

Mussel-Inspired Adhesives and Coatings

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Citation Report

#	ARTICLE	IF	CITATIONS
1	pH responsive self-healing hydrogels formed by boronate-catechol complexation. <i>Chemical Communications</i> , 2011, 47, 7497.	2.2	392
2	Enzymatically Degradable Mussel-Inspired Adhesive Hydrogel. <i>Biomacromolecules</i> , 2011, 12, 4326-4334.	2.6	190
3	Changing environments and structure-property relationships in marine biomaterials. <i>Journal of Experimental Biology</i> , 2012, 215, 873-883.	0.8	47
4	Mini-review: The role of redox in Dopa-mediated marine adhesion. <i>Biofouling</i> , 2012, 28, 865-877.	0.8	122
5	Characterization of the protein fraction of the temporary adhesive secreted by the tube feet of the sea star <i>Asterias rubens</i> . <i>Biofouling</i> , 2012, 28, 289-303.	0.8	38
6	Molecular mechanics of dihydroxyphenylalanine at a silica interface. <i>Applied Physics Letters</i> , 2012, 101, 083702.	1.5	27
7	Liquid-infused structured surfaces with exceptional anti-biofouling performance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13182-13187.	3.3	783
8	Identification, Characterization, and Expression Levels of Putative Adhesive Proteins From the Tube-Dwelling Polychaete <i>Sabellaria alveolata</i> . <i>Biological Bulletin</i> , 2012, 223, 217-225.	0.7	30
9	Biological materials: Functional adaptations and bioinspired designs. <i>Progress in Materials Science</i> , 2012, 57, 1492-1704.	16.0	582
10	Rapidly Cross-Linkable DOPA Containing Terpolymer Adhesives and PEG-Based Cross-Linkers for Biomedical Applications. <i>Macromolecules</i> , 2012, 45, 9666-9673.	2.2	110
11	Enhanced mechanical pathways through nature's building blocks: amino acids. <i>Soft Matter</i> , 2012, 8, 11431.	1.2	26
13	Challenges and opportunities. <i>Adhesion Adhesives and Sealants</i> , 2012, 9, 44-47.	0.1	0
14	Changes in Permeability and in Mechanical Properties of Layer-by-Layer Films Made from Poly(allylamine) and Montmorillonite Postmodified upon Reaction with Dopamine. <i>Biointerphases</i> , 2012, 7, 59.	0.6	5
15	Mussel-mimetic tissue adhesive for fetal membrane repair: An ex vivo evaluation. <i>Acta Biomaterialia</i> , 2012, 8, 4365-4370.	4.1	64
16	Adhesion of Mussel Foot Protein Mefp-5 to Mica: An Underwater Superglue. <i>Biochemistry</i> , 2012, 51, 6511-6518.	1.2	194
17	Mussel-inspired load bearing metal-polymer glues. <i>Chemical Communications</i> , 2012, 48, 6238.	2.2	57
18	Mussel-Glue Derived Peptide-Polymer Conjugates to Realize Enzyme-Activated Antifouling Coatings. <i>ACS Macro Letters</i> , 2012, 1, 871-875.	2.3	50
19	Natural Tissue Microenvironmental Conditions Modulate Adhesive Material Performance. <i>Langmuir</i> , 2012, 28, 15402-15409.	1.6	32

