

# Chung-Yuen Hui

## List of Publications by Year in descending order

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309  
papers

12,464  
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22099

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h-index

35952

97  
g-index

313  
all docs

313  
docs citations

313  
times ranked

7849  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Failure mechanisms of polymer interfaces reinforced with block copolymers. <i>Macromolecules</i> , 1992, 25, 3075-3088.  | 2.2 | 428       |
| 2  | Constraints on Microcontact Printing Imposed by Stamp Deformation. <i>Langmuir</i> , 2002, 18, 1394-1407.  | 1.6 | 396       |
| 3  | Design of biomimetic fibrillar interfaces: 1. Making contact. <i>Journal of the Royal Society Interface</i> , 2004, 1, 23-33.  | 1.5 | 362       |
| 4  | Fibrous nonlinear elasticity enables positive mechanical feedback between cells and ECMs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14043-14048. | 3.3 | 267       |
| 5  | Design of biomimetic fibrillar interfaces: 2. Mechanics of enhanced adhesion. <i>Journal of the Royal Society Interface</i> , 2004, 1, 35-48.  | 1.5 | 250       |
| 6  | Elastocapillarity: Surface Tension and the Mechanics of Soft Solids. <i>Annual Review of Condensed Matter Physics</i> , 2017, 8, 99-118.   | 5.2 | 247       |
| 7  | Biologically inspired crack trapping for enhanced adhesion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 10786-10791.                               | 3.3 | 234       |
| 8  | Mechanically tunable dry adhesive from wrinkled elastomers. <i>Soft Matter</i> , 2008, 4, 1830.  | 1.2 | 207       |
| 9  | The asymptotic stress and strain field near the tip of a growing crack under creep conditions. <i>International Journal of Fracture</i> , 1981, 17, 409-425.   | 1.1 | 202       |
| 10 | Adhesive contact of cylindrical lens and a flat sheet. <i>Journal of Applied Physics</i> , 1996, 80, 30-37.  | 1.1 | 195       |
| 11 | Crack blunting and the strength of soft elastic solids. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2003, 459, 1489-1516.                                 | 1.0 | 195       |
| 12 | Fracture toughness of hydrogels: measurement and interpretation. <i>Soft Matter</i> , 2016, 12, 8069-8086.   | 1.2 | 181       |
| 13 | An interface model for the prediction of Young's modulus of layered silicate-elastomer nanocomposites. <i>Polymer Composites</i> , 1998, 19, 608-617.  | 2.3 | 179       |
| 14 | Peeling Single-Stranded DNA from Graphite Surface to Determine Oligonucleotide Binding Energy by Force Spectroscopy. <i>Nano Letters</i> , 2008, 8, 4365-4372.   | 4.5 | 176       |
| 15 | Time Dependent Behavior of a Dual Cross-Link Self-Healing Gel: Theory and Experiments. <i>Macromolecules</i> , 2014, 47, 7243-7250.  | 2.2 | 166       |
| 16 | Case of diffusion in polymers. I. Transient swelling. <i>Journal of Applied Physics</i> , 1987, 61, 5129-5136.   | 1.1 | 162       |
| 17 | Reinforcement of Polymer Interfaces with Random Copolymers. <i>Physical Review Letters</i> , 1994, 73, 2472-2475.  | 2.9 | 154       |
| 18 | Case of diffusion in polymers. II. Steady-state front motion. <i>Journal of Applied Physics</i> , 1987, 61, 5137-5149.   | 1.1 | 142       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Adhesion and Fracture of Interfaces Between Immiscible Polymers: from the Molecular to the Continuum Scal. <i>Advances in Polymer Science</i> , 2001, , 53-136.   | 0.4 | 141       |
| 20 | Effect of Stamp Deformation on the Quality of Microcontact Printing:Â Theory and Experiment. <i>Langmuir</i> , 2004, 20, 6430-6438.   | 1.6 | 141       |
| 21 | Simple formulae for the effective moduli of unidirectional aligned composites. <i>Polymer Engineering and Science</i> , 1998, 38, 774-782.  | 1.5 | 122       |
| 22 | Fracture and large strain behavior of self-assembled triblock copolymer gels. <i>Soft Matter</i> , 2009, 5, 447-456.  | 1.2 | 120       |
| 23 | An exact closed form solution for fragmentation of Weibull fibers in a single filament composite with applications to fiber-reinforced ceramics. <i>Journal of the Mechanics and Physics of Solids</i> , 1995, 43, 1551-1585. | 2.3 | 115       |
| 24 | Can a fibrillar interface be stronger and tougher than a non-fibrillar one?. <i>Journal of the Royal Society Interface</i> , 2005, 2, 505-516.  | 1.5 | 113       |
| 25 | Chain Pullout Fracture of Polymer Interfaces. <i>Macromolecules</i> , 1994, 27, 2019-2024.  | 2.2 | 108       |
| 26 | Effects of Gel Thickness on Microscopic Indentation Measurements ofÂGelÂModulus. <i>Biophysical Journal</i> , 2011, 101, 643-650.   | 0.2 | 108       |
