Ke Liaoliang

List of Publications by Year
in descending order

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112 papers	7,226 citations	61984 43 h-index	58581 82 g-index
112 all docs	112 docs citations	112 times ranked	2139 citing authors

#	Article	IF	Citations
1	Nonlinear free vibration of functionally graded carbon nanotube-reinforced composite beams. Composite Structures, 2010, 92, 676-683.	5.8	488
2	Nonlinear free vibration of size-dependent functionally graded microbeams. International Journal of Engineering Science, 2012, 50, 256-267.	5.0	336
3	Functionally graded graphene reinforced composite structures: A review. Engineering Structures, 2020, 210, 110339.	5.3	332
4	Size effect on dynamic stability of functionally graded microbeams based on a modified couple stress theory. Composite Structures, 2011, 93, 342-350.	5.8	330
5	Nonlinear vibration of the piezoelectric nanobeams based on the nonlocal theory. Composite Structures, 2012, 94, 2038-2047.	5.8	296
6	Nonlinear free vibration of single-walled carbon nanotubes using nonlocal Timoshenko beam theory. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1727-1735.	2.7	259
7	Free vibration of size-dependent Mindlin microplates based on the modified couple stress theory. Journal of Sound and Vibration, 2012, 331, 94-106.	3.9	228
8	Nonlinear free vibration of embedded double-walled carbon nanotubes based on nonlocal Timoshenko beam theory. Computational Materials Science, 2009, 47, 409-417.	3.0	224
9	Two-dimensional contact mechanics of functionally graded materials with arbitrary spatial variations of material properties. International Journal of Solids and Structures, 2006, 43, 5779-5798.	2.7	194
10	Free vibration of size-dependent magneto-electro-elastic nanoplates based on the nonlocal theory. Acta Mechanica Sinica/Lixue Xuebao, 2014, 30, 516-525.	3.4	192
11	Two-dimensional sliding frictional contact of functionally graded materials. European Journal of Mechanics, A/Solids, 2007, 26, 171-188.	3.7	185
12	Thermo-electro-mechanical vibration of piezoelectric nanoplates based on the nonlocal theory. Composite Structures, 2013, 106, 167-174.	5.8	185
13	Nonlinear vibration of edge cracked functionally graded Timoshenko beams. Journal of Sound and Vibration, 2009, 324, 962-982.	3.9	166
14	An analytical study on the nonlinear vibration ofÂfunctionally graded beams. Meccanica, 2010, 45, 743-752.	2.0	163
15	Thermoelectric-mechanical vibration of piezoelectric nanobeams based on the nonlocal theory. Smart Materials and Structures, 2012, 21, 025018.	3.5	161
16	Bending, buckling and vibration of size-dependent functionally graded annular microplates. Composite Structures, 2012, 94, 3250-3257.	5.8	149
17	Flexural Vibration and Elastic Buckling of a Cracked Timoshenko Beam Made of Functionally Graded Materials. Mechanics of Advanced Materials and Structures, 2009, 16, 488-502.	2.6	142
18	Thermo-electro-mechanical vibration of size-dependent piezoelectric cylindrical nanoshells under various boundary conditions. Composite Structures, 2014, 116, 626-636.	5.8	142

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19	Free vibration of size-dependent magneto-electro-elastic nanobeams based on the nonlocal theory. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 63, 52-61.	2.7	140
20	Dynamic Stability of Functionally Graded Carbon Nanotube-Reinforced Composite Beams. Mechanics of Advanced Materials and Structures, 2013, 20, 28-37.	2.6	136
21	Free vibration of nonlocal piezoelectric nanoplates under various boundary conditions. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 66, 93-106.	2.7	130
22	Thermal effect on free vibration and buckling of size-dependent microbeams. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 1387-1393.	2.7	106
23	The size-dependent vibration of embedded magneto-electro-elastic cylindrical nanoshells. Smart Materials and Structures, 2014, 23, 125036.	3.5	104
24	Postbuckling analysis of edge cracked functionally graded Timoshenko beams under end shortening. Composite Structures, 2009, 90, 152-160.	5.8	92
25	Flow-induced vibration and instability of embedded double-walled carbon nanotubes based on a modified couple stress theory. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 1031-1039.	2.7	92
26	Axisymmetric postbuckling analysis of size-dependent functionally graded annular microplates using the physical neutral plane. International Journal of Engineering Science, 2014, 81, 66-81.	5.0	80
27	Electro-mechanical frictionless contact behavior of a functionally graded piezoelectric layered half-plane under a rigid punch. International Journal of Solids and Structures, 2008, 45, 3313-3333.	2.7	79
28	Love waves in an inhomogeneous fluid saturated porous layered half-space with linearly varying properties. Soil Dynamics and Earthquake Engineering, 2006, 26, 574-581.	3.8	75
29	Two-dimensional thermoelastic contact problem of functionally graded materials involving frictional heating. International Journal of Solids and Structures, 2011, 48, 2536-2548.	2.7	68
30	Buckling and post-buckling of size-dependent piezoelectric Timoshenko nanobeams subject to thermo-electro-mechanical loadings. International Journal of Structural Stability and Dynamics, 2014, 14, 1350067.	2.4	68
31	Large amplitude vibration of functionally graded graphene nanocomposite annular plates in thermal environments. Composite Structures, 2020, 239, 112047.	5.8	67
32	Wave propagation characteristics in magneto-electro-elastic nanoshells using nonlocal strain gradient theory. Composite Structures, 2018, 199, 10-23.	5.8	59
33	Critical examination of midplane and neutral plane formulations for vibration analysis of FGM beams. Engineering Structures, 2017, 130, 275-281.	5.3	56
34	Thermoelastic frictional contact of functionally graded materials with arbitrarily varying properties. International Journal of Mechanical Sciences, 2012, 63, 86-98.	6.7	53
35	Thermal-mechanical-electrical buckling behavior of functionally graded micro-beams based on modified couple stress theory. Composite Structures, 2018, 202, 625-634.	5.8	53
36	Frictionless contact of a functionally graded magneto-electro-elastic layered half-plane under a conducting punch. International Journal of Solids and Structures, 2014, 51, 2791-2806.	2.7	51

