Selfâ€assembly in nature: using the principles of nature

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Citation Report

#	Article	IF	Citations
1	Research Highlights: Highlights from the latest articles in nanomedicine. Nanomedicine, 2014, 9, 573-576.	1.7	0
2	Self-Assembling Properties of Peptides Derived from TDP-43 C-Terminal Fragment. Langmuir, 2014, 30, 3845-3856.	1.6	39
3	The Side Chain Makes the Difference: Investigation of the 2D Selfâ€Assembly of 1,3,5â€Tris[4â€(4â€pyridinyl)phenyl]benzene Derivatives by Scanning Tunneling Microscopy. European Journal of Organic Chemistry, 2014, 2014, 4985-4992.	1.2	8
4	Selfâ€Assembly of Tyrosine into Controlled Supramolecular Nanostructures. Chemistry - A European Journal, 2015, 21, 11681-11686.	1.7	63
5	Molecularly Engineered Selfâ€Assembling Membranes for Cellâ€Mediated Degradation. Advanced Healthcare Materials, 2015, 4, 602-612.	3.9	20
6	Dense or Porous Packing? Twoâ€Dimensional Selfâ€Assembly of Starâ€Shaped Monoâ€, Biâ€, and Terpyridine Derivatives. ChemPhysChem, 2015, 16, 949-953.	1.0	13
7	Nanoparticles based on Î²â€conglycinin and chitosan: Selfâ€assembly, characterization, and drug delivery. Journal of Applied Polymer Science, 2015, 132, .	1.3	4
8	Supramolecular Guestâ€“Host Interactions for the Preparation of Biomedical Materials. Bioconjugate Chemistry, 2015, 26, 2279-2289.	1.8	162
9	Control of polymeric nanoparticle size to improve therapeutic delivery. Journal of Controlled Release, 2015, 219, 536-547.	4.8	257
10	Controlling Cancer Cell Fate Using Localized Biocatalytic Self-Assembly of an Aromatic Carbohydrate Amphiphile. Journal of the American Chemical Society, 2015, 137, 576-579.	6.6	260
11	Control, design, and understanding of molecular self-assembly. , 2016, , 431-458.		1
12	Anion Recognition and Induced Selfâ€Assembly of an Î±,Î³â€Cyclic Peptide To Form Spherical Clusters. Angewandte Chemie - International Edition, 2016, 55, 4504-4508.	7.2	34
13	Morphological Evolution of Self-Assembled Structures Induced by the Molecular Architecture of Supra-Amphiphiles. Langmuir, 2016, 32, 13706-13715.	1.6	16
14	Co-Assembly Tags Based on Charge Complementarity (CATCH) for Installing Functional Protein Ligands into Supramolecular Biomaterials. Cellular and Molecular Bioengineering, 2016, 9, 335-350.	1.0	26
15	Interplay of Noncovalent Interactions in Ionic Liquid/Sodium Bis(2-ethylhexyl) Sulfosuccinate Mixtures: From Lamellar to Bicontinuous Cubic Liquid Crystalline Phase. Journal of Physical Chemistry B, 2016, 120, 12557-12567.	1.2	8
16	In vitro bloodâ€“brain barrier models for drug research: state-of-the-art and new perspectives on reconstituting these models on artificial basement membrane platforms. Drug Discovery Today, 2016, 21, 1367-1386.	3.2	48
17	Polysaccharide based nanogels in the drug delivery system: Application as the carrier of pharmaceutical agents. Materials Science and Engineering C, 2016, 68, 964-981.	3.8	225
18	Drug self-assembly: A phenomenon at the nanometer scale with major impact in the structureâ€“biological properties relationship and the treatment of disease. Progress in Materials Science, 2016, 82, 39-82.	16.0	24