| 27 | Crack tip fields in soft elastic solids subjected to large quasi-static deformation â€” A review. <i>Extreme Mechanics Letters</i> , 2015, 4, 131-155.  | 2.0 | 104       |
| 28 | The Fracture of Highly Deformable Soft Materials: A Tale of Two Length Scales. <i>Annual Review of Condensed Matter Physics</i> , 2021, 12, 71-94.  | 5.2 | 103       |
| 29 | Size effects in the distribution for strength of brittle matrix fibrous composites. <i>International Journal of Solids and Structures</i> , 1997, 34, 545-568.  | 1.3 | 101       |
| 30 | Analysis of a mixed mode fracture specimen: the asymmetric double cantilever beam. <i>Journal of Materials Science</i> , 1993, 28, 5620-5629.   | 1.7 | 99        |
| 31 | Stress and induction field of a spheroidal inclusion or a penny-shaped crack in a transversely isotropic piezo-electric material. <i>International Journal of Solids and Structures</i> , 1996, 33, 2719-2737.                | 1.3 | 98        |
| 32 | Fracture mechanisms of polymer interfaces reinforced with block copolymers: transition from chain pullout to crazing. <i>Macromolecules</i> , 1993, 26, 2928-2934.  | 2.2 | 97        |
| 33 | Micromechanics of crack growth into a craze in a polymer glass. <i>Macromolecules</i> , 1992, 25, 3948-3955.  | 2.2 | 92        |
| 34 | Fracture of dual crosslink gels with permanent and transient crosslinks. <i>Extreme Mechanics Letters</i> , 2016, 6, 52-59.   | 2.0 | 87        |
| 35 | Continuum and Discrete Modeling of Craze Failure at a Crack Tip in a Glassy Polymer. <i>Macromolecules</i> , 1995, 28, 2450-2459.   | 2.2 | 83        |
| 36 | Solid surface tension measured by a liquid drop under a solid film. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 10541-10545.  | 3.3 | 82        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | The initial stages of Case II diffusion at low penetrant activities. <i>Polymer</i> , 1988, 29, 673-679.   | 1.8  | 78        |
| 38 | Electrostatic model for an asymmetric combdrive. <i>Journal of Microelectromechanical Systems</i> , 2000, 9, 126-135.  | 1.7  | 78        |
| 39 | Toward single cell traction microscopy within 3D collagen matrices. <i>Experimental Cell Research</i> , 2013, 319, 2396-2408.  | 1.2  | 78        |
| 40 | Fiber-Reinforced Viscoelastomers Show Extraordinary Crack Resistance That Exceeds Metals. <i>Advanced Materials</i> , 2020, 32, e1907180.  | 11.1 | 77        |
| 41 | A micromechanical model of crack growth along polymer interfaces. <i>Mechanics of Materials</i> , 1991, 11, 257-268.   | 1.7  | 76        |
| 42 | A theory for the fracture of thin plates subjected to bending and twisting moments. <i>International Journal of Fracture</i> , 1993, 61, 211-229.  | 1.1  | 76        |
| 43 | The mechanics of tack: Viscoelastic contact on a rough surface. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 1485-1495.  | 2.4  | 76        |
| 44 | Collapse of single-walled carbon nanotubes. <i>Journal of Applied Physics</i> , 2005, 97, 074310.  | 1.1  | 76        |
| 45 | Adhesion enhancement in a biomimetic fibrillar interface. <i>Acta Biomaterialia</i> , 2005, 1, 367-375.  | 4.1  | 75        |
| 46 | Mechanics of a Dual Cross-Link Gel with Dynamic Bonds: Steady State Kinetics and Large Deformation Effects. <i>Macromolecules</i> , 2016, 49, 3497-3507.                                   | 2.2  | 74        |
| 47 | A fracture model for a weak interface in a viscoelastic material (small scale yielding analysis). <i>Journal of Applied Physics</i> , 1992, 72, 3294-3304.                                 | 1.1  | 73        |
| 48 | A cohesive zone model for the adhesion of cylinders. <i>Journal of Adhesion Science and Technology</i> , 1997, 11, 393-406.  | 1.4  | 73        |
| 49 | Cavity growth from crack-like defects in soft materials. <i>International Journal of Fracture</i> , 2004, 126, 205-221.  | 1.1  | 73        |
| 50 | Enhanced adhesion and compliance of film-terminated fibrillar surfaces. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2007, 463, 2631-2654. | 1.0  | 71        |
| 51 | Probing in Real Time the Soft Crystallization of DNA-Capped Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 380-384.   | 7.2  | 71        |
| 52 | Strengthening polymer interfaces. <i>Faraday Discussions</i> , 1994, 98, 31.   | 1.6  | 69        |
| 53 | Large deformation adhesive contact mechanics of circular membranes with a flat rigid substrate. <i>Journal of the Mechanics and Physics of Solids</i> , 2010, 58, 1225-1242.               | 2.3  | 69        |
| 54 | Effects of surface tension on the adhesive contact of a rigid sphere to a compliant substrate. <i>Soft Matter</i> , 2014, 10, 4625-4632.   | 1.2  | 69        |

