

Merger of structure and material in nacre and bone – materials

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Citation Report

#	ARTICLE	IF	CITATIONS
3	Supramolecular Control of Stiffness and Strength in Lightweight High-Performance Nacre-Mimetic Paper with Fire-Shielding Properties. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 6448-6453.	7.2	204
4	Ductile and brittle material removal mechanisms in natural nacre—A model for novel implant materials. <i>Journal of Materials Processing Technology</i> , 2010, 210, 1827-1837.	3.1	17
5	Toward delivery of multiple growth factors in tissue engineering. <i>Biomaterials</i> , 2010, 31, 6279-6308.	5.7	574
6	A novel biomimetic approach to the design of high-performance ceramic-metal composites. <i>Journal of the Royal Society Interface</i> , 2010, 7, 741-753.	1.5	247
7	Nacre from mollusk shells: a model for high-performance structural materials. <i>Bioinspiration and Biomimetics</i> , 2010, 5, 035001.	1.5	200
8	Large-Area, Lightweight and Thick Biomimetic Composites with Superior Material Properties via Fast, Economic, and Green Pathways. <i>Nano Letters</i> , 2010, 10, 2742-2748.	4.5	435
9	On the Mechanistic Origins of Toughness in Bone. <i>Annual Review of Materials Research</i> , 2010, 40, 25-53.	4.3	560
10	A Multiscale Study of High Performance Double-Walled Nanotube-Polymer Fibers. <i>ACS Nano</i> , 2010, 4, 6463-6476.	7.3	120
11	<i>Colloquium</i> : Failure of molecules, bones, and the Earth itself. <i>Reviews of Modern Physics</i> , 2010, 82, 1459-1487.	16.4	42
12	Self-assembly of organic-inorganic nanocomposites with nacre-like hierarchical structures. <i>Soft Matter</i> , 2011, 7, 4828.	1.2	19
13	Tablet-level origin of toughening in abalone shells and translation to synthetic composite materials. <i>Nature Communications</i> , 2011, 2, 173.	5.8	324
14	Nanostructure of Biogenic Calcite Crystals: A View by Small-Angle X-Ray Scattering. <i>Crystal Growth and Design</i> , 2011, 11, 2054-2058.	1.4	35
15	Nanoconfinement of Spider Silk Fibrils Begets Superior Strength, Extensibility, and Toughness. <i>Nano Letters</i> , 2011, 11, 5038-5046.	4.5	222
16	Hierarchical assembly of micro-/nano-building blocks: bio-inspired rigid structural functional materials. <i>Chemical Society Reviews</i> , 2011, 40, 3764.	18.7	341
17	Clay Nanopaper with Tough Cellulose Nanofiber Matrix for Fire Retardancy and Gas Barrier Functions. <i>Biomacromolecules</i> , 2011, 12, 633-641.	2.6	383
18	Deformation and Fracture Mechanisms of Bone and Nacre. <i>Annual Review of Materials Research</i> , 2011, 41, 41-73.	4.3	192
19	Structural hierarchies define toughness and defect-tolerance despite simple and mechanically inferior brittle building blocks. <i>Scientific Reports</i> , 2011, 1, 35.	1.6	163
20	Biomimetic design and assembly of organic-inorganic composite films with simultaneously enhanced strength and toughness. <i>Chemical Communications</i> , 2011, 47, 5274.	2.2	71

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80	pH-Based Regulation of Hydrogel Mechanical Properties Through Mussel-Inspired Chemistry and Processing. <i>Advanced Functional Materials</i> , 2013, 23, 1111-1119.	7.8	214
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163	Hybrid Supramolecular and Colloidal Hydrogels that Bridge Multiple Length Scales. <i>Angewandte Chemie</i> , 2015, 127, 5473-5478.	1.6	12
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