#	Article	IF	Citations
19	Anion Recognition and Induced Selfâ€Assembly of an Î±,Î³â€Cyclic Peptide To Form Spherical Clusters. Angewandte Chemie, 2016, 128, 4580-4584.	1.6	4
20	Nanoengineering Hybrid Supramolecular Multilayered Biomaterials Using Polysaccharides and Selfâ€Assembling Peptide Amphiphiles. Advanced Functional Materials, 2017, 27, 1605122.	7.8	53
21	Magnetoâ€Adaptive Surfactants Showing Antiâ€Curie Behavior and Tunable Surface Tension as Porogens for Mesoporous Particles with 12â€Fold Symmetry. Angewandte Chemie - International Edition, 2017, 56, 5475-5479.	7.2	8
22	Recent Progress in Cartilage Tissue Engineeringâ€"Our Experience and Future Directions. Engineering, 2017, 3, 28-35.	3.2	115
23	Magnetoâ€Adaptive Surfactants Showing Antiâ€Curie Behavior and Tunable Surface Tension as Porogens for Mesoporous Particles with 12â€Fold Symmetry. Angewandte Chemie, 2017, 129, 5567-5571.	1.6	6
24	New Bioengineering Breakthroughs and Enabling Tools in Regenerative Medicine. Current Stem Cell Reports, 2017, 3, 83-97.	0.7	5
25	Design Principles of Peptide Based Self-Assembled Nanomaterials. Advances in Experimental Medicine and Biology, 2017, 1030, 51-94.	0.8	7
26	Decoding the linear viscoelastic properties of model telechelic metallo-supramolecular polymers. Journal of Rheology, 2017, 61, 1245-1262.	1.3	39
27	Preface: Special Issue on Associating Polymers. Journal of Rheology, 2017, 61, 1099-1102.	1.3	37
28	Empowering the Potential of Cell-Penetrating Peptides for Targeted Intracellular Delivery via Molecular Self-Assembly. Advances in Experimental Medicine and Biology, 2017, 1030, 265-278.	0.8	6
29	Systematic Moiety Variations of Ultrashort Peptides Produce Profound Effects on Self-Assembly, Nanostructure Formation, Hydrogelation, and Phase Transition. Scientific Reports, 2017, 7, 12897.	1.6	25
30	Unveiling the Self-Assembling Behavior of 5-Fluorouracil and its N,Nâ€²-Dimethyl Derivative: A Spectroscopic and Microscopic Approach. Langmuir, 2017, 33, 10978-10988.	1.6	10
31	Manufacturing of hydrogel biomaterials with controlled mechanical properties for tissue engineering applications. Acta Biomaterialia, 2017, 62, 42-63.	4.1	352
32	Electrostatic self-assembly of polysaccharides into nanofibers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 531, 182-188.	2.3	39
33	Biomimetic Recognition for Acoustic Sensing in Liquids. Springer Series on Chemical Sensors and Biosensors, 2017, , 323-344.	0.5	1
34	Facile Control over the Supramolecular Ordering of Self-assembled Peptide Scaffolds by Simultaneous Assembly with a Polysacharride. Scientific Reports, 2017, 7, 4797.	1.6	23
35	Molecular Selfâ€Assembly of Cyclic Dipeptide Derivatives and Their Applications. ChemPlusChem, 2017, 82, 88-106.	1.3	93
36	Protein-Inspired Synthetic Biology: New Forms for Old Functions. , 2017, , 439-458.		0

#	Article	IF	Citations
37	Virus-Like Particles (VLPs) in Supramolecular Chemistry. , 2017, , 127-148.		0
38	Programmed Protein Self-Assembly Driven by Genetically Encoded Intein-Mediated Native Chemical Ligation. ACS Synthetic Biology, 2018, 7, 1067-1074.	1.9	7
39	Force and time-dependent self-assembly, disruption and recovery of supramolecular peptide amphiphile nanofibers. Nanotechnology, 2018, 29, 285701.	1.3	7
40	Multifunctional Self-Assembling Peptide-Based Nanostructures for Targeted Intracellular Delivery: Design, Physicochemical Characterization, and Biological Assessment. Methods in Molecular Biology, 2018, 1758, 11-26.	0.4	6
41	Biologicalisation: Biological transformation in manufacturing. CIRP Journal of Manufacturing Science and Technology, 2018, 21, 1-32.	2.3	130
42	Nanogels of Natural Polymers. Gels Horizons: From Science To Smart Materials, 2018, , 71-110.	0.3	9
43	Hydrodynamically Guided Hierarchical Selfâ€Assembly of Peptideâ€“Protein Bioinks. Advanced Functional Materials, 2018, 28, 1703716.	7.8	78
44	Intracellular Peptide Self-Assembly: A Biomimetic Approach for in Situ Nanodrug Preparation. Bioconjugate Chemistry, 2018, 29, 826-837.	1.8	37
45	Rotating magnetic field-controlled fabrication of magnetic hydrogel with spatially disk-like microstructures. Science China Materials, 2018, 61, 1112-1122.	3.5	18
46	Catalytic peptide assemblies. Chemical Society Reviews, 2018, 47, 3621-3639.	18.7	200
47	Antimicrobial polymeric nanoparticles. Progress in Polymer Science, 2018, 76, 40-64.	11.8	214
48	Effect of Anions on Nanofiber Formation of Î²-sheet Propensity Amphiphile Peptide. IOP Conference Series: Materials Science and Engineering, 2018, 358, 012061.	0.3	0
49	Self-assembly of POSS-Containing Materials. Springer Series on Polymer and Composite Materials, 2018, , 45-128.	0.5	3
50	Sphereâ€“Tubule Superstructures through Supramolecular and Supracolloidal Assembly Pathways. Small, 2018, 14, e1803215.	5.2	12
51	Self-Assembly of a Pd₄L₈ Double-Walled Square Takes Place through Two Kinds of Metastable Species. Inorganic Chemistry, 2018, 57, 13083-13086.	1.9	12
52	Molecular simulation of self-assembly. , 2018, , 305-318.		16
53	A Supramolecular Approach to Nanoscale Motion: Polymersome-Based Self-Propelled Nanomotors. Accounts of Chemical Research, 2018, 51, 1891-1900.	7.6	54
54	Osteoblastic differentiation on hydrogels fabricated from Ca2+-responsive self-assembling peptides functionalized with bioactive peptides. Bioorganic and Medicinal Chemistry, 2018, 26, 3126-3132.	1.4	15