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|----|---|-----|-----------|
| 55 | Adhesion Selectivity Using Rippled Surfaces. <i>Advanced Functional Materials</i> , 2011, 21, 547-555.  | 7.8 | 68        |
| 56 | Interface shear stresses induced by non-uniform heating of a film on a substrate. <i>Thin Solid Films</i> , 1993, 224, 159-167.   | 0.8 | 66        |
| 57 | A constitutive model for the large deformation of a self-healing gel. <i>Soft Matter</i> , 2012, 8, 8209.   | 1.2 | 63        |
| 58 | Why K? High order singularities and small scale yielding. <i>International Journal of Fracture</i> , 1995, 72, 97-120.  | 1.1 | 62        |
| 59 | The mechanics of contact and adhesion of periodically rough surfaces. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 1195-1214.   | 2.4 | 60        |
| 60 | Modeling the soft backing layer thickness effect on adhesion of elastic microfiber arrays. <i>Journal of Applied Physics</i> , 2008, 104, 044301.   | 1.1 | 60        |
| 61 | An experimental investigation of fracture by cavitation of model elastomeric networks. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2010, 48, 1409-1422.  | 2.4 | 60        |
| 62 | Indentation of a rigid sphere into an elastic substrate with surface tension and adhesion. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015, 471, 20140727.          | 1.0 | 60        |
| 63 | Optimum toughening of homopolymer interfaces with block copolymers. <i>Macromolecules</i> , 1993, 26, 6011-6020.  | 2.2 | 59        |
| 64 | How Compliance Compensates for Surface Roughness in Fibrillar Adhesion. <i>Journal of Adhesion</i> , 2005, 81, 699-721.   | 1.8 | 58        |
| 65 | A contact mechanics method for characterizing the elastic properties and permeability of gels. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 359-370.  | 2.4 | 57        |
| 66 | Effect of backing layer thickness on adhesion of single-level elastomer fiber arrays. <i>Applied Physics Letters</i> , 2007, 91, .  | 1.5 | 57        |
| 67 | The single-filament-composite test: a new statistical theory for estimating the interfacial shear strength and Weibull parameters for fiber strength. <i>Composites Science and Technology</i> , 1998, 57, 1707-1725. | 3.8 | 56        |
| 68 | Gel mechanics: A comparison of the theories of Biot and Tanaka, Hocker, and Benedek. <i>Journal of Chemical Physics</i> , 2005, 123, 154905.  | 1.2 | 55        |
| 69 | Finite strain analysis of crack tip fields in incompressible hyperelastic solids loaded in plane stress. <i>Journal of the Mechanics and Physics of Solids</i> , 2011, 59, 672-695.                                   | 2.3 | 55        |
| 70 | Finite Strain Crack Tip Fields in Soft Incompressible Elastic Solids. <i>Langmuir</i> , 2008, 24, 14245-14253.  | 1.6 | 54        |
| 71 | Surface energy effects for cavity growth and nucleation in an incompressible neo-Hookean materialâ€™s modeling and experiment. <i>International Journal of Solids and Structures</i> , 2004, 41, 6111-6127.           | 1.3 | 53        |
| 72 | Strongly enhanced static friction using a film-terminated fibrillar interface. <i>Soft Matter</i> , 2008, 4, 618.   | 1.2 | 53        |

