

Self-Healing Underwater Superoleophobic and Antibiofouling Assembly of Hierarchical Microgel Spheres

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Hydrogels with Self-Healing Attribute. , 2016, , .		0
2	Temperature-dependent phase-segregation behavior and antifouling performance of UV-curable methacrylated PDMS/PEG coatings. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1612-1623.	2.4	17
3	Silicone Oil-Infused Slippery Surfaces Based on Sol-Gel Process-Induced Nanocomposite Coatings: A Facile Approach to Highly Stable Bioinspired Surface for Biofouling Resistance. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34810-34819.	4.0	147
4	A Green Route for Substrate-Independent Oil-Repellent Coatings. <i>Scientific Reports</i> , 2016, 6, 38016.	1.6	6
5	Multiphase Media Antiadhesive Coatings: Hierarchical Self-Assembled Porous Materials Generated Using Breath Figure Patterns. <i>ACS Nano</i> , 2016, 10, 11087-11095.	7.3	72
6	Highly transparent and self-healing films based on the dynamic Schiff base linkage. <i>RSC Advances</i> , 2016, 6, 115247-115251.	1.7	22
7	Regulating Underwater Superoleophobicity to Superoleophilicity on Hierarchical Structured Copper Substrates through Assembling n-Alkanoic Acids. <i>Langmuir</i> , 2016, 32, 13493-13499.	1.6	4
8	Development of electrically conductive-superoleophobic micropillars for reducing surface adhesion of oil at low temperatures. <i>Applied Surface Science</i> , 2016, 389, 623-631.	3.1	7
9	Surfaces with Sustainable Superhydrophobicity upon Mechanical Abrasion. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 28171-28179.	4.0	74
10	Facile fabrication of highly omniphobic and self-cleaning surfaces based on water mediated fluorinated nanosilica aggregation. <i>RSC Advances</i> , 2016, 6, 74340-74348.	1.7	30
11	Robust Underwater Oil-Repellent Material Inspired by Columnar Nacre. <i>Advanced Materials</i> , 2016, 28, 8505-8510.	11.1	96
12	Stabilization of catechol-boronic ester bonds for underwater self-healing and recycling of lipophilic bulk polymer in wider pH range. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14122-14131.	5.2	75
13	Fabrication of Robust Hydrophobic and Superhydrophobic Polymer Films with Onefold or Dual Inverse Opal Structures. <i>Macromolecular Materials and Engineering</i> , 2016, 301, 1430-1436.	1.7	6
14	Intriguing Morphology Evolution from Noncrosslinked Poly(<i>tert</i> -butyl acrylate) Seeds with Polar Functional Groups in Soap-Free Emulsion Polymerization of Styrene. <i>Langmuir</i> , 2016, 32, 7829-7840.	1.6	25
15	Robust, Self-Healing Superhydrophobic Fabrics Prepared by One-Step Coating of PDMS and Octadecylamine. <i>Scientific Reports</i> , 2016, 6, 27262.	1.6	159
16	Hybrid Hairy Janus Particles as Building Blocks for Antibiofouling Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32591-32603.	4.0	31
17	Facile preparation of self-healing waterborne superhydrophobic coatings based on fluoroalkyl silane-loaded microcapsules. <i>RSC Advances</i> , 2016, 6, 53949-53954.	1.7	30
18	Fish Gill Inspired Crossflow for Efficient and Continuous Collection of Spilled Oil. <i>ACS Nano</i> , 2017, 11, 2477-2485.	7.3	186

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19	Synthesis of Dual-Stimuli-Responsive Microcontainers with Two Payloads in Different Storage Spaces for Preprogrammable Release. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3552-3556.	7.2	52
20	Synthesis of Dual-Stimuli-Responsive Microcontainers with Two Payloads in Different Storage Spaces for Preprogrammable Release. <i>Angewandte Chemie</i> , 2017, 129, 3606-3610.	1.6	10
21	A facile immersion-curing approach to surface-tailored poly(vinyl alcohol)/silica underwater superoleophobic coatings with improved transparency and robustness. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10866-10875.	5.2	45
22	A robust salt-tolerant superoleophobic alginate/graphene oxide aerogel for efficient oil/water separation in marine environments. <i>Scientific Reports</i> , 2017, 7, 46379.	1.6	51
