

# Polydopamine and Eumelanin: From Structure to Property Tailoring Strategy

Accounts of Chemical Research

47, 3541-3550

DOI: 10.1021/ar500273y

Citation Report

#	ARTICLE	IF	CITATIONS
2	Melanins and melanogenesis: from pigment cells to human health and technological applications. <i>Pigment Cell and Melanoma Research</i> , 2015, 28, 520-544.	1.5	347
3	Polydopamine as a Catalyst for Thiol Coupling. <i>ChemCatChem</i> , 2015, 7, 3822-3825.	1.8	22
5	Study on the UV-shielding and controlled-release properties of a polydopamine coating for avermectin. <i>New Journal of Chemistry</i> , 2015, 39, 2752-2757.	1.4	50
6	Highly controlled coating of biomimetic polydopamine in TiO <sub>2</sub> nanotubes. <i>Electrochemistry Communications</i> , 2015, 52, 41-44.	2.3	43
7	A water-soluble eumelanin polymer with typical polyelectrolyte behaviour by triethyleneglycol N-functionalization. <i>Journal of Materials Chemistry C</i> , 2015, 3, 2810-2816.	2.7	26
8	Control of Heterogeneous Nucleation and Growth Kinetics of Dopamine-Melanin by Altering Substrate Chemistry. <i>Langmuir</i> , 2015, 31, 3451-3458.	1.6	55
9	Biomimetic superhydrophobic surfaces by combining mussel-inspired adhesion with lotus-inspired coating. <i>Nanotechnology</i> , 2015, 26, 335602.	1.3	39
10	Electron Paramagnetic Resonance Imaging and Spectroscopy of Polydopamine Radicals. <i>Journal of Physical Chemistry B</i> , 2015, 119, 10341-10347.	1.2	40
11	Boosting, probing and switching-off visible light-induced photocurrents in eumelanin-porous silicon hybrids. <i>RSC Advances</i> , 2015, 5, 56704-56710.	1.7	8
12	Interfacial Polymerization of Dopamine in a Pickering Emulsion: Synthesis of Cross-Linkable Colloidosomes and Enzyme Immobilization at Oil/Water Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 14954-14964.	4.0	69
13	Facile fabrication of metal oxide hollow spheres using polydopamine nanoparticles as active templates. <i>Polymer International</i> , 2015, 64, 986-991.	1.6	13
14	Folic acid-polydopamine nanofibers show enhanced ordered-stacking via $\pi$ - $\pi$ interactions. <i>Soft Matter</i> , 2015, 11, 4621-4629.	1.2	62
15	Bio-Inspired Structural Colors Produced via Self-Assembly of Synthetic Melanin Nanoparticles. <i>ACS Nano</i> , 2015, 9, 5454-5460.	7.3	244
16	Polydopamine coated SPEEK membrane for a vanadium redox flow battery. <i>RSC Advances</i> , 2015, 5, 33400-33406.	1.7	42
17	A Sweet Polydopamine Nanoplatform for Synergistic Combination of Targeted Chemo-Photothermal Therapy. <i>Macromolecular Rapid Communications</i> , 2015, 36, 916-922.	2.0	64
18	Smart micelle-polydopamine core-shell nanoparticles for highly effective chemo-photothermal combination therapy. <i>Nanoscale</i> , 2015, 7, 19722-19731.	2.8	97
19	Conjugation of Hyaluronic Acid onto Surfaces via the Interfacial Polymerization of Dopamine to Prevent Protein Adsorption. <i>Langmuir</i> , 2015, 31, 12061-12070.	1.6	66
20	Feasibility of Ionization-Mediated Pathway for Ultraviolet-Induced Melanin Damage. <i>Journal of Physical Chemistry B</i> , 2015, 119, 13288-13293.	1.2	12

#	ARTICLE	IF	CITATIONS
21	Multiple antifouling capacities of hybrid membranes derived from multifunctional titania nanoparticles. <i>Journal of Membrane Science</i> , 2015, 495, 226-234.	4.1	34
22	Oxidative Self-Polymerization of Dopamine in an Acidic Environment. <i>Langmuir</i> , 2015, 31, 11671-11677.	1.6	146
23	Tailoring melanins for bioelectronics: polycysteinyldopamine as an ion conducting redox-responsive polydopamine variant for pro-oxidant thin films. <i>Journal of Materials Chemistry C</i> , 2015, 3, 6525-6531.	2.7	15
24	Recent developments in poly(dopamine)-based coatings for biomedical applications. <i>Nanomedicine</i> , 2015, 10, 2725-2742.	1.7	101
25	Intermolecular interactions in eumelanins: a computational bottom-up approach. I. small building blocks. <i>RSC Advances</i> , 2015, 5, 38513-38526.	1.7	37
26	Composite films of polydopamine and Alcian Blue for colored coating with new physical properties. <i>Journal of Colloid and Interface Science</i> , 2015, 459, 29-35.	5.0	6
27	Universal polymer coatings and their representative biomedical applications. <i>Materials Horizons</i> , 2015, 2, 567-577.	6.4	200
28	A degradable polydopamine coating based on disulfide-exchange reaction. <i>Nanoscale</i> , 2015, 7, 20149-20154.	2.8	31
29	Polydopamine-Assisted Surface Modification for Bone Biosubstitutes. <i>BioMed Research International</i> , 2016, 2016, 1-9.	0.9	71
30	Polycatechol Nanoparticle MRI Contrast Agents. <i>Small</i> , 2016, 12, 668-677.	5.2	64
31	Polydopamine deposition at fluid interfaces. <i>Polymer International</i> , 2016, 65, 1251-1257.	1.6	21
32	Pigmented Silk Nanofibrous Composite for Skeletal Muscle Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2016, 5, 1222-1232.	3.9	81
33	CuSO <sub>4</sub> /H <sub>2</sub> O <sub>2</sub> -induced Rapid Deposition of Polydopamine Coatings with High Uniformity and Enhanced Stability. <i>Angewandte Chemie</i> , 2016, 128, 3106-3109.	1.6	117
34	Novel insights on the physicochemical properties of eumelanins and their DMSO derivatives. <i>Polymer International</i> , 2016, 65, 1315-1322.	1.6	25
35	The modulation of melanin-like materials: methods, characterization and applications. <i>Polymer International</i> , 2016, 65, 1258-1266.	1.6	23
36	Evidence of Porphyrin-Like Structures in Natural Melanin Pigments Using Electrochemical Fingerprinting. <i>Advanced Materials</i> , 2016, 28, 3173-3180.	11.1	75
37	Functionalization of Polydopamine via the Aza-Michael Reaction for Antimicrobial Interfaces. <i>Langmuir</i> , 2016, 32, 5019-5028.	1.6	106
38	Polydopamine-coated open cell polyurethane foams as an inexpensive, flexible yet robust catalyst support: a proof of concept. <i>Chemical Communications</i> , 2016, 52, 4691-4693.	2.2	41

#	ARTICLE	IF	CITATIONS
39	Synthesis and Characterization of Aminopropyltriethoxysilane-Polydopamine Coatings. <i>Langmuir</i> , 2016, 32, 4370-4381.	1.6	76
40	Preparation of Thin Melanin-Type Films by Surface-Controlled Oxidation. <i>Langmuir</i> , 2016, 32, 4103-4112.	1.6	30
41	Onset of the Electronic Absorption Spectra of Isolated and $\pi$ -Stacked Oligomers of 5,6-Dihydroxyindole: An <i>Ab Initio</i> Study of the Building Blocks of Eumelanin. <i>Journal of Physical Chemistry B</i> , 2016, 120, 3493-3502.	1.2	37
42	Bioelectronic Energy Storage: A Pseudocapacitive Hydrogel Composed of Endogenous Biomolecules. <i>ACS Energy Letters</i> , 2016, 1, 672-677.	8.8	21
43	Composite films of poly(allylamine)-capped polydopamine nanoparticles and P8W48 polyoxometalates with electroactive properties. <i>Journal of Colloid and Interface Science</i> , 2016, 481, 125-130.	5.0	7
44	Bioinspired Functionalized Melanin Nanovariants with a Range of Properties Provide Effective Color Matched Photoprotection in Skin. <i>Biomacromolecules</i> , 2016, 17, 2912-2919.	2.6	18
45	A polypeptide micelle template method to prepare polydopamine composite nanoparticles for synergistic photothermal chemotherapy. <i>Polymer Chemistry</i> , 2016, 7, 5552-5562.	1.9	32
46	Deposition Kinetics of Bioinspired Phenolic Coatings on Titanium Surfaces. <i>Langmuir</i> , 2016, 32, 8050-8060.	1.6	76
47	Chemistry of polydopamine analogues. <i>Polymer International</i> , 2016, 65, 1288-1299.	1.6	86
48	Melanin from a physicochemical point of view. <i>Polymer International</i> , 2016, 65, 1300-1305.	1.6	13
49	Bio-inspired modification of $\text{TiO}_2$ nanowires for fabrication of High- $\beta$ polymer nanocomposites. , 2016, , .		1
50	Characterizations of the Formation of Polydopamine-Coated Halloysite Nanotubes in Various pH Environments. <i>Langmuir</i> , 2016, 32, 10377-10386.	1.6	59
51	Resistive switching controlled by the hydration level in thin films of the biopigment eumelanin. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9544-9553.	2.7	23
52	Melanin-Like Nanoquencher on Graphitic Carbon Nitride Nanosheets for Tyrosinase Activity and Inhibitor Assay. <i>Analytical Chemistry</i> , 2016, 88, 8355-8358.	3.2	67
53	Nanoscale Disassembly and Free Radical Reorganization of Polydopamine in Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2016, 120, 11942-11950.	1.2	15
54	Structure and Function of Iron-Loaded Synthetic Melanin. <i>ACS Nano</i> , 2016, 10, 10186-10194.	7.3	127
55	Eumelanin-Based Organic Bioelectronics: Myth or Reality?. <i>MRS Advances</i> , 2016, 1, 3801-3810.	0.5	11
56	Mussel-Inspired Polymer Carpets: Direct Photografting of Polymer Brushes on Polydopamine Nanosheets for Controlled Cell Adhesion. <i>Advanced Materials</i> , 2016, 28, 1489-1494.	11.1	76

