

Phillip B Messersmith

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2968185/publications.pdf>

Version: 2024-02-01

195
papers

38,150
citations

6254

80
h-index

3182

186
g-index

201
all docs

201
docs citations

201
times ranked

30197
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface Force Measurements of Mussel-Inspired Pressure-Sensitive Adhesives. ACS Applied Materials & Interfaces, 2022, 14, 6212-6220.	8.0	6
2	Sustained Exosome-Guided Macrophage Polarization Using Hydrolytically Degradable PEG Hydrogels for Cutaneous Wound Healing: Identification of Key Proteins and MiRNAs, and Sustained Release Formulation. Small, 2022, 18, e2200060.	10.0	54
3	A multi-tasking polypeptide from bloodworm jaws: Catalyst, template, and copolymer in film formation. Matter, 2022, 5, 1890-1908.	10.0	8
4	Phenolic-enabled nanotechnology: versatile particle engineering for biomedicine. Chemical Society Reviews, 2021, 50, 4432-4483.	38.1	163
5	A Modular Strategy for Functional Pressure Sensitive Adhesives. ACS Applied Materials & Interfaces, 2021, 13, 3161-3165.	8.0	17
6	Bioinspired Macromolecular Materials. Biomacromolecules, 2021, 22, 1-3.	5.4	5
7	High-throughput screening of multifunctional nanocoatings based on combinations of polyphenols and catecholamines. Materials Today Bio, 2021, 10, 100108.	5.5	8
8	Unlocking mammalian regeneration through hypoxia inducible factor one alpha signaling. Biomaterials, 2021, 269, 120646.	11.4	19
9	Laser-induced graphitization of polydopamine leads to enhanced mechanical performance while preserving multifunctionality. Nature Communications, 2020, 11, 4848.	12.8	38
10	Interfacial Assembly Inspired by Marine Mussels and Antifouling Effects of Polypeptoids: A Neutron Reflection Study. Langmuir, 2020, 36, 12309-12318.	3.5	9
11	Facile Macrocytic Polyphenol Barrier Coatings for PDMS Microfluidic Devices. Advanced Functional Materials, 2020, 30, 2001274.	14.9	12
12	Molecular design principles of Lysine-DOPA wet adhesion. Nature Communications, 2020, 11, 3895.	12.8	83
13	Supramolecular Cross-Links in Mussel-Inspired Tissue Adhesives. ACS Macro Letters, 2020, 9, 1439-1445.	4.8	31
14	An injectable hydrogel-formulated inhibitor of prolyl-4-hydroxylase promotes T regulatory cell recruitment and enhances alveolar bone regeneration during resolution of experimental periodontitis. FASEB Journal, 2020, 34, 13726-13740.	0.5	29
15	Cooperativity of Catechols and Amines in High-Performance Dry/Wet Adhesives. Angewandte Chemie - International Edition, 2020, 59, 16616-16624.	13.8	76
16	Cooperativity of Catechols and Amines in High-Performance Dry/Wet Adhesives. Angewandte Chemie, 2020, 132, 16759-16767.	2.0	25
17	Conformal Bacterial Cellulose Coatings as Lubricious Surfaces. ACS Nano, 2020, 14, 3885-3895.	14.6	42
18	Surface Design for Immobilization of an Antimicrobial Peptide Mimic for Efficient Anti-Biofouling. Chemistry - A European Journal, 2020, 26, 5789-5793.	3.3	25