#	Article	IF	Citations
55	Self-assembling peptides and their application in tissue engineering and regenerative medicine. , 2018, , 245-281.		11
56	Multicomponent self-assembly: Supramolecular design of complex hydrogels for biomedical applications. , 2018, , 371-397.		8
57	Vibrational and structural properties of L-Alanyl-L-Phenylalanine dipeptide by Raman spectroscopy, infrared and DFT calculations. Vibrational Spectroscopy, 2018, 98, 128-133.	1.2	16
58	Go with the Flowâ€"Microfluidics Approaches for Amyloid Research. Chemistry - an Asian Journal, 2018, 13, 3437-3447.	1.7	12
59	Tunable Control of Hydrogel Microstructure by Kinetic Competition between Self-Assembly and Crosslinking of Elastin-like Proteins. ACS Applied Materials & Interfaces, 2018, 10, 21808-21815.	4.0	34
60	A nano-fibrous platform of copolymer patterned surfaces for controlled cell alignment. RSC Advances, 2018, 8, 21777-21785.	1.7	4
61	Intracellular Selfâ€Assembly of Nanoprobes for Molecular Imaging. Advanced Biology, 2018, 2, 1800108.	3.0	35
62	Supramolecular Peptide/Polymer Hybrid Hydrogels for Biomedical Applications. Macromolecular Bioscience, 2019, 19, e1800221.	2.1	110
63	A Novel Self-Assembly Nanocrystal as Lymph Node-Targeting Delivery System: Higher Activity of Lymph Node Targeting and Longer Efficacy Against Lymphatic Metastasis. AAPS PharmSciTech, 2019, 20, 292.	1.5	8
64	Energy Transfer Induced by Dye Encapsulation in a Hybrid Nanoparticleâ€Purple Membrane Reversible Assembly. Advanced Functional Materials, 2019, 29, 1904899.	7.8	8
65	Hierarchical Structure of Silk Materials Versus Mechanical Performance and Mesoscopic Engineering Principles. Small, 2019, 15, e1903948.	5.2	82
66	Hierarchically oriented organization inÂsupramolecular peptide crystals. Nature Reviews Chemistry, 2019, 3, 567-588.	13.8	326
67	Radical-Induced Hierarchical Self-Assembly Involving Supramolecular Coordination Complexes in Both Solution and Solid States. Journal of the American Chemical Society, 2019, 141, 16014-16023.	6.6	62
68	Lewis Pairs as Highly Tunable Dynamic Cross-Links in Transient Polymer Networks. Journal of the American Chemical Society, 2019, 141, 15963-15971.	6.6	60
69	Effect of Terminal Modifications on the Adsorption and Assembly of hIAPP(20â€"29). ACS Omega, 2019, 4, 2649-2660.	1.6	11
70	Polysaccharide-based nanogels for drug and gene delivery. , 2019, , 497-557.		9
71	Molecular modeling and computational study of the chiral-dependent structures and properties of self-assembling diphenylalanine peptide nanotubes. Journal of Molecular Modeling, 2019, 25, 199.	0.8	27
72	Virus capsid assembly across different length scales inspire the development of virus-based biomaterials. Current Opinion in Virology, 2019, 36, 38-46.	2.6	25

#	Article	IF	Citations
73	A New Hope: Self-Assembling Peptides with Antimicrobial Activity. Pharmaceutics, 2019, 11, 166.	2.0	85
74	Biomaterials Inspired by Biology: From Molecules to Self-Assembly. , 2019, , .		1
75	Supramolekulare Schalter auf der Basis von Cucurbit[8]uril (CB[8]). Angewandte Chemie, 2019, 131, 409-422.	1.6	31
76	Stimuli-Responsive Protein Fibers for Advanced Applications. , 2019, , 323-377.		2
77	Enhancing the Potency of Antimicrobial Peptides through Molecular Engineering and Self-Assembly. Biomacromolecules, 2019, 20, 1362-1374.	2.6	75
78	The delivery of sensitive food bioactive ingredients: Absorption mechanisms, influencing factors, encapsulation techniques and evaluation models. Food Research International, 2019, 120, 130-140.	2.9	130
79	Allosteric pathway selection in templated assembly. Science Advances, 2019, 5, eaaw3353.	4.7	4
80	Recent Advances in Subcellular Targeted Cancer Therapy Based on Functional Materials. Advanced Materials, 2019, 31, e1802725.	11.1	230
81	Light-Responsive Size of Self-Assembled Spiropyranâ€“Lysozyme Nanoparticles with Enzymatic Function. Biomacromolecules, 2019, 20, 979-991.	2.6	22
82	Nanoparticles based on sodium alginate and Î²-conglycinin: Self-assembly and delivery of Phyllanthus urinaria phenolic compounds. Journal of Food Processing and Preservation, 2019, 43, e13851.	0.9	5
83	Cucurbit[8]uril (CB[8])â€Based Supramolecular Switches. Angewandte Chemie - International Edition, 2019, 58, 403-416.	7.2	129
84	Directing Amphiphilic Self-Assembly: From Microstructure Control to Interfacial Engineering. Langmuir, 2019, 35, 9635-9646.	1.6	8
85	Selfâ€Assembly in Proteinâ€Based Bionanomaterials. Israel Journal of Chemistry, 2020, 60, 1152-1170.	1.0	19
86	Supramolecular self-assembly of oleylamide into organogels and hydrogels: a simple approach in phase selective gelation of oil spills. Soft Materials, 2020, 18, 55-66.	0.8	6
87	Combined Experimental and Molecular Simulation Study of Insulinâ€“Chitosan Complexation Driven by Electrostatic Interactions. Journal of Chemical Information and Modeling, 2020, 60, 854-865.	2.5	12
88	High-pressure studies on l,l-dileucine crystals by Raman spectroscopy and synchrotron X-ray diffraction combined with DFT calculations. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 229, 117899.	2.0	6
89	Indole-based high-performance polymeric materials with enhanced mechanical and thermal properties via cation-Ï€ interaction. High Performance Polymers, 2020, 32, 662-668.	0.8	2
90	Bioinspired Design of Grapheneâ€Based Materials. Advanced Functional Materials, 2020, 30, 2007458.	7.8	15