23	Preparation and characterization of underwater superoleophobic chitosan/poly(vinyl alcohol) coatings for self-cleaning and oil/water separation. <i>Applied Surface Science</i> , 2017, 412, 10-18.	3.1	38
24	Grafting Binary PEG and Fluoropolymer Brushes from Mix-Biomimic Initiator as "Ambiguous" Surfaces for Antibiofouling. <i>Macromolecular Chemistry and Physics</i> , 2017, 218, 1700085.	1.1	11
25	Robust transparent superamphiphobic coatings on non-fabric flat substrates with inorganic adhesive titania bonded silica. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8352-8359.	5.2	35
26	Novel amphiphilic poly(dimethylsiloxane) based polyurethane networks tethered with carboxybetaine and their combined antibacterial and anti-adhesive property. <i>Applied Surface Science</i> , 2017, 412, 1-9.	3.1	52
27	Environmental stimuli-responsive self-repairing waterbased superhydrophobic coatings. <i>RSC Advances</i> , 2017, 7, 543-550.	1.7	40
28	Inorganic Adhesives for Robust Superwetting Surfaces. <i>ACS Nano</i> , 2017, 11, 1113-1119.	7.3	204
29	Self-Healing Superhydrophobic Materials Showing Quick Damage Recovery and Long-Term Durability. <i>Langmuir</i> , 2017, 33, 9972-9978.	1.6	53
30	Smart candle soot coated membranes for on-demand immiscible oil/water mixture and emulsion switchable separation. <i>Nanoscale</i> , 2017, 9, 13610-13617.	2.8	131
31	Transparent smart surface with pH-induced wettability transition between superhydrophobicity and underwater superoleophobicity. <i>Materials and Design</i> , 2017, 135, 69-76.	3.3	27
32	A robust superhydrophobic TiO ₂ NPs coated cellulose sponge for highly efficient oil-water separation. <i>Scientific Reports</i> , 2017, 7, 9428.	1.6	50
33	A general and facile chemical avenue for the controlled and extreme regulation of water wettability in air and oil wettability under water. <i>Chemical Science</i> , 2017, 8, 6542-6554.	3.7	47
34	Facile preparation of superhydrophobic PDMS with patternable and controllable water adhesion characteristics. <i>Journal of Materials Science</i> , 2017, 52, 11428-11441.	1.7	16
35	Bioinspired Design of Three-Dimensional Ordered Tribachia-Post Arrays with Re-entrant Geometry for Omniphobic and Slippery Surfaces. <i>ACS Nano</i> , 2017, 11, 8265-8272.	7.3	67
36	Furan-functionalized aniline trimer based self-healing polymers exhibiting high efficiency of anticorrosion. <i>Polymer</i> , 2017, 125, 227-233.	1.8	35

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37	Inorganic adhesives for robust, self-healing, superhydrophobic surfaces. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19297-19305.	5.2	128
38	Self-healing polymeric materials for membrane separation: an example of a polybenzimidazole-based membrane for pervaporation dehydration on isopropanol aqueous solution. <i>RSC Advances</i> , 2017, 7, 38360-38366.	1.7	14
39	Transparent, abrasion-insensitive superhydrophobic coatings for real-world applications. <i>Scientific Reports</i> , 2017, 7, 15078.	1.6	42
40	Selective hierarchical patterning of silicon nanostructures via soft nanostencil lithography. <i>Nanotechnology</i> , 2017, 28, 465303.	1.3	9
41	Drug release of yolk/shell microcapsule controlled by pH-responsive yolk swelling. <i>Chemical Engineering Journal</i> , 2017, 327, 953-961.	6.6	34
42	Raspberry-like patchy particles achieved by decorating carboxylated polystyrene cores with snowman-like poly(vinylidene fluoride)/poly(4-vinylpyridine) Janus particles. <i>Polymer</i> , 2017, 122, 139-147.	1.8	23
43	Water-repairable zwitterionic polymer coatings for anti-biofouling surfaces. <i>Journal of Materials Chemistry B</i> , 2017, 5, 6728-6733.	2.9	58
44	Robust micro-nanoscale flowerlike ZnO/epoxy resin superhydrophobic coating with rapid healing ability. <i>Chemical Engineering Journal</i> , 2017, 313, 1152-1159.	6.6	136
45	Production and Characterization of Superhydrophobic and Antibacterial Coated Fabrics Utilizing ZnO Nanocatalyst. <i>Scientific Reports</i> , 2018, 8, 3925.	1.6	129