#	ARTICLE	IF	CITATIONS
19	Bioinspired Design Provides High-Strength Benzoxazine Structural Adhesives. <i>Angewandte Chemie</i> , 2019, 131, 12399-12407.	2.0	20
20	Enhanced Adhesion and Cohesion of Bioinspired Dry/Wet Pressure-Sensitive Adhesives. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 28296-28306.	8.0	92
21	Bioinspired Design Provides High-Strength Benzoxazine Structural Adhesives. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12271-12279.	13.8	79
22	Mechanical Enhancement of Bioinspired Polydopamine Nanocoatings. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43599-43607.	8.0	70
23	Universal nanothin silk coatings via controlled spider silk self-assembly. <i>Biomaterials Science</i> , 2019, 7, 683-695.	5.4	15
24	Supramolecular Polymer Hydrogels for Drug-Induced Tissue Regeneration. <i>ACS Nano</i> , 2019, 13, 5493-5501.	14.6	48
25	Biomaterials in fetal surgery. <i>Biomaterials Science</i> , 2019, 7, 3092-3109.	5.4	21
26	Pulling together to improve stability. <i>Nature Chemistry</i> , 2019, 11, 295-296.	13.6	1
27	Marine-inspired polymers in medical adhesion. <i>European Polymer Journal</i> , 2019, 116, 134-143.	5.4	98
28	Direct Evidence for the Polymeric Nature of Polydopamine. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1077-1082.	13.8	148
29	Direct Evidence for the Polymeric Nature of Polydopamine. <i>Angewandte Chemie</i> , 2019, 131, 1089-1094.	2.0	44
30	Ten Years of Polydopamine: Current Status and Future Directions. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7521-7522.	8.0	52
31	Drug delivery and epimorphic salamander-type mouse regeneration: A full parts and labor plan. <i>Advanced Drug Delivery Reviews</i> , 2018, 129, 254-261.	13.7	8
32	Polydopamine Surface Chemistry: A Decade of Discovery. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7523-7540.	8.0	1,232
33	Mussel-Inspired Conductive Polymer Binder for Si-Alloy Anode in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 5440-5446.	8.0	90
34	Polymer@MOFs capsules prepared through controlled interfacial mineralization for switching on/off enzymatic reactions. <i>Applied Materials Today</i> , 2018, 13, 320-328.	4.3	14
35	Surface Functionalization and Patterning by Multifunctional Resorcinarenes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 39268-39278.	8.0	14
36	Untemplated Resveratrol-Mediated Polydopamine Nanocapsule Formation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34792-34801.	8.0	35

#	ARTICLE	IF	CITATIONS
37	Injectable dynamic covalent hydrogels of boronic acid polymers cross-linked by bioactive plant-derived polyphenols. <i>Biomaterials Science</i> , 2018, 6, 2487-2495.	5.4	72
38	Self-Assembled Nanofibers for Strong Underwater Adhesion: The Trick of Barnacles. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 25017-25025.	8.0	40
39	Facile synthesis and surface modification of bioinspired nanoparticles from quercetin for drug delivery. <i>Biomaterials Science</i> , 2018, 6, 2656-2666.	5.4	31
40	From sequence to color. <i>Science</i> , 2017, 356, 1011-1012.	12.6	11
41	Exploratory Testing of Diatom Silica to Map the Role of Material Attributes on Cell Fate. <i>Scientific Reports</i> , 2017, 7, 14138.	3.3	17
42	Phenolic condensation and facilitation of fluorescent carbon dot formation: a mechanism study. <i>Nanoscale</i> , 2017, 9, 16596-16601.	5.6	32
43	Self-Healing Hydrogels Formed by Complexation between Calcium Ions and Bisphosphonate-Functionalized Star-Shaped Polymers. <i>Macromolecules</i> , 2017, 50, 8698-8706.	4.8	39
44	Size Control and Fluorescence Labeling of Polydopamine Melanin-Mimetic Nanoparticles for Intracellular Imaging. <i>Biomimetics</i> , 2017, 2, 17.	3.3	33
45	Polydopamine-Mediated Immobilization of Alginate Lyase to Prevent <i>P. aeruginosa</i> Adhesion. <i>Macromolecular Bioscience</i> , 2016, 16, 1301-1310.	4.1	8
46	Polydopamine-Enabled Approach toward Tailored Plasmonic Nanogapped Nanoparticles: From Nanogap Engineering to Multifunctionality. <i>ACS Nano</i> , 2016, 10, 11066-11075.	14.6	109
47	Deposition Kinetics of Bioinspired Phenolic Coatings on Titanium Surfaces. <i>Langmuir</i> , 2016, 32, 8050-8060.	3.5	76
48	Biomimetic Adhesives and Coatings Based on Mussel Adhesive Proteins. , 2016, , 345-378.		9
49	Collagen-collagen interactions mediated by plant-derived proanthocyanidins: A spectroscopic and atomic force microscopy study. <i>Acta Biomaterialia</i> , 2016, 41, 110-118.	8.3	55
50	Effect of disulfide bonding and multimerization on proteoglycan 4's cartilage boundary lubricating ability and adsorption. <i>Connective Tissue Research</i> , 2016, 57, 113-123.	2.3	19
51	Controlling Hydrogel Mechanics via Bio-Inspired Polymer-Nanoparticle Bond Dynamics. <i>ACS Nano</i> , 2016, 10, 1317-1324.	14.6	253
52	A comparative investigation of mussel-mimetic sealants for fetal membrane repair. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 58, 57-64.	3.1	23
53	Biological Adhesion. , 2016, , .		0
54	Design of Novel Mixer and Applicator for Two-Component Surgical Adhesives. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2015, 9, 0450011-450016.	0.7	1