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37	Sliding frictional contact analysis of functionally graded piezoelectric layered half-plane. Acta Mechanica, 2010, 209, 249-268.	2.1	50
38	Nonlinear vibration of piezoelectric nanoplates using nonlocal Mindlin plate theory. Mechanics of Advanced Materials and Structures, 2018, 25, 1252-1264.	2.6	50
39	Two-dimensional contact problem for a coatingâ€“graded layerâ€“substrate structure under a rigid cylindrical punch. International Journal of Mechanical Sciences, 2008, 50, 985-994.	6.7	49
40	Nonlinear vibration of carbon nanotube embedded in viscous elastic matrix under parametric excitation by nonlocal continuum theory. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 83, 195-200.	2.7	48
41	Crack identification of functionally graded beams using continuous wavelet transform. Composite Structures, 2019, 210, 473-485.	5.8	48
42	Fretting contact with finite friction of a functionally graded coating with arbitrarily varying elastic modulus Part 1: Normal loading. Journal of Strain Analysis for Engineering Design, 2007, 42, 293-304.	1.8	46
43	Ultra-high-temperature tensile properties and fracture behavior of ZrB2-based ceramics in air above 1500Â°C. Materials & Design, 2013, 52, 17-22.	5.1	45
44	Axisymmetric frictionless contact of a functionally graded piezoelectric layered half-space under a conducting punch. International Journal of Solids and Structures, 2016, 90, 45-59.	2.7	45
45	Nonlinear Vibration of Nonlocal Piezoelectric Nanoplates. International Journal of Structural Stability and Dynamics, 2015, 15, 1540013.	2.4	43
46	Size effect on the free vibration of geometrically nonlinear functionally graded micro-beams under electrical actuation and temperature change. Composite Structures, 2015, 133, 1137-1148.	5.8	42
47	Frictionless contact analysis of a functionally graded piezoelectric layered half-plane. Smart Materials and Structures, 2008, 17, 025003.	3.5	41
48	Fretting Contact of Two Dissimilar Elastic Bodies with Functionally Graded Coatings. Mechanics of Advanced Materials and Structures, 2010, 17, 433-447.	2.6	41
49	Wave propagation in magneto-electro-elastic nanobeams via two nonlocal beam models. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 86, 253-261.	2.7	41
50	Propagation of Love Waves in an Inhomogeneous Fluid Saturated Porous Layered Half-Space with Properties Varying Exponentially. Journal of Engineering Mechanics - ASCE, 2005, 131, 1322-1328.	2.9	38
51	Sliding Frictional Contact of Functionally Graded Magneto-Electro-Elastic Materials Under a Conducting Flat Punch. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	2.2	35
52	Dynamic Buckling of Thermo-Electro-Mechanically Loaded FG-CNTRC Beams. International Journal of Structural Stability and Dynamics, 2015, 15, 1540017.	2.4	33
53	Sliding frictional contact analysis of an elastic solid with couple stresses. International Journal of Mechanical Sciences, 2017, 133, 804-816.	6.7	33
54	Wave Propagation Analysis of Piezoelectric Nanoplates Based on the Nonlocal Theory. International Journal of Structural Stability and Dynamics, 2018, 18, 1850060.	2.4	33

