Xi-Qiao Feng

List of Publications by Year in descending order

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444 papers 18,862 citations

59 h-index 118 g-index

453 all docs 453 docs citations

453 times ranked

16757 citing authors

#	Article	IF	CITATIONS
1	Three-dimensional crack bridging model of biological materials with twisted Bouligand structures. Journal of the Mechanics and Physics of Solids, 2022, 159, 104729.	4.8	18
2	Micromechanical method for determining the effective surface elastic modulus of solids with surface microstructures. Mechanics of Materials, 2022, 165, 104201.	3.2	O
3	Structural topology optimization with an adaptive design domain. Computer Methods in Applied Mechanics and Engineering, 2022, 389, 114382.	6.6	29
4	Nacre's brick–mortar structure suppresses the adverse effect of microstructural randomness. Journal of the Mechanics and Physics of Solids, 2022, 159, 104769.	4.8	24
5	Fluid–solid coupling dynamic model for oscillatory growth of multicellular lumens. Journal of Biomechanics, 2022, 131, 110937.	2.1	1
6	Regulation of cell attachment, spreading, and migration by hydrogel substrates with independently tunable mesh size. Acta Biomaterialia, 2022, 141, 178-189.	8.3	14
7	Evaporation of liquid nanofilms: A minireview. Physics of Fluids, 2022, 34, 021302.	4.0	2
8	Experimental and theoretical studies on the dynamic landing of water striders on water. Soft Matter, 2022, 18, 3575-3582.	2.7	3
9	Phototactic Miniature Soft Robots with Terrain Adaptability. Advanced Materials Technologies, 2022, 7, .	5.8	10
10	Surface effect on the necking of hyperelastic materials. Current Applied Physics, 2022, 38, 91-98.	2.4	2
11	Domino-like stacking order switching in twisted monolayer–multilayer graphene. Nature Materials, 2022, 21, 621-626.	27.5	28
12	An energy-conservative many-body dissipative particle dynamics model for thermocapillary drop motion. Physics of Fluids, 2022, 34, .	4.0	5
13	Atomic stick-slip friction as a two-dimensional thermally activated process. Physical Review B, 2022, 105, .	3.2	1
14	Radial wrinkling of viscoelastic film-substrate systems. International Journal of Solids and Structures, 2022, 249, 111689.	2.7	3
15	Extracting the properties of constituent phases from the overall response of composites: A deep neural network method. Composite Structures, 2022, , 115707.	5.8	1
16	An energy method for the bifurcation analysis of necking. Extreme Mechanics Letters, 2022, , 101793.	4.1	1
17	Dual-Scale Stick-Slip Friction on <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mtext>Graphene</mml:mtext><mml:mo>/</mml:mo><mml:mrow><mml:m .<="" 128,="" 2022,="" letters,="" moiré="" physical="" review="" structure.="" superlattice="" td=""><td>ıi>h⁄k∦mml:</td><td>mi20/mml:mn</td></mml:m></mml:mrow></mml:mrow></mml:math>	ıi>h⁄k∦mml:	mi 2 0/mml:mn
18	Multi-functional topology optimization of <i>Victoria cruziana</i> Vieins. Journal of the Royal Society Interface, 2022, 19, .	3.4	4