#	ARTICLE	IF	CITATIONS
55	Mussel-Inspired Modification of Nanofibers for REST siRNA Delivery: Understanding the Effects of Gene Silencing and Substrate Topography on Human Mesenchymal Stem Cell Neuronal Commitment. <i>Macromolecular Bioscience</i> , 2015, 15, 1457-1468.	4.1	31
56	Drug-induced regeneration in adult mice. <i>Science Translational Medicine</i> , 2015, 7, 290ra92.	12.4	72
57	Versatile Core-Shell Nanoparticle@Metal-Organic Framework Nanohybrids: Exploiting Mussel-Inspired Polydopamine for Tailored Structural Integration. <i>ACS Nano</i> , 2015, 9, 6951-6960.	14.6	223
58	Improved method for synthesis of cysteine modified hyaluronic acid for in situ hydrogel formation. <i>Chemical Communications</i> , 2015, 51, 9662-9665.	4.1	20
59	Polymer Directed Self-Assembly of pH-Responsive Antioxidant Nanoparticles. <i>Langmuir</i> , 2015, 31, 3612-3620.	3.5	61
60	Multifunctional Magnetic Nanochains: Exploiting Self-Polymerization and Versatile Reactivity of Mussel-Inspired Polydopamine. <i>Chemistry of Materials</i> , 2015, 27, 3071-3076.	6.7	81
61	Control of hierarchical polymer mechanics with bioinspired metal-coordination dynamics. <i>Nature Materials</i> , 2015, 14, 1210-1216.	27.5	375
62	Conductive Polymer Binder for High-Tap-Density Nanosilicon Material for Lithium-Ion Battery Negative Electrode Application. <i>Nano Letters</i> , 2015, 15, 7927-7932.	9.1	121
63	Molecular Design of Antifouling Polymer Brushes Using Sequence-Specific Peptoids. <i>Advanced Materials Interfaces</i> , 2015, 2, 1400225.	3.7	77
64	MUC1-Targeted Cancer Cell Photothermal Ablation Using Bioinspired Gold Nanorods. <i>PLoS ONE</i> , 2015, 10, e0128756.	2.5	25
65	Back Cover: <i>Macromol. Biosci.</i> 2/2014. <i>Macromolecular Bioscience</i> , 2014, 14, 298-298.	4.1	0
66	Bacterial Killing by Light-Triggered Release of Silver from Biomimetic Metal Nanorods. <i>Small</i> , 2014, 10, 169-178.	10.0	81
67	Decoration of Electrospun Nanofibers with Monomeric Catechols to Facilitate Cell Adhesion. <i>Macromolecular Bioscience</i> , 2014, 14, 270-279.	4.1	28
68	Interfacial Assembly of Mussel-Inspired Au@Ag@ Polydopamine Core-Shell Nanoparticles for Recyclable Nanocatalysts. <i>Advanced Materials</i> , 2014, 26, 701-705.	21.0	196
69	Biomaterials Science Emerging Investigators themed issue. <i>Biomaterials Science</i> , 2014, 2, 602.	5.4	0
70	Molecular diversity in phenolic and polyphenolic precursors of tannin-inspired nanocoatings. <i>Chemical Communications</i> , 2014, 50, 7265-7268.	4.1	248
71	Metal-coordination: using one of nature's tricks to control soft material mechanics. <i>Journal of Materials Chemistry B</i> , 2014, 2, 2467-2472.	5.8	178
72	New Antifouling Platform Characterized by Single-Molecule Imaging. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 3553-3558.	8.0	21

