

Xi-Qiao Feng

List of Publications by Year in Descending Order

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

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|--------------------|--------------------------|---------------|-----------------|
| 431 papers | 14,913 citations | 53 h-index | 107 g-index |
| 453 ext. papers | 16,951 ext. citations | 4 avg, IF | 6.93 L-index |

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 431 | Regulation of cell attachment, spreading, and migration by hydrogel substrates with independently tunable mesh size.. <i>Acta Biomaterialia</i> , 2022 , 141, 178-178 | 10.8 | 0 |
| 430 | Evaporation of liquid nanofilms: A minireview.. <i>Physics of Fluids</i> , 2022 , 34, 021302 | 4.4 | 1 |
| 429 | Three-dimensional crack bridging model of biological materials with twisted Bouligand structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2022 , 159, 104729 | 5 | 1 |
| 428 | Micromechanical method for determining the effective surface elastic modulus of solids with surface microstructures. <i>Mechanics of Materials</i> , 2022 , 165, 104201 | 3.3 | |
| 427 | Structural topology optimization with an adaptive design domain. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022 , 389, 114382 | 5.7 | 2 |
| 426 | Nacre's brick-mortar structure suppresses the adverse effect of microstructural randomness. <i>Journal of the Mechanics and Physics of Solids</i> , 2022 , 159, 104769 | 5 | 0 |
| 425 | Surface effect on the necking of hyperelastic materials. <i>Current Applied Physics</i> , 2022 , 38, 91-98 | 2.6 | 1 |
| 424 | Radial wrinkling of viscoelastic film-substrate systems. <i>International Journal of Solids and Structures</i> , 2022 , 111689 | 3.1 | |
| 423 | Extracting the properties of constituent phases from the overall response of composites: A deep neural network method. <i>Composite Structures</i> , 2022 , 115707 | 5.3 | 1 |
| 422 | An energy method for the bifurcation analysis of necking. <i>Extreme Mechanics Letters</i> , 2022 , 101793 | 3.9 | 0 |
| 421 | Fluid-solid coupling dynamic model for oscillatory growth of multicellular lumens.. <i>Journal of Biomechanics</i> , 2021 , 131, 110937 | 2.9 | 0 |
| 420 | Breaking the symmetry to suppress the Plateau-Rayleigh instability and optimize hydropower utilization. <i>Nature Communications</i> , 2021 , 12, 6899 | 17.4 | 5 |
| 419 | Piezo1 regulates migration and invasion of breast cancer cells via modulating cell mechanobiological properties. <i>Acta Biochimica Et Biophysica Sinica</i> , 2021 , 53, 10-18 | 2.8 | 10 |
| 418 | Influence of Considering the Sorption Effect in the Betti-Maxwell Reciprocal Theorem on Gas Transport Capacity in Unconventional Reservoirs. <i>Transport in Porous Media</i> , 2021 , 137, 451-469 | 3.1 | 3 |
| 417 | Effect of shear stress on adhesive contact with a generalized Maugis-Dugdale cohesive zone model. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 148, 104275 | 5 | 13 |
| 416 | Deep learning method for determining the surface elastic moduli of microstructured solids. <i>Extreme Mechanics Letters</i> , 2021 , 44, 101226 | 3.9 | 9 |
| 415 | Collective migrations in an epithelial cancerous cell monolayer. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021 , 37, 773-784 | 2 | 1 |

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| 414 | EML webinar overview: Dynamics of collective cells. <i>Extreme Mechanics Letters</i> , 2021 , 44, 101255 | 3.9 | 2 |
| 413 | Preface: Mechanics of soft materials and flexible structures. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021 , 37, 746-747 | 2 | 0 |
| 412 | Dynamic intracellular mechanical cues facilitate collective signaling responses. <i>IScience</i> , 2021 , 24, 102396 | 6.1 | 3 |
| 411 | AFM-based indentation method for measuring the relaxation property of living cells. <i>Journal of Biomechanics</i> , 2021 , 122, 110444 | 2.9 | 1 |
| 410 | Extracellular Matrix Stiffness Regulates DNA Methylation by PKC β -Dependent Nuclear Transport of DNMT3L. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2100821 | 10.1 | 4 |
| 409 | Bio-chemo-mechanical theory of active shells. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 152, 104419 | 5 | 5 |
| 408 | Fracture toughness analysis of helical fiber-reinforced biocomposites. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 146, 104206 | 5 | 6 |
| 407 | Buckling-regulated bandgaps of soft metamaterials with chiral hierarchical microstructure. <i>Extreme Mechanics Letters</i> , 2021 , 43, 101166 | 3.9 | 2 |
| 406 | Why are isolated and collective cells greatly different in stiffness?. <i>Journal of the Mechanics and Physics of Solids</i> , 2021 , 147, 104280 | 5 | 1 |
| 405 | Biomechanics in Bino-Italian Joint□ <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021 , 37, 169-172 | 2 | 6 |
| 404 | Energetics of mesoscale cell turbulence in two-dimensional monolayers. <i>Communications Physics</i> , 2021 , 4, | 5.4 | 10 |
| 403 | Tuning frictional properties of molecularly thin erucamide films through controlled self-assembling. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2021 , 37, 1041 | 2 | 0 |
| 402 | Deep learning method for predicting the mechanical properties of aluminum alloys with small data sets. <i>Materials Today Communications</i> , 2021 , 28, 102570 | 2.5 | 0 |
| 401 | A finite-strain micromechanical model for the hyperelasticity of tendons and ligaments with crimped fibers. <i>Mechanics of Materials</i> , 2021 , 160, 103955 | 3.3 | 1 |
| 400 | Mechanoelectrical flexible hub-beam model of ionic-type solvent-free nanofluids. <i>Mechanical Systems and Signal Processing</i> , 2021 , 159, 107833 | 7.8 | 21 |
| 399 | Hypertonic pressure affects the pluripotency and self-renewal of mouse embryonic stem cells. <i>Stem Cell Research</i> , 2021 , 56, 102537 | 1.6 | 0 |
| 398 | Switchable adhesion with a high tuning ratio achieved on polymer surfaces with embedded low-melting-point alloy. <i>Extreme Mechanics Letters</i> , 2021 , 49, 101488 | 3.9 | 3 |
| 397 | Measurement of the interconnected turgor pressure and envelope elasticity of live bacterial cells. <i>Soft Matter</i> , 2021 , 17, 2042-2049 | 3.6 | 2 |

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| 396 | Length Scale Effect in Frictional Aging of Silica Contacts. <i>Physical Review Letters</i> , 2020 , 125, 215502 | 7.4 | 2 |
| 395 | A function of fascin1 in the colony formation of mouse embryonic stem cells. <i>Stem Cells</i> , 2020 , 38, 1078-1090 | 3.2 | 2 |
| 394 | Reaktitelbild: Droplet Precise Self-Splitting on Patterned Adhesive Surfaces for Simultaneous Multidetecction (Angew. Chem. 26/2020). <i>Angewandte Chemie</i> , 2020 , 132, 10754-10754 | 3.6 | |
| 393 | Morphomechanics of tumors. <i>Current Opinion in Biomedical Engineering</i> , 2020 , 15, 51-58 | 4.4 | 3 |
| 392 | The relation between the collective motility and shapes of human cancer cells under heat stress. <i>Applied Physics Letters</i> , 2020 , 116, 043703 | 3.4 | |
| 391 | Collective dynamics of coherent motile cells on curved surfaces. <i>Soft Matter</i> , 2020 , 16, 2941-2952 | 3.6 | 7 |
| 390 | Bionic torus as a self-adaptive soft grasper in robots. <i>Applied Physics Letters</i> , 2020 , 116, 023701 | 3.4 | 9 |
| 389 | The development of creep damage constitutive equations for high Cr steel. <i>Materials at High Temperatures</i> , 2020 , 37, 129-138 | 1.1 | 9 |
| 388 | Surface effects on cylindrical indentation of a soft layer on a rigid substrate. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2020 , 36, 422-429 | 2 | 14 |
| 387 | Droplet Precise Self-Splitting on Patterned Adhesive Surfaces for Simultaneous Multidetecction. <i>Angewandte Chemie</i> , 2020 , 132, 10622-10626 | 3.6 | |
| 386 | Droplet Precise Self-Splitting on Patterned Adhesive Surfaces for Simultaneous Multidetecction. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 10535-10539 | 16.4 | 34 |
| 385 | embryonic tail bending is driven by asymmetrical notochord contractility and coordinated by epithelial proliferation. <i>Development (Cambridge)</i> , 2020 , 147, | 6.6 | 7 |
| 384 | Surface effects on frequency dispersion characteristics of Lamb waves in a nanoplate. <i>Thin Solid Films</i> , 2020 , 697, 137831 | 2.2 | 2 |
| 383 | Morphological optimization of scorpion telson. <i>Journal of the Mechanics and Physics of Solids</i> , 2020 , 135, 103773 | 5 | 13 |
| 382 | Gas migration in the reservoirs of ultra-low porosity and permeability based on an improved apparent permeability model. <i>Journal of Petroleum Science and Engineering</i> , 2020 , 185, 106614 | 4.4 | 7 |
| 381 | Static and dynamic properties of pre-twisted leaves and stalks with varying chiral morphologies. <i>Extreme Mechanics Letters</i> , 2020 , 34, 100612 | 3.9 | 5 |
| 380 | Wrinkling pattern evolution on curved surfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 2020 , 135, 103798 | 5 | 15 |
| 379 | A micromechanical model of tendon and ligament with crimped fibers. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020 , 112, 104086 | 4.1 | 4 |