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|----|---|------|-----------|
| 73 | Adhesion between single-walled carbon nanotubes. <i>Journal of Applied Physics</i> , 2005, 97, 074304.  | 1.1  | 52        |
| 74 | Flattening of a patterned compliant solid by surface stress. <i>Soft Matter</i> , 2014, 10, 4084-4090.  | 1.2  | 52        |
| 75 | Mechanics of sintering thin films " II. Cracking due to self-stress. <i>Mechanics of Materials</i> , 1991, 11, 221-234.   | 1.7  | 51        |
| 76 | Viscoelastic contract, work of adhesion and the JKR technique. <i>Journal Physics D: Applied Physics</i> , 1999, 32, 2250-2260.   | 1.3  | 51        |
| 77 | Elastica solution for a nanotube formed by self-adhesion of a folded thin film. <i>Journal of Applied Physics</i> , 2004, 96, 3429-3434.  | 1.1  | 51        |
| 78 | Fracture Toughness and Failure Mechanisms of Epoxy/Rubber-Modified Polystyrene (HIPS) Interfaces Reinforced by Grafted Chains. <i>Macromolecules</i> , 1996, 29, 4728-4736.                             | 2.2  | 50        |
| 79 | Mechanics of contact and adhesion between viscoelastic spheres: An analysis of hysteresis during loading and unloading. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2002, 40, 772-793. | 2.4  | 50        |
| 80 | Interface fracture and viscoelastic deformation in finite size specimens. <i>Journal of Applied Physics</i> , 1992, 72, 3305-3316.  | 1.1  | 48        |
| 81 | Mechanical and swelling properties of PDMS interpenetrating polymer networks. <i>Polymer</i> , 2006, 47, 6226-6235.   | 1.8  | 48        |
| 82 | Effect of Rate on Adhesion and Static Friction of a Film-Terminated Fibrillar Interface. <i>Langmuir</i> , 2009, 25, 2765-2771.   | 1.6  | 48        |
| 83 | Cohesive Zone Models and Fracture. <i>Journal of Adhesion</i> , 2011, 87, 1-52.   | 1.8  | 48        |
| 84 | Analysis of adhesion and interface debonding in laminated safety glass. <i>Journal of Adhesion Science and Technology</i> , 1997, 11, 49-63.  | 1.4  | 46        |
| 85 | Strengthening Polymer Interfaces with Triblock Copolymers. <i>Macromolecules</i> , 1997, 30, 549-560.   | 2.2  | 46        |
| 86 | Rheology of a dual crosslink self-healing gel: Theory and measurement using parallel-plate torsional rheometry. <i>Journal of Rheology</i> , 2015, 59, 643-665.   | 1.3  | 46        |
| 87 | Extreme cavity expansion in soft solids: Damage without fracture. <i>Science Advances</i> , 2020, 6, eaaz0418.  | 4.7  | 45        |
| 88 | Fracture Toughness of Polymer Interface Reinforced With Diblock Copolymer: Effect of Homopolymer Molecular Weight. <i>Macromolecules</i> , 1996, 29, 7536-7543.   | 2.2  | 44        |
| 89 | Adhesion, friction, and compliance of bio-mimetic and bio-inspired structured interfaces. <i>Materials Science and Engineering Reports</i> , 2011, 72, 253-253.   | 14.8 | 44        |
| 90 | Gravity and Surface Tension Effects on the Shape Change of Soft Materials. <i>Langmuir</i> , 2013, 29, 8665-8674.   | 1.6  | 44        |