#	ARTICLE	IF	CITATIONS
73	pH-dependent cross-linking of catechols through oxidation via Fe ³⁺ and potential implications for mussel adhesion. RSC Advances, 2014, 4, 25127-25134.	3.6	95
74	High Ionic Strength Formation of DOPA-Melanin Coating for Loading and Release of Cationic Antimicrobial Compounds. Advanced Materials Interfaces, 2014, 1, 1400145.	3.7	52
75	Seamless Metallic Coating and Surface Adhesion of Self-Assembled Bioinspired Nanostructures Based on Di-(3,4-dihydroxy-phenylalanine) Peptide Motif. ACS Nano, 2014, 8, 7220-7228.	14.6	68
76	Antifouling Glycocalyx-Mimetic Peptoids. Journal of the American Chemical Society, 2013, 135, 13015-13022.	13.7	113
77	pH-Based Regulation of Hydrogel Mechanical Properties Through Mussel-Inspired Chemistry and Processing. Advanced Functional Materials, 2013, 23, 1111-1119.	14.9	214
78	Nanofibrous scaffold-mediated REST knockdown to enhance neuronal differentiation of stem cells. Biomaterials, 2013, 34, 3581-3590.	11.4	90
79	Mechanically Robust, Negative-Swelling, Mussel-Inspired Tissue Adhesives. Advanced Healthcare Materials, 2013, 2, 745-755.	7.6	194
80	Electrospun catechol-modified poly(ethyleneglycol) nanofibrous mesh for anti-fouling properties. Journal of Materials Chemistry B, 2013, 1, 3940.	5.8	35
81	Colorless Multifunctional Coatings Inspired by Polyphenols Found in Tea, Chocolate, and Wine. Angewandte Chemie - International Edition, 2013, 52, 10766-10770.	13.8	713
82	Cartilage boundary lubricating ability of aldehyde modified proteoglycan 4 (PRG4-CHO). Osteoarthritis and Cartilage, 2013, 21, 186-189.	1.3	10
83	Mussel mimetic tissue adhesive for fetal membrane repair: initial in vivo investigation in rabbits. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2013, 171, 240-245.	1.1	46
84	Hydrogels formed by oxo-ester mediated native chemical ligation. Biomaterials Science, 2013, 1, 603.	5.4	30
85	ECM-Incorporated Hydrogels Cross-Linked via Native Chemical Ligation To Engineer Stem Cell Microenvironments. Biomacromolecules, 2013, 14, 3102-3111.	5.4	30
86	Polydopamine-enabled surface functionalization of gold nanorods for cancer cell-targeted imaging and photothermal therapy. Nanomedicine, 2013, 8, 17-28.	3.3	192
87	Mussel-Inspired Histidine-Based Transient Network Metal Coordination Hydrogels. Macromolecules, 2013, 46, 1167-1174.	4.8	254
88	Biomimetic polydopamine coating on gold nanorods for biofunctionalization, imaging, and photothermal therapy. , 2013, , .		1
89	Water Detoxification by a Substrate-Bound Catecholamine Adsorbent. ChemPlusChem, 2012, 77, 987-990.	2.8	57
90	Mussel-mimetic tissue adhesive for fetal membrane repair: An ex vivo evaluation. Acta Biomaterialia, 2012, 8, 4365-4370.	8.3	64

#	ARTICLE	IF	CITATIONS
91	Surface-Grafted Polysarcosine as a Peptoid Antifouling Polymer Brush. <i>Langmuir</i> , 2012, 28, 16099-16107.	3.5	146
92	Biological Adhesion. , 2012, , 211-229.		2
93	An Experimentalâ€Theoretical Analysis of Protein Adsorption on Peptidomimetic Polymer Brushes. <i>Langmuir</i> , 2012, 28, 2288-2298.	3.5	66
94	The Present and Future of Biologically Inspired Adhesive Interfaces and Materials. <i>Langmuir</i> , 2012, 28, 2200-2205.	3.5	162
95	Universal Surface-Initiated Polymerization of Antifouling Zwitterionic Brushes Using a Mussel-Mimetic Peptide Initiator. <i>Langmuir</i> , 2012, 28, 7258-7266.	3.5	159
96	Polydopamineâ€Assisted immobilization of trypsin onto monolithic structures for protein digestion. <i>Journal of Separation Science</i> , 2012, 35, 1514-1520.	2.5	33
97	Enzymatic Mineralization of Hydrogels for Bone Tissue Engineering by Incorporation of Alkaline Phosphatase. <i>Macromolecular Bioscience</i> , 2012, 12, 1077-1089.	4.1	75
98	Doubly Biomimetic Catecholic Phosphorylcholine Copolymer: A Platform Strategy for Fabricating Antifouling Surfaces. <i>Macromolecular Bioscience</i> , 2012, 12, 979-985.	4.1	63
99	Oneâ€Step Multipurpose Surface Functionalization by Adhesive Catecholamine. <i>Advanced Functional Materials</i> , 2012, 22, 2949-2955.	14.9	436
100	A novel technique for in situ aggregation of <i>Gluconobacter oxydans</i> using bioâ€adhesive magnetic nanoparticles. <i>Biotechnology and Bioengineering</i> , 2012, 109, 2970-2977.	3.3	28
101	Real time assessment of surface interactions with a titanium passivation layer by surface plasmon resonance. <i>Acta Biomaterialia</i> , 2012, 8, 1260-1266.	8.3	3
102	Mussel-inspired silver-releasing antibacterial hydrogels. <i>Biomaterials</i> , 2012, 33, 3783-3791.	11.4	219
103	pH-induced metal-ligand cross-links inspired by mussel yield self-healing polymer networks with near-covalent elastic moduli. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 2651-2655.	7.1	1,314
104	Catechol Redox Induced Formation of Metal Coreâ€Polymer Shell Nanoparticles. <i>Chemistry of Materials</i> , 2011, 23, 1130-1135.	6.7	132
105	pH responsive self-healing hydrogels formed by boronateâ€catechol complexation. <i>Chemical Communications</i> , 2011, 47, 7497.	4.1	392
106	Catechol Polymers for pH-Responsive, Targeted Drug Delivery to Cancer Cells. <i>Journal of the American Chemical Society</i> , 2011, 133, 11850-11853.	13.7	400
107	Antibacterial Performance of Polydopamine-Modified Polymer Surfaces Containing Passive and Active Components. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 4602-4610.	8.0	317
108	Enzymatically Degradable Mussel-Inspired Adhesive Hydrogel. <i>Biomacromolecules</i> , 2011, 12, 4326-4334.	5.4	190