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19	Deep learning method for predicting the strengths of microcracked brittle materials. Engineering Fracture Mechanics, 2022, 271, 108600.	4.3	14
20	Mechanical–electrochemical coupling theory of bacterial cells. International Journal of Solids and Structures, 2022, 252, 111804.	2.7	0
21	Fracture toughness analysis of helical fiber-reinforced biocomposites. Journal of the Mechanics and Physics of Solids, 2021, 146, 104206.	4.8	22
22	Buckling-regulated bandgaps of soft metamaterials with chiral hierarchical microstructure. Extreme Mechanics Letters, 2021, 43, 101166.	4.1	10
23	Why are isolated and collective cells greatly different in stiffness?. Journal of the Mechanics and Physics of Solids, 2021, 147, 104280.	4.8	13
24	Biomechanics in "Sino-Italian Joint― Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 169-172.	3.4	6
25	Energetics of mesoscale cell turbulence in two-dimensional monolayers. Communications Physics, 2021, 4, .	5.3	34
26	Influence of Considering the Sorption Effect in the Betti-Maxwell Reciprocal Theorem on Gas Transport Capacity in Unconventional Reservoirs. Transport in Porous Media, 2021, 137, 451-469.	2.6	3
27	Effect of shear stress on adhesive contact with a generalized Maugis-Dugdale cohesive zone model. Journal of the Mechanics and Physics of Solids, 2021, 148, 104275.	4.8	25
28	Deep learning method for determining the surface elastic moduli of microstructured solids. Extreme Mechanics Letters, 2021, 44, 101226.	4.1	18
29	Collective migrations in an epithelial–cancerous cell monolayer. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 773-784.	3.4	3
30	EML webinar overview: Dynamics of collective cells. Extreme Mechanics Letters, 2021, 44, 101255.	4.1	3
31	Preface: Mechanics of soft materials and flexible structures. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 746-747.	3.4	3
32	Dynamic intracellular mechanical cues facilitate collective signaling responses. IScience, 2021, 24, 102396.	4.1	5
33	AFM-based indentation method for measuring the relaxation property of living cells. Journal of Biomechanics, 2021, 122, 110444.	2.1	5
34	Extracellular Matrix Stiffness Regulates DNA Methylation by PKC α â€Dependent Nuclear Transport of DNMT3L. Advanced Healthcare Materials, 2021, 10, 2100821.	7.6	11
35	Bio-chemo-mechanical theory of active shells. Journal of the Mechanics and Physics of Solids, 2021, 152, 104419.	4.8	18
36	Tuning frictional properties of molecularly thin erucamide films through controlled self-assembling. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1041-1049.	3.4	6

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37	Deep learning method for predicting the mechanical properties of aluminum alloys with small data sets. Materials Today Communications, 2021, 28, 102570.	1.9	8
38	A finite-strain micromechanical model for the hyperelasticity of tendons and ligaments with crimped fibers. Mechanics of Materials, 2021, 160, 103955.	3.2	4
39	Mechanoelectrical flexible hub-beam model of ionic-type solvent-free nanofluids. Mechanical Systems and Signal Processing, 2021, 159, 107833.	8.0	58
40	Hypertonic pressure affects the pluripotency and self-renewal of mouse embryonic stem cells. Stem Cell Research, 2021, 56, 102537.	0.7	3
41	Switchable adhesion with a high tuning ratio achieved on polymer surfaces with embedded low-melting-point alloy. Extreme Mechanics Letters, 2021, 49, 101488.	4.1	9
42	Measurement of the interconnected turgor pressure and envelope elasticity of live bacterial cells. Soft Matter, 2021, 17, 2042-2049.	2.7	7
43	Breaking the symmetry to suppress the Plateau–Rayleigh instability and optimize hydropower utilization. Nature Communications, 2021, 12, 6899.	12.8	32
44	Morphological optimization of scorpion telson. Journal of the Mechanics and Physics of Solids, 2020, 135, 103773.	4.8	29
45	Gas migration in the reservoirs of ultra-low porosity and permeability based on an improved apparent permeability model. Journal of Petroleum Science and Engineering, 2020, 185, 106614.	4.2	12
46	Static and dynamic properties of pre-twisted leaves and stalks with varying chiral morphologies. Extreme Mechanics Letters, 2020, 34, 100612.	4.1	7
47	Wrinkling pattern evolution on curved surfaces. Journal of the Mechanics and Physics of Solids, 2020, 135, 103798.	4.8	28
48	A micromechanical model of tendon and ligament with crimped fibers. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 112, 104086.	3.1	8
49	Topology optimization method for the design of bioinspired self-similar hierarchical microstructures. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113399.	6.6	22
50	Mesoscopic dynamic model of epithelial cell division with cell-cell junction effects. Physical Review E, 2020, 102, 012405.	2.1	8
51	Abnormal conductivity in low-angle twisted bilayer graphene. Science Advances, 2020, 6, .	10.3	54
52	Piezo1 regulates migration and invasion of breast cancer cells via modulating cell mechanobiological properties. Acta Biochimica Et Biophysica Sinica, 2020, 53, 10-18.	2.0	35
53	Optocapillarity-driven assembly and reconfiguration of liquid crystal polymer actuators. Nature Communications, 2020, 11, 5780.	12.8	23
54	Geometric Confinement Guides the Expression of Cancer Stem Cell Molecular Markers CD44 via Cell Traction Forces. ACS Biomaterials Science and Engineering, 2020, 6, 4623-4630.	5.2	3