#	Article	IF	Citations
91	Accessing Highly Tunable Nanostructured Hydrogels in a Short Ionic Complementary Peptide Sequence via pH Trigger. Langmuir, 2020, 36, 12107-12120.	1.6	26
92	Complementary Nucleobase Interactions Drive the Hierarchical Self-Assembly of Coreâ€“Shell Bottlebrush Block Copolymers toward Cylindrical Supramolecules. Macromolecules, 2020, 53, 9747-9757.	2.2	21
93	La^{III} and Zn^{II} Cooperatively Template a Metalâ€“Organic Capsule. Journal of the American Chemical Society, 2020, 142, 19856-19861.	6.6	37
94	Control over the fibrillization yield by varying the oligomeric nucleation propensities of self-assembling peptides. Communications Chemistry, 2020, 3, .	2.0	7
95	Hostâ€“Guest-Mediated Epitope Presentation on Self-Assembled Peptide Amphiphile Hydrogels. ACS Biomaterials Science and Engineering, 2020, 6, 4870-4880.	2.6	14
96	Protein and peptide nanofiber matrices for the regenerative medicine. , 2020, , 327-350.		0
97	Structures and Properties of the Self-Assembling Diphenylalanine Peptide Nanotubes Containing Water Molecules: Modeling and Data Analysis. Nanomaterials, 2020, 10, 1999.	1.9	21
98	Peptide-based topical agents and intravenous hemostat for rapid hemostasis. RSC Medicinal Chemistry, 2020, 11, 1100-1111.	1.7	10
99	Photoresponsive Photoacid-Macroion Nano-Assemblies. Polymers, 2020, 12, 1746.	2.0	7
100	Biomimetic peptide self-assembly for functional materials. Nature Reviews Chemistry, 2020, 4, 615-634.	13.8	411
101	Selfâ€Assembly of Pseudo[1]rotaxanes by Palladium(II)/Platinum(II)â€Directed Integrative Social Selfâ€Sorting: Is the Metal Required?. ChemPlusChem, 2020, 85, 2672-2678.	1.3	1
102	Light-directed trapping of metastable intermediates in a self-assembly process. Nature Communications, 2020, 11, 6260.	5.8	15
103	Molecular modeling and computational study of the chiral-dependent structures and properties of the self-assembling diphenylalanine peptide nanotubes, containing water molecules. Journal of Molecular Modeling, 2020, 26, 326.	0.8	7
104	Integrating self-assembly and biofabrication for the development of structures with enhanced complexity and hierarchical control. Biofabrication, 2020, 12, 032002.	3.7	33
105	New Patchy Particle Model with Anisotropic Patches for Molecular Dynamics Simulations: Application to a Coarse-Grained Model of Cellulose Nanocrystal. Journal of Chemical Theory and Computation, 2020, 16, 3699-3711.	2.3	13
106	Ultrashort Peptide Self-Assembly: Front-Runners to Transport Drug and Gene Cargos. Frontiers in Bioengineering and Biotechnology, 2020, 8, 504.	2.0	50
107	Interfacial Self-Assembly to Spatially Organize Graphene Oxide Into Hierarchical and Bioactive Structures. Frontiers in Materials, 2020, 7, .	1.2	4
108	Influence of the Thermodynamic and Kinetic Control of Selfâ€Assembly on the Microstructure Evolution of Silkâ€Elastinâ€Like Recombinamer Hydrogels. Small, 2020, 16, e2001244.	5.2	23