#	ARTICLE	IF	CITATIONS
109	Mussel-Inspired Adhesives and Coatings. Annual Review of Materials Research, 2011, 41, 99-132.	9.3	1,422
110	Facile, high efficiency immobilization of lipase enzyme on magnetic iron oxide nanoparticles via a biomimetic coating. BMC Biotechnology, 2011, 11, 63.	3.3	242
111	Mussel-mimetic tissue adhesive for fetal membrane repair: a standardized <i>ex vivo</i> evaluation using elastomeric membranes. Prenatal Diagnosis, 2011, 31, 654-660.	2.3	52
112	Facile DNA Immobilization on Surfaces through a Catecholamine Polymer. Angewandte Chemie - International Edition, 2011, 50, 732-736.	13.8	176
113	Biological performance of mussel-inspired adhesive in extrahepatic islet transplantation. Biomaterials, 2010, 31, 420-427.	11.4	298
114	Injectable candidate sealants for fetal membrane repair: bonding and toxicity in vitro. American Journal of Obstetrics and Gynecology, 2010, 202, 85.e1-85.e9.	1.3	109
115	A Bioinspired Polymeric Template for 1D Assembly of Metallic Nanoparticles, Semiconductor Quantum Dots, and Magnetic Nanoparticles. Macromolecular Rapid Communications, 2010, 31, 2109-2114.	3.9	32
116	Acetonide protection of dopamine for the synthesis of highly pure N-docosahexaenoyldopamine. Tetrahedron Letters, 2010, 51, 2403-2405.	1.4	25
117	Molecular resurfacing of cartilage with proteoglycan 4. Acta Biomaterialia, 2010, 6, 3388-3394.	8.3	22
118	Anti-inflammatory peptide-functionalized hydrogels for insulin-secreting cell encapsulation. Biomaterials, 2010, 31, 308-314.	11.4	170
119	The contribution of plasmid design and release to in vivo gene expression following delivery from cationic polymer modified scaffolds. Biomaterials, 2010, 31, 1140-1147.	11.4	49
120	Thermo-sensitive, injectable, and tissue adhesive sol-gel transition hyaluronic acid/pluronic composite hydrogels prepared from bio-inspired catechol-thiol reaction. Soft Matter, 2010, 6, 977.	2.7	336
121	Holding On by a Hard-Shell Thread. Science, 2010, 328, 180-181.	12.6	14
122	Wet Performance of Biomimetic Fibrillar Adhesives. , 2010, , 285-294.		3
123	Adhesion of DOPA-Functionalized Model Membranes to Hard and Soft Surfaces. Journal of Adhesion, 2009, 85, 631-645.	3.0	72
124	Facile Conjugation of Biomolecules onto Surfaces via Mussel Adhesive Protein Inspired Coatings. Advanced Materials, 2009, 21, 431-434.	21.0	1,348
125	Heparin-Coated Gold Nanoparticles for Liver-Specific CT Imaging. Chemistry - A European Journal, 2009, 15, 13341-13347.	3.3	146
126	A novel low-friction surface for biomedical applications: Modification of poly(dimethylsiloxane) (PDMS) with polyethylene glycol(PEG)-DOPA-Lysine. Journal of Biomedical Materials Research - Part A, 2009, 90A, 742-749.	4.0	81