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55	Buckling of growing bacterial chains. Journal of the Mechanics and Physics of Solids, 2020, 145, 104146.	4.8	11
56	Predictive assembling model reveals the self-adaptive elastic properties of lamellipodial actin networks for cell migration. Communications Biology, 2020, 3, 616.	4.4	16
57	Universal Statistical Laws for the Velocities of Collective Migrating Cells. Advanced Biology, 2020, 4, e2000065.	3.0	13
58	Length Scale Effect in Frictional Aging of Silica Contacts. Physical Review Letters, 2020, 125, 215502.	7.8	9
59	A function of fascin1 in the colony formation of mouse embryonic stem cells. Stem Cells, 2020, 38, 1078-1090.	3.2	3
60	Rücktitelbild: Droplet Precise Selfâ€Splitting on Patterned Adhesive Surfaces for Simultaneous Multidetection (Angew. Chem. 26/2020). Angewandte Chemie, 2020, 132, 10754-10754.	2.0	0
61	Morphomechanics of tumors. Current Opinion in Biomedical Engineering, 2020, 15, 51-58.	3.4	6
62	The relation between the collective motility and shapes of human cancer cells under heat stress. Applied Physics Letters, 2020, 116, 043703.	3.3	1
63	Collective dynamics of coherent motile cells on curved surfaces. Soft Matter, 2020, 16, 2941-2952.	2.7	23
64	Bionic torus as a self-adaptive soft grasper in robots. Applied Physics Letters, 2020, 116, .	3.3	18
65	The development of creep damage constitutive equations for high Cr steel. Materials at High Temperatures, 2020, 37, 129-138.	1.0	13
66	Surface effects on cylindrical indentation of a soft layer on a rigid substrate. Acta Mechanica Sinica/Lixue Xuebao, 2020, 36, 422-429.	3.4	22
67	Droplet Precise Selfâ€Splitting on Patterned Adhesive Surfaces for Simultaneous Multidetection. Angewandte Chemie, 2020, 132, 10622-10626.	2.0	5
68	Droplet Precise Selfâ€Splitting on Patterned Adhesive Surfaces for Simultaneous Multidetection. Angewandte Chemie - International Edition, 2020, 59, 10535-10539.	13.8	65
69	Decohesion of a rigid flat punch from an elastic layer of finite thickness. Journal of the Mechanics and Physics of Solids, 2020, 139, 103937.	4.8	19
70	<i>Ciona</i> embryonic tail bending is driven by asymmetrical notochord contractility and coordinated by epithelial proliferation. Development (Cambridge), 2020, 147, .	2.5	16
71	Advances in collective cell dynamics. Chinese Science Bulletin, 2020, 65, 3100-3117.	0.7	1
72	10.1063/1.5128474.1., 2020, , .		0