#	Article	IF	Citations
109	Self-assembled nanostructures from amphiphilic block copolymers prepared via ring-opening metathesis polymerization (ROMP). Progress in Polymer Science, 2020, 107, 101278.	11.8	77
110	Self-Assembly of Porphyrin Nanostructures at the Interface between Two Immiscible Liquids. Journal of Physical Chemistry C, 2020, 124, 6929-6937.	1.5	16
111	Designer Selfâ€Assembling Peptide Hydrogels to Engineer 3D Cell Microenvironments for Cell Constructs Formation and Precise Oncology Remodeling in Ovarian Cancer. Advanced Science, 2020, 7, 1903718.	5.6	77
112	Self-Assembly of Copolymer Micelles: Higher-Level Assembly for Constructing Hierarchical Structure. Chemical Reviews, 2020, 120, 4111-4140.	23.0	150
113	Block copolymers for nanoscale drug and gene delivery. , 2020, , 181-200.		10
114	Supramolecular Exchange among Assemblies of Opposite Charge Leads to Hierarchical Structures. Journal of the American Chemical Society, 2020, 142, 12216-12225.	6.6	44
115	Programmable Nanodisc Patterning by DNA Origami. Nano Letters, 2020, 20, 6032-6037.	4.5	21
116	Supramolecular Selfâ€Assembly of Î² 3 â€Peptides Mediated by Janusâ€Type Recognition Units. Chemistry - A European Journal, 2020, 26, 12145-12149.	1.7	2
117	Protein and peptide-based delivery systems. , 2020, , 145-161.		7
118	Selective Self-Assembly of 5-Fluorouracil through Nonlinear Solvent Response Modulates Membrane Dynamics. Langmuir, 2020, 36, 2707-2719.	1.6	9
119	Nanoscale Self-Assembly for Therapeutic Delivery. Frontiers in Bioengineering and Biotechnology, 2020, 8, 127.	2.0	170
120	Understanding the Self-Assembling Behavior of Biological Building Block Molecules: A Spectroscopic and Microscopic Approach. Journal of Physical Chemistry B, 2020, 124, 2065-2080.	1.2	15
121	Spatial Manipulation and Integration of Supramolecular Filaments on Hydrogel Substrates towards Advanced Soft Devices. Angewandte Chemie, 2020, 132, 8679-8685.	1.6	1
122	Semiâ€Rationally Designed Short Peptides Selfâ€Assemble and Bind Hemin to Promote Cyclopropanation. Angewandte Chemie - International Edition, 2020, 59, 8108-8112.	7.2	36
123	Layered self-assemblies for controlled drug delivery: A translational overview. Biomaterials, 2020, 242, 119929.	5.7	46
124	Spatial Manipulation and Integration of Supramolecular Filaments on Hydrogel Substrates towards Advanced Soft Devices. Angewandte Chemie - International Edition, 2020, 59, 8601-8607.	7.2	7
125	Biofunctionalization of Natural Fiber-Reinforced Biocomposites for Biomedical Applications. Biomolecules, 2020, 10, 148.	1.8	91
126	Hydrogen Bonding in a l-Glutamine-Based Polyamidoamino Acid and its pH-Dependent Self-Ordered Coil Conformation. Polymers, 2020, 12, 881.	2.0	5

#	Article	IF	Citations
127	Semiâ€Rationally Designed Short Peptides Selfâ€Assemble and Bind Hemin to Promote Cyclopropanation. Angewandte Chemie, 2020, 132, 8185-8189.	1.6	8
128	Magnetic Field-Induced Alignment of Nanofibrous Supramolecular Membranes: A Molecular Design Approach to Create Tissue-like Biomaterials. ACS Applied Materials & Interfaces, 2020, 12, 22661-22672.	4.0	21
129	Linear Viscoelasticity of Associative Polymers: Sticky Rouse Model and the Role of Bridges. Macromolecules, 2020, 53, 3438-3451.	2.2	26
130	Facile surface modification of amphiphilic cellulose nanofibrils prepared by aqueous counter collision. Carbohydrate Polymers, 2021, 255, 117342.	5.1	15
131	From infection to healing: The use of plant viruses in bioactive hydrogels. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2021, 13, e1662.	3.3	15
132	Tunable dynamic properties of hydrogen-bonded supramolecular assemblies in solution. Progress in Polymer Science, 2021, 112, 101321.	11.8	13
133	Multi-scale Structure and Dynamics of Dendronized Polymers with Varying Generations. Macromolecules, 2021, 54, 235-248.	2.2	10
134	Reversible Design of Dynamic Assemblies at Small Scales. Advanced Intelligent Systems, 2021, 3, 2000193.	3.3	10
135	Tunable modalities in polyolefin synthesis via coordination insertion catalysis. European Polymer Journal, 2021, 142, 110100.	2.6	35
136	Encapsulation of Î²-carotene by self-assembly of rapeseed meal-derived peptides: Factor optimization and structural characterization. LWT - Food Science and Technology, 2021, 138, 110456.	2.5	13
137	Selfâ€Assembly of Photoresponsive Molecular Amphiphiles in Aqueous Media. Angewandte Chemie, 2021, 133, 11708-11731.	1.6	18
138	Selfâ€Assembly of Photoresponsive Molecular Amphiphiles in Aqueous Media. Angewandte Chemie - International Edition, 2021, 60, 11604-11627.	7.2	81
139	Recent advances in the fabrication and bio-medical applications of self-assembled dipeptide nanostructures. Nanomedicine, 2021, 16, 139-163.	1.7	14
140	Encapsulation and Targeted Release. , 2021, , 369-407.		2
141	Self-assembling Properties. , 2021, , 307-333.		1
142	Characterization of an Amphiphilic Janus-Type Surface in the Cellulose Nanofibril Prepared by Aqueous Counter Collision. Biomacromolecules, 2021, 22, 620-628.	2.6	29
143	Deciphering the evolution of supramolecular nanofibers in solution and solid-state: a combined microscopic and spectroscopic approach. Chemical Science, 2021, 12, 5874-5882.	3.7	25
144	Applications of Discrete Synthetic Macromolecules in Life and Materials Science: Recent and Future Trends. Advanced Science, 2021, 8, 2004038.	5.6	76