#	ARTICLE	IF	CITATIONS
127	Effects of dispersion and interfacial modification on the macroscale properties of TiO ₂ polymer-matrix nanocomposites. <i>Composites Science and Technology</i> , 2009, 69, 1880-1886.	7.8	156
128	Hydrogels Cross-Linked by Native Chemical Ligation. <i>Biomacromolecules</i> , 2009, 10, 2194-2200.	5.4	114
129	Effects of Supported Lipid Monolayer Fluidity on the Adhesion of Hematopoietic Progenitor Cell Lines to Fibronectin-Derived Peptide Ligands for $\alpha 5 \beta 1$ and $\alpha 4 \beta 1$ Integrins. <i>Langmuir</i> , 2009, 25, 2994-3002.	3.5	19
130	Norepinephrine: Material-Independent, Multifunctional Surface Modification Reagent. <i>Journal of the American Chemical Society</i> , 2009, 131, 13224-13225.	13.7	298
131	Experimental and theoretical investigation of chain length and surface coverage on fouling of surface grafted polypeptides. <i>Biointerphases</i> , 2009, 4, FA22-FA32.	1.6	49
132	Formation and Functionalization of Metallic Nanoparticles with Biomimetic Multifunctional Catechols. , 2009, , .		0
133	Substrate-Independent Layer-by-Layer Assembly by Using Mussel-Inspired Polymers. <i>Advanced Materials</i> , 2008, 20, 1619-1623.	21.0	418
134	Bioinspired Surface Immobilization of Hyaluronic Acid on Monodisperse Magnetite Nanocrystals for Targeted Cancer Imaging. <i>Advanced Materials</i> , 2008, 20, 4154-4157.	21.0	274
135	Mimicking mussel adhesion to improve interfacial properties in composites. <i>Composites Science and Technology</i> , 2008, 68, 2042-2048.	7.8	64
136	Convenient synthesis of acetonide-protected 3,4-dihydroxyphenylalanine (DOPA) for Fmoc solid-phase peptide synthesis. <i>Tetrahedron Letters</i> , 2008, 49, 5519-5521.	1.4	24
137	Self-Assembly and Adhesion of DOPA-Modified Methacrylic Triblock Hydrogels. <i>Biomacromolecules</i> , 2008, 9, 122-128.	5.4	146
138	Protein, cell and bacterial fouling resistance of polypeptoid-modified surfaces: effect of side-chain chemistry. <i>Soft Matter</i> , 2008, 4, 131-139.	2.7	137
139	Multitasking in Tissues and Materials. <i>Science</i> , 2008, 319, 1767-1768.	12.6	75
140	Surface-immobilised antimicrobial peptoids. <i>Biofouling</i> , 2008, 24, 439-448.	2.2	97
141	Thermal gelation and tissue adhesion of biomimetic hydrogels. <i>Biomedical Materials (Bristol)</i> , 2007, 2, 203-210.	3.3	169
142	Matrix-assisted pulsed-laser evaporation of DOPA-modified poly(ethylene glycol) thin films. <i>Journal of Adhesion Science and Technology</i> , 2007, 21, 287-299.	2.6	8
143	Surface Presentation of Bioactive Ligands in a Nonadhesive Background Using DOPA-Tethered Biotinylated Poly(ethylene glycol). <i>Langmuir</i> , 2007, 23, 10635-10643.	3.5	41
144	Method for Screening and MALDI-TOF MS Sequencing of Encoded Combinatorial Libraries. <i>Analytical Chemistry</i> , 2007, 79, 7275-7285.	6.5	17