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73	Surface effects on frequency dispersion characteristics of Lamb waves in a nanoplate. Thin Solid Films, 2020, 697, 137831.	1.8	11
74	Mechanical characterization of the key portions in locust semi-lunar processes under different strain rates. Journal of Biomechanics, 2019, 95, 109314.	2.1	7
75	Heat Stress-Induced Multiple Multipolar Divisions of Human Cancer Cells. Cells, 2019, 8, 888.	4.1	7
76	Dynamic instability and migration modes of collective cells in channels. Journal of the Royal Society Interface, 2019, 16, 20190258.	3.4	18
77	A cell-based model for analyzing growth and invasion of tumor spheroids. Science China Technological Sciences, 2019, 62, 1341-1348.	4.0	5
78	Impacts of the substrate stiffness on the anti-wear performance of graphene. AIP Advances, 2019, 9, .	1.3	13
79	Compression Generated by a 3D Supracellular Actomyosin Cortex Promotes Embryonic Stem Cell Colony Growth and Expression of Nanog and Oct4. Cell Systems, 2019, 9, 214-220.e5.	6.2	20
80	Deep neural network method for predicting the mechanical properties of composites. Applied Physics Letters, 2019, 115, .	3.3	88
81	Tuning friction to a superlubric state via in-plane straining. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24452-24456.	7.1	72
82	Enumeration–screening method for the design of simple polygonal tensegrities. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20180812.	2.1	2
83	On the robustness of spider capture silk's adhesion. Extreme Mechanics Letters, 2019, 29, 100477.	4.1	5
84	Phase transition and optimal actuation of active bilayer structures. Extreme Mechanics Letters, 2019, 29, 100467.	4.1	8
85	Mechanical Roles of F-Actin in the Differentiation of Stem Cells: A Review. ACS Biomaterials Science and Engineering, 2019, 5, 3788-3801.	5.2	28
86	Coupling analysis of screwing motion of double-walled carbon nanotubes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2309-2313.	2.1	2
87	Quantum dots-reinforced luminescent silkworm silk with superior mechanical properties and highly stable fluorescence. Journal of Materials Science, 2019, 54, 9945-9957.	3.7	25
88	Spontaneous droplets gyrating via asymmetric self-splitting on heterogeneous surfaces. Nature Communications, 2019, 10, 950.	12.8	135
89	Multiscale fracture mechanics model for the dorsal closure in Drosophila embryogenesis. Journal of the Mechanics and Physics of Solids, 2019, 127, 154-166.	4.8	9
90	Torsion Instability of Anisotropic Cylindrical Tissues with Growth. Acta Mechanica Solida Sinica, 2019, 32, 621-632.	1.9	6

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91	Ultrastructural organization of NompC in the mechanoreceptive organelle of <i>Drosophila</i> campaniform mechanoreceptors. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7343-7352.	7.1	21
92	Regulating wrinkling patterns by periodic surface stiffness in film-substrate structures. Science China Technological Sciences, 2019, 62, 747-754.	4.0	7
93	Collective oscillation in dense suspension of self-propelled chiral rods. Soft Matter, 2019, 15, 2999-3007.	2.7	10
94	In-plane compressive behavior of graphene-coated aluminum nano-honeycombs. Computational Materials Science, 2019, 156, 396-403.	3.0	10
95	Three-dimensional collective cell motions in an acinus-like lumen. Journal of Biomechanics, 2019, 84, 234-242.	2.1	7
96	Bio–chemo–mechanical modeling of growing biological tissues: Finite element method. International Journal of Non-Linear Mechanics, 2019, 108, 46-54.	2.6	14
97	3D-printed biomimetic surface structures with abnormal friction properties. Extreme Mechanics Letters, 2019, 26, 46-52.	4.1	6
98	Engineering Surface Patterns with Shape Memory Polymers: Multiple Design Dimensions for Diverse and Hierarchical Structures. ACS Applied Materials & Samp; Interfaces, 2019, 11, 1563-1570.	8.0	23
99	Sliding friction and contact angle hysteresis of droplets on microhole-structured surfaces. European Physical Journal E, 2018, 41, 25.	1.6	11
100	Revisiting the Critical Condition for the Cassie–Wenzel Transition on Micropillar-Structured Surfaces. Langmuir, 2018, 34, 3838-3844.	3.5	45
101	Synergistic adhesion mechanisms of spider capture silk. Journal of the Royal Society Interface, 2018, 15, 20170894.	3.4	18
102	Bucklingâ€Induced Assembly of Threeâ€Dimensional Tunable Metamaterials (Phys. Status Solidi RRL 4/2018). Physica Status Solidi - Rapid Research Letters, 2018, 12, 1870314.	2.4	1
103	Effects of nanofiber orientations on the fracture toughness of cellulose nanopaper. Engineering Fracture Mechanics, 2018, 194, 350-361.	4.3	47
104	Bucklingâ€Induced Assembly of Threeâ€Dimensional Tunable Metamaterials. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700420.	2.4	1
105	Surface wrinkling of anisotropic films bonded on a compliant substrate. International Journal of Solids and Structures, 2018, 141-142, 219-231.	2.7	21
106	Regional stretch method to measure the elastic and hyperelastic properties of soft materials. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	5.1	1
107	Wrinkling patterns in soft shells. Soft Matter, 2018, 14, 1681-1688.	2.7	12
108	Orientations of Cells on Compliant Substrates under Biaxial Stretches: A Theoretical Study. Biophysical Journal, 2018, 114, 701-710.	0.5	35