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| 378 | Topology optimization method for the design of bioinspired self-similar hierarchical microstructures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020 , 372, 113399 | 5.7 | 11 |
| 377 | Mesoscopic dynamic model of epithelial cell division with cell-cell junction effects. <i>Physical Review E</i> , 2020 , 102, 012405 | 2.4 | 4 |
| 376 | Abnormal conductivity in low-angle twisted bilayer graphene. <i>Science Advances</i> , 2020 , 6, | 14.3 | 18 |
| 375 | Optocapillarity-driven assembly and reconfiguration of liquid crystal polymer actuators. <i>Nature Communications</i> , 2020 , 11, 5780 | 17.4 | 7 |
| 374 | Geometric Confinement Guides the Expression of Cancer Stem Cell Molecular Markers CD44 via Cell Traction Forces. <i>ACS Biomaterials Science and Engineering</i> , 2020 , 6, 4623-4630 | 5.5 | 1 |
| 373 | Buckling of growing bacterial chains. <i>Journal of the Mechanics and Physics of Solids</i> , 2020 , 145, 104146 | 5 | 3 |
| 372 | Predictive assembling model reveals the self-adaptive elastic properties of lamellipodial actin networks for cell migration. <i>Communications Biology</i> , 2020 , 3, 616 | 6.7 | 7 |
| 371 | Universal Statistical Laws for the Velocities of Collective Migrating Cells. <i>Advanced Biology</i> , 2020 , 4, e2000065 | 9.9 | 6 |
| 370 | Decohesion of a rigid flat punch from an elastic layer of finite thickness. <i>Journal of the Mechanics and Physics of Solids</i> , 2020 , 139, 103937 | 5 | 7 |
| 369 | Enumeration-screening method for the design of simple polygonal tensegrities. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019 , 475, 20180812 | 2.4 | 1 |
| 368 | On the robustness of spider capture silk adhesion. <i>Extreme Mechanics Letters</i> , 2019 , 29, 100477 | 3.9 | 1 |
| 367 | Phase transition and optimal actuation of active bilayer structures. <i>Extreme Mechanics Letters</i> , 2019 , 29, 100467 | 3.9 | 2 |
| 366 | Mechanical Roles of F-Actin in the Differentiation of Stem Cells: A Review. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 3788-3801 | 5.5 | 15 |
| 365 | Coupling analysis of screwing motion of double-walled carbon nanotubes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019 , 383, 2309-2313 | 2.3 | 2 |
| 364 | Quantum dots-reinforced luminescent silkworm silk with superior mechanical properties and highly stable fluorescence. <i>Journal of Materials Science</i> , 2019 , 54, 9945-9957 | 4.3 | 15 |
| 363 | Spontaneous droplets gyrating via asymmetric self-splitting on heterogeneous surfaces. <i>Nature Communications</i> , 2019 , 10, 950 | 17.4 | 78 |
| 362 | Multiscale fracture mechanics model for the dorsal closure in Drosophila embryogenesis. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 127, 154-166 | 5 | 9 |
| 361 | Torsion Instability of Anisotropic Cylindrical Tissues with Growth. <i>Acta Mechanica Solida Sinica</i> , 2019 , 32, 621-632 | 2 | 3 |

- 360 Ultrastructural organization of NompC in the mechanoreceptive organelle of campaniform mechanoreceptors. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 7343-7352 11.5 15
- 359 Regulating wrinkling patterns by periodic surface stiffness in film-substrate structures. *Science China Technological Sciences*, **2019**, 62, 747-754 3.5 4
- 358 Mechanical characterization of the key portions in locust semi-lunar processes under different strain rates. *Journal of Biomechanics*, **2019**, 95, 109314 2.9 5
- 357 Heat Stress-Induced Multiple Multipolar Divisions of Human Cancer Cells. *Cells*, **2019**, 8, 7.9 5
- 356 Dynamic instability and migration modes of collective cells in channels. *Journal of the Royal Society Interface*, **2019**, 16, 20190258 4.1 9
- 355 A cell-based model for analyzing growth and invasion of tumor spheroids. *Science China Technological Sciences*, **2019**, 62, 1341-1348 3.5 4
- 354 Impacts of the substrate stiffness on the anti-wear performance of graphene. *AIP Advances*, **2019**, 9, 075317 1.5 10
- 353 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 10.6 12
- 352 Deep neural network method for predicting the mechanical properties of composites. *Applied Physics Letters*, **2019**, 115, 161901 3.4 35
- 351 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 11.5 32
- 350 Collective oscillation in dense suspension of self-propelled chiral rods. *Soft Matter*, **2019**, 15, 2999-3007 3.6 7
- 349 In-plane compressive behavior of graphene-coated aluminum nano-honeycombs. *Computational Materials Science*, **2019**, 156, 396-403 3.2 4
- 348 Three-dimensional collective cell motions in an acinus-like lumen. *Journal of Biomechanics*, **2019**, 84, 234-242 2.9 6
- 347 Biohemomechanical modeling of growing biological tissues: Finite element method. *International Journal of Non-Linear Mechanics*, **2019**, 108, 46-54 2.8 11
- 346 3D-printed biomimetic surface structures with abnormal friction properties. *Extreme Mechanics Letters*, **2019**, 26, 46-52 3.9 6
- 345 Engineering Surface Patterns with Shape Memory Polymers: Multiple Design Dimensions for Diverse and Hierarchical Structures. *ACS Applied Materials & Interfaces*, **2019**, 11, 1563-1570 9.5 18
- 344 Sliding friction and contact angle hysteresis of droplets on microhole-structured surfaces. *European Physical Journal E*, **2018**, 41, 25 1.5 8
- 343 Revisiting the Critical Condition for the Cassie-Wenzel Transition on Micropillar-Structured Surfaces. *Langmuir*, **2018**, 34, 3838-3844 4 34

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| 342 | Synergistic adhesion mechanisms of spider capture silk. <i>Journal of the Royal Society Interface</i> , 2018 , 15, | 4.1 | 9 |
| 341 | Buckling-Induced Assembly of Three-Dimensional Tunable Metamaterials (Phys. Status Solidi RRL 4/2018). <i>Physica Status Solidi - Rapid Research Letters</i> , 2018 , 12, 1870314 | 2.5 | 1 |
| 340 | Effects of nanofiber orientations on the fracture toughness of cellulose nanopaper. <i>Engineering Fracture Mechanics</i> , 2018 , 194, 350-361 | 4.2 | 37 |
| 339 | Buckling-Induced Assembly of Three-Dimensional Tunable Metamaterials. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018 , 12, 1700420 | 2.5 | 1 |
| 338 | Surface wrinkling of anisotropic films bonded on a compliant substrate. <i>International Journal of Solids and Structures</i> , 2018 , 141-142, 219-231 | 3.1 | 17 |
| 337 | Regional stretch method to measure the elastic and hyperelastic properties of soft materials. <i>Science China: Physics, Mechanics and Astronomy</i> , 2018 , 61, 1 | 3.6 | 1 |
| 336 | Wrinkling patterns in soft shells. <i>Soft Matter</i> , 2018 , 14, 1681-1688 | 3.6 | 9 |
| 335 | Orientations of Cells on Compliant Substrates under Biaxial Stretches: A Theoretical Study. <i>Biophysical Journal</i> , 2018 , 114, 701-710 | 2.9 | 28 |
| 334 | Printable Skin-Driven Mechanoluminescence Devices via Nanodoped Matrix Modification. <i>Advanced Materials</i> , 2018 , 30, e1800291 | 24 | 108 |
| 333 | Determinative Surface-Wrinkling Microstructures on Polypyrrole Films by Laser Writing. <i>Langmuir</i> , 2018 , 34, 4793-4802 | 4 | 9 |
| 332 | Buckling of a slender rod confined in a circular tube: Theory, simulation, and experiment. <i>International Journal of Mechanical Sciences</i> , 2018 , 140, 288-305 | 5.5 | 23 |
| 331 | Post-Buckling Analysis of a Rod Confined in a Cylindrical Tube. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2018 , 85, | 2.7 | 12 |
| 330 | Mechanical exfoliation of two-dimensional materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 115, 248-262 | 5 | 78 |
| 329 | Wrinkling of thin films on a microstructured substrate. <i>Mechanics of Advanced Materials and Structures</i> , 2018 , 25, 975-981 | 1.8 | 4 |
| 328 | Contact stiffness of regularly patterned multi-asperity interfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 111, 277-289 | 5 | 20 |
| 327 | An oscillating dynamic model of collective cells in a monolayer. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 112, 650-666 | 5 | 14 |
| 326 | Shear horizontal wave dispersion in nanolayers with surface effects and determination of surface elastic constants. <i>Thin Solid Films</i> , 2018 , 645, 134-138 | 2.2 | 5 |
| 325 | Local Monte Carlo Method for Fatigue Analysis of Coarse-Grained Metals with a Nanograined Surface Layer. <i>Metals</i> , 2018 , 8, 479 | 2.3 | |