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57	In vitro electrochemical characterization of polydopamine melanin as a tissue stimulating electrode material. <i>Journal of Materials Chemistry B</i> , 2016, 4, 3031-3036.	2.9	20
58	Quinone and its derivatives for energy harvesting and storage materials. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11179-11202.	5.2	211
59	Oxidant Control of Polydopamine Surface Chemistry in Acids: A Mechanism-Based Entry to Superhydrophilic-Superoleophobic Coatings. <i>Chemistry of Materials</i> , 2016, 28, 4697-4705.	3.2	255
60	CuSO <sub>4</sub> /H <sub>2</sub> O <sub>2</sub> -induced Rapid Deposition of Polydopamine Coatings with High Uniformity and Enhanced Stability. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3054-3057.	7.2	403
61	Polyelectrolytes to produce nanosized polydopamine. <i>Journal of Colloid and Interface Science</i> , 2016, 469, 184-190.	5.0	37
62	5,6-Dihydroxyindole-2-carboxylic Acid@TiO <sub>2</sub> Charge Transfer Complexes in the Radical Polymerization of Melanogenic Precursor(s). <i>Journal of Physical Chemistry C</i> , 2016, 120, 6262-6268.	1.5	36
63	Integration of inorganic nanostructures with polydopamine-derived carbon: tunable morphologies and versatile applications. <i>Nanoscale</i> , 2016, 8, 1770-1788.	2.8	74
64	Surface-Functionalization of Nanostructured Cellulose Aerogels by Solid State Eumelanin Coating. <i>Biomacromolecules</i> , 2016, 17, 564-571.	2.6	45
65	Multifunctional Polyphenols- and Catecholamines-Based Self-Defensive Films for Health Care Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 1220-1232.	4.0	68
66	Polydopamine nanofilms as visible light-harvesting interfaces for palladium nanocrystal catalyzed coupling reactions. <i>Catalysis Science and Technology</i> , 2016, 6, 1764-1771.	2.1	75
67	Enzymatic-induced upconversion photoinduced electron transfer for sensing tyrosine in human serum. <i>Biosensors and Bioelectronics</i> , 2016, 77, 957-962.	5.3	47
68	Interactions of iron, dopamine and neuromelanin pathways in brain aging and Parkinson's disease. <i>Progress in Neurobiology</i> , 2017, 155, 96-119.	2.8	490
69	Bio-Inspired Fluoro-polydopamine Meets Barium Titanate Nanowires: A Perfect Combination to Enhance Energy Storage Capability of Polymer Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7547-7555.	4.0	137
70	A novel injectable formulation of 6-fluoro-L-DOPA imaging agent for diagnosis of neuroendocrine tumors and Parkinson's disease. <i>International Journal of Pharmaceutics</i> , 2017, 519, 304-313.	2.6	13
71	Mussel-inspired Fluoro-Polydopamine Functionalization of Titanium Dioxide Nanowires for Polymer Nanocomposites with Significantly Enhanced Energy Storage Capability. <i>Scientific Reports</i> , 2017, 7, 43071.	1.6	42
72	Bio-inspired strategy for controlled dopamine polymerization in basic solutions. <i>Polymer Chemistry</i> , 2017, 8, 2145-2151.	1.9	44
73	Hierarchical Self-Assembly of Dopamine into Patterned Structures. <i>Advanced Materials Interfaces</i> , 2017, 4, 1601218.	1.9	13
74	Natural based eumelanin nanoparticles functionalization and preliminary evaluation as carrier for gentamicin. <i>Reactive and Functional Polymers</i> , 2017, 114, 38-48.	2.0	16

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75	Bio-inspired polydopamine coating as a facile approach to constructing polymer nanocomposites for energy storage. <i>Journal of Materials Chemistry C</i> , 2017, 5, 3112-3120.	2.7	61
76	A dinuclear biomimetic Cu complex derived from <i>l</i> -histidine: synthesis and stereoselective oxidations. <i>Dalton Transactions</i> , 2017, 46, 4018-4029.	1.6	11
77	Multifunctional Thin Films and Coatings from Caffeic Acid and a Cross-Linking Diamine. <i>Langmuir</i> , 2017, 33, 2096-2102.	1.6	41
78	Electrochemical deposition of dopamine-hyaluronic acid conjugates for anti-biofouling bioelectrodes. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4507-4513.	2.9	32
79	Well-defined functional mesoporous silica/polymer hybrids prepared by an ICAR ATRP technique integrated with bio-inspired polydopamine chemistry for lithium isotope separation. <i>Dalton Transactions</i> , 2017, 46, 6117-6127.	1.6	20
80	Assessing the Performance of Eumelanin/Si Interface for Photovoltaic Applications. <i>Journal of Physical Chemistry C</i> , 2017, 121, 11576-11584.	1.5	15
81	Nacre-inspired design of graphene oxide-polydopamine nanocomposites for enhanced mechanical properties and multi-functionalities. <i>Nano Futures</i> , 2017, 1, 011003.	1.0	41
82	Synthetic Melanin E-Ink. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 16553-16560.	4.0	39
83	Synthesis, Structure Characterization, and Evaluation in Microglia Cultures of Neuromelanin Analogues Suitable for Modeling Parkinson's Disease. <i>ACS Chemical Neuroscience</i> , 2017, 8, 501-512.	1.7	40
84	In Situ Live-Cell Nucleus Fluorescence Labeling with Bioinspired Fluorescent Probes. <i>Analytical Chemistry</i> , 2017, 89, 7861-7868.	3.2	26
85	Recent progress in the biomedical applications of polydopamine nanostructures. <i>Biomaterials Science</i> , 2017, 5, 1204-1229.	2.6	219
86	Nanoarchitecturing of Natural Melanin Nanospheres by Layer-by-Layer Assembly: Macroscale Anti-inflammatory Conductive Coatings with Optoelectronic Tunability. <i>Biomacromolecules</i> , 2017, 18, 1908-1917.	2.6	39
87	Polydopamine Generates Hydroxyl Free Radicals under Ultraviolet-Light Illumination. <i>Langmuir</i> , 2017, 33, 5938-5946.	1.6	43
88	Polymeric peptide pigments with sequence-encoded properties. <i>Science</i> , 2017, 356, 1064-1068.	6.0	244
89	Rapid Deposition of Uniform Polydopamine Coatings on Nanoparticle Surfaces with Controllable Thickness. <i>Langmuir</i> , 2017, 33, 6046-6053.	1.6	43
90	Elucidating the Photoprotection Mechanism of Eumelanin Monomers. <i>Journal of Physical Chemistry B</i> , 2017, 121, 5988-5994.	1.2	14
91	Oxidized catechol-derived poly (ethylene glycol) for thiol-specific conjugation. <i>Reactive and Functional Polymers</i> , 2017, 117, 97-105.	2.0	5
92	Mussel-Inspired Polyglycerol Coatings with Controlled Wettability: From Superhydrophilic to Superhydrophobic Surface Coatings. <i>Langmuir</i> , 2017, 33, 9508-9520.	1.6	28

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93	Structural Color Tuning: Mixing Melanin-Like Particles with Different Diameters to Create Neutral Colors. <i>Langmuir</i> , 2017, 33, 3824-3830.	1.6	69
94	Metal-Free Photoinduced Electron Transfer-Atom Transfer Radical Polymerization Integrated with Bioinspired Polydopamine Chemistry as a Green Strategy for Surface Engineering of Magnetic Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 13637-13646.	4.0	52
95	Enhanced Photocatalytic Degradation of Environmental Pollutants under Visible Irradiation by a Composite Coating. <i>Environmental Science &amp; Technology</i> , 2017, 51, 5137-5145.	4.6	63
96	Performance and Mechanism of Uranium Adsorption from Seawater to Poly(dopamine)-Inspired Sorbents. <i>Environmental Science &amp; Technology</i> , 2017, 51, 4606-4614.	4.6	168
97	Norepinephrine modified thin film composite membranes for forward osmosis. <i>Desalination</i> , 2017, 423, 157-164.	4.0	16
98	Ultrathin thermoresponsive self-folding 3D graphene. <i>Science Advances</i> , 2017, 3, e1701084.	4.7	144
99	Biopolymer-Drug Conjugate Nanotheranostics for Multimodal Imaging-Guided Synergistic Cancer Photothermal-Chemotherapy. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 31576-31588.	4.0	49
100	Mussel-Inspired Polydopamine Coating on Tobacco Mosaic Virus: One-Dimensional Hybrid Nanofibers for Gold Nanoparticle Growth. <i>Langmuir</i> , 2017, 33, 9866-9872.	1.6	14
101	Versatile Surface Modification Using Polydopamine and Related Polycatecholamines: Chemistry, Structure, and Applications. <i>Advanced Materials Interfaces</i> , 2017, 4, 1601192.	1.9	266
102	Green Tea Makes Polyphenol Nanoparticles with Radical-Scavenging Activities. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700446.	2.0	70
103	Controlled Architecture of Glass Fiber/Poly(glycidyl methacrylate) Composites via Surface-Initiated ICAR ATRP Mediated by Mussel-Inspired Polydopamine Chemistry. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 11467-11476.	1.8	9
104	Melanin-Inspired Polymeric Peptide Pigments with Tunable Sequence-Dependent Behavior. <i>CheM</i> , 2017, 3, 28-30.	5.8	3
105	A one step method for the functional and property modification of DOPA based nanocoatings. <i>Nanoscale</i> , 2017, 9, 12409-12415.	2.8	19
106	Polydopamine-filled bacterial nanocellulose as a biodegradable interfacial photothermal evaporator for highly efficient solar steam generation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18397-18402.	5.2	257
107	Biomimetic Oxygen-Evolving Photobacteria Based on Amino Acid and Porphyrin Hierarchical Self-Organization. <i>ACS Nano</i> , 2017, 11, 12840-12848.	7.3	26
108	Controlled Architecture of Hybrid Polymer Nanocapsules with Tunable Morphologies by Manipulating Surface-Initiated ARGET ATRP from Hydrothermally Modified Polydopamine. <i>Chemistry of Materials</i> , 2017, 29, 10212-10219.	3.2	30
109	A Compatible Sensitivity Enhancement Strategy for Electrochemiluminescence Immunosensors Based on the Biomimetic Melanin-Like Deposition. <i>Analytical Chemistry</i> , 2017, 89, 13049-13053.	3.2	55
110	Electrotriggered Confined Self-assembly of Metal-Polyphenol Nanocoatings Using a Morphogenic Approach. <i>Chemistry of Materials</i> , 2017, 29, 9668-9679.	3.2	65