#	ARTICLE	IF	CITATIONS
145	Fusion of Seashell Nacre and Marine Bioadhesive Analogs: High-Strength Nanocomposite by Layer-by-Layer Assembly of Clay and L-3,4-Dihydroxyphenylalanine Polymer. <i>Advanced Materials</i> , 2007, 19, 949-955.	21.0	204
146	Enzymes on nanotubes thwart fouling. <i>Nature Nanotechnology</i> , 2007, 2, 138-139.	31.5	23
147	A reversible wet/dry adhesive inspired by mussels and geckos. <i>Nature</i> , 2007, 448, 338-341.	27.8	1,806
148	Mussel-Inspired Surface Chemistry for Multifunctional Coatings. <i>Science</i> , 2007, 318, 426-430.	12.6	9,012
149	Facile coupling of synthetic peptides and peptide-polymer conjugates to cartilage via transglutaminase enzyme. <i>Biomaterials</i> , 2007, 28, 5215-5224.	11.4	34
150	Biomimetic Adhesive Polymers Based on Mussel Adhesive Proteins. , 2006, , 257-278.		32
151	Single-molecule mechanics of mussel adhesion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 12999-13003.	7.1	1,814
152	Enhancement of poly(ethylene glycol) mucoadsorption by biomimetic end group functionalization. <i>Biointerphases</i> , 2006, 1, 134-141.	1.6	60
153	Algal antifouling and fouling-release properties of metal surfaces coated with a polymer inspired by marine mussels. <i>Biofouling</i> , 2006, 22, 391-399.	2.2	148
154	Cell Fouling Resistance of Polymer Brushes Grafted from Ti Substrates by Surface-Initiated Polymerization: Effect of Ethylene Glycol Side Chain Length. <i>Biomacromolecules</i> , 2006, 7, 2443-2448.	5.4	195
155	Rapid Gel Formation and Adhesion in Photocurable and Biodegradable Block Copolymers with High DOPA Content. <i>Macromolecules</i> , 2006, 39, 1740-1748.	4.8	183
156	Surface-initiated polymerization from TiO ₂ nanoparticle surfaces through a biomimetic initiator: A new route toward polymer-matrix nanocomposites. <i>Composites Science and Technology</i> , 2006, 66, 1198-1204.	7.8	121
157	Quartz Crystal Microbalance Studies of Polymer Gels and Solutions in Liquid Environments. <i>Analytical Chemistry</i> , 2006, 78, 1158-1166.	6.5	33
158	Processing of mussel adhesive protein analog thin films by matrix assisted pulsed laser evaporation. <i>Applied Surface Science</i> , 2005, 247, 217-224.	6.1	22
159	Processing of mussel-adhesive protein analog copolymer thin films by matrix-assisted pulsed laser evaporation. <i>Applied Surface Science</i> , 2005, 248, 416-421.	6.1	20
160	Enzymatically cross-linked hydrogels and their adhesive strength to biosurfaces. <i>Orthodontics and Craniofacial Research</i> , 2005, 8, 145-149.	2.8	53
161	Bioinspired antifouling polymers. <i>Materials Today</i> , 2005, 8, 38-46.	14.2	217
162	Laser Thin Film Processing of Biopolymers: Mussel Adhesive Protein Analog. <i>Materials Research Society Symposia Proceedings</i> , 2005, 897, 1.	0.1	0

#	ARTICLE	IF	CITATIONS
163	New Peptidomimetic Polymers for Antifouling Surfaces. <i>Journal of the American Chemical Society</i> , 2005, 127, 7972-7973.	13.7	402
164	Biomimetic Anchor for Surface-Initiated Polymerization from Metal Substrates. <i>Journal of the American Chemical Society</i> , 2005, 127, 15843-15847.	13.7	419
165	Protein Resistance of Titanium Oxide Surfaces Modified by Biologically Inspired mPEG ⁺ DOPA. <i>Langmuir</i> , 2005, 21, 640-646.	3.5	423
166	Immobilized Thrombopoietin (TPO) Lipopeptide Mimic Supports Similar Signaling and CD34+ Cell Differentiation as Soluble TPO. <i>Blood</i> , 2005, 106, 3150-3150.	1.4	24
167	Self-Assembling Polymer-Peptide Conjugates: Nanostructural Tailoring. <i>Advanced Materials</i> , 2004, 16, 907-910.	21.0	143
168	Lipopeptides Incorporated into Supported Phospholipid Monolayers Have High Specific Activity at Low Incorporation Levels. <i>Journal of the American Chemical Society</i> , 2004, 126, 15223-15230.	13.7	36
169	Synthesis of 3,4-dihydroxyphenylalanine (DOPA) containing monomers and their co-polymerization with PEG-diacrylate to form hydrogels. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2004, 15, 449-464.	3.5	106
170	Thermal assembly of a biomimetic mineral/collagen composite. <i>Biomaterials</i> , 2003, 24, 4881-4890.	11.4	84
171	Mussel Adhesive Protein Mimetic Polymers for the Preparation of Nonfouling Surfaces. <i>Journal of the American Chemical Society</i> , 2003, 125, 4253-4258.	13.7	548
172	Rational Design of Transglutaminase Substrate Peptides for Rapid Enzymatic Formation of Hydrogels. <i>Journal of the American Chemical Society</i> , 2003, 125, 14298-14299.	13.7	185
173	Enzymatic Modification of Self-Assembled Peptide Structures with Tissue Transglutaminase. <i>Bioconjugate Chemistry</i> , 2003, 14, 748-755.	3.6	153
174	Surface Modification for Protein Resistance Using a Biomimetic Approach. <i>Materials Research Society Symposia Proceedings</i> , 2003, 774, 221.	0.1	1
175	Formation of Fibrinogen-Based Hydrogels Using Phototriggerable Dipalmitoyl Liposomes. <i>Bioconjugate Chemistry</i> , 2002, 13, 640-646.	3.6	41
176	Synthesis and Characterization of Self-Assembling Block Copolymers Containing Bioadhesive End Groups. <i>Biomacromolecules</i> , 2002, 3, 397-406.	5.4	174
177	Synthesis and Gelation of DOPA-Modified Poly(ethylene glycol) Hydrogels. <i>Biomacromolecules</i> , 2002, 3, 1038-1047.	5.4	544
178	In situ forming biomaterials. <i>Oral and Maxillofacial Surgery Clinics of North America</i> , 2002, 14, 29-38.	1.0	17
179	In situ crosslinking of a biomimetic peptide-PEG hydrogel via thermally triggered activation of factor XIII. <i>Biomaterials</i> , 2002, 23, 2703-2710.	11.4	164
180	Phospholipid Strategies in Biomineralization and Biomaterials Research. <i>Annual Review of Materials Research</i> , 2001, 31, 237-263.	9.3	117