46	Self-Healing Biomaterials: From Molecular Concepts to Clinical Applications. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800118.	1.9	73
47	Intelligent environmental nanomaterials. <i>Environmental Science: Nano</i> , 2018, 5, 811-836.	2.2	54
48	Underwater Mechanically Robust Oil-Repellent Materials: Combining Conflicting Properties Using a Heterostructure. <i>Advanced Materials</i> , 2018, 30, 1706634.	11.1	58
49	Novel dual superlyophobic materials in water-oil systems: under oil magneto-fluid transportation and oil-water separation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2935-2941.	5.2	57
50	Sprayed superamphiphilic copper foams for long term recoverable oil-water separation. <i>Surface and Coatings Technology</i> , 2018, 334, 394-401.	2.2	20
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56	Structural regulation of hollow spherical TiO ₂ by varying titanium source amount and their thermal insulation property. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 537, 69-75.	2.3	22
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61	Designing robust underwater superoleophobic microstructures on copper substrates. <i>Nanoscale</i> , 2018, 10, 20435-20442.	2.8	14
62	Dual water-healable zwitterionic polymer coatings for anti-biofouling surfaces. <i>Journal of Materials Chemistry B</i> , 2018, 6, 6930-6935.	2.9	40
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65	Water-free dedusting on antireflective glass with durable superhydrophobicity. <i>Surface and Coatings Technology</i> , 2018, 356, 123-131.	2.2	23
66	Microgel in a Pore: Intraparticle Segregation or Snail-like Behavior Caused by Collapse and Swelling. <i>Macromolecules</i> , 2018, 51, 8147-8155.	2.2	14
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68	Electrospinning: A versatile strategy for mimicking natural creatures. <i>Composites Communications</i> , 2018, 10, 175-185.	3.3	34
69	UV-Cured Fluoride-Free Polyurethane Functionalized Textile with pH-Induced Switchable Superhydrophobicity and Underwater Superoleophobicity for Controllable Oil/Water Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 16616-16628.	3.2	62
70	Bioinspired Superwettability Electrospun Micro/Nanofibers and Their Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1801114.	7.8	204
71	Seeded Emulsion Polymerization of Styrene in the Presence of Water-Swollen Hydrogel Microspheres. <i>Langmuir</i> , 2018, 34, 8571-8580.	1.6	17
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75	Synthesis of fish scale and lotus leaf mimicking, stretchable and durable multilayers. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15993-16002.	5.2	37
76	Fabrication of self-healing waterbased superhydrophobic coatings from POSS modified silica nanoparticles. <i>Materials Letters</i> , 2018, 229, 281-285.	1.3	43
77	Corrosive environments tolerant, ductile and self-healing hydrogel for highly efficient oil/water separation. <i>Chemical Engineering Journal</i> , 2018, 354, 1185-1196.	6.6	44
78	Fabrication of UV-Triggered Liquid-Repellent Coatings with Long-Term Self-Repairing Performance. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 31777-31783.	4.0	37
79	Anti-Biofouling and Healable Materials: Preparation, Mechanisms, and Biomedical Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1800596.	7.8	75
80	Facile Fabrication of Superhydrophobic and Underwater Superoleophobic Coatings. <i>ACS Applied Nano Materials</i> , 2018, 1, 4894-4899.	2.4	28
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97	Facile fabrication of waterborne fabric coatings with multifunctional superhydrophobicity and thermal insulation. <i>Materials Letters</i> , 2019, 250, 123-126.	1.3	9
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101	Synthesis of mesoporous silica-shell/oil-core microspheres for common waterborne polymer coatings with robust superhydrophobicity. <i>Progress in Organic Coatings</i> , 2019, 132, 275-282.	1.9	27
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105	A rubber-like, underwater superoleophobic hydrogel for efficient oil/water separation. <i>Chemical Engineering Journal</i> , 2019, 361, 364-372.	6.6	63