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111	Microplasma-assisted rapid, chemical oxidant-free and controllable polymerization of dopamine for surface modification. <i>Polymer Chemistry</i> , 2017, 8, 4388-4392.	1.9	38
112	Polydopamine Coating To Stabilize a Free-Standing Lipid Bilayer for Channel Sensing. <i>Langmuir</i> , 2017, 33, 7256-7262.	1.6	4
113	Polydopamine and eumelanin molecular structures investigated with ab initio calculations. <i>Chemical Science</i> , 2017, 8, 1631-1641.	3.7	162
114	Facile fabrication of robust polydopamine microcapsules for insulin delivery. <i>Journal of Colloid and Interface Science</i> , 2017, 487, 12-19.	5.0	68
115	1.29 Electroactive Polymeric Biomaterials $\hat{t}$ . , 2017, , 664-687.		1
116	Melanin-Based Contrast Agents for Biomedical Optoacoustic Imaging and Theranostic Applications. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1719.	1.8	43
117	The Supramolecular Buildup of Eumelanin: Structures, Mechanisms, Controllability. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1901.	1.8	42
118	Colour-Value Based Method for Polydopamine Coating-Stability Characterization on Polyethersulfone Membranes. <i>Membranes</i> , 2017, 7, 70.	1.4	10
119	Calcium-Mediated Control of Polydopamine Film Oxidation and Iron Chelation. <i>International Journal of Molecular Sciences</i> , 2017, 18, 14.	1.8	33
120	Anti-Melanogenic Effects of Flavonoid Glycosides from <i>Limonium tetragonum</i> (Thunb.) Bullock via Inhibition of Tyrosinase and Tyrosinase-Related Proteins. <i>Molecules</i> , 2017, 22, 1480.	1.7	28
121	Composite Materials and Films Based on Melanins, Polydopamine, and Other Catecholamine-Based Materials. <i>Biomimetics</i> , 2017, 2, 12.	1.5	13
122	Melanin and Melanin-Related Polymers as Materials with Biomedical and Biotechnological Applications – Cuttlefish Ink and Mussel Foot Proteins as Inspired Biomolecules. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1561.	1.8	126
123	Deciphering Molecular Mechanisms of Interface Buildup and Stability in Porous Si/Eumelanin Hybrids. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1567.	1.8	15
124	Replacing Nitrogen by Sulfur: From Structurally Disordered Eumelanins to Regioregular Thiomelanin Polymers. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2169.	1.8	13
125	Application of polydopamine in biomedical microfluidic devices. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1.	1.0	18
126	Polydopamine Surface Chemistry: A Decade of Discovery. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 7523-7540.	4.0	1,232
127	Novel Intrapolymerization Doped Manganese – Eumelanin Coordination Nanocomposites with Ultrahigh Relaxivity and Their Application in Tumor Theranostics. <i>Advanced Science</i> , 2018, 5, 1800032.	5.6	43
128	Cytotoxicity of paramagnetic cations – Loaded polydopamine nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 167, 284-290.	2.5	15



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129	Polydopamine Induced in-Situ Formation of Metallic Nanoparticles in Confined Microchannels of Porous Membrane as Flexible Catalytic Reactor. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 14735-14743.	4.0	32
130	Mussel-inspired modification of PPS membrane to separate and remove the dyes from the wastewater. <i>Chemical Engineering Journal</i> , 2018, 341, 371-382.	6.6	131
131	Kinetics of Melanin Polymerization during Enzymatic and Nonenzymatic Oxidation. <i>Journal of Physical Chemistry B</i> , 2018, 122, 2047-2063.	1.2	23
132	Polydopamine films change their physicochemical and antimicrobial properties with a change in reaction conditions. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 5744-5755.	1.3	45
133	Mussel-Inspired Polymer-Based Universal Spray Coating for Surface Modification: Fast Fabrication of Antibacterial and Superhydrophobic Surface Coatings. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701254.	1.9	99
134	Bio-inspired redox-cycling antimicrobial film for sustained generation of reactive oxygen species. <i>Biomaterials</i> , 2018, 162, 109-122.	5.7	72
135	Polydopamine and Polydopamine-Silane Hybrid Surface Treatments in Structural Adhesive Applications. <i>Langmuir</i> , 2018, 34, 1274-1286.	1.6	63
136	The photoreactive free radical in eumelanin. <i>Science Advances</i> , 2018, 4, eaaq1293.	4.7	72
137	Polydopamine films and particles with catalytic activity. <i>Catalysis Today</i> , 2018, 301, 196-203.	2.2	65
138	Mussel-inspired polydopamine-polyethylenimine conjugated nanoparticles as efficient gene delivery vectors for mammalian cells. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 161, 403-412.	2.5	32
139	Insect cuticular melanins are distinctly different from those of mammalian epidermal melanins. <i>Pigment Cell and Melanoma Research</i> , 2018, 31, 384-392.	1.5	37
140	Polydopamine Based Colloidal Materials: Synthesis and Applications. <i>Chemical Record</i> , 2018, 18, 410-432.	2.9	67
141	Chemical vapor deposition - based synthesis of conductive polydopamine thin-films. <i>Thin Solid Films</i> , 2018, 645, 320-325.	0.8	51
142	A Comparison Study of Antiuaviolet and Sustained Release Properties of Polydopamine/Avermectin Microcapsule and Microsphere. <i>International Journal of Polymer Science</i> , 2018, 2018, 1-13.	1.2	8
143	Enzymatically Active Polydopamine @ Alkaline Phosphatase Nanoparticles Produced by NaIO <sub>4</sub> Oxidation of Dopamine. <i>Biomimetics</i> , 2018, 3, 36.	1.5	11
144	Polydopamine and eumelanin models in various oxidation states. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 28135-28143.	1.3	25
145	Polydopamine nanoparticles kill cancer cells. <i>RSC Advances</i> , 2018, 8, 36201-36208.	1.7	41
146	Polydopamine nanostructures as biomaterials for medical applications. <i>Journal of Materials Chemistry B</i> , 2018, 6, 6895-6903.	2.9	66

#	ARTICLE	IF	CITATIONS
147	Surface with Reversible Green-Light-Switched Wettability by Donor–Acceptor Stenhouse Adducts. <i>Langmuir</i> , 2018, 34, 15537-15543.	1.6	29
148	Understanding the Polymerization Process of Eumelanin by Computer Simulations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28368-28374.	1.5	11
149	Physical and Chemical Control of Interface Stability in Porous Si–Eumelanin Hybrids. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28405-28415.	1.5	14
150	Understanding the Role of Aggregation in the Broad Absorption Bands of Eumelanin. <i>ACS Nano</i> , 2018, 12, 12050-12061.	7.3	49
151	Morphological Diversity, Protein Adsorption, and Cellular Uptake of Polydopamine-Coated Gold Nanoparticles. <i>Langmuir</i> , 2018, 34, 14033-14045.	1.6	32
152	Polydopamine for Biomedical Application and Drug Delivery System. , 2018, 08, .		23
153	Polymer–Nanoparticle Interaction as a Design Principle in the Development of a Durable Ultrathin Universal Binary Antibiofilm Coating with Long-Term Activity. <i>ACS Nano</i> , 2018, 12, 11881-11891.	7.3	51
154	Spectroscopic Characterization of Natural Melanin from a <i>Streptomyces cyaneofuscatus</i> Strain and Comparison with Melanin Enzymatically Synthesized by Tyrosinase and Laccase. <i>Molecules</i> , 2018, 23, 1916.	1.7	39
155	Two-photon fluorescent polydopamine nanodots for CAR-T cell function verification and tumor cell/tissue detection. <i>Journal of Materials Chemistry B</i> , 2018, 6, 6459-6467.	2.9	16
156	Boosting the Electrochemical Performance of Li–S Batteries with a Dual Polysulfides Confinement Strategy. <i>Small</i> , 2018, 14, e1802516.	5.2	58
157	Progressive fuzzy cation– assembly of biological catecholamines. <i>Science Advances</i> , 2018, 4, eaat7457.	4.7	200
158	Synthesis of Polydopamine Nanoparticles for Drug Delivery Applications. <i>Microscopy and Microanalysis</i> , 2018, 24, 1758-1759.	0.2	21
159	Polydopamine-inspired nanomaterials for energy conversion and storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21827-21846.	5.2	103
160	Polydopamine Nanomaterials: Recent Advances in Synthesis Methods and Applications. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018, 6, 109.	2.0	166
161	Polymethyldopa Nanoparticles-Based Fluorescent Sensor for Detection of Tyrosinase Activity. <i>ACS Sensors</i> , 2018, 3, 1855-1862.	4.0	48
162	Effects of pH and Oxidants on the First Steps of Polydopamine Formation: A Thermodynamic Approach. <i>Journal of Physical Chemistry B</i> , 2018, 122, 6314-6327.	1.2	146
163	In Situ Structural Elucidation and Selective Pb <sup>2+</sup> Ion Recognition of Polydopamine Film Formed by Controlled Electrochemical Oxidation of Dopamine. <i>Langmuir</i> , 2018, 34, 7048-7058.	1.6	17
164	Closer to the polydopamine structure: new insights from a combined <sup>13</sup> C/ <sup>1</sup> H/ <sup>2</sup> H solid-state NMR study on deuterated samples. <i>Polymer Chemistry</i> , 2018, 9, 3379-3387.	1.9	46

#	ARTICLE	IF	CITATIONS
165	Synchronously improved dielectric and mechanical properties of wave-transparent laminated composites combined with outstanding thermal stability by incorporating isozyme/POSS functionalized PBO fibers. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7652-7660.	2.7	97
166	Radical Scavenging Activities of Biomimetic Catechol-Chitosan Films. <i>Biomacromolecules</i> , 2018, 19, 3502-3514.	2.6	34
167	Biomimetic Chemistry at Interfaces. <i>Interface Science and Technology</i> , 2018, 21, 367-404.	1.6	3
168	<i>In situ</i> insights into the nanoscale deposition of 5,6-dihydroxyindole-based coatings and the implications on the underwater adhesion mechanism of polydopamine coatings. <i>RSC Advances</i> , 2018, 8, 27695-27702.	1.7	17
169	The Pros and Cons of Polydopamine-Sensitized Titanium Oxide for the Photoreduction of CO <sub>2</sub> . <i>Catalysts</i> , 2018, 8, 215.	1.6	17
170	Melanin-Based Functional Materials. <i>International Journal of Molecular Sciences</i> , 2018, 19, 228.	1.8	25
171	Structural Requirements of Alkylglyceryl-l-Ascorbic Acid Derivatives for Melanogenesis Inhibitory Activity. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1144.	1.8	11
172	Cyclodextrin-Based Magnetic Nanoparticles for Cancer Therapy. <i>Nanomaterials</i> , 2018, 8, 170.	1.9	61
173	Aggressive Man-Made Red Blood Cells for Hypoxia-Resistant Photodynamic Therapy. <i>Advanced Materials</i> , 2018, 30, e1802006.	11.1	239
174	Metal-Polydopamine Framework: An Innovative Signal-Generation Tag for Colorimetric Immunoassay. <i>Analytical Chemistry</i> , 2018, 90, 11099-11105.	3.2	260
175	Expedient synthesis of eumelanin-inspired 5,6-dihydroxyindole-2-carboxylate ethyl ester derivatives. <i>RSC Advances</i> , 2018, 8, 28323-28328.	1.7	2
176	Localized heating with a photothermal polydopamine coating facilitates a novel membrane distillation process. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18799-18807.	5.2	138
177	Polydopamine Nanoparticles Enhance Drug Release for Combined Photodynamic and Photothermal Therapy. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 21125-21136.	4.0	217
178	Formation of Homogeneous Epinephrine-Melanin Solutions to Fabricate Electrodes for Enhanced Photoelectrochemical Biosensing. <i>Langmuir</i> , 2018, 34, 7744-7750.	1.6	16
179	Skin Pigmentation-Inspired Polydopamine Sunscreens. <i>Advanced Functional Materials</i> , 2018, 28, 1802127.	7.8	122
180	Polydopamine Encapsulation of Fluorescent Nanodiamonds for Biomedical Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1801252.	7.8	58
181	Applications of polydopamine modifications in capillary electrophoretic analysis. <i>Journal of Separation Science</i> , 2019, 42, 342-359.	1.3	17
182	Pro- and Anti-oxidant Properties of Redox-Active Catechol-Chitosan Films. <i>Frontiers in Chemistry</i> , 2019, 7, 541.	1.8	13