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|-----|--|-----|-----------|
| 91  | Phase Angle Effects on Fracture Toughness of Polymer Interfaces Reinforced with Block Copolymers. <i>Macromolecules</i> , 1994, 27, 4382-4390.   | 2.2 | 43        |
| 92  | Temperature dependence of case II diffusion. <i>Polymer</i> , 1988, 29, 1131-1136.   | 1.8 | 42        |
| 93  | Deformation near a liquid contact line on an elastic substrate. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140085.                            | 1.0 | 42        |
| 94  | Adhesive contact between a rippled elastic surface and a rigid spherical indenter: from partial to full contact. <i>Soft Matter</i> , 2011, 7, 10728.  | 1.2 | 41        |
| 95  | Fracture mechanics of a self-healing hydrogel with covalent and physical crosslinks: A numerical study. <i>Journal of the Mechanics and Physics of Solids</i> , 2018, 120, 79-95.                            | 2.3 | 41        |
| 96  | Mechanics of sintering thin films " I. Formulation and analytical results. <i>Mechanics of Materials</i> , 1990, 9, 107-119.   | 1.7 | 40        |
| 97  | Mapping Three-Dimensional Stress and Strain Fields within a Soft Hydrogel Using a Fluorescence Microscope. <i>Biophysical Journal</i> , 2012, 102, 2241-2250.  | 0.2 | 40        |
| 98  | Superior fracture resistance of fiber reinforced polyampholyte hydrogels achieved by extraordinarily large energy-dissipative process zones. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13431-13440. | 5.2 | 40        |
| 99  | The Role of Viscoelastic Adhesive Contact in the Sintering of Polymeric Particles. <i>Journal of Colloid and Interface Science</i> , 2001, 237, 267-282.   | 5.0 | 38        |
| 100 | Collapse of microchannels during anodic bonding: Theory and experiments. <i>Journal of Applied Physics</i> , 2004, 95, 2800-2808.  | 1.1 | 38        |
| 101 | Residual thermal stresses and calculation of the critical metal particle size for interfacial crack extension in metal-ceramic matrix composites. <i>Acta Materialia</i> , 1996, 44, 279-287.                | 3.8 | 37        |
| 102 | Detailed simulation of craze fibril failure at a crack tip in a glassy polymer. <i>Acta Materialia</i> , 1997, 45, 3555-3563.  | 3.8 | 37        |
| 103 | Contact measurement of internal fluid flow within poly(n-isopropylacrylamide) gels. <i>Journal of Chemical Physics</i> , 2007, 127, 094906.  | 1.2 | 37        |
| 104 | Surface Tension, Surface Energy, and Chemical Potential Due to Their Difference. <i>Langmuir</i> , 2013, 29, 11310-11316.  | 1.6 | 37        |
| 105 | Propagation of a brittle fracture in a viscoelastic fluid. <i>Soft Matter</i> , 2011, 7, 9474.   | 1.2 | 36        |
| 106 | Measurement of Interfacial Fracture Toughness Under Combined Mechanical and Thermal Stresses. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 1998, 120, 349-353.                         | 1.2 | 35        |
| 107 | Design of bio-inspired fibrillar interfaces for contact and adhesion " theory and experiments. <i>Journal of Adhesion Science and Technology</i> , 2007, 21, 1259-1280.                                      | 1.4 | 35        |
| 108 | Detachment of stretched viscoelastic fibrils. <i>European Physical Journal E</i> , 2008, 25, 253-266.  | 0.7 | 35        |