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| 324 | Biochemomechanical modeling of vascular collapse in growing tumors. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 121, 463-479 | 5 | 15 |
| 323 | Impacts of environments on nanoscale wear behavior of graphene: Edge passivation vs. substrate pinning. <i>Carbon</i> , 2018 , 139, 59-66 | 10.4 | 45 |
| 322 | Dynamic Migration Modes of Collective Cells. <i>Biophysical Journal</i> , 2018 , 115, 1826-1835 | 2.9 | 36 |
| 321 | Functional gradient effects on the energy absorption of spider orb webs. <i>Applied Physics Letters</i> , 2018 , 113, 103701 | 3.4 | 11 |
| 320 | Micropipette aspiration method for characterizing biological materials with surface energy. <i>Journal of Biomechanics</i> , 2018 , 80, 32-36 | 2.9 | 4 |
| 319 | Tuning Local Electrical Conductivity via Fine Atomic Scale Structures of Two-Dimensional Interfaces. <i>Nano Letters</i> , 2018 , 18, 6030-6036 | 11.5 | 13 |
| 318 | Swertia mussoitii extracts induce mitochondria-dependent apoptosis in gastric cancer cells. <i>Biomedicine and Pharmacotherapy</i> , 2018 , 104, 603-612 | 7.5 | 6 |
| 317 | On the internal architecture of emergent plants. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 119, 224-239 | 5 | 28 |
| 316 | A multiscale crack-bridging model of cellulose nanopaper. <i>Journal of the Mechanics and Physics of Solids</i> , 2017 , 103, 22-39 | 5 | 49 |
| 315 | A non-equilibrium thermodynamic model for tumor extracellular matrix with enzymatic degradation. <i>Journal of the Mechanics and Physics of Solids</i> , 2017 , 104, 32-56 | 5 | 23 |
| 314 | A Role of BK Channel in Regulation of Ca Channel in Ventricular Myocytes by Substrate Stiffness. <i>Biophysical Journal</i> , 2017 , 112, 1406-1416 | 2.9 | 10 |
| 313 | Moiré superlattice-level stick-slip instability originated from geometrically corrugated graphene on a strongly interacting substrate. <i>2D Materials</i> , 2017 , 4, 025079 | 5.9 | 22 |
| 312 | Edge wrinkling of a soft ridge with gradient thickness. <i>Applied Physics Letters</i> , 2017 , 110, 231604 | 3.4 | 6 |
| 311 | A Dynamic Biochemomechanical Model of Geometry-Confined Cell Spreading. <i>Biophysical Journal</i> , 2017 , 112, 2377-2386 | 2.9 | 10 |
| 310 | Giant energy absorption capacity of graphene-based carbon honeycombs. <i>Carbon</i> , 2017 , 118, 348-357 | 10.4 | 30 |
| 309 | A dynamic cellular vertex model of growing epithelial tissues. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2017 , 33, 250-259 | 2 | 11 |
| 308 | Wrinkling of a stiff film resting on a fiber-filled soft substrate and its potential application as tunable metamaterials. <i>Extreme Mechanics Letters</i> , 2017 , 11, 121-127 | 3.9 | 12 |
| 307 | Collective dynamics of cancer cells confined in a confluent monolayer of normal cells. <i>Journal of Biomechanics</i> , 2017 , 52, 140-147 | 2.9 | 25 |

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| 306 | Friction of Droplets Sliding on Microstructured Superhydrophobic Surfaces. <i>Langmuir</i> , 2017 , 33, 13480-13489 | 4.4 | 28 |
| 305 | High-speed spinning disks on flexible threads. <i>Scientific Reports</i> , 2017 , 7, 13111 | 4.9 | 6 |
| 304 | A nonlinear poroelastic theory of solid tumors with glycosaminoglycan swelling. <i>Journal of Theoretical Biology</i> , 2017 , 433, 49-56 | 2.3 | 17 |
| 303 | Experimental and theoretical studies on the morphogenesis of bacterial biofilms. <i>Soft Matter</i> , 2017 , 13, 7389-7397 | 3.6 | 17 |
| 302 | Lateral force modulation by moiré superlattice structure: Surfing on periodically undulated graphene sheets. <i>Carbon</i> , 2017 , 125, 76-83 | 10.4 | 10 |
| 301 | Pump drill: A superb device for converting translational motion into high-speed rotation. <i>Extreme Mechanics Letters</i> , 2017 , 16, 56-63 | 3.9 | 3 |
| 300 | Activation and synchronization of the oscillatory morphodynamics in multicellular monolayer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 8157-8162 | 11.5 | 37 |
| 299 | Line tension effects on the wetting of nanostructures: an energy method. <i>Nanotechnology</i> , 2017 , 28, 384001 | 3.4 | 7 |
| 298 | Interaction between an edge dislocation and a bridged crack with surface elasticity. <i>Archive of Applied Mechanics</i> , 2017 , 87, 1739-1768 | 2.2 | 1 |
| 297 | Bulge test method for measuring the hyperelastic parameters of soft membranes. <i>Acta Mechanica</i> , 2017 , 228, 4187-4197 | 2.1 | 9 |
| 296 | Review and perspective on soft matter modeling in cellular mechanobiology: cell contact, adhesion, mechanosensing, and motility. <i>Acta Mechanica</i> , 2017 , 228, 4095-4122 | 2.1 | 9 |
| 295 | Microbead-regulated surface wrinkling patterns in a film-substrate system. <i>Applied Physics Letters</i> , 2017 , 111, 151601 | 3.4 | 3 |
| 294 | Preface: molecular, cellular, and tissue mechanobiology. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2017 , 33, 219-221 | 2 | 8 |
| 293 | Instabilities of soft films on compliant substrates. <i>Journal of the Mechanics and Physics of Solids</i> , 2017 , 98, 350-365 | 5 | 50 |
| 292 | Low velocity impact of a nanoparticle on a rectangular nanoplate: A theoretical study. <i>International Journal of Mechanical Sciences</i> , 2017 , 123, 253-259 | 5.5 | 5 |
| 291 | Stable elastic wave band-gaps of phononic crystals with hyperelastic transformation materials. <i>Extreme Mechanics Letters</i> , 2017 , 11, 37-41 | 3.9 | 11 |
| 290 | Transient Response of a Circular Nanoplate Subjected to Low Velocity Impact. <i>International Journal of Applied Mechanics</i> , 2017 , 09, 1750114 | 2.4 | 2 |
| 289 | Study of biomechanical, anatomical, and physiological properties of scorpion stingers for developing biomimetic materials. <i>Materials Science and Engineering C</i> , 2016 , 58, 1112-21 | 8.3 | 35 |

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|-----|---|------|-----|
| 288 | Curvature induced hierarchical wrinkling patterns in soft bilayers. <i>Soft Matter</i> , 2016 , 12, 7977-7982 | 3.6 | 31 |
| 287 | Structures, properties, and energy-storage mechanisms of the semi-lunar process cuticles in locusts. <i>Scientific Reports</i> , 2016 , 6, 35219 | 4.9 | 24 |
| 286 | Tension-compression asymmetry in the binding affinity of membrane-anchored receptors and ligands. <i>Physical Review E</i> , 2016 , 93, 032411 | 2.4 | 3 |
| 285 | Reduced graphene oxide/silver hybrid with N,N-dimethyl formamide for oxygen reduction reactions and surface enhanced Raman scattering. <i>RSC Advances</i> , 2016 , 6, 102519-102527 | 3.7 | 5 |
| 284 | Surface effects on nanoindentation of soft solids by different indenters. <i>Materials Research Express</i> , 2016 , 3, 115021 | 1.7 | 7 |
| 283 | Biochemomechanical poroelastic theory of avascular tumor growth. <i>Journal of the Mechanics and Physics of Solids</i> , 2016 , 94, 409-432 | 5 | 41 |
| 282 | Molecular Dynamics Simulation on Hydrogen Ion Implantation Process in Smart-Cut Technology. <i>Acta Mechanica Sinica</i> , 2016 , 29, 111-119 | 2 | 6 |
| 281 | Chirality Induced by Structural Transformation in a Tensegrity: Theory and Experiment. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2016 , 83, | 2.7 | 8 |
| 280 | Handedness-dependent hyperelasticity of biological soft fibers with multilayered helical structures. <i>International Journal of Non-Linear Mechanics</i> , 2016 , 81, 19-29 | 2.8 | 20 |
| 279 | Micromechanics methods for evaluating the effective moduli of soft neo-Hookean composites. <i>Archive of Applied Mechanics</i> , 2016 , 86, 219-234 | 2.2 | 6 |
| 278 | Theoretical model and design of electroadhesive pad with interdigitated electrodes. <i>Materials and Design</i> , 2016 , 89, 485-491 | 8.1 | 33 |
| 277 | Energy corrugation in atomic-scale friction on graphite revisited by molecular dynamics simulations. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2016 , 32, 604-610 | 2 | 13 |
| 276 | Propagation of Love waves with surface effects in an electrically-shortened piezoelectric nanofilm on a half-space elastic substrate. <i>Ultrasonics</i> , 2016 , 66, 65-71 | 3.5 | 21 |
| 275 | Snapping instability in prismatic tensegrities under torsion. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2016 , 37, 275-288 | 3.2 | 11 |
| 274 | Effects of surface tension on the adhesive contact between a hard sphere and a soft substrate. <i>International Journal of Solids and Structures</i> , 2016 , 84, 133-138 | 3.1 | 22 |
| 273 | Buckling of an elastic fiber with finite length in a soft matrix. <i>Soft Matter</i> , 2016 , 12, 2086-94 | 3.6 | 20 |
| 272 | Controlling elastic wave propagation in a soft bilayer system via wrinkling-induced stress patterns. <i>Soft Matter</i> , 2016 , 12, 4204-13 | 3.6 | 17 |
| 271 | Guided Self-Propelled Leaping of Droplets on a Micro-Anisotropic Superhydrophobic Surface. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 4265-9 | 16.4 | 108 |