#	ARTICLE	IF	CITATIONS
183	Retardation Effect of Catechol Moiety during Radical Copolymerization of 3,4-Dihydroxystyrene with Various Monomers. <i>Chemistry Letters</i> , 2019, 48, 928-931.	0.7	5
184	One-pot route to synthesize HNTs@PVDF membrane for rapid and effective separation of emulsion-oil and dyes from waste water. <i>Journal of Hazardous Materials</i> , 2019, 380, 120865.	6.5	67
185	Electrochemical deposition of bio-inspired laccase-polydopamine films for phenolic sensors. <i>Electrochimica Acta</i> , 2019, 319, 462-471.	2.6	48
186	Polydopamine-wrapped Cu/Cu(II) nano-heterostructures: An efficient electrocatalyst for non-enzymatic glucose detection. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 580, 123689.	2.3	24
187	Controlled reversible buckling of polydopamine spherical microcapsules: revealing the hidden rich phenomena of post-buckling of spherical polymeric shells. <i>Soft Matter</i> , 2019, 15, 6504-6517.	1.2	10
188	Artificial melanin particles: new building blocks for biomimetic structural coloration. <i>Polymer Journal</i> , 2019, 51, 1127-1135.	1.3	28
189	Natural Eumelanin and Its Derivatives as Multifunctional Materials for Bioinspired Applications: A Review. <i>Biomacromolecules</i> , 2019, 20, 4312-4331.	2.6	73
190	Enhancing Energy Storage Devices with Biomacromolecules in Hybrid Electrodes. <i>Biotechnology Journal</i> , 2019, 14, e1900062.	1.8	21
192	Functional Macromolecule-Enabled Colloidal Synthesis: From Nanoparticle Engineering to Multifunctionality. <i>Advanced Materials</i> , 2019, 31, e1902733.	11.1	25
193	Effect of pyrolyzed catecholamine polymers for concurrent enhancements of electrical conductivity and mechanical strength of graphene-based fibers. <i>Composites Science and Technology</i> , 2019, 183, 107818.	3.8	6
194	Colloidal Photonic Inks for Mechanochromic Films and Patterns with Structural Colors of High Saturation. <i>Chemistry of Materials</i> , 2019, 31, 8154-8162.	3.2	103
195	Construction of Bio/Nanointerfaces: Stable Gold Nanoparticle Bioconjugates in Complex Systems. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 40817-40825.	4.0	13
196	Block copolymer nanoparticles-based fluorescent sensor for ultrasensitive detection of tyrosinase activity and inhibitor. <i>Sensors and Actuators B: Chemical</i> , 2019, 298, 126935.	4.0	14
197	Synthesis of Ultrasmall Synthetic Melanin Nanoparticles by UV Irradiation in Acidic and Neutral Conditions. <i>ACS Applied Bio Materials</i> , 2019, 2, 4667-4674.	2.3	28
198	Achieving traceless ablation of solid tumors without recurrence by mild photothermal-chemotherapy of triple stimuli-responsive polymer-drug conjugate nanoparticles. <i>Journal of Materials Chemistry B</i> , 2019, 7, 415-432.	2.9	32
199	A self-roughened and biodegradable superhydrophobic coating with UV shielding, solar-induced self-healing and versatile oil-water separation ability. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2122-2128.	5.2	205
200	Room temperature preparation of water-soluble polydopamine-polyethyleneimine copolymer dots for selective detection of copper ions. <i>Talanta</i> , 2019, 197, 584-591.	2.9	34
201	Redox chemistry in the pigment eumelanin as a function of temperature using broadband dielectric spectroscopy. <i>RSC Advances</i> , 2019, 9, 3857-3867.	1.7	22

#	ARTICLE	IF	CITATIONS
202	Intermolecular association of some selected melanin monomers and their optical absorption. Computational and Theoretical Chemistry, 2019, 1151, 43-49.	1.1	6
203	Catechol-Containing Acrylic Poly(ionic liquid) Hydrogels as Bioinspired Filters for Water Decontamination. ACS Applied Polymer Materials, 2019, 1, 1887-1895.	2.0	17
204	Enzyme-inspired flavinâ€“polydopamine as a biocompatible nanoparticle photocatalyst. Nanoscale Horizons, 2019, 4, 1318-1325.	4.1	7
205	Breaking Out the Traditional Polymerization: Tailoring the Shape, Structure, and Optical Properties of Polydopamine by Using CdTe Quantum Dots. Macromolecular Chemistry and Physics, 2019, 220, 1900109.	1.1	4
206	Flavin Conjugated Polydopamine Nanoparticles Displaying Light-Driven Monooxygenase Activity. Frontiers in Chemistry, 2019, 7, 278.	1.8	11
207	A Robust Fungal Allomelanin Mimic: An Antioxidant and Potent Freeâ€“Electron Donor with Freeâ€“Radical Properties that can be Tuned by Ionic Liquids. ChemPlusChem, 2019, 84, 1331-1337.	1.3	24
208	The Chemistry of Bioinspired Catechol(amine)-Based Coatings. ACS Biomaterials Science and Engineering, 2019, 5, 2708-2724.	2.6	72
209	Photothermal Membrane Water Treatment for Two Worlds. Accounts of Chemical Research, 2019, 52, 1215-1225.	7.6	117
210	Polydopamine-assisted surface modification for orthopaedic implants. Journal of Orthopaedic Translation, 2019, 17, 82-95.	1.9	91
211	Modular Assembly of Biomaterials Using Polyphenols as Building Blocks. ACS Biomaterials Science and Engineering, 2019, 5, 5578-5596.	2.6	105
212	Fabrication of superhydrophobic fabrics with outstanding self-healing performance in sunlight. Materials Chemistry Frontiers, 2019, 3, 1341-1348.	3.2	19
213	Surface Modification of Nanoparticles for Targeted Drug Delivery. , 2019, , .		27
214	Mucopenetration and biocompatibility of polydopamine surfaces for delivery in an Ex Vivo porcine bladder. Journal of Controlled Release, 2019, 300, 161-173.	4.8	34
215	Polydopamine Nanoparticles Prepared Using Redox-Active Transition Metals. Journal of Physical Chemistry B, 2019, 123, 2513-2524.	1.2	45
216	Polydopamine-Based Simple and Versatile Surface Modification of Polymeric Nano Drug Carriers. , 2019, , 369-389.		3
217	Photothermal materials: A key platform enabling highly efficient water evaporation driven by solar energy. Materials Today Energy, 2019, 12, 277-296.	2.5	250
218	Nascent particle sizes and degrees of entanglement are responsible for the significant differences in impact strength of ultrahigh molecular weight polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 632-641.	2.4	26
219	Direct Evidence for the Critical Role of 5,6-Dihydroxyindole in Polydopamine Deposition and Aggregation. Langmuir, 2019, 35, 5191-5201.	1.6	37

#	ARTICLE	IF	CITATIONS
220	Micro-Structured Polydopamine Films via Pulsed Electrochemical Deposition. <i>Nanomaterials</i> , 2019, 9, 242.	1.9	14
221	Recyclable Cytokines on Short and Injectable Polylactic Acid Fibers for Enhancing Tâ€Cell Function. <i>Advanced Functional Materials</i> , 2019, 29, 1808361.	7.8	16
222	Synthetic Melanin Hybrid Patchy Nanoparticle Photocatalysts. <i>Journal of Physical Chemistry C</i> , 2019, 123, 5345-5352.	1.5	34
223	Polydopamineâ€coated silk yarn for improving the light fastness of natural dyes. <i>Coloration Technology</i> , 2019, 135, 143-151.	0.7	17
224	Role of polydopamineâ€™s redox-activity on its pro-oxidant, radical-scavenging, and antimicrobial activities. <i>Acta Biomaterialia</i> , 2019, 88, 181-196.	4.1	137
225	Melanin-mimetic multicolor and low-toxicity hair dye. <i>RSC Advances</i> , 2019, 9, 33617-33624.	1.7	20
226	Unravelling the polydopamine mystery: is the end in sight?. <i>Polymer Chemistry</i> , 2019, 10, 5771-5777.	1.9	42
227	High effectiveness of pure polydopamine in extraction of uranium and plutonium from groundwater and seawater. <i>RSC Advances</i> , 2019, 9, 30052-30063.	1.7	11
228	Phenolic Building Blocks for the Assembly of Functional Materials. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1904-1927.	7.2	302
229	Phenolische Bausteine fÃ¼r die Assemblierung von Funktionsmaterialien. <i>Angewandte Chemie</i> , 2019, 131, 1920-1945.	1.6	34
230	Nitrodopamine vs dopamine as an intermediate layer for bone regeneration applications. <i>Materials Science and Engineering C</i> , 2019, 98, 461-471.	3.8	16
231	Investigation of the chemical structure and formation mechanism of polydopamine from selfâ€assembly of dopamine by liquid chromatography/mass spectrometry coupled with isotopeâ€labelling techniques. <i>Rapid Communications in Mass Spectrometry</i> , 2019, 33, 429-436.	0.7	21
232	Melanin/polydopamine-based nanomaterials for biomedical applications. <i>Science China Chemistry</i> , 2019, 62, 162-188.	4.2	91
233	Dopamin, oxidativer Stress und Proteinâ€Chinonmodifikationen bei Parkinson und anderen neurodegenerativen Erkrankungen. <i>Angewandte Chemie</i> , 2019, 131, 6580-6596.	1.6	7
234	Dopamine, Oxidative Stress and Proteinâ€Quinone Modifications in Parkinson's and Other Neurodegenerative Diseases. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6512-6527.	7.2	160
235	Scalable Biosynthesis of Melanin by the Basidiomycete <i>Armillaria cepistipes</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2019, 67, 132-139.	2.4	50
236	Phenol-Directed Câ€H Functionalization. <i>ACS Catalysis</i> , 2019, 9, 521-555.	5.5	167
237	Lucigenin fluorescent assay of tyrosinase activity and its inhibitor screening. <i>Sensors and Actuators B: Chemical</i> , 2019, 280, 41-45.	4.0	21