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|-----|---|-----|-----------|
| 109 | Stability of Nanoporous Materials. <i>Macromolecular Rapid Communications</i> , 2004, 25, 1487-1490.  | 2.0 | 34        |
| 110 | The effect of aspect ratio on adhesion and stiffness for soft elastic fibres. <i>Journal of the Royal Society Interface</i> , 2011, 8, 1166-1175.   | 1.5 | 34        |
| 111 | Viscoelastic crack healing and adhesion. <i>Journal of Applied Physics</i> , 1999, 86, 4232-4241.   | 1.1 | 33        |
| 112 | Effect of the Monomer Ratio on the Strengthening of Polymer Phase Boundaries by Random Copolymers. <i>Macromolecules</i> , 1997, 30, 6727-6736.   | 2.2 | 32        |
| 113 | Adhesion of a Fibrillar Interface on Wet and Rough Surfaces. <i>Journal of Adhesion</i> , 2010, 86, 39-61.  | 1.8 | 32        |
| 114 | Axisymmetric membrane in adhesive contact with rigid substrates: Analytical solutions under large deformation. <i>International Journal of Solids and Structures</i> , 2012, 49, 672-683. | 1.3 | 32        |
| 115 | Failure of Elastomeric Polymers Due to Rate Dependent Bond Rupture. <i>Langmuir</i> , 2004, 20, 6052-6064.  | 1.6 | 31        |
| 116 | Planar equilibrium shapes of a liquid drop on a membrane. <i>Soft Matter</i> , 2015, 11, 8960-8967.   | 1.2 | 31        |
| 117 | Measurement of the fracture toughness of polymer-non-polymer interfaces. <i>Journal of Materials Science</i> , 1993, 28, 4234-4244.   | 1.7 | 30        |
| 118 | The accuracy of the geometric assumptions in the JKR (JohnsonKendallRoberts) theory of adhesion. <i>Journal of Adhesion Science and Technology</i> , 2000, 14, 1297-1319.                 | 1.4 | 29        |
| 119 | Model-Independent Extraction of Adhesion Energy from Indentation Experiments. <i>Langmuir</i> , 2008, 24, 9401-9409.  | 1.6 | 29        |
| 120 | Aspects of cohesive zone models and crack growth in rate-dependent materials. <i>International Journal of Fracture</i> , 1991, 52, 119-144.   | 1.1 | 29        |
| 121 | Thermal Fluctuations Limit the Adhesive Strength of Compliant Solids. <i>Journal of Adhesion</i> , 2006, 82, 671-696.   | 1.8 | 28        |
| 122 | Mechanics of Bioinspired and Biomimetic Fibrillar Interfaces. <i>MRS Bulletin</i> , 2007, 32, 492-495.  | 1.7 | 28        |
| 123 | Molecular weight dependence of the fracture toughness of glassy polymers arising from crack propagation through a craze. <i>Polymer Engineering and Science</i> , 1995, 35, 419-425.      | 1.5 | 27        |
| 124 | The energy release rate of a pressurized crack in soft elastic materials: effects of surface tension and large deformation. <i>Soft Matter</i> , 2014, 10, 7723-7729.                     | 1.2 | 27        |
| 125 | Interplay between intermolecular interactions and chain pullout in the adhesion of elastomer. <i>Macromolecules</i> , 1994, 27, 608-609.  | 2.2 | 26        |
| 126 | Title is missing!. <i>International Journal of Fracture</i> , 2000, 104, 387-407.   | 1.1 | 26        |