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| 270 | Guided Self-Propelled Leaping of Droplets on a Micro-Anisotropic Superhydrophobic Surface. <i>Angewandte Chemie</i> , 2016 , 128, 4337-4341 | 3.6 | 25 |
| 269 | Mechanics of Fibrous Biological Materials With Hierarchical Chirality. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2016 , 83, | 2.7 | 8 |
| 268 | Morphomechanics of bacterial biofilms undergoing anisotropic differential growth. <i>Applied Physics Letters</i> , 2016 , 109, 143701 | 3.4 | 24 |
| 267 | Channel morphology effect on water transport through graphene bilayers. <i>Scientific Reports</i> , 2016 , 6, 38583 | 4.9 | 28 |
| 266 | Wrinkling micropatterns regulated by a hard skin layer with a periodic stiffness distribution on a soft material. <i>Applied Physics Letters</i> , 2016 , 108, 021903 | 3.4 | 32 |
| 265 | Chirality-dependent flutter of Typha blades in wind. <i>Scientific Reports</i> , 2016 , 6, 28907 | 4.9 | 8 |
| 264 | Mechanical properties of graphynes under shearing and bending. <i>Journal of Applied Physics</i> , 2016 , 119, 204304 | 2.5 | 12 |
| 263 | Effects of tension-compression asymmetry on the surface wrinkling of film-substrate systems. <i>Journal of the Mechanics and Physics of Solids</i> , 2016 , 94, 88-104 | 5 | 44 |
| 262 | A Tensegrity Model of Cell Reorientation on Cyclically Stretched Substrates. <i>Biophysical Journal</i> , 2016 , 111, 1478-1486 | 2.9 | 53 |
| 261 | Stability of Cassie-Baxter wetting states on microstructured surfaces. <i>Physical Review E</i> , 2016 , 94, 042801 | 4.4 | 23 |
| 260 | Fracture toughness of laminates reinforced by piezoelectric z-pins. <i>Theoretical and Applied Fracture Mechanics</i> , 2015 , 77, 35-40 | 3.7 | 9 |
| 259 | Constructing large-scale tensegrity structures with bar-bar connection using prismatic elementary cells. <i>Archive of Applied Mechanics</i> , 2015 , 85, 383-394 | 2.2 | 13 |
| 258 | Mode-I pullout model of nanofibers with surface effects. <i>Engineering Fracture Mechanics</i> , 2015 , 150, 115-125 | 4.1 | 4 |
| 257 | Biomechanical tactics of chiral growth in emergent aquatic macrophytes. <i>Scientific Reports</i> , 2015 , 5, 12610 | 4.9 | 21 |
| 256 | Structures, properties, and functions of the stings of honey bees and paper wasps: a comparative study. <i>Biology Open</i> , 2015 , 4, 921-8 | 2.2 | 47 |
| 255 | Functional map of biological and biomimetic materials with hierarchical surface structures. <i>RSC Advances</i> , 2015 , 5, 66901-66926 | 3.7 | 35 |
| 254 | Effect of lateral dimension on the surface wrinkling of a thin film on compliant substrate induced by differential growth/swelling. <i>Journal of the Mechanics and Physics of Solids</i> , 2015 , 83, 129-145 | 5 | 23 |
| 253 | Surface Wrinkling Patterns of Film-Substrate Systems With a Structured Interface. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2015 , 82, | 2.7 | 26 |

252 MULTISCALE MECHANICS OF BIOLOGICAL MATERIALS **2015**, 19-20

- 251 Effects of surface atomistic modification on mechanical properties of gold nanowires. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2015**, 379, 1893-1897 2.3 7
- 250 Semi-Analytic Solution of Multiple Inhomogeneous Inclusions and Cracks in an Infinite Space. *International Journal of Computational Methods*, **2015**, 12, 1550002 1.1 9
- 249 Synergistic Effects of Chiral Morphology and Reconfiguration in Cattail Leaves. *Journal of Bionic Engineering*, **2015**, 12, 634-642 2.7 17
- 248 Frequency dispersion of love waves in a piezoelectric nanofilm bonded on a semi-infinite elastic substrate. *Chinese Journal of Mechanical Engineering (English Edition)*, **2015**, 28, 1157-1162 2.5 4
- 247 An experimental study of deep brain stimulation lead fracture: possible fatigue mechanisms and prevention approach. *Neuromodulation*, **2015**, 18, 243-8; discussion 248 3.1 5
- 246 Towards a quantitative understanding of period-doubling wrinkling patterns occurring in film/substrate bilayer systems. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2015**, 471, 20140695 2.4 22
- 245 A self-consistent model for the elastic contact of rough surfaces. *Acta Mechanica*, **2015**, 226, 285-293 2.1 13
- 244 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, 056102 3.4 1
- 243 Time-Independent Plasticity Based on Thermodynamic Equilibrium and Its Stability. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **2015**, 137, 1.8 1
- 242 Spear and Shield: Survival War between Mantis Shrimps and Abalones. *Advanced Materials Interfaces*, **2015**, 2, 1500250 4.6 13
- 241 Lifeact and Utr230 induce distinct actin assemblies in cell nuclei. *Cytoskeleton*, **2015**, 72, 570-5 2.4 17
- 240 Mechanical Behavior of Nanostructured Materials. *Journal of Nanomaterials*, **2015**, 2015, 1-2 3.2 1
- 239 Atomic Structure and Energy Distribution of Collapsed Carbon Nanotubes of Different Chiralities. *Journal of Nanomaterials*, **2015**, 2015, 1-5 3.2 6
- 238 Micro/Nanostructures and Mechanical Properties of Trabecular Bone in Ovariectomized Rats. *International Journal of Endocrinology*, **2015**, 2015, 252503 2.7 9
- 237 Disentangling longitudinal and shear elastic waves by neo-Hookean soft devices. *Applied Physics Letters*, **2015**, 106, 161903 3.4 24
- 236 Radial wrinkles on film/substrate system induced by local prestretch: A theoretical analysis. *International Journal of Solids and Structures*, **2015**, 58, 12-19 3.1 7
- 235 Wrinkling pattern evolution of cylindrical biological tissues with differential growth. *Physical Review E*, **2015**, 91, 012403 2.4 14

| | | | |
|-----|---|------|-----|
| 234 | Compressive behavior of crystalline nanoparticles with atomic-scale surface steps. <i>Materials Research Express</i> , 2015 , 2, 015006 | 1.7 | 10 |
| 233 | Magnetorheological brush - a soft structure with highly tuneable stiffness. <i>Soft Matter</i> , 2014 , 10, 1537-43 | 3.6 | 12 |
| 232 | Optimal characteristic nanosizes of mineral bridges in mollusk nacre. <i>RSC Advances</i> , 2014 , 4, 32451-32456 | 5.7 | 15 |
| 231 | Influence of surface tension on fractal contact model. <i>Journal of Applied Physics</i> , 2014 , 115, 123522 | 2.5 | 4 |
| 230 | Interface thermal conductance and rectification in hybrid graphene/silicene monolayer. <i>Carbon</i> , 2014 , 79, 236-244 | 10.4 | 93 |
| 229 | A facile method to realize perfectly matched layers for elastic waves. <i>Wave Motion</i> , 2014 , 51, 1170-1178 | 1.8 | 7 |
| 228 | Analysis of bending and buckling of pre-twisted beams: A bioinspired study. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2014 , 30, 507-515 | 2 | 18 |
| 227 | Deformation analysis of vesicles in an alternating-current electric field. <i>Physical Review E</i> , 2014 , 90, 022709 | 0.9 | 1 |
| 226 | Mechanical properties of carbon nanotube ropes with hierarchical helical structures. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 71, 64-83 | 5 | 59 |
| 225 | Efficient Self-Propelling of Small-Scale Condensed Microdrops by Closely Packed ZnO Nanoneedles. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 2084-8 | 6.4 | 118 |
| 224 | On flaw tolerance of nacre: a theoretical study. <i>Journal of the Royal Society Interface</i> , 2014 , 11, 20131016 | 4.1 | 46 |
| 223 | Stiffness matrix based form-finding method of tensegrity structures. <i>Engineering Structures</i> , 2014 , 58, 36-48 | 4.7 | 68 |
| 222 | Indentation-triggered pattern transformation in hyperelastic soft cellular solids. <i>Comptes Rendus - Mecanique</i> , 2014 , 342, 292-298 | 2.1 | 4 |
| 221 | Effects of internal pressure and surface tension on the growth-induced wrinkling of mucosae. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 29, 594-601 | 4.1 | 14 |
| 220 | Zeolitic imidazolate framework 67-derived high symmetric porous Co ₃ O ₄ hollow dodecahedra with highly enhanced lithium storage capability. <i>Small</i> , 2014 , 10, 1932-8 | 11 | 403 |
| 219 | Buckling and postbuckling of stiff lamellae in a compliant matrix. <i>Composites Science and Technology</i> , 2014 , 99, 89-95 | 8.6 | 12 |
| 218 | Pipette aspiration of hyperelastic compliant materials: Theoretical analysis, simulations and experiments. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 68, 179-196 | 5 | 9 |
| 217 | BUCKLING AND SURFACE WRINKLING OF AN ELASTIC GRADED CYLINDER WITH ELASTIC MODULUS ARBITRARILY VARYING ALONG RADIAL DIRECTION. <i>International Journal of Applied Mechanics</i> , 2014 , 06, 1450003 | 2.4 | 13 |