#	ARTICLE	IF	CITATIONS
238	Simultaneously enhanced mechanical properties and thermal properties of ultrahigh-molecular-weight polyethylene with polydopamine-coated alumina platelets. <i>Polymer International</i> , 2019, 68, 151-159.	1.6	11
239	Polydopamine-clay functionalized <i>Calotropis gigantea</i> fiber: A recyclable oil-absorbing material with large lumens. <i>Journal of Natural Fibers</i> , 2019, 16, 1156-1165.	1.7	6
240	Recent developments in polydopamine fluorescent nanomaterials. <i>Materials Horizons</i> , 2020, 7, 746-761.	6.4	171
241	Self-assembled core-shell polydopamine@MXene with synergistic solar absorption capability for highly efficient solar-to-vapor generation. <i>Nano Research</i> , 2020, 13, 255-264.	5.8	174
242	Highly fluorescent oligodopamine (F-ODA) for accurate and sensitive detection of the neurotransmitter dopamine. <i>Analytical Biochemistry</i> , 2020, 591, 113571.	1.1	5
243	Mussel-inspired UV protective organic coatings via layer-by-layer assembly. <i>European Polymer Journal</i> , 2020, 124, 109455.	2.6	12
244	Enzyme Mimicking Based on the Natural Melanin Particles from Human Hair. <i>IScience</i> , 2020, 23, 100778.	1.9	27
245	Self-assembled gold decorated polydopamine nanospheres as electrochemical sensor for simultaneous determination of ascorbic acid, dopamine, uric acid and tryptophan. <i>Materials Science and Engineering C</i> , 2020, 109, 110602.	3.8	68
246	CuCl <sub>2</sub> anchored on polydopamine coated-magnetic nanoparticles (Fe <sub>3</sub> O <sub>4</sub> @PDA/Cu(II)): Preparation, characterization and evaluation of its cytotoxicity, antioxidant, antibacterial, and antifungal properties. <i>Polyhedron</i> , 2020, 177, 114327.	1.0	21
247	Membrane Binding Strongly Affecting the Dopamine Reactivity Induced by Copper Prion and Copper/Amyloid- $\beta$ (A $\beta$ ) Peptides. A Ternary Copper/A $\beta$ /Prion Peptide Complex Stabilized and Solubilized in Sodium Dodecyl Sulfate Micelles. <i>Inorganic Chemistry</i> , 2020, 59, 900-912.	1.9	14
248	Melanin Biopolymers: Tailoring Chemical Complexity for Materials Design. <i>Angewandte Chemie</i> , 2020, 132, 11292-11301.	1.6	14
249	Melanin Biopolymers: Tailoring Chemical Complexity for Materials Design. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11196-11205.	7.2	121
250	Polydopamine – its Prolific Use as Catalyst and Support Material. <i>ChemCatChem</i> , 2020, 12, 2649-2689.	1.8	40
251	Highly discriminative fluorometric sensor based on luminescent covalent organic nanospheres for tyrosinase activity monitoring and inhibitor screening. <i>Sensors and Actuators B: Chemical</i> , 2020, 305, 127386.	4.0	16
252	Fabrication of Mixed-Charge Polypeptide Coating for Enhanced Hemocompatibility and Anti-Infective Effect. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 2999-3010.	4.0	53
253	Natural melanin/TiO <sub>2</sub> hybrids for simultaneous removal of dyes and heavy metal ions under visible light. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 389, 112292.	2.0	19
254	Photothermal-enhanced synthetic melanin inks for near-infrared imaging. <i>Polymer</i> , 2020, 186, 122042.	1.8	57
255	Compression Isotherms of Polydopamine Films. <i>Colloid Journal</i> , 2020, 82, 546-554.	0.5	2

#	ARTICLE	IF	CITATIONS
256	Microbial production of melanin and its various applications. <i>World Journal of Microbiology and Biotechnology</i> , 2020, 36, 170.	1.7	89
257	Laser-induced graphitization of polydopamine leads to enhanced mechanical performance while preserving multifunctionality. <i>Nature Communications</i> , 2020, 11, 4848.	5.8	38
258	Proton-Conductive Melanin-Like Fibers through Enzymatic Oxidation of a Self-Assembling Peptide. <i>Advanced Materials</i> , 2020, 32, e2003511.	11.1	38
259	Polydopamine Film Self-Assembled at Air/Water Interface for Organic Electronic Memory Devices. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000979.	1.9	13
260	Signal-off electrochemiluminescence immunosensor based on Mn-Eumelanin coordination nanoparticles quenching PtCo-CuFe <sub>2</sub> O <sub>4</sub> -reduced graphene oxide enhanced luminol. <i>Sensors and Actuators B: Chemical</i> , 2020, 323, 128702.	4.0	10
261	Chemoenzymatic elaboration of the Raper-Mason pathway unravels the structural diversity within eumelanin pigments. <i>Chemical Science</i> , 2020, 11, 7836-7841.	3.7	17
262	Characterization of broadband complex refractive index of synthetic melanin coatings and their changes after ultraviolet irradiation. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	22
263	Codeposition of Levodopa and Polyethyleneimine: Reaction Mechanism and Coating Construction. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 54094-54103.	4.0	39
264	Engineering proton conductivity in melanin using metal doping. <i>Journal of Materials Chemistry B</i> , 2020, 8, 8050-8060.	2.9	27
265	Melanin and Melanin-Like Hybrid Materials in Regenerative Medicine. <i>Nanomaterials</i> , 2020, 10, 1518.	1.9	44
266	Bioinspired Melanin-Based Optically Active Materials. <i>Advanced Optical Materials</i> , 2020, 8, 2000932.	3.6	77
267	Effect of the Polydopamine Composite Method on Structural Coloration: Comparison of Binary and Unary Assembly of Colloidal Particles. <i>Langmuir</i> , 2020, 36, 11880-11887.	1.6	9
268	Efficient Cellular Internalization and Transport of Bowl-Shaped Polydopamine Particles. <i>Particle and Particle Systems Characterization</i> , 2020, 37, 2000166.	1.2	11
269	Superhydrophilic Coating with Antibacterial and Oil-Repellent Properties via NaIO <sub>4</sub> -Triggered Polydopamine/Sulfobetaine Methacrylate Polymerization. <i>Polymers</i> , 2020, 12, 2008.	2.0	21
270	Polydopamine-Incorporated Nanoformulations for Biomedical Applications. <i>Macromolecular Bioscience</i> , 2020, 20, e2000228.	2.1	31
271	En Route to a Chiral Melanin: The Dynamic From-Imprinted-to-Template-Supramolecular Role of Porphyrin Hetero-Aggregates During the Oxidative Polymerization of L-DOPA. <i>Frontiers in Chemistry</i> , 2020, 8, 616961.	1.8	5
272	Progress in polydopamine-based melanin mimetic materials for structural color generation. <i>Science and Technology of Advanced Materials</i> , 2020, 21, 833-848.	2.8	26
273	Construction of a Mesoporous Polydopamine@GO/Cellulose Nanofibril Composite Hydrogel with an Encapsulation Structure for Controllable Drug Release and Toxicity Shielding. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 57410-57420.	4.0	71



#	ARTICLE	IF	CITATIONS
274	Polydopamine-based nanoreactors: synthesis and applications in bioscience and energy materials. <i>Chemical Science</i> , 2020, 11, 12269-12281.	3.7	44
275	Spectroscopic Investigation and Nanoscale Characterization of Epinephrine Autooxidation under Alkaline Conditions. <i>Langmuir</i> , 2020, 36, 5040-5047.	1.6	6
276	Metal-Free Hydrogen-Bonded Polymers Mimic Noble Metal Electrocatalysts. <i>Advanced Materials</i> , 2020, 32, e1902177.	11.1	24
277	Nanofiltration membrane based on graphene oxide crosslinked with zwitterion-functionalized polydopamine for improved performances. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 110, 153-162.	2.7	20
278	Ratiometric fluorescence nanoprobe for monitoring of intracellular temperature and tyrosine based on a dual emissive carbon dots/gold nanohybrid. <i>Talanta</i> , 2020, 219, 121279.	2.9	15
279	Lymph node-targeted immune-activation mediated by imiquimod-loaded mesoporous polydopamine based-nanocarriers. <i>Biomaterials</i> , 2020, 255, 120208.	5.7	66
280	Self-Assembly of Allomelanin Dimers and the Impact of Poly(ethylene glycol) on the Assembly: A Molecular Dynamics Simulation Study. <i>Journal of Physical Chemistry B</i> , 2020, 124, 2702-2714.	1.2	13
281	Adjustable synthesis of polydopamine nanospheres and their nucleation and growth. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 603, 125196.	2.3	35
282	Radical-Enriched Artificial Melanin. <i>Chemistry of Materials</i> , 2020, 32, 5759-5767.	3.2	17
283	Selenomelanin: An Abiotic Selenium Analogue of Pheomelanin. <i>Journal of the American Chemical Society</i> , 2020, 142, 12802-12810.	6.6	34
284	Supramolecular Regulation of Polydopamine Formation by Amyloid Fibers. <i>Chemistry - A European Journal</i> , 2020, 26, 5500-5507.	1.7	8
285	Paramagnetism and Relaxation Dynamics in Melanin Biomaterials. <i>Journal of Physical Chemistry B</i> , 2020, 124, 2110-2115.	1.2	5
286	Development of Stimulus-Responsive Degradable Film via Codeposition of Dopamine and Cystamine. <i>Chemistry - an Asian Journal</i> , 2020, 15, 2622-2626.	1.7	3
287	Catechol-functionalized hydrogels: biomimetic design, adhesion mechanism, and biomedical applications. <i>Chemical Society Reviews</i> , 2020, 49, 433-464.	18.7	517
288	Polydopamine-based functional materials and their applications in energy, environmental, and catalytic fields: State-of-the-art review. <i>Chemical Engineering Journal</i> , 2020, 387, 124019.	6.6	159
289	Gas-Generating, pH-Responsive Calcium Carbonate Hybrid Particles with Biomimetic Coating for Contrast-Enhanced Ultrasound Imaging. <i>Particle and Particle Systems Characterization</i> , 2020, 37, 1900471.	1.2	24
290	Engineering Shelf-Stable Coating for Microfluidic Organ-on-a-Chip Using Bioinspired Catecholamine Polymers. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 6910-6923.	4.0	17
291	Mimicking Natural Human Hair Pigmentation with Synthetic Melanin. <i>ACS Central Science</i> , 2020, 6, 1179-1188.	5.3	55