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20	Bio-Inspired Antifouling Strategies. Annual Review of Materials Research, 2012, 42, 211-229.	4.3	242
21	Zebra mussel adhesion: Structure of the byssal adhesive apparatus in the freshwater mussel, <i>Dreissena polymorpha</i> . Journal of Structural Biology, 2012, 177, 613-620.	1.3	28
22	Functional Nanogels as Platforms for Imparting Antibacterial, Antibiofilm, and Antiadhesion Activities to Stainless Steel. Advanced Functional Materials, 2012, 22, 5271-5282.	7.8	71
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25	Clay and DOPA Containing Polyelectrolyte Multilayer Film for Imparting Anticorrosion Properties to Galvanized Steel. Langmuir, 2012, 28, 2971-2978.	1.6	32
26	Mussel-Inspired Thiol-Ene Polymer Networks: Influencing Network Properties and Adhesion with Catechol Functionality. Chemistry of Materials, 2012, 24, 3633-3642.	3.2	81
27	Four-Stranded Coiled-Coil Elastic Protein in the Byssus of the Giant Clam, <i>Tridacna maxima</i> . Biomacromolecules, 2012, 13, 332-341.	2.6	20
28	Kinetics of polydopamine film deposition as a function of pH and dopamine concentration: Insights in the polydopamine deposition mechanism. Journal of Colloid and Interface Science, 2012, 386, 366-372.	5.0	330
29	Degradation of polydopamine coatings by sodium hypochlorite: A process depending on the substrate and the film synthesis method. Polymer Degradation and Stability, 2012, 97, 1844-1849.	2.7	39
30	Immobilization of epidermal growth factor on titanium and stainless steel surfaces via dopamine treatment. Materials Science and Engineering C, 2012, 32, 2552-2561.	3.8	42
31	Competition between Oxidation and Coordination in Cross-Linking of Polystyrene Copolymer Containing Catechol Groups. ACS Macro Letters, 2012, 1, 457-460.	2.3	168
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36	Localization of the bioadhesive precursors of the sandcastle worm, <i>Phragmatopoma californica</i> (Fewkes). Journal of Experimental Biology, 2012, 215, 351-361.	0.8	68
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38	Universal Surface-Initiated Polymerization of Antifouling Zwitterionic Brushes Using a Mussel-Mimetic Peptide Initiator. <i>Langmuir</i> , 2012, 28, 7258-7266.	1.6	159
39	Significance of the Amide Functionality on DOPA-Based Monolayers on Gold. <i>Langmuir</i> , 2012, 28, 16900-16908.	1.6	14
40	Self-Assembly and Emulsification of Poly{[styrene- <i>alt</i> -maleic acid]- <i>co</i> -[styrene- <i>alt</i> -(<i>N</i> -3,4-dihydroxyphenylethyl-maleamic acid)]}. <i>Langmuir</i> , 2012, 28, 9211-9222.	1.6	78
41	Activity Control of Mussel Glue Derived Enzymes: A Study on Thermoresponsive Tyrosinase-PNIPAM Conjugates. <i>ACS Symposium Series</i> , 2012, , 271-285.	0.5	3
42	Towards High-Performance Bioinspired Composites. <i>Advanced Materials</i> , 2012, 24, 5024-5044.	11.1	332
43	Rapid self-healing hydrogels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 4383-4388.	3.3	633
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45	Adsorption of Mefp-1: Influence of pH on adsorption kinetics and adsorbed amount. <i>Journal of Colloid and Interface Science</i> , 2012, 379, 107-113.	5.0	26
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50	Genetic engineering in biomimetic composites. <i>Trends in Biotechnology</i> , 2012, 30, 191-197.	4.9	26
51	Combining biomimetic principles from the lotus leaf and mussel adhesive: polystyrene films with superhydrophobic and adhesive layers. <i>RSC Advances</i> , 2013, 3, 9352.	1.7	32
52	Impact tolerance in mussel thread networks by heterogeneous material distribution. <i>Nature Communications</i> , 2013, 4, 2187.	5.8	71
53	Mini-review: Barnacle adhesives and adhesion. <i>Biofouling</i> , 2013, 29, 735-749.	0.8	128
54	Iron binding β -hairpin peptides. <i>BioMetals</i> , 2013, 26, 667-675.	1.8	3
55	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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57	Colorless Multifunctional Coatings Inspired by Polyphenols Found in Tea, Chocolate, and Wine. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10766-10770.	7.2	713
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61	Polydopamine Microcapsules with Different Wall Structures Prepared by a Template-Mediated Method for Enzyme Immobilization. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 9991-9997.	4.0	86
62	Fabrication of dopamine-modified hyaluronic acid/chitosan multilayers on titanium alloy by layer-by-layer self-assembly for promoting osteoblast growth. <i>Applied Surface Science</i> , 2013, 284, 732-737.	3.1	51
63	The Intersection of Interfacial Forces and Electrochemical Reactions. <i>Journal of Physical Chemistry B</i> , 2013, 117, 16369-16387.	1.2	15
65	Byssal proteins of the freshwater zebra mussel, <i>Dreissena polymorpha</i> . <i>Biofouling</i> , 2013, 29, 77-85.	0.8	35
66	Engineering materials from proteins. <i>AIChE Journal</i> , 2013, 59, 3558-3568.	1.8	20
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68	Mussel-inspired pH-triggered reversible foamed multi-responsive gel – the surprising effect of water. <i>Chemical Communications</i> , 2013, 49, 4685.	2.2	48
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70	Mussel inspired surface functionalization of electrospun nanofibers for bio-applications. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 17029.	1.3	38
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73	Silver-Polydopamine Hybrid Coatings of Electrospun Poly(vinyl alcohol) Nanofibers. <i>Macromolecular Materials and Engineering</i> , 2013, 298, 547-554.	1.7	103
74	Polydopamine-enabled surface functionalization of gold nanorods for cancer cell-targeted imaging and photothermal therapy. <i>Nanomedicine</i> , 2013, 8, 17-28.	1.7	192