| | | | |
|-----|--|-----|-----|
| 216 | Axial compression-induced wrinkles on a core-shell soft cylinder: Theoretical analysis, simulations and experiments. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 73, 212-227 | 5 | 26 |
| 215 | Time-Independent Plasticity Related to Critical Point of Free Energy Function and Functional. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2014 , 136, | 1.8 | 3 |
| 214 | On the Applicability of Sneddon's Solution for Interpreting the Indentation of Nonlinear Elastic Biopolymers. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2014 , 81, | 2.7 | 17 |
| 213 | Determination of the Reduced Creep Function of Viscoelastic Compliant Materials Using Pipette Aspiration Method. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2014 , 81, | 2.7 | 4 |
| 212 | Archimedean spiral wrinkles on a film-substrate system induced by torsion. <i>Applied Physics Letters</i> , 2014 , 104, 031910 | 3.4 | 15 |
| 211 | Surface effects on the persistence length of nanowires and nanotubes. <i>Theoretical and Applied Mechanics Letters</i> , 2014 , 4, 051009 | 1.8 | 2 |
| 210 | Towards understanding elastocapillarity: comparing wetting of soft and rigid plates. <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 155105 | 1.8 | 2 |
| 209 | Integrin activation and internalization mediated by extracellular matrix elasticity: a biomechanical model. <i>Journal of Biomechanics</i> , 2014 , 47, 1479-84 | 2.9 | 28 |
| 208 | Spherical indentation method for determining the constitutive parameters of hyperelastic soft materials. <i>Biomechanics and Modeling in Mechanobiology</i> , 2014 , 13, 1-11 | 3.8 | 79 |
| 207 | Mechanical Properties of Chitin-Protein Interfaces: A Molecular Dynamics Study. <i>BioNanoScience</i> , 2013 , 3, 312-320 | 3.4 | 26 |
| 206 | Mechanical properties of bioinspired bicontinuous nanocomposites. <i>Computational Materials Science</i> , 2013 , 80, 71-78 | 3.2 | 13 |
| 205 | A unified solution for self-equilibrium and super-stability of rhombic truncated regular polyhedral tensegrities. <i>International Journal of Solids and Structures</i> , 2013 , 50, 234-245 | 3.1 | 24 |
| 204 | A truncated conical beam model for analysis of the vibration of rat whiskers. <i>Journal of Biomechanics</i> , 2013 , 46, 1987-95 | 2.9 | 23 |
| 203 | Mechanical properties and scaling laws of nanoporous gold. <i>Journal of Applied Physics</i> , 2013 , 113, 023505.5 | 5.5 | 137 |
| 202 | Hierarchical multiscale model for biomechanics analysis of microfilament networks. <i>Journal of Applied Physics</i> , 2013 , 113, 194701 | 2.5 | 20 |
| 201 | Buoyancy of a thin plate pressing a floating oil film on water. <i>Langmuir</i> , 2013 , 29, 6562-72 | 4 | 5 |
| 200 | Steered molecular dynamics simulations on the peeling and shearing of carbon nanotubes on a silicon substrate. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 5374-81 | 1.3 | 2 |
| 199 | A Numerical Method for Simulating Nonlinear Mechanical Responses of Tensegrity Structures Under Large Deformations. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2013 , 80, | 2.7 | 19 |

| | | | |
|-----|---|-----|-----|
| 198 | Indentation method for measuring the viscoelastic kernel function of nonlinear viscoelastic soft materials. <i>Journal of Materials Research</i> , 2013 , 28, 806-816 | 2.5 | 9 |
| 197 | Tissue Growth Model for the Swelling Analysis of Core-Shell Hydrogels. <i>Soft Materials</i> , 2013 , 11, 117-124 | 1.7 | 8 |
| 196 | Dislocation-templated amorphization of Ge ₂ Sb ₂ Te ₅ nanowires under electric pulses: A theoretical model. <i>Journal of Applied Physics</i> , 2013 , 113, 243507 | 2.5 | 4 |
| 195 | IMPROVEMENT OF THE PEELING STRENGTH OF THIN FILMS BY A BIOINSPIRED HIERARCHICAL INTERFACE. <i>International Journal of Applied Mechanics</i> , 2013 , 05, 1350012 | 2.4 | 16 |
| 194 | Chemisorption-induced microcantilever deflection: a theoretical model. <i>Philosophical Magazine Letters</i> , 2013 , 93, 183-195 | 1 | |
| 193 | Hierarchical chirality transfer in the growth of Towel Gourd tendrils. <i>Scientific Reports</i> , 2013 , 3, 3102 | 4.9 | 92 |
| 192 | Buckling and post-buckling of a stiff film resting on an elastic graded substrate. <i>International Journal of Solids and Structures</i> , 2012 , 49, 1656-1664 | 3.1 | 48 |
| 191 | Two-dimensional Hertzian contact problem with surface tension. <i>International Journal of Solids and Structures</i> , 2012 , 49, 1588-1594 | 3.1 | 48 |
| 190 | Adhesion-dependent negative friction coefficient on chemically modified graphite at the nanoscale. <i>Nature Materials</i> , 2012 , 11, 1032-7 | 27 | 201 |
| 189 | On elastocapillarity: A review. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2012 , 28, 928-940 | 2 | 60 |
| 188 | Controlled release and assembly of drug nanoparticles via pH-responsive polymeric micelles: a theoretical study. <i>Journal of Physical Chemistry B</i> , 2012 , 116, 6003-9 | 3.4 | 17 |
| 187 | Anisotropic surface effects on the formation of chiral morphologies of nanomaterials. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012 , 468, 609-633 | 2.4 | 25 |
| 186 | Discontinuous crack-bridging model for fracture toughness analysis of nacre. <i>Journal of the Mechanics and Physics of Solids</i> , 2012 , 60, 1400-1419 | 5 | 176 |
| 185 | Normal impact of adhesive microparticles with a film/substrate system: A numerical study. <i>Computational Materials Science</i> , 2012 , 60, 130-136 | 3.2 | 4 |
| 184 | Numerical study on the effects of hierarchical wavy interface morphology on fracture toughness. <i>Computational Materials Science</i> , 2012 , 57, 14-22 | 3.2 | 30 |
| 183 | Wrinkling and creasing of a compressed elastoplastic film resting on a soft substrate. <i>Computational Materials Science</i> , 2012 , 57, 111-117 | 3.2 | 13 |
| 182 | Damage model of bone under mechanical and electromagnetic loadings. <i>Computational Materials Science</i> , 2012 , 57, 89-93 | 3.2 | 4 |
| 181 | Surface wrinkling and folding of core-shell soft cylinders. <i>Soft Matter</i> , 2012 , 8, 556-562 | 3.6 | 60 |

| | | | |
|-----|--|------|-----|
| 180 | Biomechanical modeling of surface wrinkling of soft tissues with growth-dependent mechanical properties. <i>Acta Mechanica Solida Sinica</i> , 2012 , 25, 483-492 | 2 | 28 |
| 179 | Atomistic calculations of surface energy of spherical copper surfaces. <i>Acta Mechanica Solida Sinica</i> , 2012 , 25, 557-561 | 2 | 14 |
| 178 | Self-assembly of lipids and nanoparticles in aqueous solution: Self-consistent field simulations. <i>Theoretical and Applied Mechanics Letters</i> , 2012 , 2, 014004 | 1.8 | 2 |
| 177 | Wrinkling of a bilayer resting on a soft substrate under in-plane compression. <i>Philosophical Magazine</i> , 2012 , 92, 1554-1568 | 1.6 | 30 |
| 176 | Mechanics of morphological instabilities and surface wrinkling in soft materials: a review. <i>Soft Matter</i> , 2012 , 8, 5728 | 3.6 | 519 |
| 175 | On the applicability of carbon nanotubes as nanomechanical probes and manipulators. <i>Nanotechnology</i> , 2012 , 23, 415502 | 3.4 | 1 |
| 174 | Spontaneous formation of double helical structure due to interfacial adhesion. <i>Applied Physics Letters</i> , 2012 , 100, 263104 | 3.4 | 22 |
| 173 | Role of flexibility in the water repellency of water strider legs: theory and experiment. <i>Physical Review E</i> , 2012 , 85, 021607 | 2.4 | 31 |
| 172 | Self-equilibrium and super-stability of truncated regular polyhedral tensegrity structures: a unified analytical solution. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012 , 468, 3323-3347 | 2.4 | 33 |
| 171 | Biaxial stress controlled three-dimensional helical cracks. <i>NPG Asia Materials</i> , 2012 , 4, e14-e14 | 10.3 | 7 |
| 170 | Chemisorption-Induced Resonance Frequency Shift of a Microcantilever. <i>Chinese Physics Letters</i> , 2012 , 29, 056801 | 1.8 | 3 |
| 169 | Surface effects on the superelasticity of nanohelices. <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 265303 | 10.3 | 6 |
| 168 | Theoretical Analysis of Chemisorption-Induced Surface Stress. <i>Advanced Materials Research</i> , 2012 , 528, 229-232 | 0.5 | |
| 167 | Deflection and Resonance Frequency Shift of a Microcantilever Induced by Chemisorption: Oxygen on Si(100). <i>Advanced Materials Research</i> , 2012 , 503-504, 455-458 | 0.5 | |
| 166 | Mucosal wrinkling in animal antra induced by volumetric growth. <i>Applied Physics Letters</i> , 2011 , 98, 153703 | 3.4 | 11 |
| 165 | Surface effects on the mechanical properties of nanoporous materials. <i>Nanotechnology</i> , 2011 , 22, 265714 | 3.4 | 35 |
| 164 | Numerical exploration of plastic deformation mechanisms of copper nanowires with surface defects. <i>Computational Materials Science</i> , 2011 , 50, 3425-3430 | 3.2 | 30 |
| 163 | EFFECTS OF SURFACE ELASTICITY ON MIXED-MODE FRACTURE. <i>International Journal of Applied Mechanics</i> , 2011 , 03, 435-446 | 2.4 | 16 |