#	Article	IF	Citations
145	Pushing and Pulling: A Dual pH Trigger Controlled by Varying the Alkyl Tail Length in Heme Coordinating Peptide Amphiphiles. Journal of Physical Chemistry B, 2021, 125, 1317-1330.	1.2	5
146	Self-assembled mRNA vaccines. Advanced Drug Delivery Reviews, 2021, 170, 83-112.	6.6	248
147	Modeling and physical properties of diphenylalanine peptide nanotubes containing water molecules. Ferroelectrics, 2021, 574, 78-91.	0.3	11
148	An interfacial self-assembling bioink for the manufacturing of capillary-like structures with tuneable and anisotropic permeability. Biofabrication, 2021, 13, 035027.	3.7	16
149	Recent Progress in the Design and Medical Application of In Situ Self-Assembled Polypeptide Materials. Pharmaceutics, 2021, 13, 753.	2.0	17
150	(Macro)molecular self-assembly for hydrogel drug delivery. Advanced Drug Delivery Reviews, 2021, 172, 275-295.	6.6	92
151	Assembly of a Phenylalanine Nanotube by the use of Molecular Dynamics Manipulator. Mathematical Biology and Bioinformatics, 2021, 16, 244-255.	0.1	6
152	Biomedical Applications of Supramolecular Materials in the Controllable Delivery of Steroids. Frontiers in Molecular Biosciences, 2021, 8, 700712.	1.6	5
153	Insights on the emerging biotechnology of histidine-rich peptides. Biotechnology Advances, 2022, 54, 107817.	6.0	35
154	A unique twisted rodâ€like pattern due to Ïâ€Ï stacking induced hostâ€guest selfâ€assembly. Journal of Polymer Science, 2021, 59, 2170-2176.	2.0	1
155	Regulation of Circularly Polarized Luminescence in Multicomponent Supramolecular Coassemblies. ChemPhotoChem, 2022, 6, .	1.5	27
156	Ex Vivo and In Vivo Properties of an Injectable Hydrogel Derived From Acellular Ear Cartilage Extracellular Matrix. Frontiers in Bioengineering and Biotechnology, 2021, 9, 740635.	2.0	10
157	Altered Peptide Selfâ€Assembly and Coâ€Assembly with DNA by Modification of Aromatic Residues. ChemMedChem, 2021, 16, 3559-3564.	1.6	2
158	Modeling of Self-Assembled Peptide Nanotubes and Determination of Their Chirality Sign Based on Dipole Moment Calculations. Nanomaterials, 2021, 11, 2415.	1.9	11
159	Bionanomaterials based on protein self-assembly: Design and applications in biotechnology. Biotechnology Advances, 2021, 52, 107835.	6.0	26
160	Amphiphilic self-assembly peptides: Rational strategies to design and delivery for drugs in biomedical applications. Colloids and Surfaces B: Biointerfaces, 2021, 208, 112040.	2.5	31
161	Higher-order interfiber interactions in the self-assembly of benzene-1,3,5-tricarboxamide-based peptides in water. Polymer Chemistry, 2021, 12, 3478-3487.	1.9	8
162	Chiral Peculiar Properties of Self-Organization of Diphenylalanine Peptide Nanotubes: Modeling Of Structure and Properties. Mathematical Biology and Bioinformatics, 2019, 14, 94-125.	0.1	11

#	Article	IF	Citations
163	Self-assembly of amino acids toward functional biomaterials. Beilstein Journal of Nanotechnology, 2021, 12, 1140-1150.	1.5	23
164	Chiral self-assembly of peptides: Toward the design of supramolecular polymers with enhanced chemical and biological functions. Progress in Polymer Science, 2021, 123, 101469.	11.8	39
165	A Geometrical Approach to the Incompatible Substructure Problem in Parallel Self-Assembly. Lecture Notes in Computer Science, 2014, , 751-760.	1.0	3
166	Chapter 12. Cucurbit[n]uril-based (n=7 and 8) (Supra)molecular Switches. Monographs in Supramolecular Chemistry, 2019, , 324-361.	0.2	0
168	Peptide Design and Self-assembly into Targeted Nanostructure and Functional Materials. Chemical Reviews, 2021, 121, 13915-13935.	23.0	116
170	Computer modeling and numerical studies of peptide nanotubes based on diphenylalanine. Keldysh Institute Preprints, 2021, , 1-54.	0.1	1
171	Structure and Shape of Surface-Mediated Assembly of Surfactants. Energy & Fuels, 0, , .	2.5	1
172	Factors Affecting Secondary and Supramolecular Structures of Selfâ€Assembling Peptide Nanocarriers. Macromolecular Bioscience, 2022, 22, e2100347.	2.1	8
173	Self-Assembling Peptides: From Design to Biomedical Applications. International Journal of Molecular Sciences, 2021, 22, 12662.	1.8	41
174	Modeling the Tumor Microenvironment of Ovarian Cancer: The Application of Self-Assembling Biomaterials. Cancers, 2021, 13, 5745.	1.7	6
175	Amino acid regulated co-assembly for formation of one-dimensional ordered monocrystal by hydrogen bonding interactions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 636, 128169.	2.3	2
176	Polymer Colloids for Functional Coating Applications. , 2022, , .		0
177	Computational design of cutin derivative bio-materials from fatty acids. , 2022, , 215-243.		0
178	Bottom-up supramolecular assembly in two dimensions. Chemical Science, 2022, 13, 3057-3068.	3.7	30
180	Surfactant-like Peptide Self-Assembled into Hybrid Nanostructures for Electronic Nose Applications. ACS Nano, 2022, 16, 4444-4457.	7.3	8
181	Enzymeâ€mediated intratumoral selfâ€assembly of nanotheranostics for enhanced imaging and tumor therapy. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2022, 14, e1786.	3.3	6
182	Alkali-activation of cellulose nanofibrils to facilitate surface chemical modification under aqueous conditions. Journal of Wood Science, 2022, 68, .	0.9	9
183	Nanoscale Faceting and Ligand Shell Structure Dominate the Selfâ€Assembly of Nonpolar Nanoparticles into Superlattices. Advanced Materials, 2022, 34, e2109093.	11.1	13