106	Seawater-Induced Healable Underwater Superoleophobic Antifouling Coatings. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 1353-1362.	4.0	34
107	Biomimetic Hierarchical TiO ₂ @CuO Nanowire Arrays-Coated Copper Meshes with Superwetting and Self-Cleaning Properties for Efficient Oil/Water Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 2569-2577.	3.2	64
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109	Radical Cation Initiated Surface Polymerization on Photothermal Rubber for Smart Antifouling Coatings. <i>Chemistry - A European Journal</i> , 2019, 25, 183-188.	1.7	17
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119	Preparation and properties of polyvinylpyrrolidone-cuprous oxide microcapsule antifouling coating. <i>Progress in Organic Coatings</i> , 2020, 141, 105317.	1.9	16
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121	Covalently Modulated and Transiently Visible Writing: Rational Association of Two Extremes of Water Wettabilities. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 2935-2943.	4.0	10
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133	An overview of controlled-biocide-release coating based on polymer resin for marine antifouling applications. <i>Journal of Polymer Research</i> , 2020, 27, 1.	1.2	42
134	Zwitterionic nanogels modified nanofibrous membrane for efficient oil/water separation. <i>Journal of Membrane Science</i> , 2020, 612, 118379.	4.1	55
135	Reduction of imine-based cross-linkages to achieve sustainable underwater superoleophobicity that performs under challenging conditions. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15148-15156.	5.2	13
136	Robust Superhydrophobic Membrane for Solving Water-Accelerated Fatigue of ZDDP-Containing Lubricating Oils. <i>Langmuir</i> , 2020, 36, 8560-8569.	1.6	15
137	Superomniphobic Silk Fibroin/Ag Nanowires Membrane for Flexible and Transparent Electronic Sensor. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 10039-10049.	4.0	35
138	A Self-Cleaning Mucus-Like and Hierarchical Ciliary Bionic Surface for Marine Antifouling. <i>Advanced Engineering Materials</i> , 2020, 22, 1901198.	1.6	17
140	Preparation of water-borne non-fluorinated anti-smudge surfaces and their applications. <i>Progress in Organic Coatings</i> , 2020, 142, 105581.	1.9	10
141	Flourishing Self-Healing Surface Materials: Recent Progresses and Challenges. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901959.	1.9	30
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149	Stiffness Tomography of Ultra-Soft Nanogels by Atomic Force Microscopy. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2280-2287.	7.2	39
150	Synthesis of hollow TiO ₂ @SiO ₂ spheres via a recycling template method for solar heat protection coating. <i>Ceramics International</i> , 2021, 47, 2678-2685.	2.3	21
151	Plant-inspired quercetin thin films: universal coatings and their postfunctionalization for non-biofouling applications. <i>New Journal of Chemistry</i> , 2021, 45, 7533-7541.	1.4	5
152	Copper Tannic Acid-Coordinated Metal-Organic Nanosheets for Synergistic Antimicrobial and Antifouling Coatings. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 10446-10456.	4.0	45
153	Review of Self-Healing Polymers as Propitious Biomaterials. <i>Current Smart Materials</i> , 2021, 5, 38-53.	0.5	0
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155	Facile fabrication of ultra-robust underwater superoleophobic coating with remarkable self-cleaning performance in harsh environments. <i>Materials Chemistry and Physics</i> , 2021, 263, 124413.	2.0	5
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158	Grafting embedded poly(ionic liquid) brushes on biomimetic sharklet resin surface for anti-biofouling applications. <i>Progress in Organic Coatings</i> , 2021, 157, 106298.	1.9	12
159	Antifouling strategies based on super-phobic polymer materials. <i>Progress in Organic Coatings</i> , 2021, 157, 106285.	1.9	40