| | | | |
|-----|---|------|-----|
| 162 | Chirality Transfer from Molecular to Morphological Scales in Quasi-One-Dimensional Nanomaterials: A Continuum Model. <i>Journal of Computational and Theoretical Nanoscience</i> , 2011 , 8, 1278-1287 ^{0.3} ¹² | | |
| 161 | Effective elastic properties of nanoporous materials with hierarchical structure. <i>Acta Materialia</i> , 2011 , 59, 6801-6808 | 8.4 | 35 |
| 160 | A continuum theory of surface piezoelectricity for nanodielectrics. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011 , 54, 564-573 | 3.6 | 53 |
| 159 | On determination of the damping factor of linear viscoelastic materials using dynamic indentation: a theoretical study. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011 , 54, 598-605 | 3.6 | 5 |
| 158 | Perspectives in mechanics of heterogeneous solids. <i>Acta Mechanica Solida Sinica</i> , 2011 , 24, 1-26 | 2 | 43 |
| 157 | Surface stress effect in mechanics of nanostructured materials. <i>Acta Mechanica Solida Sinica</i> , 2011 , 24, 52-82 | 2 | 234 |
| 156 | Self-assembly of organic/inorganic nanocomposites with nacre-like hierarchical structures. <i>Soft Matter</i> , 2011 , 7, 4828 | 3.6 | 17 |
| 155 | Surface wrinkling patterns on a core-shell soft sphere. <i>Physical Review Letters</i> , 2011 , 106, 234301 | 7.4 | 177 |
| 154 | An enriched radial point interpolation method (e-RPIM) for analysis of crack tip fields. <i>Engineering Fracture Mechanics</i> , 2011 , 78, 175-190 | 4.2 | 48 |
| 153 | Static and dynamic mechanical properties of cattle horns. <i>Materials Science and Engineering C</i> , 2011 , 31, 179-183 | 8.3 | 23 |
| 152 | Spontaneous instability of soft thin films on curved substrates due to van der Waals interaction. <i>Journal of the Mechanics and Physics of Solids</i> , 2011 , 59, 610-624 | 5 | 16 |
| 151 | Surface wrinkling of mucosa induced by volumetric growth: Theory, simulation and experiment. <i>Journal of the Mechanics and Physics of Solids</i> , 2011 , 59, 758-774 | 5 | 161 |
| 150 | Growth and surface folding of esophageal mucosa: a biomechanical model. <i>Journal of Biomechanics</i> , 2011 , 44, 182-8 | 2.9 | 56 |
| 149 | Coarse-grained mechanochemical model for simulating the dynamic behavior of microtubules. <i>Physical Review E</i> , 2011 , 84, 031933 | 2.4 | 25 |
| 148 | Instability of electrowetting on a dielectric substrate. <i>Journal of Applied Physics</i> , 2011 , 109, 034309 | 2.5 | 8 |
| 147 | An approximate continuum theory for interaction between dislocation and inhomogeneity of any shape and properties. <i>Journal of Applied Physics</i> , 2011 , 109, 113529 | 2.5 | 30 |
| 146 | Position transitions of polymer-grafted nanoparticles in diblock-copolymer nanocomposites. <i>EXPRESS Polymer Letters</i> , 2011 , 5, 374-383 | 3.4 | 13 |
| 145 | Integrin activation and internalization on soft ECM as a mechanism of induction of stem cell differentiation by ECM elasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 9466-71 | 11.5 | 248 |

| | | | |
|-----|--|-----|-----|
| 144 | Mechanochemical modeling of dynamic microtubule growth involving sheet-to-tube transition. <i>PLoS ONE</i> , 2011 , 6, e29049 | 3.7 | 11 |
| 143 | Monte Carlo Form-Finding Method for Tensegrity Structures 2010 , | | 2 |
| 142 | Experimental study on the mechanical properties of the horn sheaths from cattle. <i>Journal of Experimental Biology</i> , 2010 , 213, 479-86 | 3 | 50 |
| 141 | A molecular mechanisms-based biophysical model for two-phase cell spreading. <i>Applied Physics Letters</i> , 2010 , 96, 043703 | 3.4 | 18 |
| 140 | Constructing tensegrity structures from one-bar elementary cells. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2010 , 466, 45-61 | 2.4 | 31 |
| 139 | Correlation of the thermal and electrical conductivities of nanoporous gold. <i>Nanotechnology</i> , 2010 , 21, 85703 | 3.4 | 32 |
| 138 | Geometry independence of the normalized relaxation functions of viscoelastic materials in indentation. <i>Philosophical Magazine</i> , 2010 , 90, 1639-1655 | 1.6 | 21 |
| 137 | Self-assembled nanostructures of homopolymer and diblock copolymer blends in a selective solvent. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 1257-63 | 3.4 | 23 |
| 136 | Surface wrinkling of nanostructured thin films on a compliant substrate. <i>Computational Materials Science</i> , 2010 , 49, 767-772 | 3.2 | 14 |
| 135 | Surface Stress Effects on the Bending Direction and Twisting Chirality of Lamellar Crystals of Chiral Polymer. <i>Macromolecules</i> , 2010 , 43, 5762-5770 | 5.5 | 80 |
| 134 | Damage Micromechanics for Constitutive Relations and Failure of Microcracked Quasi-Brittle Materials. <i>International Journal of Damage Mechanics</i> , 2010 , 19, 911-948 | 3 | 58 |
| 133 | Effect of surface stresses on the vibration and buckling of piezoelectric nanowires. <i>Europhysics Letters</i> , 2010 , 91, 56007 | 1.6 | 90 |
| 132 | Surface effects on the elasticity of nanosprings. <i>Europhysics Letters</i> , 2010 , 92, 16002 | 1.6 | 15 |
| 131 | Surface effects in various bending-based test methods for measuring the elastic property of nanowires. <i>Nanotechnology</i> , 2010 , 21, 205702 | 3.4 | 43 |
| 130 | Micromechanics prediction of the effective elastic moduli of graphene sheet-reinforced polymer nanocomposites. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2010 , 18, 045005 | 2 | 117 |
| 129 | Buckling and postbuckling of a compressed thin film bonded on a soft elastic layer: a three-dimensional analysis. <i>Archive of Applied Mechanics</i> , 2010 , 80, 175-188 | 2.2 | 23 |
| 128 | Morphological stability analysis of vesicles with mechanical-electrical coupling effects. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2010 , 26, 5-11 | 2 | 2 |
| 127 | About the special topic of mechanics and biomimetics of biomaterials and animal locomotion. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2010 , 26, 3-4 | 2 | |

| | | |
|-----|---|--------|
| 126 | Design methods of rhombic tensegrity structures. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2010 , 26, 559-565 | 21 |
| 125 | Controllable nanostructural transitions in grafted nanoparticle-block copolymer composites. <i>Nano Research</i> , 2010 , 3, 356-362 | 10 20 |
| 124 | Surface effects on mode-I crack tip fields: A numerical study. <i>Engineering Fracture Mechanics</i> , 2010 , 77, 1048-1057 | 4.2 39 |
| 123 | Dislocation-based semi-analytical method for calculating stress intensity factors of cracks: Two-dimensional cases. <i>Engineering Fracture Mechanics</i> , 2010 , 77, 3521-3531 | 4.2 11 |
| 122 | A Monte Carlo form-finding method for large scale regular and irregular tensegrity structures. <i>International Journal of Solids and Structures</i> , 2010 , 47, 1888-1898 | 3.1 85 |
| 121 | Theoretical study of the competition between cell-cell and cell-matrix adhesions. <i>Physical Review E</i> , 2009 , 80, 011921 | 2.4 20 |
| 120 | Morphological instability of spherical soft particles induced by surface charges. <i>Applied Physics Letters</i> , 2009 , 95, 021903 | 3.4 7 |
| 119 | Interfacial slippage effect on the surface instability of a thin elastic film under van der Waals force. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 055302 | 3 17 |
| 118 | Determining the elastic modulus of thin films using a buckling-based method: computational study. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 175506 | 3 8 |
| 117 | Surface patterning of soft polymer film-coated cylinders via an electric field. <i>Journal of Physics Condensed Matter</i> , 2009 , 21, 445006 | 1.8 15 |
| 116 | Determination of the elastic modulus of micro- and nanowires/tubes using a buckling-based metrology. <i>Scripta Materialia</i> , 2009 , 61, 1044-1047 | 5.6 13 |
| 115 | Fracture mechanics analysis on Smart-Cut [®] technology. Part 1: Effects of stiffening wafer and defect interaction. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2009 , 25, 73-81 | 2 9 |
| 114 | Fracture mechanics analysis on Smart-Cut [®] technology. Part 2: Effect of bonding flaws. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2009 , 25, 197-203 | 2 4 |
| 113 | Microtensile tests of mechanical properties of nanoporous Au thin films. <i>Journal of Materials Science</i> , 2009 , 44, 4728-4733 | 4.3 33 |
| 112 | A phase field method for simulating morphological evolution of vesicles in electric fields. <i>Journal of Computational Physics</i> , 2009 , 228, 4162-4181 | 4.1 29 |
| 111 | Numerical simulations of the normal impact of adhesive microparticles with a rigid substrate. <i>Powder Technology</i> , 2009 , 189, 34-41 | 5.2 22 |
| 110 | Atomic-scale finite element analysis of vibration mode transformation in carbon nanorings and single-walled carbon nanotubes. <i>International Journal of Solids and Structures</i> , 2009 , 46, 4342-4360 | 3.1 16 |
| 109 | Surface effects on the elastic modulus of nanoporous materials. <i>Applied Physics Letters</i> , 2009 , 94, 011916 | 4 82 |