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109	Printable Skinâ€Driven Mechanoluminescence Devices via Nanodoped Matrix Modification. Advanced Materials, 2018, 30, e1800291.	21.0	178
110	Determinative Surface-Wrinkling Microstructures on Polypyrrole Films by Laser Writing. Langmuir, 2018, 34, 4793-4802.	3.5	11
111	Buckling of a slender rod confined in a circular tube: Theory, simulation, and experiment. International Journal of Mechanical Sciences, 2018, 140, 288-305.	6.7	40
112	Post-Buckling Analysis of a Rod Confined in a Cylindrical Tube. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	17
113	Mechanical exfoliation of two-dimensional materials. Journal of the Mechanics and Physics of Solids, 2018, 115, 248-262.	4.8	143
114	Wrinkling of thin films on a microstructured substrate. Mechanics of Advanced Materials and Structures, 2018, 25, 975-981.	2.6	5
115	Contact stiffness of regularly patterned multi-asperity interfaces. Journal of the Mechanics and Physics of Solids, 2018, 111, 277-289.	4.8	30
116	An oscillating dynamic model of collective cells in a monolayer. Journal of the Mechanics and Physics of Solids, 2018, 112, 650-666.	4.8	16
117	Shear horizontal wave dispersion in nanolayers with surface effects and determination of surface elastic constants. Thin Solid Films, 2018, 645, 134-138.	1.8	9
118	Dynamic Migration Modes of Collective Cells. Biophysical Journal, 2018, 115, 1826-1835.	0.5	63
119	Functional gradient effects on the energy absorption of spider orb webs. Applied Physics Letters, 2018, 113, .	3.3	21
120	Micropipette aspiration method for characterizing biological materials with surface energy. Journal of Biomechanics, 2018, 80, 32-36.	2.1	7
121	Tuning Local Electrical Conductivity via Fine Atomic Scale Structures of Two-Dimensional Interfaces. Nano Letters, 2018, 18, 6030-6036.	9.1	22
122	Swertia mussotii extracts induce mitochondria-dependent apoptosis in gastric cancer cells. Biomedicine and Pharmacotherapy, 2018, 104, 603-612.	5.6	9
123	On the internal architecture of emergent plants. Journal of the Mechanics and Physics of Solids, 2018, 119, 224-239.	4.8	55
124	Local Monte Carlo Method for Fatigue Analysis of Coarse-Grained Metals with a Nanograined Surface Layer. Metals, 2018, 8, 479.	2.3	1
125	Biochemomechanical modeling of vascular collapse in growing tumors. Journal of the Mechanics and Physics of Solids, 2018, 121, 463-479.	4.8	22
126	Editorial to the Special Issue 50th Anniversary of EFM. Engineering Fracture Mechanics, 2018, 187, 16-21.	4.3	0

