

Structure and mechanics of interfaces in biological mat

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Manufacture and Mechanics of Topologically Interlocked Material Assemblies. Applied Mechanics Reviews, 2016, 68, .	4.5	48
2	Robust bioinspired graphene-based nanocomposites via synergistic toughening of zinc ions and covalent bonding. Journal of Materials Chemistry A, 2016, 4, 17073-17079.	5.2	44
3	Dramatic Enhancement of Graphene Oxide/Silk Nanocomposite Membranes: Increasing Toughness, Strength, and Young's modulus via Annealing of Interfacial Structures. ACS Applied Materials & Interfaces, 2016, 8, 24962-24973.	4.0	81
4	Toughening of thin ceramic plates using bioinspired surface patterns. International Journal of Solids and Structures, 2016, 97-98, 389-399.	1.3	35
5	Carving 3D architectures within glass: Exploring new strategies to transform the mechanics and performance of materials. Extreme Mechanics Letters, 2016, 7, 104-113.	2.0	50
6	Advanced Structural Materials by Bioinspiration. Advanced Engineering Materials, 2017, 19, 1600787.	1.6	103
7	A General Bioinspired, Metals-Based Synergic Cross-Linking Strategy toward Mechanically Enhanced Materials. ACS Nano, 2017, 11, 2835-2845.	7.3	39
8	Surface protection in bio-shields via a functional soft skin layer: Lessons from the turtle shell. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 73, 68-75.	1.5	19
9	Bio-inspired "jigsaw"-like interlocking sutures: Modeling, optimization, 3D printing and testing. Journal of the Mechanics and Physics of Solids, 2017, 102, 224-238.	2.3	86
10	Lamellar Ceramic Semicrystalline-Polymer Composite Fabricated by Freeze Casting. Advanced Engineering Materials, 2017, 19, 1700214.	1.6	8
11	Functional gradients and heterogeneities in biological materials: Design principles, functions, and bioinspired applications. Progress in Materials Science, 2017, 88, 467-498.	16.0	554
12	Learning from nature: constructing high performance graphene-based nanocomposites. Materials Today, 2017, 20, 210-219.	8.3	104
13	Fatigue Resistant Bioinspired Composite from Synergistic Two-Dimensional Nanocomponents. ACS Nano, 2017, 11, 7074-7083.	7.3	49
14	Printing nature: Unraveling the role of nacre's mineral bridges. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 76, 135-144.	1.5	119
15	Mechanical properties of crossed-lamellar structures in biological shells: A review. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 74, 54-71.	1.5	87
16	Magnetically actuated functional gradient nanocomposites for strong and ultra-durable biomimetic interfaces/surfaces. Materials Horizons, 2017, 4, 869-877.	6.4	28
17	Cymbiola nobilis shell: Toughening mechanisms in a crossed-lamellar structure. Scientific Reports, 2017, 7, 40043.	1.6	26
18	Nacre-mimetic bulk lamellar composites reinforced with high aspect ratio glass flakes. Bioinspiration and Biomimetics, 2017, 12, 016002.	1.5	1

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19	Granular Nanostructure: A Facile Biomimetic Strategy for the Design of Supertough Polymeric Materials with High Ductility and Strength. <i>Advanced Materials</i> , 2017, 29, 1704661.	11.1	135
20	Fatigue-Resistant Bioinspired Graphene-Based Nanocomposites. <i>Advanced Functional Materials</i> , 2017, 27, 1703459.	7.8	37
21	Catastrophic failure of nacre under pure shear stresses of torsion. <i>Scientific Reports</i> , 2017, 7, 13123.	1.6	42
22	High-Performance Nanocomposites Inspired by Nature. <i>Advanced Materials</i> , 2017, 29, 1702959.	11.1	138
23	Freeze Casting for Assembling Bioinspired Structural Materials. <i>Advanced Materials</i> , 2017, 29, 1703155.	11.1	160
24	Topological Design of Ultrastrong and Highly Conductive Graphene Films. <i>Advanced Materials</i> , 2017, 29, 1702831.	11.1	108
25	Aligning cellulose nanofibril dispersions for tougher fibers. <i>Scientific Reports</i> , 2017, 7, 11860.	1.6	79
26	Computational Framework to Predict Failure and Performance of Bone-Inspired Materials. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 3236-3243.	2.6	22
27	Template-Guided Assembly of Silk Fibroin on Cellulose Nanofibers for Robust Nanostructures with Ultrafast Water Transport. <i>ACS Nano</i> , 2017, 11, 12008-12019.	7.3	107
28	2.10 Bone as a Material $\hat{\sigma}$, 2017, , 202-227.		10
29	Bioinspired Multifunctional Ceramic Platelet-Reinforced Piezoelectric Polymer Composite. <i>Advanced Engineering Materials</i> , 2017, 19, 1600570.	1.6	11
30	Design, 3D printing and testing of architected materials with bistable interlocks. <i>Extreme Mechanics Letters</i> , 2017, 11, 1-7.	2.0	45
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32	Intermittent beading in fiber composites. <i>Composites Science and Technology</i> , 2018, 160, 21-31.	3.8	24
33	Multiple Synergistic Toughening Graphene Nanocomposites through Cadmium Ions and Cellulose Nanocrystals. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800145.	1.9	23
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39	Precision compatibilizers for composites: in-between self-aggregation, surfaces recognition and interface stabilization. <i>Soft Matter</i> , 2018, 14, 1992-1995.	1.2	9
40	Bioinspired Nacre-Like Ceramic with Nickel Inclusions Fabricated by Electroless Plating and Spark Plasma Sintering. <i>Advanced Engineering Materials</i> , 2018, 20, 1700782.	1.6	26
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43	Local and global measurements show that damage initiation in articular cartilage is inhibited by the surface layer and has significant rate dependence. <i>Journal of Biomechanics</i> , 2018, 72, 63-70.	0.9	15
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