#	ARTICLE	IF	CITATIONS
292	Tripeptide-dopamine fluorescent hybrids: a coassembly-inspired antioxidative strategy. <i>Chemical Communications</i> , 2020, 56, 6301-6304.	2.2	8
293	Melanin-based nanomaterials: The promising nanoplatforms for cancer diagnosis and therapy. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2020, 28, 102211.	1.7	20
294	Bioinspired polydopamine nanoparticles: synthesis, nanomechanical properties, and efficient PEGylation strategy. <i>Journal of Materials Chemistry B</i> , 2020, 8, 4489-4504.	2.9	39
295	Photoprotection and Skin Pigmentation: Melanin-Related Molecules and Some Other New Agents Obtained from Natural Sources. <i>Molecules</i> , 2020, 25, 1537.	1.7	135
296	Polydopamine-dyed eri silk yarn for the improvement of wash and light fastness properties. <i>Journal of the Textile Institute</i> , 2021, 112, 553-560.	1.0	3
297	Computational aspects towards understanding the photoprocesses in eumelanin. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2021, 11, e1505.	6.2	4
298	Polydopamine Sensors of Bacterial Hypoxia via Fluorescence Coupling. <i>Advanced Functional Materials</i> , 2021, 31, 2007993.	7.8	14
299	Self-healable and biodegradable soy protein-based protective functional film with low cytotoxicity and high mechanical strength. <i>Chemical Engineering Journal</i> , 2021, 404, 126505.	6.6	52
300	In Situ Depositing Ag NPs on PDA/SiW <sub>11</sub> V Co-encapsulated Fe <sub>3</sub> O <sub>4</sub> @TiO <sub>2</sub> Magnetic Microspheres as Highly Efficient and Durable Visible-light-driven Photocatalysts. <i>ChemCatChem</i> , 2021, 13, 388-396.	1.8	10
301	Multi-functionalized nanofibers with reactive oxygen species scavenging capability and fibrocartilage inductivity for tendon-bone integration. <i>Journal of Materials Science and Technology</i> , 2021, 70, 91-104.	5.6	14
302	Au@polydopamine nanoparticles/tocilizumab composite as efficient scavengers of oxygen free radicals for improving the treatment of rheumatoid arthritis. <i>Materials Science and Engineering C</i> , 2021, 118, 111434.	3.8	12
303	Melanins as Sustainable Resources for Advanced Biotechnological Applications. <i>Global Challenges</i> , 2021, 5, 2000102.	1.8	16
304	Polymeric biomaterials inspired by marine mussel adhesive proteins. <i>Reactive and Functional Polymers</i> , 2021, 159, 104802.	2.0	12
305	Mixed solvent synthesis of polydopamine nanospheres for sustainable multilayer flame retardant nanocoating. <i>Polymer Chemistry</i> , 2021, 12, 2389-2396.	1.9	11
306	<sc>Dopa in small peptides: an amazing functionality to form supramolecular materials. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 4622-4636.	1.5	11
307	SERS characterization of dopamine and <i>in situ</i> dopamine polymerization on silver nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 12158-12170.	1.3	12
308	Strategic Advances in Spatiotemporal Control of Bioinspired Phenolic Chemistries in Materials Science. <i>Advanced Functional Materials</i> , 2021, 31, 2008821.	7.8	39
309	<i>In-Situ</i> Growth of Platinum Nanowires on Polydopamine for Enhancing Mechanical and Electrochemical Properties of Flexible Microelectrode Arrays. <i>IEEE Sensors Journal</i> , 2021, 21, 22868-22877.	2.4	5

#	ARTICLE	IF	CITATIONS
310	Synthesis of mussel-inspired polydopamine-gallium nanoparticles for biomedical applications. <i>Nanomedicine</i> , 2021, 16, 5-17.	1.7	1
311	Understanding the self-polymerization mechanism of dopamine by molecular simulation and applying dopamine surface modification to improve the interfacial adhesion of polyimide fibers with epoxy resin matrix. <i>High Performance Polymers</i> , 2021, 33, 601-614.	0.8	7
312	Recent Advances in a Polydopamine-Mediated Antimicrobial Adhesion System. <i>Frontiers in Microbiology</i> , 2020, 11, 607099.	1.5	70
313	Melanin-Like Nanomedicine in Photothermal Therapy Applications. <i>International Journal of Molecular Sciences</i> , 2021, 22, 399.	1.8	26
314	Sensing Materials: Biopolymeric Nanostructures. , 2021, , .		0
315	Transition-metal coordinate bonds for bioinspired macromolecules with tunable mechanical properties. <i>Nature Reviews Materials</i> , 2021, 6, 421-436.	23.3	148
316	Melanin-Inspired Chromophoric Microparticles Composed of Polymeric Peptide Pigments. <i>Angewandte Chemie</i> , 2021, 133, 7642-7647.	1.6	2
317	Melanin-Inspired Chromophoric Microparticles Composed of Polymeric Peptide Pigments. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7564-7569.	7.2	22
318	Unraveling the Structure and Function of Melanin through Synthesis. <i>Journal of the American Chemical Society</i> , 2021, 143, 2622-2637.	6.6	174
319	Water Mediated Rearrangement of Alkynyl Cyclohexadienones: Access to <i>meta</i> -Alkenylated Phenols. <i>Organic Letters</i> , 2021, 23, 1840-1845.	2.4	9
320	New insight into melanin for food packaging and biotechnology applications. <i>Critical Reviews in Food Science and Nutrition</i> , 2022, 62, 4629-4655.	5.4	57
321	NIR-Actuated Remote Activation of Ferroptosis in Target Tumor Cells through a Photothermally Responsive Iron-Chelated Biopolymer Nanoplatform. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8938-8947.	7.2	112
322	Smart nano-micro platforms for ophthalmological applications: The state-of-the-art and future perspectives. <i>Biomaterials</i> , 2021, 270, 120682.	5.7	32
323	Dopamine Self-Polymerization as a Simple and Powerful Tool to Modulate the Viscoelastic Mechanical Properties of Peptide-Based Gels. <i>Molecules</i> , 2021, 26, 1363.	1.7	15
324	Control of Structural Coloration by Natural Sunlight Irradiation on a Melanin Precursor Polymer Inspired by Skin Tanning. <i>Biomacromolecules</i> , 2021, 22, 1730-1738.	2.6	9
325	An engineered coccolith-based hybrid that transforms light into swarming motion. <i>Cell Reports Physical Science</i> , 2021, 2, 100373.	2.8	2
326	NIR-Actuated Remote Activation of Ferroptosis in Target Tumor Cells through a Photothermally Responsive Iron-Chelated Biopolymer Nanoplatform. <i>Angewandte Chemie</i> , 2021, 133, 9020-9029.	1.6	7
327	Intervention of Polydopamine Assembly and Adhesion on Nanoscale Interfaces: State-of-the-Art Designs and Biomedical Applications. <i>Advanced Healthcare Materials</i> , 2021, 10, e2002138.	3.9	43

#	ARTICLE	IF	CITATIONS
328	Oxidant-dependent antioxidant activity of polydopamine films: The chemistry-morphology interplay. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 614, 126134.	2.3	14
329	Multifunctional polydopamine-based nanoparticles: synthesis, physico-chemical properties and applications for bimodal photothermal/photodynamic therapy of cancer. <i>Multifunctional Materials</i> , 2021, 4, 022001.	2.4	16
330	Emergence of melanin-inspired supercapacitors. <i>Nano Today</i> , 2021, 37, 101075.	6.2	121
331	Interaction of Neuromelanin with Xenobiotics and Consequences for Neurodegeneration; Promising Experimental Models. <i>Antioxidants</i> , 2021, 10, 824.	2.2	20
332	Melanin, the What, the Why and the How: An Introductory Review for Materials Scientists Interested in Flexible and Versatile Polymers. <i>Polymers</i> , 2021, 13, 1670.	2.0	42
333	Engineering highly transparent UV-shielding films with disassembled polydopamine oligomers as light adsorber. <i>Applied Surface Science</i> , 2021, 550, 149284.	3.1	18
334	On the free radical redox chemistry of 5,6-dihydroxyindole. <i>Chemical Physics</i> , 2021, 546, 111158.	0.9	10
335	Competitive Binding-Modulated Metal-Phenolic Assemblies for Adaptable Nanofilm Engineering. <i>Chemistry of Materials</i> , 2021, 33, 4733-4744.	3.2	7
336	Hydrogen Atom Transfer from HOO <sup>.</sup> to ortho-Quinones Explains the Antioxidant Activity of Polydopamine. <i>Angewandte Chemie</i> , 2021, 133, 15348-15352.	1.6	5
337	Hydrogen Atom Transfer from HOO <sup>.</sup> to ortho-Quinones Explains the Antioxidant Activity of Polydopamine. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15220-15224.	7.2	57
338	Nature-Inspired Functional Chromophores from Biomimetic o-Quinone Chemistry. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 2982-2989.	1.2	10
339	Inhibiting Oxygen Release from Li-rich, Mn-rich Layered Oxides at the Surface with a Solution Processable Oxygen Scavenger Polymer. <i>Advanced Energy Materials</i> , 2021, 11, 2100552.	10.2	64
340	Stability and Optical Absorption of a Comprehensive Virtual Library of Minimal Eumelanin Oligomer Models**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 18800-18809.	7.2	9
341	Photothermal Waterborne Polydopamine/Polyurethanes with Light-to-Heat Conversion Properties. <i>ACS Applied Polymer Materials</i> , 2021, 3, 3929-3940.	2.0	22
342	Colorful Pigments for Hair Dyeing Based on Enzymatic Oxidation of Tyrosine Derivatives. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 34851-34864.	4.0	10
343	Stability and Optical Absorption of a Comprehensive Virtual Library of Minimal Eumelanin Oligomer Models**. <i>Angewandte Chemie</i> , 2021, 133, 18948-18957.	1.6	1
344	Improved Polydopamine Deposition in Amine-Functionalized Silica Aerogels for Enhanced UV Absorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 41084-41093.	4.0	3
345	Mutual Benefit between Cu(II) and Polydopamine for Improving Photothermal-Chemodynamic Therapy. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 38127-38137.	4.0	56