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127	Impacts of environments on nanoscale wear behavior of graphene: Edge passivation vs. substrate pinning. Carbon, 2018, 139, 59-66.	10.3	62
128	A multiscale crack-bridging model of cellulose nanopaper. Journal of the Mechanics and Physics of Solids, 2017, 103, 22-39.	4.8	75
129	A non-equilibrium thermodynamic model for tumor extracellular matrix with enzymatic degradation. Journal of the Mechanics and Physics of Solids, 2017, 104, 32-56.	4.8	32
130	A Role of BK Channel in Regulation of Ca 2+ Channel in Ventricular Myocytes by Substrate Stiffness. Biophysical Journal, 2017, 112, 1406-1416.	0.5	12
131	Moir \tilde{A} © superlattice-level stick-slip instability originated from geometrically corrugated graphene on a strongly interacting substrate. 2D Materials, 2017, 4, 025079.	4.4	33
132	Edge wrinkling of a soft ridge with gradient thickness. Applied Physics Letters, 2017, 110, .	3.3	9
133	A Dynamic Biochemomechanical Model of Geometry-Confined Cell Spreading. Biophysical Journal, 2017, 112, 2377-2386.	0.5	14
134	Giant energy absorption capacity of graphene-based carbon honeycombs. Carbon, 2017, 118, 348-357.	10.3	38
135	A dynamic cellular vertex model of growing epithelial tissues. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 250-259.	3.4	19
136	Wrinkling of a stiff film resting on a fiber-filled soft substrate and its potential application as tunable metamaterials. Extreme Mechanics Letters, 2017, 11, 121-127.	4.1	13
137	Collective dynamics of cancer cells confined in a confluent monolayer of normal cells. Journal of Biomechanics, 2017, 52, 140-147.	2.1	30
138	Friction of Droplets Sliding on Microstructured Superhydrophobic Surfaces. Langmuir, 2017, 33, 13480-13489.	3.5	39
139	High-speed spinning disks on flexible threads. Scientific Reports, 2017, 7, 13111.	3.3	7
140	A nonlinear poroelastic theory of solid tumors with glycosaminoglycan swelling. Journal of Theoretical Biology, 2017, 433, 49-56.	1.7	24
141	Experimental and theoretical studies on the morphogenesis of bacterial biofilms. Soft Matter, 2017, 13, 7389-7397.	2.7	30
142	Lateral force modulation by moir \tilde{A} superlattice structure: Surfing on periodically undulated graphene sheets. Carbon, 2017, 125, 76-83.	10.3	18
143	Pump drill: A superb device for converting translational motion into high-speed rotation. Extreme Mechanics Letters, 2017, 16, 56-63.	4.1	6
144	Activation and synchronization of the oscillatory morphodynamics in multicellular monolayer. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8157-8162.	7.1	57

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145	Line tension effects on the wetting of nanostructures: an energy method. Nanotechnology, 2017, 28, 384001.	2.6	8
146	Interaction between an edge dislocation and a bridged crack with surface elasticity. Archive of Applied Mechanics, 2017, 87, 1739-1768.	2.2	2
147	Bulge test method for measuring the hyperelastic parameters of soft membranes. Acta Mechanica, 2017, 228, 4187-4197.	2.1	13
148	Review and perspective on soft matter modeling in cellular mechanobiology: cell contact, adhesion, mechanosensing, and motility. Acta Mechanica, 2017, 228, 4095-4122.	2.1	11
149	Microbead-regulated surface wrinkling patterns in a film–substrate system. Applied Physics Letters, 2017, 111, .	3.3	4
150	Preface: molecular, cellular, and tissue mechanobiology. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 219-221.	3.4	8
151	Instabilities of soft films on compliant substrates. Journal of the Mechanics and Physics of Solids, 2017, 98, 350-365.	4.8	58
152	Low velocity impact of a nanoparticle on a rectangular nanoplate: A theoretical study. International Journal of Mechanical Sciences, 2017, 123, 253-259.	6.7	6
153	Stable elastic wave band-gaps of phononic crystals with hyperelastic transformation materials. Extreme Mechanics Letters, 2017, 11, 37-41.	4.1	15
154	Transient Response of a Circular Nanoplate Subjected to Low Velocity Impact. International Journal of Applied Mechanics, 2017, 09, 1750114.	2.2	2
155	Controlling elastic wave propagation in a soft bilayer system via wrinkling-induced stress patterns. Soft Matter, 2016, 12, 4204-4213.	2.7	20
156	Guided Selfâ€Propelled Leaping of Droplets on a Microâ€Anisotropic Superhydrophobic Surface. Angewandte Chemie - International Edition, 2016, 55, 4265-4269.	13.8	135
157	Guided Selfâ€Propelled Leaping of Droplets on a Microâ€Anisotropic Superhydrophobic Surface. Angewandte Chemie, 2016, 128, 4337-4341.	2.0	26
158	Mechanics of Fibrous Biological Materials With Hierarchical Chirality. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2,2	11
159	Morphomechanics of bacterial biofilms undergoing anisotropic differential growth. Applied Physics Letters, 2016, 109, .	3.3	31
160	Channel morphology effect on water transport through graphene bilayers. Scientific Reports, 2016, 6, 38583.	3.3	30
161	Wrinkling micropatterns regulated by a hard skin layer with a periodic stiffness distribution on a soft material. Applied Physics Letters, 2016, 108, 021903.	3.3	34
162	Chirality-dependent flutter of Typha blades in wind. Scientific Reports, 2016, 6, 28907.	3.3	10