#	Article	IF	Citations
184	Advances in Rational Protein Engineering toward Functional Architectures and Their Applications in Food Science. Journal of Agricultural and Food Chemistry, 2022, 70, 4522-4533.	2.4	6
185	Molecular Dynamics Simulation Study of the Self-Assembly of Phenylalanine Peptide Nanotubes. Nanomaterials, 2022, 12, 861.	1.9	5
186	Molecular modelling and computational studies of peptide diphenylalanine nanotubes, containing waters: structural and interactions analysis. Journal of Molecular Modeling, 2022, 28, 81.	0.8	7
187	Optical Polarization-Based Measurement Methods for Characterization of Self-Assembled Peptidesâ€™ and Amino Acidsâ€™ Micro- and Nanostructures. Molecules, 2022, 27, 1802.	1.7	2
188	Hierarchical Selfâ€Assembly of Adhesive and Conductive Gels with Anionâ€Coordinated Triple Helicate Junctions. Angewandte Chemie, 0, , .	1.6	5
189	Hierarchical Selfâ€Assembly of Adhesive and Conductive Gels with Anionâ€Coordinated Triple Helicate Junctions. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
190	Selfâ€Assembly of Copolymers Containing Crystallizable Blocks: Strategies and Applications. Macromolecular Rapid Communications, 2022, 43, e2200071.	2.0	15
191	Peptide Amphiphile Hydrogels Based on Homoternary Cucurbit[8]uril Host-Guest Complexes. Bioconjugate Chemistry, 2022, 33, 111-120.	1.8	6
192	Predicting Spontaneous Orientational Self-Assembly: In Silico Design of Materials with Quantum Mechanically Derived Force Fields. Journal of Physical Chemistry Letters, 2022, 13, 243-250.	2.1	10
193	Designer peptides as versatile building blocks for functional materials. Bioorganic and Medicinal Chemistry Letters, 2022, 68, 128733.	1.0	7
194	Bioactive Keratin and Fibroin Nanoparticles: An Overview of Their Preparation Strategies. Nanomaterials, 2022, 12, 1406.	1.9	9
196	Synthesis of <scp>d</scp>â€<scp>glucitol</scp>based Gemini amphiphilic nanotransporters. Polymers for Advanced Technologies, 2022, 33, 2601-2609.	1.6	3
197	Bioinspired Approaches to Self-Assembly of Virus-like Particles: From Molecules to Materials. Accounts of Chemical Research, 2022, 55, 1349-1359.	7.6	21
198	Luminescence and morphological behaviour of the aromatic dipeptide pair having singular structural variability. Luminescence, 2023, 38, 1185-1191.	1.5	0
200	Aqueous Supramolecular Assemblies of Photocontrolled Molecular Amphiphiles. , 2022, , 267-308.		1
201	Designing energy-efficient separation membranes: Knowledge from nature for a sustainable future. , 2022, 2, 100031.		13
202	Reversible Co-Self-Assembly and Self-Sorting Systems of Polymer Micelles in Water: Polymers Switch Association Partners in Response to Salts. Macromolecules, 2022, 55, 5213-5221.	2.2	6
203	pH- and concentration-dependent supramolecular assembly of a fungal defensin plectasin variant into helical non-amyloid fibrils. Nature Communications, 2022, 13, .	5.8	9

#	Article	IF	Citations
204	In vivo Iron-Based Coordination Assembly for Disease Diagnosis and Treatment. BIO Integration, 2023, 4, .	0.9	0
205	Self-Assembly of DNA-Grafted Colloids: A Review of Challenges. Micromachines, 2022, 13, 1102.	1.4	10
206	Carbonic anhydrase membranes for carbon capture and storage. , 2022, 2, 100031.		4
208	A Wide Bandgap Semiconducting Magnesium Hydrogel: Moisture Harvest, Iodine Sequestration, and Resistive Switching. Langmuir, 2022, 38, 10601-10610.	1.6	13
209	Hierarchical self-assembly of an excitation-wavelength-dependent emissive fluorophore and cucurbiturils for secondary encryption. Matter, 2022, 5, 3883-3900.	5.0	26
210	A 3D Peptide/[60]Fullerene Hybrid for Multivalent Recognition. Angewandte Chemie, 0, , .	1.6	0
211	Flavonoid-based nanomedicines to target tumor microenvironment. OpenNano, 2022, 8, 100081.	1.8	6
212	Design and construction of amino acids, peptides and proteins-based self-assembled nanostructures. , 2022, , 33-55.		0
213	Self-assembled peptides and proteins for biomedical applications. , 2022, , 173-192.		0
214	Histidine as a key modulator of molecular self-assembly: Peptide-based supramolecular materials inspired by biological systems. Materials Today, 2022, 60, 106-127.	8.3	29
215	A 3D Peptide/[60]Fullerene Hybrid for Multivalent Recognition. Angewandte Chemie - International Edition, 2022, 61, .	7.2	4
216	Selfâ€Assembly and Transport Behaviour of Nonâ€ionic Fluorinated and Alkylated Amphiphiles for Drug Delivery. ChemistrySelect, 2022, 7, .	0.7	1
217	A critical overview of current progress for COVID-19: development of vaccines, antiviralÂdrugs, and therapeutic antibodies. Journal of Biomedical Science, 2022, 29, .	2.6	64
218	Unique threeâ€component coâ€assembly among AIEgen, Lâ€GSH, and Ag⁺ for the formation of helical nanowires. Aggregate, 2023, 4, .	5.2	3
219	Porphysomes and Porphyrin-Based Nanomaterials for Drug Delivery System. Nanotechnology in the Life Sciences, 2022, , 281-312.	0.4	0
220	Rip it, stitch it, click it: A Chemist's guide to VLP manipulation. Virology, 2022, 577, 105-123.	1.1	8
221	Poly(thioctic acid): From Bottomâ€Up Selfâ€Assembly to 3Dâ€Fused Deposition Modeling Printing. Advanced Science, 2022, 9, .	5.6	10
222	Aryl-Capped Lysine-Dehydroamino Acid Dipeptide Supergelators as Potential Drug Release Systems. International Journal of Molecular Sciences, 2022, 23, 11811.	1.8	3