#	ARTICLE	IF	CITATIONS
346	Recent developments in polydopamine-based photocatalytic nanocomposites for energy production: Physico-chemical properties and perspectives. <i>Catalysis Today</i> , 2022, 397-399, 316-349.	2.2	26
347	Facile preparation of chitosan-dopamine-inulin aldehyde hydrogel for drug delivery application. <i>International Journal of Biological Macromolecules</i> , 2021, 185, 716-724.	3.6	42
348	Dual Blood-Brain Barrier-Glioma Targeting Peptide-Poly(levodopamine) Hybrid Nanoplatforms as Potential Near Infrared Phototheranostic Agents in Glioblastoma. <i>Bioconjugate Chemistry</i> , 2021, 32, 2014-2031.	1.8	14
349	Polydopamine nanoparticles as dual-task platform for osteoarthritis therapy: A scavenger for reactive oxygen species and regulator for cellular powerhouses. <i>Chemical Engineering Journal</i> , 2021, 417, 129284.	6.6	38
350	Artificial Melanogenesis by Confining Melanin/Polydopamine Production inside Polymersomes. <i>Macromolecular Bioscience</i> , 2021, 21, e2100249.	2.1	8
352	Colored Surfaces Made of Synthetic Eumelanin. <i>Nanomaterials</i> , 2021, 11, 2320.	1.9	0
353	A theoretical study of supramolecular aggregation of polydopamine tetramer subunits in aqueous solution. <i>Journal of Molecular Graphics and Modelling</i> , 2021, 107, 107946.	1.3	6
354	Sustainable MXene/PDA hydrogel with core-shell structure tailored for highly efficient solar evaporation and long-term desalination. <i>Polymer</i> , 2021, 230, 124075.	1.8	28
355	Polydopamine Coated CeO <sub>2</sub> as Radical Scavenger Filler for Aquivion Membranes with High Proton Conductivity. <i>Materials</i> , 2021, 14, 5280.	1.3	2
356	The Photophysics and Photochemistry of Melanin-Like Nanomaterials Depend on Morphology and Structure. <i>Chemistry - A European Journal</i> , 2021, 27, 16309-16319.	1.7	10
357	Durable, self-healing superhydrophobic nanofibrous membrane with self-cleaning ability for highly-efficient oily wastewater purification. <i>Journal of Membrane Science</i> , 2021, 634, 119402.	4.1	132
358	Triphasic Polymer Particles Assembled via Microphase Separation with Multiple Functions. <i>Langmuir</i> , 2021, 37, 11818-11834.	1.6	0
359	Recent advances in dopamine-based materials constructed via one-pot co-assembly strategy. <i>Advances in Colloid and Interface Science</i> , 2021, 295, 102489.	7.0	27
360	Near-infrared fluorescent probe based on Ag&Mn:ZnInS QDs for tyrosinase activity detection and inhibitor screening. <i>Sensors and Actuators B: Chemical</i> , 2021, 344, 130234.	4.0	12
361	Electrosynthesis of polydopamine-ethanolamine films for the development of immunosensing interfaces. <i>Scientific Reports</i> , 2021, 11, 2237.	1.6	24
362	Recent developments in mussel-inspired materials for biomedical applications. <i>Biomaterials Science</i> , 2021, 9, 6653-6672.	2.6	42
363	Stimuli-responsive polydopamine-based smart materials. <i>Chemical Society Reviews</i> , 2021, 50, 8319-8343.	18.7	262
364	Melanin-Like Nanomaterials for Advanced Biomedical Applications: A Versatile Platform with Extraordinary Promise. <i>Advanced Science</i> , 2020, 7, 1903129.	5.6	113

#	ARTICLE	IF	CITATIONS
365	Mussel-like Surface Adhesion and Photoinduced Cooperative Deformation of Janus Particles. <i>Langmuir</i> , 2020, 36, 14372-14385.	1.6	3
366	MUC1-Targeted Cancer Cell Photothermal Ablation Using Bioinspired Gold Nanorods. <i>PLoS ONE</i> , 2015, 10, e0128756.	1.1	25
367	Melanin: A Naturally Existing Multifunctional Material. <i>Applied Chemistry for Engineering</i> , 2016, 27, 115-122.	0.2	19
368	Biomimetic Structural Color Materials Based on Artificial Melanin Particles. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2020, 33, 111-116.	0.1	5
369	Structural and Functional Tailoring of Melanin-Like Polydopamine Radical Scavengers. <i>CCS Chemistry</i> , 2020, 2, 128-138.	4.6	99
370	NMR Spectroelectrochemistry in Studies of Dopamine Oxidation. <i>Electrochemistry</i> , 2020, 88, 200-204.	0.6	8
371	Melanin-based structural coloration of birds and its biomimetic applications. <i>Applied Microscopy</i> , 2021, 51, 14.	0.8	6
372	Preferential solvation and optical properties of eumelanin building blocks in binary mixture of methanol and water. <i>Journal of Chemical Physics</i> , 2021, 155, 174504.	1.2	3
373	Mussel-inspired chemistry: A promising strategy for natural polysaccharides in biomedical applications. <i>Progress in Polymer Science</i> , 2021, 123, 101472.	11.8	77
374	Facile preparation of hierarchical porous polydopamine microspheres for rapid removal of chromate from the wastewater. <i>Journal of Leather Science and Engineering</i> , 2020, 2, .	2.7	20
375	An innovative layer-by-layer coated titanium hydroxide-(gentamicin-polydopamine) as a hybrid drug delivery platform. <i>Journal of Drug Delivery Science and Technology</i> , 2022, 67, 102943.	1.4	7
376	Hybrid Porphyrin/DOPA-melanin film as self-assembled material and smart device for dye-pollutant removal in water. <i>Chemical Engineering Journal</i> , 2022, 433, 133262.	6.6	12
377	Femtosecond laser nano-structuring for surface plasmon resonance-based detection of uranium. <i>Applied Surface Science</i> , 2022, 576, 151831.	3.1	9
379	Fabrication PDA-polyurea microcapsules with anti-photolysis and sustained-release performances via Pickering emulsion template. <i>Colloid and Polymer Science</i> , 2022, 300, 1-10.	1.0	2
380	The Application of Nanomaterial in Skeletal Muscle Regeneration. , 2021, , 37-85.		0
381	Fabrication of Functional Polycatechol Nanoparticles. <i>ACS Macro Letters</i> , 2022, 11, 251-256.	2.3	31
382	Bio-inspired antibacterial coatings on urinary stents for encrustation prevention. <i>Journal of Materials Chemistry B</i> , 2022, 10, 2584-2596.	2.9	17
383	Kinetics-Regulated Interfacial Selective Superassembly of Asymmetric Smart Nanovehicles with Tailored Topological Hollow Architectures. <i>Angewandte Chemie</i> , 0, , .	1.6	0

#	ARTICLE	IF	CITATIONS
384	Revisiting the adhesion mechanism of mussel-inspired chemistry. <i>Chemical Science</i> , 2022, 13, 1698-1705.	3.7	53
385	Accelerated Mimetic Oxidase Activity of Polydopamine-Dressed PdCu Nanozyme for the Detection of Ascorbic Acid Related Bioenzymes. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 1653-1663.	3.2	30
386	Polydopamine-Induced Modification on the Highly Charged Surface of Asymmetric Nanofluidics: A Strategy for Adjustable Ion Current Rectification Properties. <i>Analytical Chemistry</i> , 2022, 94, 2493-2501.	3.2	9
387	Kinetics-Regulated Interfacial Selective Superassembly of Asymmetric Smart Nanovehicles with Tailored Topological Hollow Architectures. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	20
388	Exciton interactions in helical crystals of a hydrogen-bonded eumelanin monomer. <i>Chemical Science</i> , 2022, 13, 2331-2338.	3.7	6
389	NIR-responsive waterborne polyurethane-polydopamine coatings for light-driven disinfection of surfaces. <i>Progress in Organic Coatings</i> , 2022, 164, 106669.	1.9	4
390	Preparation and Separation Properties of Electrospinning Modified Membrane with Ionic Liquid Terminating Polyimide/Polyvinylpyrrolidone@Polydopamine. <i>Membranes</i> , 2022, 12, 189.	1.4	3
391	Coordination Geometry in Metallo-Supramolecular Polymer Networks. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1
392	Free Energy and Stacking of Eumelanin Nanoaggregates. <i>Journal of Physical Chemistry B</i> , 2022, 126, 1805-1818.	1.2	8
393	Highly Conductive Melanin-like Polymer Composites for Nonenzymatic Glucose Biosensors with a Wide Detection Range. <i>ACS Applied Polymer Materials</i> , 2022, 4, 2527-2535.	2.0	5
394	Melanin and Melanin-Functionalized Nanoparticles as Promising Tools in Cancer Research—A Review. <i>Cancers</i> , 2022, 14, 1838.	1.7	23
395	Complexes of Alkaline and Ammonium Cations with Dopamine and Eumelanin Precursors: Dissecting the Role of Noncovalent Cation-π and Cation-Lone Pair (l <sub>f</sub> -Type) Interactions. <i>Journal of Physical Chemistry A</i> , 2022, 126, 2330-2341.	1.1	1
396	Manganese-containing polydopamine nanoparticles as theranostic agents for magnetic resonance imaging and photothermal/chemodynamic combined ferroptosis therapy treating gastric cancer. <i>Drug Delivery</i> , 2022, 29, 1201-1211.	2.5	24
397	Melanin pigment derived from marine organisms and its industrial applications. <i>Dyes and Pigments</i> , 2022, 201, 110214.	2.0	27
398	Phenotypic Characterization and Comparative Genomics of the Melanin-Producing Yeast <i>Exophiala lecanii-corni</i> Reveals a Distinct Stress Tolerance Profile and Reduced Ribosomal Genetic Content. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 1078.	1.5	9
399	Polydopamine-drug conjugate nanocomposites based on ZIF-8 for targeted cancer photothermal-chemotherapy. <i>Journal of Biomedical Materials Research - Part A</i> , 2022, 110, 954-963.	2.1	14
400	Structural Color Production in Melanin-Based Disordered Colloidal Nanoparticle Assemblies in Spherical Confinement. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	15
401	The Photochemical Activity of a Halogen-Bonded Complex Enables the Microfluidic Light-Driven Alkylation of Phenols. <i>Organic Letters</i> , 2022, 24, 2961-2966.	2.4	22