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163	Mechanical properties of graphynes under shearing and bending. Journal of Applied Physics, 2016, 119, .	2.5	17
164	Effects of tension–compression asymmetry on the surface wrinkling of film–substrate systems. Journal of the Mechanics and Physics of Solids, 2016, 94, 88-104.	4.8	57
165	A Tensegrity Model of Cell Reorientation on Cyclically Stretched Substrates. Biophysical Journal, 2016, 111, 1478-1486.	0.5	65
166	Stability of Cassie-Baxter wetting states on microstructured surfaces. Physical Review E, 2016, 94, 042801.	2.1	27
167	Curvature induced hierarchical wrinkling patterns in soft bilayers. Soft Matter, 2016, 12, 7977-7982.	2.7	36
168	Structures, properties, and energy-storage mechanisms of the semi-lunar process cuticles in locusts. Scientific Reports, 2016, 6, 35219.	3.3	38
169	Tension-compression asymmetry in the binding affinity of membrane-anchored receptors and ligands. Physical Review E, 2016, 93, 032411.	2.1	4
170	Reduced graphene oxide/silver hybrid with N,N-dimethyl formamide for oxygen reduction reactions and surface enhanced Raman scattering. RSC Advances, 2016, 6, 102519-102527.	3.6	6
171	Surface effects on nanoindentation of soft solids by different indenters. Materials Research Express, 2016, 3, 115021.	1.6	10
172	Biochemomechanical poroelastic theory of avascular tumor growth. Journal of the Mechanics and Physics of Solids, 2016, 94, 409-432.	4.8	61
173	Molecular Dynamics Simulation on Hydrogen Ion Implantation Process in Smart-Cut Technology. Acta Mechanica Solida Sinica, 2016, 29, 111-119.	1.9	10
174	Chirality Induced by Structural Transformation in a Tensegrity: Theory and Experiment. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	9
175	Handedness-dependent hyperelasticity of biological soft fibers with multilayered helical structures. International Journal of Non-Linear Mechanics, 2016, 81, 19-29.	2.6	26
176	Micromechanics methods for evaluating the effective moduli of soft neo-Hookean composites. Archive of Applied Mechanics, 2016, 86, 219-234.	2.2	8
177	Theoretical model and design of electroadhesive pad with interdigitated electrodes. Materials and Design, 2016, 89, 485-491.	7.0	45
178	Energy corrugation in atomic-scale friction on graphite revisited by molecular dynamics simulations. Acta Mechanica Sinica/Lixue Xuebao, 2016, 32, 604-610.	3.4	19
179	Propagation of Love waves with surface effects in an electrically-shorted piezoelectric nanofilm on a half-space elastic substrate. Ultrasonics, 2016, 66, 65-71.	3.9	26
180	Snapping instability in prismatic tensegrities under torsion. Applied Mathematics and Mechanics (English Edition), 2016, 37, 275-288.	3.6	16

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181	Effects of surface tension on the adhesive contact between a hard sphere and a soft substrate. International Journal of Solids and Structures, 2016, 84, 133-138.	2.7	27
182	Buckling of an elastic fiber with finite length in a soft matrix. Soft Matter, 2016, 12, 2086-2094.	2.7	22
183	Study of biomechanical, anatomical, and physiological properties of scorpion stingers for developing biomimetic materials. Materials Science and Engineering C, 2016, 58, 1112-1121.	7.3	43
184	Response to "Comment on  Disentangling longitudinal and shear elastic waves by neo-Hookean soft devices'―[Appl. Phys. Lett. 107 , 056101 (2015)]. Applied Physics Letters, 2015, 107, .	3.3	1
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