#	Article	IF	Citations
223	Biomimetic Self-Assembled Chiral Inorganic Nanomaterials: A New Strategy for Solving Medical Problems. Biomimetics, 2022, 7, 165.	1.5	0
224	Biocompatible puerarin injectable-hydrogel using self-assembly tetrapeptide for local treatment of osteoarthritis in rats. Journal of Drug Delivery Science and Technology, 2022, 78, 103909.	1.4	0
225	Chiral-engineered supraparticles: Emerging tools for drug delivery. Drug Discovery Today, 2023, 28, 103420.	3.2	8
226	Exploiting directed self-assembly and disassembly for off-to-on fluorescence responsive live cell imaging. RSC Advances, 2022, 12, 35655-35665.	1.7	4
227	Preparation of PLGA-Coated Porous Silica Nanofibers for Drug Release. Pharmaceutics, 2022, 14, 2660.	2.0	3
228	Self-assembly of bioinspired peptides for biomimetic synthesis of advanced peptide-based nanomaterials: a mini-review. Nano Futures, 2023, 7, 012001.	1.0	3
229	Biofabrication of Self-Assembling Covalent Protein Nanoparticles through Histidine-Templated Cysteine Coupling. ACS Sustainable Chemistry and Engineering, 2023, 11, 4133-4144.	3.2	2
230	Keto-form directed hierarchical chiral self-assembly of Schiff base derivatives with amplified circularly polarized luminescence. Chinese Chemical Letters, 2024, 35, 108409.	4.8	4
231	Finite-Size Effects of Casimirâ€“van der Waals Forces in the Self-Assembly of Nanoparticles. Physics, 2023, 5, 322-330.	0.5	2
232	Hyaluronic Acid-Based Nanosystems for CD44 Mediated Anti-Inflammatory and Antinociceptive Activity. International Journal of Molecular Sciences, 2023, 24, 7286.	1.8	10
233	Structural intrinsic disorder in a functionalized potyviral coat protein as a main viability determinant of its assembled nanoparticles. International Journal of Biological Macromolecules, 2023, 236, 123958.	3.6	2
234	Uncovering the mechanisms of cyclic peptide self-assembly in membranes with the chirality-aware MA(R/S)TINI forcefield. Journal of Colloid and Interface Science, 2023, 642, 84-99.	5.0	1
235	Progressive Approach of Supramolecules Towards the Advancement of Antimicrobial Drugs. , 2022, , 113-134.		0
236	3D self-assembled nanocarriers for drug delivery. Drug Metabolism Reviews, 2023, 55, 140-162.	1.5	2
237	Lipidation of Naturally Occurring Î±-Helical Antimicrobial Peptides as a Promising Strategy for Drug Design. International Journal of Molecular Sciences, 2023, 24, 3951.	1.8	2
238	Structuring supramolecular hyaluronan hydrogels via peptide self-assembly for modulating the cell microenvironment. Materials Today Bio, 2023, 19, 100598.	2.6	3
239	Simulation workflows to predict the circular dichroism and circularly polarized luminescence of chiral materials. Chirality, 2023, 35, 673-680.	1.3	4
240	å›ºç›¸å^†å‰²ç»„è£…å…¨åŠå…¶æ–™™. Scientia Sinica Chimica, 2023, , .	0.2	0

#	Article	IF	Citations
241	A Paradigm Shift from 2D to 3D: Surface Supramolecular Assemblies and Their Electronic Properties Explored by Scanning Tunneling Microscopy and Spectroscopy. Small, 2023, 19, .	5.2	4
242	Short Peptide Nanofiber Biomaterials Ameliorate Local Hemostatic Capacity of Surgical Materials and Intraoperative Hemostatic Applications in Clinics. Advanced Materials, 2023, 35, .	11.1	5
243	Supramolecular Soft Material Enabled by Metal Coordination and Hydrogen Bonding: Stretchability, Selfâ€Healing, Impact Resistance, 3D Printing, and Motion Monitoring. Small, 2023, 19, .	5.2	7
244	Supramolecular chiral emergence in water even after compensating for helix chirality in vesicular helix-peptide-aromatic frameworks. Polymer Journal, 0, , .	1.3	0
245	Engineering precise sequence-defined polymers for advanced functions. Progress in Polymer Science, 2023, 141, 101677.	11.8	12
262	Introduction to soft particles: Fundamentals and perspectives. Advances in Chemical Engineering, 2023, , 1-34.	0.5	0