| | | | |
|-----|--|-----|------|
| 108 | Surface effects on buckling of nanowires under uniaxial compression. <i>Applied Physics Letters</i> , 2009 , 94, 141913 | 3.4 | 244 |
| 107 | The Role of Adaptive-Deformation of Water Strider Leg in Its Walking on Water. <i>Journal of Adhesion Science and Technology</i> , 2009 , 23, 493-501 | 2 | 32 |
| 106 | Timoshenko beam model for buckling and vibration of nanowires with surface effects. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 155411 | 3 | 190 |
| 105 | Self-assembled lipid nanostructures encapsulating nanoparticles in aqueous solution. <i>Soft Matter</i> , 2009 , 5, 3977 | 3.6 | 17 |
| 104 | Wearless scratch on NiTi shape memory alloy due to phase transformational shakedown. <i>Applied Physics Letters</i> , 2008 , 92, 121909 | 3.4 | 17 |
| 103 | Three-dimensional analysis of spontaneous surface instability and pattern formation of thin soft films. <i>Journal of Applied Physics</i> , 2008 , 103, 083501 | 2.5 | 16 |
| 102 | Surface Effects on the Near-Tip Stresses for Mode-I and Mode-III Cracks. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2008 , 75, | 2.7 | 54 |
| 101 | Theoretical analysis of resonance frequency change induced by adsorption. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 125306 | 3 | 23 |
| 100 | Elastic Analysis of Physisorption-Induced Substrate Deformation. <i>Chinese Physics Letters</i> , 2008 , 25, 205-208 | 2 | |
| 99 | Effect of Mechanical Milling on Photoluminescence of γ -Alumina Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2008 , 8, 1414-1416 | 1.3 | 7 |
| 98 | Influence of residual thermal stresses and geometric parameters on stress and electric fields in multilayer ceramic capacitors under electric bias. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 135310 | 3 | 8 |
| 97 | Twisting of nanowires induced by anisotropic surface stresses. <i>Applied Physics Letters</i> , 2008 , 92, 191901 | 3.4 | 50 |
| 96 | Theoretical analysis of adsorption-induced microcantilever bending. <i>Journal of Applied Physics</i> , 2008 , 103, 093506 | 2.5 | 22 |
| 95 | Thermal Effects of Ferroelectric/Magnetic Materials Under Cyclic-Electric Loading. <i>Journal of Thermal Stresses</i> , 2008 , 32, 149-164 | 2.2 | 2 |
| 94 | Effects of particle size, particle/matrix interface adhesion and particle loading on mechanical properties of particulate-polymer composites. <i>Composites Part B: Engineering</i> , 2008 , 39, 933-961 | 10 | 2142 |
| 93 | A three-dimensional theoretical model for estimating the thermal residual stresses in micro multilayer ceramic capacitors. <i>Composites Science and Technology</i> , 2008 , 68, 692-698 | 8.6 | 9 |
| 92 | Mechanical property of carbon nanotubes with intramolecular junctions: Molecular dynamics simulations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008 , 372, 6661-6666 | 2.3 | 89 |
| 91 | Plasma surface graft of acrylic acid and biodegradation of poly(butylene succinate) films. <i>Thin Solid Films</i> , 2008 , 516, 5659-5663 | 2.2 | 17 |

| | | | |
|----|---|-----|-----|
| 90 | Surface effects on the near-tip stress fields of a mode-II crack. <i>International Journal of Fracture</i> , 2008 , 151, 95-106 | 2.3 | 38 |
| 89 | Spinodal surface instability of soft elastic thin films. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2008 , 24, 289-296 | | 8 |
| 88 | Mechanical properties of cocoons constructed consecutively by a single silkworm caterpillar, <i>Bombyx mori</i> . <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2008 , 24, 151-160 | 2 | 10 |
| 87 | Elasticity-driven droplet movement on a microbeam with gradient stiffness: a biomimetic self-propelling mechanism. <i>Journal of Colloid and Interface Science</i> , 2008 , 323, 133-40 | 9.3 | 32 |
| 86 | Dynamic stress intensity factors of a semi-infinite crack in an orthotropic functionally graded material. <i>Mechanics of Materials</i> , 2008 , 40, 37-47 | 3.3 | 40 |
| 85 | An electromechanical liquid crystal model of vesicles. <i>Journal of the Mechanics and Physics of Solids</i> , 2008 , 56, 2844-2862 | 5 | 30 |
| 84 | Fundamental solution of a power-law orthotropic and half-space functionally graded material under line loads. <i>Composites Science and Technology</i> , 2008 , 68, 27-34 | 8.6 | 11 |
| 83 | Effect of surface roughness on nanoindentation test of thin films. <i>Engineering Fracture Mechanics</i> , 2008 , 75, 4965-4972 | 4.2 | 122 |
| 82 | Fracture mechanics analysis of the effects of temperature and material mismatch on the Smart-Cut [®] technology. <i>Engineering Fracture Mechanics</i> , 2008 , 75, 4996-5006 | 4.2 | 9 |
| 81 | Evaluation of Threshold Voltage for 30 nm Symmetric Double Gate (SDG) MOSFET and It's Variation with Process Parameters. <i>Journal of Computational and Theoretical Nanoscience</i> , 2008 , 5, 619-626 | 0.3 | 6 |
| 80 | Molecular dynamics simulations of deformation and rupture of super carbon nanotubes under tension. <i>Journal of Nanoscience and Nanotechnology</i> , 2008 , 8, 6274-82 | 1.3 | 1 |
| 79 | Buoyant force and sinking conditions of a hydrophobic thin rod floating on water. <i>Physical Review E</i> , 2007 , 76, 066103 | 2.4 | 78 |
| 78 | Superior water repellency of water strider legs with hierarchical structures: experiments and analysis. <i>Langmuir</i> , 2007 , 23, 4892-6 | 4 | 285 |
| 77 | Superior flexibility of super carbon nanotubes: Molecular dynamics simulations. <i>Applied Physics Letters</i> , 2007 , 91, 043108 | 3.4 | 33 |
| 76 | Effects of surface elasticity and residual surface tension on the natural frequency of microbeams. <i>Applied Physics Letters</i> , 2007 , 90, 231904 | 3.4 | 358 |
| 75 | Fracture mechanics analysis of three-dimensional ion cut technology. <i>Journal of Mechanics of Materials and Structures</i> , 2007 , 2, 1831-1852 | 1.2 | 6 |
| 74 | Towards Understanding Why a Superhydrophobic Coating Is Needed by Water Striders. <i>Advanced Materials</i> , 2007 , 19, 2257-2261 | 24 | 252 |
| 73 | Analysis of spherical indentation of superelastic shape memory alloys. <i>International Journal of Solids and Structures</i> , 2007 , 44, 1-17 | 3.1 | 62 |

| | | | |
|----|---|------|-----|
| 72 | Mechanical properties of silkworm cocoon pelades. <i>Engineering Fracture Mechanics</i> , 2007 , 74, 1953-1962 | 4.2 | 45 |
| 71 | Effects of electric fatigue on the butterfly curves of ferroelectric ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 459, 273-277 | 5.3 | 17 |
| 70 | Variability in mechanical properties of Bombyx mori silk. <i>Materials Science and Engineering C</i> , 2007 , 27, 675-683 | 8.3 | 74 |
| 69 | A new micro-tensile system for measuring the mechanical properties of low-dimensional materialsBibers and films. <i>Polymer Testing</i> , 2007 , 26, 513-518 | 4.5 | 19 |
| 68 | Effects of surface stresses on contact problems at nanoscale. <i>Journal of Applied Physics</i> , 2007 , 101, 013510 | 10.9 | 96 |
| 67 | Effect of interfacial slippage in peel test: theoretical model. <i>European Physical Journal E</i> , 2007 , 23, 67-76 | 1.5 | 18 |
| 66 | A simple constitutive model for ferroelectric ceramics under electrical/mechanical loading. <i>Acta Mechanica Solida Sinica</i> , 2007 , 20, 1-12 | 2 | 7 |
| 65 | Effects of dislocation configuration, crack blunting and free surfaces on the triggering load of dislocation sources. <i>Acta Mechanica Solida Sinica</i> , 2007 , 20, 103-109 | 2 | 1 |
| 64 | Shakedown analysis of shape memory alloy structures. <i>International Journal of Plasticity</i> , 2007 , 23, 183-206 | 2.6 | 47 |
| 63 | Anti-plane Yoffe Moving Crack Problem in Isotropic Functionally Graded Materials. <i>Journal of Reinforced Plastics and Composites</i> , 2007 , 26, 127-137 | 2.9 | 3 |
| 62 | Capillary Adhesion of Microbeams: Finite Deformation Analysis. <i>Chinese Physics Letters</i> , 2007 , 24, 2349-2352 | 3.2 | 13 |
| 61 | Hierarchical capillary adhesion of microcantilevers or hairs. <i>Journal Physics D: Applied Physics</i> , 2007 , 40, 5564-5570 | 3 | 31 |
| 60 | Directional Motion of Droplets in a Conical Tube or on a Conical Fibre. <i>Chinese Physics Letters</i> , 2007 , 24, 3210-3213 | 1.8 | 36 |
| 59 | Influence of thickness and number of dielectric layers on residual stresses in micromultilayer ceramic capacitors. <i>Journal of Applied Physics</i> , 2007 , 101, 104117 | 2.5 | 11 |
| 58 | Interface effects on the diffraction of plane compressional waves by a nanosized spherical inclusion. <i>Journal of Applied Physics</i> , 2007 , 102, 043533 | 2.5 | 41 |
| 57 | Surface buckling of a bending microbeam due to surface elasticity. <i>Europhysics Letters</i> , 2007 , 77, 44002 | 1.6 | 32 |
| 56 | Mechanisms of superhydrophobicity on hydrophilic substrates. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 356002 | 1.8 | 93 |
| 55 | Ultrasonic technique for extracting nanofibers from nature materials. <i>Applied Physics Letters</i> , 2007 , 90, 073112 | 3.4 | 192 |