160	Multibioinspired Wettable Patterned Slippery Surface for Efficient Water Harvesting. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100691.	1.9	6
161	Preparation of biomimetic hair-like composite coatings with water-collecting and superamphiphobic properties. <i>Progress in Organic Coatings</i> , 2021, 158, 106372.	1.9	5
162	Multiresponsive Microgels: Toward an Independent Tuning of Swelling and Surface Properties. <i>Langmuir</i> , 2021, 37, 11212-11221.	1.6	3
163	Superhydrophilic, underwater superoleophobic and self-cleaning nickel composite mesh via simultaneous acid etching and in-situ growth of Prussian blue analogue for oil-water separation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 627, 127140.	2.3	10
164	Nanogels: A novel approach in antimicrobial delivery systems and antimicrobial coatings. <i>Bioactive Materials</i> , 2021, 6, 3634-3657.	8.6	63
165	Layer-by-layer construction of super-hydrophilic and self-healing polyvinylidene fluoride composite membrane for efficient oil/water emulsion separation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 629, 127462.	2.3	21

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167	Sea slug inspired smart marine antifouling coating with reversible chemical bonds: Controllable UV-responsive coumarin releasing and efficient UV-healing properties. <i>Chemical Engineering Journal</i> , 2022, 429, 132471.	6.6	36
168	Recent Progress and Future Directions of Multifunctional (Super)Wetting Smooth/Structured Surfaces and Coatings. <i>Advanced Functional Materials</i> , 2020, 30, 1907772.	7.8	53
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173	Recent advancement in Bi ₅ O ₇ I-based nanocomposites for high performance photocatalysts. <i>Chemosphere</i> , 2022, 288, 132668.	4.2	22
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175	Bioinspired marine antifouling coatings: Status, prospects, and future. <i>Progress in Materials Science</i> , 2022, 124, 100889.	16.0	181
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177	Sol-gel-derived hard coatings from tetraethoxysilane and organoalkoxysilanes bearing zwitterionic and isothiazolinone groups and their antifouling behaviors. <i>Journal of Materials Chemistry B</i> , 2022, 10, 406-417.	2.9	19
178	Dually reactive multilayer coatings enable orthogonal manipulation of underwater superoleophobicity and oil adhesion via post-functionalization. <i>Materials Horizons</i> , 2022, 9, 991-1001.	6.4	14
179	Fabrication and characterization of transparent underwater superoleophobic coatings based chitin nanofibers and polyvinyl alcohol. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	3
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188	Role of chemistry in bio-inspired liquid wettability. <i>Chemical Society Reviews</i> , 2022, 51, 5452-5497.	18.7	53
189	Facile fabrication of multifunctional underwater superoleophobic zwitterionic coating by surface-initiated redox polymerization. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 649, 129463.	2.3	2
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191	Recent advances in gel materials with special wettability: a review. <i>Journal of Materials Science</i> , 2022, 57, 13179-13201.	1.7	3
192	Fabrication of transparent wear-resistant superhydrophobic SiO ₂ film via phase separation and chemical vapor deposition methods. <i>Ceramics International</i> , 2022, 48, 32143-32151.	2.3	24
193	Tailoring the Hydrophilicity for Delayed Condensation Frosting in Antifogging Coatings. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 35064-35073.	4.0	9
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197	Macroscopic Supramolecular Assembly of Rigid Building Blocks Facilitated by Layer-By-Layer Assembled Microgel Film. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 2459-2467.	4.0	7
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209	A systematic review on polymer-based superhydrophobic coating for preventing biofouling menace. Journal of Coatings Technology Research, 2023, 20, 1499-1512.	1.2	4