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76	The photocrosslinkable tissue adhesive based on copolymeric dextran/HEMA. <i>Carbohydrate Polymers</i> , 2013, 92, 1423-1431.	5.1	30
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81	Fusion of nacre, mussel, and lotus leaf: bio-inspired graphene composite paper with multifunctional integration. <i>Nanoscale</i> , 2013, 5, 5758.	2.8	59
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83	Dual-Responsive Capsules with Tunable Low Critical Solution Temperatures and Their Loading and Release Behavior. <i>Langmuir</i> , 2013, 29, 5631-5637.	1.6	56
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85	Influence of current collector on capacitive behavior and cycling stability of Tiron doped polypyrrole electrodes. <i>Journal of Power Sources</i> , 2013, 240, 42-49.	4.0	69
86	Bioinspired, Calcium-Free Alginate Hydrogels with Tunable Physical and Mechanical Properties and Improved Biocompatibility. <i>Biomacromolecules</i> , 2013, 14, 2004-2013.	2.6	242
87	Self-Healing Mussel-Inspired Multi-pH-Responsive Hydrogels. <i>Biomacromolecules</i> , 2013, 14, 297-301.	2.6	399
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90	Molecular surface chemistry in marine bioadhesion. <i>Advances in Colloid and Interface Science</i> , 2013, 195-196, 1-18.	7.0	68
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106	Light-triggered Multifunctionality at Surfaces Mediated by Photolabile Protecting Groups. <i>Macromolecular Rapid Communications</i> , 2013, 34, 310-329.	2.0	69
107	Synthetic adhesive oligopeptides with rigid polyhydroxylated amino acids. <i>Biopolymers</i> , 2013, 99, 273-281.	1.2	2
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123	ENGINEERING OF SURFACE FUNCTIONALITY ONTO POLYSTYRENE MICROCARRIERS FOR THE ATTACHMENT AND GROWTH OF HUMAN ENDOTHELIAL CELLS. <i>Journal of Molecular and Engineering Materials</i> , 2014, 02, 1450003.	0.9	1
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126	Dopamine-Based Coatings and Hydrogels: Toward Substitution-Related Structure-Property Relationships. <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 2403-2413.	1.1	36
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134	Biomimetic Micro-patterning of Epoxy Coatings for Enhanced Surface Hydrophobicity and Low Friction. <i>Macromolecular Materials and Engineering</i> , 2014, 299, 237-247.	1.7	14
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136	Thiol-ene adhesives from clove oil derivatives. <i>RSC Advances</i> , 2014, 4, 61927-61935.	1.7	25
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145	Organ Repair, Hemostasis, and In Vivo Bonding of Medical Devices by Aqueous Solutions of Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 6369-6373.	7.2	197
146	A review of new methods of surface chemical modification, dispersion and electrophoretic deposition of metal oxide particles. <i>RSC Advances</i> , 2014, 4, 22716.	1.7	165
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150	Physicochemical perspective on polydopamine and poly(catecholamine) films for their applications in biomaterial coatings (Review). <i>Biointerphases</i> , 2014, 9, 030801.	0.6	39
151	Tuning the low critical solution temperature of polymer brushes grafted on single-walled carbon nanotubes and temperature dependent loading and release properties. <i>Journal of Polymer Science Part A</i> , 2014, 52, 1807-1814.	2.5	16

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153	Molecular mechanics of mussel adhesion proteins. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 62, 19-30.	2.3	56
154	The Mechanical Role of Metal Ions in Biogenic Protein-Based Materials. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12026-12044.	7.2	229
155	Bio-Inspired Dopamine Functionalization of Polypyrrole for Improved Adhesion and Conductivity. <i>Macromolecular Rapid Communications</i> , 2014, 35, 350-354.	2.0	78
156	Kovalente Oberflächenmodifikationen von Oxiden. <i>Angewandte Chemie</i> , 2014, 126, 6438-6474.	1.6	50
157	Oxidative Nanopeeling Chemistry-Based Synthesis and Photodynamic and Photothermal Therapeutic Applications of Plasmonic Core-Petal Nanostructures. <i>Journal of the American Chemical Society</i> , 2014, 136, 16317-16325.	6.6	152
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