| | | | |
|----|---|------|-----|
| 54 | Constitutive Relations of Ferroelectric Ceramics with Electric Fatigue Effects. <i>Chinese Physics Letters</i> , 2006 , 23, 1911-1914 | 1.8 | 6 |
| 53 | Simulation of adatom clustering on a stepped surface. <i>Philosophical Magazine Letters</i> , 2006 , 86, 277-289 | 1 | 5 |
| 52 | Surface effects on the diffraction of plane compressional waves by a nanosized circular hole. <i>Applied Physics Letters</i> , 2006 , 89, 231923 | 3.4 | 84 |
| 51 | Determination of transformation stresses of shape memory alloy thin films: A method based on spherical indentation. <i>Applied Physics Letters</i> , 2006 , 88, 241912 | 3.4 | 21 |
| 50 | Self-assembly of single-walled carbon nanotubes into multiwalled carbon nanotubes in water: molecular dynamics simulations. <i>Nano Letters</i> , 2006 , 6, 430-4 | 11.5 | 69 |
| 49 | Molecular-dynamic studies of carbon-water-carbon composite nanotubes. <i>Small</i> , 2006 , 2, 1348-55 | 11 | 33 |
| 48 | Stone-Wales transformation: Precursor of fracture in carbon nanotubes. <i>International Journal of Mechanical Sciences</i> , 2006 , 48, 1464-1470 | 5.5 | 24 |
| 47 | Pattern instability of a soft elastic thin film under van der Waals forces. <i>Mechanics of Materials</i> , 2006 , 38, 88-99 | 3.3 | 46 |
| 46 | Morphology of Liquid Drops and thin Films on a Solid Surface with Sinusoidal Microstructures. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2006 , 22, 315-322 | 2 | 11 |
| 45 | Two-dimensional model of vesicle adhesion on curved substrates. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2006 , 22, 529-535 | 2 | 29 |
| 44 | Elastic Sv-Wave Scattering by an Interface Crack Between a Piezoelectric Layer and an Elastic Substrate 2006 , 112-120 | | |
| 43 | Mechanical properties of silkworm cocoons. <i>Polymer</i> , 2005 , 46, 9192-9201 | 3.9 | 102 |
| 42 | Numerical analysis of interaction and coalescence of numerous microcracks. <i>Engineering Fracture Mechanics</i> , 2005 , 72, 1841-1865 | 4.2 | 23 |
| 41 | Multiscale Analysis of Fracture of Carbon Nanotubes Embedded in Composites. <i>International Journal of Fracture</i> , 2005 , 134, 369-386 | 2.3 | 33 |
| 40 | Thermal Effects on Fracture of Piezoelectric Materials. <i>Journal of Intelligent Material Systems and Structures</i> , 2005 , 16, 567-572 | 2.3 | 3 |
| 39 | The Effect of Nanotube Waviness and Agglomeration on the Elastic Property of Carbon Nanotube-Reinforced Composites. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2004 , 126, 250-257 | 1.8 | 506 |
| 38 | Effective Elastic and Plastic Properties of Interpenetrating Multiphase Composites. <i>Applied Composite Materials</i> , 2004 , 11, 33-55 | 2 | 40 |
| 37 | Quasi-micromechanical damage model for brittle solids with interacting microcracks. <i>Mechanics of Materials</i> , 2004 , 36, 261-273 | 3.3 | 25 |

- | | | | |
|----|--|-----|----|
| 36 | Defect nucleation in SOI wafers due to hydrogen ion implantation. <i>Theoretical and Applied Fracture Mechanics</i> , 2004 , 42, 295-301 | 3.7 | 6 |
| 35 | A piezoelectric constitutive theory with rotation gradient effects. <i>European Journal of Mechanics, A/Solids</i> , 2004 , 23, 455-466 | 3.7 | 37 |
| 34 | Mechanics of Smart-Cut [®] technology. <i>International Journal of Solids and Structures</i> , 2004 , 41, 4299-4320 | 3.1 | 55 |
| 33 | Defect nucleation in carbon nanotubes under tension and torsion: Stone-Wales transformation. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2004 , 193, 3419-3429 | 5.7 | 58 |
| 32 | A triggering criterion of dislocation sources under Mode-I singular stresses. <i>International Journal of Fracture</i> , 2004 , 126, 281-286 | 2.3 | 1 |
| 31 | A simple method for calculating interaction of numerous microcracks and its applications. <i>International Journal of Solids and Structures</i> , 2003 , 40, 447-464 | 3.1 | 41 |
| 30 | Interface effects on effective elastic moduli of nanocrystalline materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 363, 1-8 | 5.3 | 54 |
| 29 | Electrochemically synthesized polythiophene films with self-organized microstructure. <i>Polymer Engineering and Science</i> , 2003 , 43, 919-922 | 2.3 | 1 |
| 28 | Limit analysis of ductile composites based on homogenization theory. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2003 , 459, 659-675 | 2.4 | 27 |
| 27 | Analysis on interaction of numerous microcracks. <i>Computational Materials Science</i> , 2003 , 28, 454-461 | 3.2 | 11 |
| 26 | A micromechanical model for interpenetrating multiphase composites. <i>Computational Materials Science</i> , 2003 , 28, 486-493 | 3.2 | 72 |
| 25 | Transient response of an insulating crack between dissimilar piezoelectric layers under mechanical and electrical impacts. <i>Archive of Applied Mechanics</i> , 2002 , 72, 615-629 | 2.2 | 22 |
| 24 | A micromechanics model for estimating the effective thermoelastic properties of layered media. <i>Composites Science and Technology</i> , 2002 , 62, 441-449 | 8.6 | 7 |
| 23 | Transient response of an interface crack between dissimilar piezoelectric layers under mechanical impacts. <i>International Journal of Solids and Structures</i> , 2002 , 39, 1743-1756 | 3.1 | 30 |
| 22 | Effects of thickness on mechanical properties of conducting polythiophene films. <i>Journal of Materials Science Letters</i> , 2002 , 21, 715-717 | | 32 |
| 21 | Elastic Wave Scattering by an Interface Crack Between a Piezoelectric Layer and an Elastic Substrate. <i>International Journal of Fracture</i> , 2002 , 116, 29-34 | 2.3 | 15 |
| 20 | Effective elastic moduli and interface effects of nanocrystal-line materials. <i>Science Bulletin</i> , 2002 , 47, 1493 | | 3 |
| 19 | On estimation methods for effective moduli of microcracked solids. <i>Archive of Applied Mechanics</i> , 2001 , 71, 537-548 | 2.2 | 10 |

| | | | |
|----|--|-----|----|
| 18 | Effective elastic moduli of polymer-layered silicate nanocomposites. <i>Science Bulletin</i> , 2001 , 46, 1130-1133 | | 8 |
| 17 | Strain gradient near interface of coaxial cylinders in torsion. <i>Theoretical and Applied Fracture Mechanics</i> , 2001 , 36, 195-202 | 3.7 | 2 |
| 16 | Boundary layers near interfaces between crystals with strain gradient effects. <i>Mechanics Research Communications</i> , 2001 , 28, 87-95 | 2.2 | 8 |
| 15 | Possible giant magnetoelectric effect of ferromagnetic rare-earth/iron-alloys-filled ferroelectric polymers. <i>Applied Physics Letters</i> , 2001 , 78, 2527-2529 | 3.4 | 87 |
| 14 | On the coalescence of collinear cracks in quasi-brittle materials. <i>Engineering Fracture Mechanics</i> , 2000 , 65, 511-524 | 4.2 | 16 |
| 13 | An approximate scheme for considering effects of microcrack interaction on the overall constitutive relation of brittle solids under complex loading. <i>Acta Mechanica</i> , 2000 , 139, 143-159 | 2.1 | 13 |
| 12 | Estimate of effective elastic moduli with microcrack interaction effects. <i>Theoretical and Applied Fracture Mechanics</i> , 2000 , 34, 225-233 | 3.7 | 45 |
| 11 | Three-Dimensional Micromechanical Model for Quasi-Brittle Solids with Residual Strains under Tension. <i>International Journal of Damage Mechanics</i> , 2000 , 9, 79-110 | 3 | 19 |
| 10 | Three-Dimensional Micromechanical Model for Quasi-Brittle Solids with Residual Strains under Tension. <i>International Journal of Damage Mechanics</i> , 2000 , 9, 79-110 | 3 | 5 |
| 9 | A global/local shakedown analysis method of elastoplastic cracked structures. <i>Engineering Fracture Mechanics</i> , 1999 , 63, 179-192 | 4.2 | 12 |
| 8 | Analyses of damage localization at crack tip in a brittle damaged material. <i>Engineering Fracture Mechanics</i> , 1996 , 53, 169-177 | 4.2 | 10 |
| 7 | On shakedown of three-dimensional elastoplastic strain-hardening structures. <i>International Journal of Plasticity</i> , 1996 , 12, 1241-1256 | 7.6 | 26 |
| 6 | A micromechanics-based damage model for microcrack-weakened brittle solids. <i>Mechanics of Materials</i> , 1995 , 20, 59-76 | 3.3 | 54 |
| 5 | Damage and shakedown analysis of structures with strain-hardening. <i>International Journal of Plasticity</i> , 1995 , 11, 237-249 | 7.6 | 21 |
| 4 | Micromechanical modelling of tensile response of elastic-brittle materials. <i>International Journal of Solids and Structures</i> , 1995 , 32, 3359-3372 | 3.1 | 17 |
| 3 | An Upper Bound on Damage of Elastic-Plastic Structures at Shakedown. <i>International Journal of Damage Mechanics</i> , 1994 , 3, 277-289 | 3 | 11 |
| 2 | A new damage model for microcrack-weakened brittle solids. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 1993 , 9, 251-260 | 2 | 18 |
| 1 | Phototactic Miniature Soft Robots with Terrain Adaptability. <i>Advanced Materials Technologies</i> , 2101660 | 6.8 | 3 |