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|-----|---|-----|-----------|
| 127 | Title is missing!. International Journal of Fracture, 2001, 109, 1-28.  | 1.1 | 26        |
| 128 | Friction of Poroelastic Contacts with Thin Hydrogel Films. Langmuir, 2018, 34, 9617-9626.   | 1.6 | 26        |
| 129 | The Effective Thermal Conductivity of a Packing of Spheres. Journal of Applied Mechanics, Transactions ASME, 1990, 57, 789-791.   | 1.1 | 25        |
| 130 | Barnacles resist removal by crack trapping. Journal of the Royal Society Interface, 2011, 8, 868-879.   | 1.5 | 25        |
| 131 | Time-temperature equivalence in a PVA dual cross-link self-healing hydrogel. Journal of Rheology, 2018, 62, 991-1000.   | 1.3 | 25        |
| 132 | The mechanics of self-similar crack growth in an elastic power-law creeping material. International Journal of Solids and Structures, 1986, 22, 357-372.  | 1.3 | 24        |
| 133 | Estimation of interfacial shear strength: an application of a new statistical theory for single fiber composite test. Composites Science and Technology, 1999, 59, 2037-2046.                         | 3.8 | 24        |
| 134 | Rheological properties and adhesive failure of thin viscoelastic layers. Journal of Rheology, 2002, 46, 273-294.  | 1.3 | 24        |
| 135 | Adhesive contact of a rigid circular cylinder to a soft elastic substrate – the role of surface tension. Soft Matter, 2015, 11, 3844-3851.  | 1.2 | 24        |
| 136 | Time dependent fracture of soft materials: linear versus nonlinear viscoelasticity. Soft Matter, 2020, 16, 6163-6179.   | 1.2 | 24        |
| 137 | Analysis of fragmentation in the single filament composite: Roles of fiber strength distributions and exclusion zone models. Journal of the Mechanics and Physics of Solids, 1996, 44, 1715-1737.     | 2.3 | 23        |
| 138 | Strength statistics of adhesive contact between a fibrillar structure and a rough substrate. Journal of the Royal Society Interface, 2008, 5, 441-448.  | 1.5 | 23        |
| 139 | Mechanism of Sliding Friction on a Film-Terminated Fibrillar Interface. Langmuir, 2009, 25, 2772-2780.  | 1.6 | 23        |
| 140 | The surface stress of biomedical silicones is a stimulant of cellular response. Science Advances, 2020, 6, eaay0076.  | 4.7 | 23        |
| 141 | Stress Relaxation Near the Tip of a Stationary Mode I Crack in a Poroelastic Solid. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .  | 1.1 | 22        |
| 142 | Modeling the failure of an adhesive layer in a peel test. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 2277-2291.   | 2.4 | 21        |
| 143 | Large deformation contact mechanics of long rectangular membranes. I. Adhesionless contact. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130424. | 1.0 | 21        |
| 144 | Mechanics of an adhesive tape in a zero degree peel test: effect of large deformation and material nonlinearity. Soft Matter, 2018, 14, 9681-9692.  | 1.2 | 21        |

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|-----|---|-----|-----------|
| 145 | A boundary element method for calculating the K field for cracks along a bimaterial interface. Computational Mechanics, 1994, 15, 58-78.  | 2.2 | 20        |
| 146 | Steam pressure induced in crack-like cavities in moisture saturated polymer matrix composites during rapid heating. International Journal of Solids and Structures, 2005, 42, 1055-1072.        | 1.3 | 20        |
| 147 | Compliance of a microfibril subjected to shear and normal loads. Journal of the Royal Society Interface, 2008, 5, 1087-1097.  | 1.5 | 20        |
| 148 | Adhesion of Microchannel-Based Complementary Surfaces. Langmuir, 2012, 28, 4213-4222.   | 1.6 | 20        |
| 149 | Droplets on an elastic membrane: Configurational energy balance and modified Young equation. Journal of the Mechanics and Physics of Solids, 2020, 138, 103902.                                 | 2.3 | 20        |
| 150 | Evaluation of hypersingular integrals in the boundary element method by complex variable techniques. International Journal of Solids and Structures, 1997, 34, 203-221.                         | 1.3 | 19        |
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