Haneesh Kesari

List of Publications by Year
in descending order

25 papers	546 citations	759233 12 h-index	642732 23 g-index
26 all docs	26 docs citations	26 times ranked	529 citing authors

#	Article	IF	Citations
1	Determining rigid body motion from accelerometer data through the square-root of a negative semi-definite tensor, with applications in mild traumatic brain injury. Computer Methods in Applied Mechanics and Engineering, 2022, 390, 114271.	6.6	3
2	A quantitative relationship between rotational head kinematics and brain tissue strain from a 2-D parametric finite element analysis. Brain Multiphysics, 2021, 2, 100024.	2.3	26
3	Angle-independent optimal adhesion in plane peeling of thin elastic films at large surface roughnesses. Journal of the Mechanics and Physics of Solids, 2021, 148, 104270.	4.8	10
4	Force sensors for measuring microenvironmental forces during mesenchymal condensation. Biomaterials, 2021, 270, 120684.	11.4	7
5	Sawtooth patterns in flexural force curves of structural biological materials are not signatures of toughness enhancement: Part I. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 119, 104362.	3.1	5
6	Sawtooth patterns in flexural force curves of structural biological materials are not signatures of toughness enhancement: Part II. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 124, 104787.	3.1	1
7	An accelerometer-only algorithm for determining the acceleration field of a rigid body, with application in studying the mechanics of mild traumatic brain injury. Journal of the Mechanics and Physics of Solids, 2020, 143, 104014.	4.8	7
8	Lamellar architectures in stiff biomaterials may not always be templates for enhancing toughness in composites. Nature Communications, 2020, 11, 373.	12.8	38
9	Effect of machine stiffness on interpreting contact force–indentation depth curves in adhesive elastic contact experiments. Journal of the Mechanics and Physics of Solids, 2019, 131, 404-423.	4.8	10
10	Depth-dependent hysteresis in adhesive elastic contacts at large surface roughness. Scientific Reports, 2019, 9, 1639.	3.3	34
11	Effects of geometric nonlinearity in an adhered microbeam for measuring the work of adhesion. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170594.	2.1	0
12	Molecular statics study of depth-dependent hysteresis in nano-scale adhesive elastic contacts. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 055002.	2.0	9
13	Enhanced bending failure strain in biological glass fibers due to internal lamellar architecture. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 76, 69-75.	3.1	15
14	A new structure-property connection in the skeletal elements of the marine sponge Tethya aurantia that guards against buckling instability. Scientific Reports, 2017, 7, 39547.	3.3	13
15	A Millimeter Scale Flexural Testing System for Measuring the Mechanical Properties of Marine Sponge Spicules. Journal of Visualized Experiments, 2017, , .	0.3	2
16	Mean deformation metrics for quantifying 3D cell–matrix interactions without requiring information about matrix material properties. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2898-2903.	7.1	60
17	New functional insights into the internal architecture of the laminated anchor spicules of *Euplectella aspergillum*. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4976-4981.	7.1	50
18	Significance of Nucleation Kinetics in Sn Whisker Formation. Journal of Electronic Materials, 2014, 43, 4435-4441.	2.2	20

#	Article	IF	Citations
19	Time integrators based on approximate discontinuous Hamiltonians. International Journal for Numerical Methods in Engineering, 2012, 89, 71-104.	2.8	1
20	Adhesive Frictionless Contact Between an Elastic Isotropic Half-Space and a Rigid Axi-Symmetric Punch. Journal of Elasticity, 2012, 106, 203-224.	1.9	16
21	Effective macroscopic adhesive contact behavior induced by small surface roughness. Journal of the Mechanics and Physics of Solids, 2011, 59, 2488-2510.	4.8	57
22	Role of surface roughness in hysteresis during adhesive elastic contact. Philosophical Magazine Letters, 2010, 90, 891-902.	1.2	63
23	Transverse and torsional shear stresses in prismatic bodies having inhomogeneous material properties using a new 2D stress function. Journal of Mechanics of Materials and Structures, 2009, 4, 659-674.	0.6	9
24	A new software tool (VA-BATTS) to calculate bending, axial, torsional and transverse shear stresses within bone cross sections having inhomogeneous material properties. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 463-476.	1.6	24
25	Analytical solutions for the stiffness and damping coefficients of squeeze films in MEMS devices with perforated back plates. Journal of Micromechanics and Microengineering, 2005, 15, 2083-2092.	2.6	66