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55	Two-dimensional fretting contact analysis of piezoelectric materials. International Journal of Solids and Structures, 2015, 73-74, 41-54.	2.7	31
56	Buckling and post-buckling analyses of size-dependent piezoelectric nanoplates. Theoretical and Applied Mechanics Letters, 2016, 6, 253-267.	2.8	31
57	Thermoelastic instability of functionally graded materials with interaction of frictional heat and contact resistance. Mechanics Based Design of Structures and Machines, 2018, 46, 139-156.	4.7	30
58	Electro-mechanical sliding frictional contact of a piezoelectric half-plane under a rigid conducting punch. Applied Mathematical Modelling, 2014, 38, 5471-5489.	4.2	29
59	Fretting contact with finite friction of a functionally graded coating with arbitrarily varying elastic modulus Part 2: Tangential loading. Journal of Strain Analysis for Engineering Design, 2007, 42, 305-313.	1.8	28
60	Flexural Vibration of an Atomic Force Microscope Cantilever Based on Modified Couple Stress Theory. International Journal of Structural Stability and Dynamics, 2015, 15, 1540025.	2.4	28
61	Wave Propagation in Nanoscaled Periodic Layered Structures. Journal of Computational and Theoretical Nanoscience, 2013, 10, 2427-2437.	0.4	27
62	Fretting contact of a functionally graded piezoelectric layered half-plane under a conducting punch. Smart Materials and Structures, 2016, 25, 025014.	3.5	26
63	Thermoelastic contact instability of a functionally graded layer and a homogeneous half-plane. International Journal of Solids and Structures, 2014, 51, 3962-3972.	2.7	25
64	Thermal effect on the pull-in instability of functionally graded micro-beams subjected to electrical actuation. Composite Structures, 2014, 116, 136-146.	5.8	25
65	Frictional contact problem between a functionally graded magnetoelectroelastic layer and a rigid conducting flat punch with frictional heat generation. Journal of Thermal Stresses, 2016, 39, 245-277.	2.0	25
66	Two-Dimensional Frictionless Contact of a Coated Half-Plane Based on Couple Stress Theory. International Journal of Applied Mechanics, 2018, 10, 1850049.	2.2	24
67	Shape memory polymer composite structures with two-way shape memory effects. Materials Letters, 2012, 89, 216-218.	2.6	23
68	Nonlocal free vibration of graded nanobeams resting on a nonlinear elastic foundation using DQM and LaDQM. Composite Structures, 2017, 176, 736-747.	5.8	22
69	Free vibration of variable thickness FGM beam submerged in fluid. Composite Structures, 2020, 233, 111582.	5.8	21
70	Modeling the temperature, crystallization, and residual stress for selective laser sintering of polymeric powder. Acta Mechanica, 2021, 232, 3635-3653.	2.1	21
71	Stress Analysis for an Elastic Semispace with Surface and Graded Layer Coatings under Induced Torsion. Mechanics Based Design of Structures and Machines, 2015, 43, 74-94.	4.7	19
72	An effective method for the sliding frictional contact of a conducting cylindrical punch on FGPMs. International Journal of Solids and Structures, 2018, 141-142, 127-136.	2.7	18

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73	The coupled thermoelastic instability of FGM coatings with arbitrarily varying properties: in-plane sliding. Acta Mechanica, 2018, 229, 2979-2995.	2.1	17
74	Surface effect on the contact problem of a piezoelectric half-plane. International Journal of Solids and Structures, 2020, 185-186, 380-393.	2.7	17
75	Nonlinear vibration of edged cracked FGM beams using differential quadrature method. Science China: Physics, Mechanics and Astronomy, 2012, 55, 2114-2121.	5.1	16
76	Thermoelastic instability of functionally graded coating with arbitrarily varying properties considering contact resistance and frictional heat. Applied Mathematical Modelling, 2017, 43, 521-537.	4.2	16
77	Thermoelastic instability of a functionally graded layer interacting with a homogeneous layer. International Journal of Mechanical Sciences, 2015, 99, 218-227.	6.7	15
78	Surface Effect on Static Bending of Functionally Graded Porous Nanobeams Based on Reddyâ€™s Beam Theory. International Journal of Structural Stability and Dynamics, 2019, 19, 1950062.	2.4	15
79	Thermal contact of magneto-electro-elastic materials subjected to a conducting flat punch. Journal of Strain Analysis for Engineering Design, 2015, 50, 513-527.	1.8	14
80	Axisymmetric torsional fretting contact between a spherical punch and an FGPM coating. Applied Mathematical Modelling, 2017, 52, 576-589.	4.2	14
81	Vibrational power flow analysis of cracked functionally graded beams. Thin-Walled Structures, 2020, 150, 106626.	5.3	14
82	The axisymmetric torsional contact problem of a functionally graded piezoelectric coated half-space. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 406-414.	3.4	12
83	Numerical Study of Coupled Electrical-Thermal-Mechanical-Wear Behavior in Electrical Contacts. Metals, 2021, 11, 955.	2.3	12
84	Thermo-Mechanical Analysis of an Inhomogeneous Double-Layer Coating System under Hertz Pressure and Tangential Traction. Mechanics of Advanced Materials and Structures, 2009, 16, 308-318.	2.6	11
85	Axisymmetric thermoelastic contact of an FGM-coated half-space under a rotating punch. Acta Mechanica, 2021, 232, 2361-2378.	2.1	10
86	Size-dependent vibration and dynamic stability of AFG microbeams immersed in fluid. Thin-Walled Structures, 2021, 161, 107432.	5.3	10
87	Two-dimensional fretting contact of piezoelectric materials under a rigid conducting cylindrical punch. Journal of Mechanics of Materials and Structures, 2016, 11, 535-558.	0.6	9
88	Thermo-elastic dynamic instability of an elastic half-plane sliding against a coated half-plane. International Journal of Mechanical Sciences, 2016, 117, 275-285.	6.7	9
89	Elastohydrodynamic lubrication line contact of piezoelectric materials. International Journal of Mechanical Sciences, 2019, 163, 105145.	6.7	9
90	Frictionally excited thermoelastic dynamic instability of functionally graded materials. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 99-111.	3.4	9

