular inhomogeneity with interface stiffness and tension. <i>International Journal of Fracture</i> , 2009, 159, 191-207.	2.2	12
38	Green Function for the Problem of a Plane Containing a Circular Hole With Surface Effects. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2011, 78, .	2.2	12
39	Lost in translation: Crack problems in different languages. <i>International Journal of Solids and Structures</i> , 2014, 51, 4492-4503.	2.7	12
40	On the elastic far-field response of a two-dimensional coated circular inhomogeneity: Analysis and applications. <i>International Journal of Solids and Structures</i> , 2018, 130-131, 199-210.	2.7	12
41	Consistent discretization of higher-order interface models for thin layers and elastic material surfaces, enabled by isogeometric cut-cell methods. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 350, 245-267.	6.6	11
42	Complex variables boundary element analysis of three-dimensional crack problems. <i>Engineering Analysis With Boundary Elements</i> , 2013, 37, 1532-1544.	3.7	10
43	On modeling of elastic interface layers in particle composites. <i>International Journal of Engineering Science</i> , 2022, 176, 103697.	5.0	10
44	Boundary element analysis of non-planar three-dimensional cracks using complex variables. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2015, 76, 44-54.	5.8	9
45	Direct boundary integral procedure for a Boltzmann viscoelastic plane with circular holes and elastic inclusions. <i>Computational Mechanics</i> , 2005, 37, 110-118.	4.0	8
46	On the use of Somigliana's formulae and series of surface spherical harmonics for elasticity problems with spherical boundaries. <i>Engineering Analysis With Boundary Elements</i> , 2007, 31, 116-132.	3.7	8
47	On convergence of the generalized Maxwell scheme: conductivity of composites containing cubic arrays of spherical particles. <i>Philosophical Magazine Letters</i> , 2016, 96, 392-401.	1.2	8
48	Novel approach for measuring the effective shear modulus of porous materials. <i>Journal of Materials Science</i> , 2010, 45, 936-945.	3.7	7
49	Evaluation of some approximate estimates for the effective tetragonal elastic moduli of two-phase fiber-reinforced composites. <i>Journal of Composite Materials</i> , 2014, 48, 2349-2362.	2.4	7
50	Complex variable boundary integral method for linear viscoelasticity. <i>Engineering Analysis With Boundary Elements</i> , 2006, 30, 1057-1068.	3.7	4
51	Numerical modeling of micro- and macro-behavior of viscoelastic porous materials. <i>Computational Mechanics</i> , 2008, 41, 797-816.	4.0	4
52	On "strange" properties of some symmetric inhomogeneities. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015, 471, 20150157.	2.1	4
53	BEM-based second-order imperfect interface modeling of potential problems with thin layers. <i>International Journal of Solids and Structures</i> , 2021, 230-231, 111155.	2.7	4
54	Anisotropic imperfect interface in elastic particulate composite with initial stress. <i>Mathematics and Mechanics of Solids</i> , 2022, 27, 872-895.	2.4	4

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55	The universal algorithm based on complex hypersingular integral equation to solve plane elasticity problems. <i>Computational Mechanics</i> , 1996, 18, 127-138.	4.0	4
56	On the BÃ¼vickÃ©Benveniste methodology and related approaches for modelling thin layers. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, .	3.4	4
57	A semi-analytical solution for multiple circular inhomogeneities in one of two joined isotropic elastic half-planes. <i>Engineering Analysis With Boundary Elements</i> , 2007, 31, 692-705.	3.7	3
58	Numerical study of the GurtinÃ©Murdoch model for curved interfaces : benchmark solutions and analysis of curvature-related effects. <i>Journal of Mechanics of Materials and Structures</i> , 2021, 16, 23-48.	0.6	3
59	Transient heat conduction in a medium with multiple circular cavities and inhomogeneities. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 80, 1437-1462.	2.8	2
60	Three-dimensional BEM analysis of stress state near a crack-borehole system. <i>Engineering Analysis With Boundary Elements</i> , 2016, 73, 133-143.	3.7	2
61	Elastic disk with isoperimetric Cosserat coating. <i>European Journal of Mechanics, A/Solids</i> , 2023, 100, 104568.	3.7	1
62	Computational Modeling of Viscoelastic Porous Materials. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	0
63	The shape of Maxwell's equivalent inhomogeneity and Ã©strangeÃ©™ properties of regular polygons and other symmetric domains. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2015, , hbv012.	1.3	0
64	Analytical solution for doubly-periodic harmonic problems with circular inhomogeneities and superconducting or membrane-type interfaces. <i>European Journal of Mechanics, A/Solids</i> , 2023, 100, 104556.	3.7	0