#	ARTICLE	IF	CITATIONS
402	Polymer Grafting to Polydopamine Free Radicals for Universal Surface Functionalization. <i>Journal of the American Chemical Society</i> , 2022, 144, 6992-7000.	6.6	28
403	Mussel-inspired polydopamine microspheres self-adhered on natural hemp fibers for marine uranium harvesting and photothermal-enhanced antifouling properties. <i>Journal of Colloid and Interface Science</i> , 2022, 622, 109-116.	5.0	12
404	Mechanistic Insights into the Ameliorating Effect of Melanogenesis of Psoralen Derivatives in B16F10 Melanoma Cells. <i>Molecules</i> , 2022, 27, 2613.	1.7	9
407	Systematic Approach to Mimic Phenolic Natural Polymers for Biofabrication. <i>Polymers</i> , 2022, 14, 1282.	2.0	6
408	Chemistry and Analysis of Organic Compounds in Dinosaurs. <i>Biology</i> , 2022, 11, 670.	1.3	11
409	Recent Advances in Intrinsically Fluorescent Polydopamine Materials. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4560.	1.3	6
410	Interfacially responsive electron transfer and matter conversion by polydopamine-mediated nanoplateforms for advancing disease theranostics. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2022, 14, e1805.	3.3	3
411	In-situ thickness control of centimetre-scale 2D-Like polydopamine films with large scalability. <i>Materials Today Chemistry</i> , 2022, 24, 100935.	1.7	9
412	Polydopamine at biological interfaces. <i>Advances in Colloid and Interface Science</i> , 2022, 305, 102689.	7.0	81
413	Non-covalent small molecule partnership for redox-active films: Beyond polydopamine technology. <i>Journal of Colloid and Interface Science</i> , 2022, 624, 400-410.	5.0	3
414	Sustainable hydrogen peroxide production based on dopamine through Janus-like mechanism transition from chemical to photocatalytic reactions. <i>Journal of Catalysis</i> , 2022, 411, 235-244.	3.1	9
415	Polydopamine-assisted in-situ formation of dense MOF layer on polyolefin separator for synergistic enhancement of lithium-sulfur battery. <i>Nano Research</i> , 2022, 15, 8048-8055.	5.8	24
416	Polydopamine Biomaterials for Skin Regeneration. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 2196-2219.	2.6	26
417	Nickel/Brønsted acid dual-catalyzed regioselective C-H bond allylation of phenols with 1,3-dienes. <i>Organic Chemistry Frontiers</i> , 2022, 9, 3834-3839.	2.3	3
418	Investigation of Gentamicin Release from Polydopamine Nanoparticles. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6319.	1.3	4
419	Materials for energy conversion in membrane distillation localized heating: Review, analysis and future perspectives of a paradigm shift. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 167, 112702.	8.2	16
420	Neuromelanins in brain aging and Parkinson's disease: synthesis, structure, neuroinflammatory, and neurodegenerative role. <i>IUBMB Life</i> , 2023, 75, 55-65.	1.5	26
422	Recent progress in multifunctional conjugated polymer nanomaterial-based synergistic combination phototherapy for microbial infection theranostics. <i>Coordination Chemistry Reviews</i> , 2022, 470, 214701.	9.5	21



#	ARTICLE	IF	CITATIONS
423	In-Situ Growth of Au Nanoparticles on Polydopamine Nanotube for the Preparation of Hybrid Nanotubes with Improved Enzyme-Like Activity. SSRN Electronic Journal, 0, , .	0.4	0
424	Impact of Polydopamine Nanoparticle Surface Pattern and Roughness on Interactions with Poly(ethylene glycol) in Aqueous Solution: A Multiscale Modeling and Simulation Study. Journal of Physical Chemistry B, 2022, 126, 6301-6313.	1.2	1
425	Eumelanin-inspired nanomaterials in electrochemical energy storage devices: A review. Chemical Engineering Journal, 2023, 452, 138607.	6.6	12
426	Transfection with Plasmid-Encoding lncRNA-SLERCC nanoparticle-mediated delivery suppressed tumor progression in renal cell carcinoma. Journal of Experimental and Clinical Cancer Research, 2022, 41, .	3.5	16
427	Coordination geometry in metallo-supramolecular polymer networks. Coordination Chemistry Reviews, 2022, 471, 214733.	9.5	19
428	Optimized design of environmentally-friendly polydopamine nanoparticles for the stabilization of both thermo- and photo-oxidation of polypropylene: Size effects. Polymer Testing, 2022, 116, 107795.	2.3	5
429	Current material engineering strategies to prevent catheter encrustation in urinary tracts. Materials Today Bio, 2022, 16, 100413.	2.6	6
430	Topographyâ€Supported Nanoarchitectonics of Hybrid Scaffold for Systematically Modulated Bone Regeneration and Remodeling. Advanced Functional Materials, 2022, 32, .	7.8	22
431	A Flexible and Robust Structural Color Film Obtained by Assembly of Surface-Modified Melanin Particles. Nanomaterials, 2022, 12, 3338.	1.9	2
432	A catalytic membrane based on dopamine directional deposition biomimetically induced by immobilized enzyme for dye degradation. Chemical Engineering Research and Design, 2022, 188, 453-461.	2.7	5
433	Multicomponent System of Singleâ€Walled Carbon Nanotubes Functionalized with a Melaninâ€Inspired Material for Optical Detection and Scavenging of Metals. Advanced Functional Materials, 2022, 32, .	7.8	10
434	Dopamine as a bioinspired adhesion promoter for the metallization of multi-responsive phase change microcapsules. Journal of Materials Science, 2022, 57, 16755-16775.	1.7	1
435	Metal-Phenolic Networks as Broad-Spectrum Antioxidant Coatings for Hemoglobin Nanoparticles Working as Oxygen Carriers. Chemistry of Materials, 2022, 34, 9200-9211.	3.2	4
436	Mussel-inspired PDA-based MIP-SERS sensor for the detection of trace MG in environmental water. Analyst, The, 2022, 147, 5701-5709.	1.7	1
437	Polymerization of <sc>l</sc>-Tyrosine, <sc>l</sc>-Phenylalanine, and 2-Phenylethylamine as a Versatile Method of Surface Modification for Implantable Medical Devices. ACS Omega, 2022, 7, 39234-39249.	1.6	3
439	Infrared imaging of surface confluent polydopamine (PDA) films at the nanoscale. Colloids and Surfaces B: Biointerfaces, 2023, 221, 112954.	2.5	5
440	Structurally diverse polydopamine-based nanomedicines for cancer therapy. , 2022, 1, .		5
441	Reversible Supramolecular Noncovalent Self-Assembly Determines the Optical Properties and the Formation of Melanin-like Nanoparticles. Journal of Physical Chemistry Letters, 2022, 13, 9829-9833.	2.1	4

#	ARTICLE	IF	CITATIONS
442	An array structure of polydopamine/wood solar interfacial evaporator for high-efficiency water generation and desalination. <i>Solar Energy Materials and Solar Cells</i> , 2023, 249, 112052.	3.0	12
443	Crosslinking Mechanisms of Phenol, Catechol, and Gallol for Synthetic Polyphenols: A Comparative Review. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 11626.	1.3	6
444	Eumelanin from the Black Soldier Fly as Sustainable Biomaterial: Characterisation and Functional Benefits in Tissue-Engineered Composite Scaffolds. <i>Biomedicines</i> , 2022, 10, 2945.	1.4	6
445	Molecular investigation of interplay mechanism between polydopamine and graphene oxide: The effect of oxidation degree on the adsorption behavior of polydopamine. <i>Applied Surface Science</i> , 2023, 611, 155759.	3.1	6
446	Au Nanoparticles on Polydopamine Nanotubes for Enzyme-Like Nanomaterials with Improved Activities. <i>ACS Applied Nano Materials</i> , 2022, 5, 17870-17878.	2.4	7
447	Eminent differences in cryogenic toughness of ultra-high molecular weight polyethylene with different entanglement densities. <i>Journal of Applied Polymer Science</i> , 0, , .	1.3	1
448	Molecular Dynamics Simulations of Polydopamine Nanosphere™s Structure Based on Experimental Evidence. <i>Polymers</i> , 2022, 14, 5486.	2.0	0
449	Structural Investigation of DHICA Eumelanin Using Density Functional Theory and Classical Molecular Dynamics Simulations. <i>Molecules</i> , 2022, 27, 8417.	1.7	0
450	Enhancing the interfacial bond strength of aluminum/polymer laminated film of the soft package lithium-ion battery through polydopamine surface modification. <i>Journal of Applied Polymer Science</i> , 0, , .	1.3	2
451	Structural elucidation of polydopamine facilitated by ionic liquid solvation. <i>Physical Chemistry Chemical Physics</i> , 2023, 25, 14700-14710.	1.3	3
452	Biomimetic pheomelanin to unravel the electronic, molecular and supramolecular structure of the natural product. <i>Chemical Science</i> , 2023, 14, 4183-4192.	3.7	6
453	Tailoring the Chemical Structure of Cellulose Nanocrystals by Amine Functionalization. <i>European Journal of Organic Chemistry</i> , 2023, 26, .	1.2	2
454	DOPA pheomelanin is increased in nigral neuromelanin of Parkinson™s disease. <i>Progress in Neurobiology</i> , 2023, 223, 102414.	2.8	6
455	Experimental Methods to Get Polydopamine Films: A Comparative Review on the Synthesis Methods, the Films™ Composition and Properties. <i>Macromolecular Rapid Communications</i> , 2023, 44, .	2.0	3
456	Kinetic study of polydopamine sphere synthesis using TRIS: relationship between synthesis conditions and final properties. <i>RSC Advances</i> , 2023, 13, 5081-5095.	1.7	9
457	Recent Advances in Bio-Inspired Versatile Polydopamine Platforms for ‘Smart’ Cancer Photothermal Therapy. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2023, 41, 699-712.	2.0	8
458	Recent Advances and Progress on Melanin: From Source to Application. <i>International Journal of Molecular Sciences</i> , 2023, 24, 4360.	1.8	11
459	Bioinspired nanoerythrocytes for metabolic microenvironment remodeling and long-term prognosis promoting of acute ischemic stroke. <i>Nano Today</i> , 2023, 49, 101806.	6.2	3

#	ARTICLE	IF	CITATIONS
460	Sustainable production of active pharmaceutical ingredients from lignin-based benzoic acid derivatives <i>via</i> demand orientation. Green Chemistry, 2023, 25, 3791-3815.	4.6	6
461	Recent Applications of Melanin-like Nanoparticles as Antioxidant Agents. Antioxidants, 2023, 12, 863.	2.2	9
462	Synthesis and Characterization of Humic/Melanin-like Compounds by Oxidative Polymerization of Simple Aromatic Precursors. Water (Switzerland), 2023, 15, 1400.	1.2	1
463	Nanoscale surface coatings based on plant phenolics. , 2023, , 195-216.		1
464	Regulation of biological processes by intrinsically chiral engineered materials. Nature Reviews Materials, 2023, 8, 403-413.	23.3	12
469	Exploiting Melanin-Metal Interactions for Emerging Technologies. , 2023, , 111-125.		0
482	The future of electronic materials isâ€¦degradable!. Journal of Materials Chemistry C, 2023, 11, 11803-11813.	2.7	0
506	Structure prediction from spectra amidst dynamical heterogeneity in melanin. Chemical Communications, 2024, 60, 2613-2616.	2.2	0