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91	Experimental Investigation on Fretting Wear Behavior of Piezoceramics under Sphere-on-Flat Contact. Tribology Transactions, 2020, 63, 971-985.	2.0	9
92	Axisymmetric contact vibration analysis of a rigid spherical punch on a piezoelectric half-space. International Journal of Solids and Structures, 2021, 210-211, 224-236.	2.7	9
93	Dynamic instability of an elastic solid sliding against a functionally graded material coated half-plane. International Journal of Mechanical Sciences, 2014, 89, 323-331.	6.7	8
94	Axisymmetric partial slip contact of a functionally graded piezoelectric coating under a conducting punch. Journal of Intelligent Material Systems and Structures, 2017, 28, 1925-1940.	2.5	8
95	Dynamic contact response of an elastic sphere on a piezoelectric half-space. Applied Mathematical Modelling, 2021, 100, 16-32.	4.2	8
96	Thermoelastic instability of functionally graded materials in frictionless contact. Acta Mechanica, 2015, 226, 2295-2311.	2.1	6
97	Frictionally Excited Thermoelastic Instability of Functionally Graded Materials Sliding Out-of-Plane With Contact Resistance. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	6
98	Free vibration of FGM Mindlin plates submerged in fluid. Engineering Structures, 2022, 259, 114144.	5.3	6
99	Experimental Studies on Fretting Wear Behavior of PVDF Piezoelectric Thin Films. Materials, 2021, 14, 734.	2.9	5
100	Elastohydrodynamic lubrication line contact in couple-stress elasticity. Mathematics and Mechanics of Solids, 2021, 26, 1053-1073.	2.4	5
101	Dynamic Response of a Coated Half-Plane with Hysteretic Damping Under a Harmonic Hertz Load. Acta Mechanica Solida Sinica, 2020, 33, 449-463.	1.9	4
102	Fretting Wear Behavior of Three Kinds of Rubbers under Sphere-On-Flat Contact. Materials, 2021, 14, 2153.	2.9	4
103	The size-dependent elastohydrodynamic lubrication contact of a coated half-plane with non-Newtonian fluid. Applied Mathematics and Mechanics (English Edition), 2021, 42, 915-930.	3.6	4
104	Elastohydrodynamic Lubrication Line Contact of a Functionally Graded Material Coated Half-Plane. Journal of Tribology, 2020, 142, .	1.9	4
105	Elastohydrodynamic Lubrication Line Contact Based on Surface Elasticity Theory. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	4
106	Axisymmetric contact analysis of piezoelectric materials with surface effect. Journal of Intelligent Material Systems and Structures, 2021, 32, 1643-1661.	2.5	3
107	Vibrational power flow analysis of Timoshenko microbeams with a crack. Composite Structures, 2022, 289, 115483.	5.8	3
108	The dynamic contact of a viscoelastic coated half-plane under a rigid flat punch. Mechanics Based Design of Structures and Machines, 2023, 51, 5925-5940.	4.7	3

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109	Softening-Spring Phenomenon in Large Amplitude Vibration of Two-Layer Bi-Material Beams. International Journal of Structural Stability and Dynamics, 2022, 22, .	2.4	2
110	Instability Study Of Functionally Graded Micro-Beam Under The Thermal-Mechanical-Electrical Multifield Coupling. , 2021, , .		1
111	THERMOELASTIC CONTACT MECHANICS OF FUNCTIONALLY GRADED MATERIALS. , 2015, , 49-50.		0
112	Progress in some basic problems on contact mechanics of functionally graded materials. Chinese Science Bulletin, 2015, 60, 1565-1573.	0.7	0