#	ARTICLE	IF	CITATIONS
181	Thermally and Photochemically Triggered Self-Assembly of Peptide Hydrogels. <i>Journal of the American Chemical Society</i> , 2001, 123, 9463-9464.	13.7	236
182	Chiral Self-Assembly of Nanotubules and Ribbons from Phospholipid Mixtures. <i>Nano Letters</i> , 2001, 1, 375-378.	9.1	93
183	Triggered release of calcium from lipid vesicles: a bioinspired strategy for rapid gelation of polysaccharide and protein hydrogels. <i>Biomaterials</i> , 2001, 22, 453-462.	11.4	114
184	Protection of 3,4-dihydroxyphenylalanine (DOPA) for Fmoc solid-phase peptide synthesis. <i>Tetrahedron Letters</i> , 2000, 41, 5795-5798.	1.4	31
185	Compartmental control of mineral formation: adaptation of a biomineralization strategy for biomedical use. <i>Polyhedron</i> , 2000, 19, 357-363.	2.2	33
186	Preparation of a nanostructured organoceramic and its reversible interlayer expansion. <i>Journal of Materials Research</i> , 1999, 14, 315-318.	2.6	8
187	Formation of Polymerizable Phospholipid Nanotubules and Their Transformation into a Network Gel. <i>Langmuir</i> , 1999, 15, 4464-4471.	3.5	70
188	Thermally Triggered Calcium Phosphate Formation from Calcium-Loaded Liposomes. <i>Chemistry of Materials</i> , 1998, 10, 117-124.	6.7	30
189	Preparation of Calcium-Loaded Liposomes and Their Use in Calcium Phosphate Formation. <i>Chemistry of Materials</i> , 1998, 10, 109-116.	6.7	19
190	Synthesis and Lcst Behavior of Thermally Responsive Poly(N-Isopropylacrylamide)/Layered Silicate Nanocomposites. <i>Materials Research Society Symposia Proceedings</i> , 1996, 457, 507.	0.1	13
191	Synthesis and barrier properties of poly(ϵ -caprolactone)-layered silicate nanocomposites. <i>Journal of Polymer Science Part A</i> , 1995, 33, 1047-1057.	2.3	1,159
192	Synthesis of nanocomposites: Organoceramics. <i>Journal of Materials Research</i> , 1992, 7, 2599-2611.	2.6	134
193	Synthesis and Properties of Poly(Vinyl Alcohol)/Calcium Aluminate Nanocomposites. <i>Materials Research Society Symposia Proceedings</i> , 1991, 245, 191.	0.1	2
194	Stress enhancement and fatigue susceptibility of porous coated Ti-6Al-4V implants: An elastic analysis. <i>Journal of Biomedical Materials Research Part B</i> , 1990, 24, 591-604.	3.1	8
195	Adhesive block copolymers for tissue repair and drug delivery. , 0, , .		0