Job Boekhoven

List of Publications by Year
in descending order

126 papers	10,837 citations	46918 47 h-index	30848 102 g-index
140 all docs	140 docs citations	140 times ranked	7497 citing authors

#	Article	IF	Citations
1	Carbodiimide-fueled catalytic reaction cycles to regulate supramolecular processes. Chemical Communications, 2022, 58, 1284-1297.	2.2	25
2	A rotating bioreactor for the production of biofilms at the solidâ€“air interface. Biotechnology and Bioengineering, 2022, 119, 895-906.	1.7	4
3	Tunable induced circular dichroism in gels. Chirality, 2022, 34, 550-558.	1.3	4
4	Memory, switches, and an OR-port through bistability in chemically fueled crystals. Nature Communications, 2022, 13, .	5.8	19
5	Evolution and Singleâ€Droplet Analysis of Fuelâ€Driven Compartments by Dropletâ€Based Microfluidics. Angewandte Chemie, 2022, 134, .	1.6	6
6	Evolution and Singleâ€Droplet Analysis of Fuelâ€Driven Compartments by Dropletâ€Based Microfluidics. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
7	A Method to Quench Carbodiimideâ€Fueled Selfâ€Assembly. ChemSystemsChem, 2021, 3, e2000037.	1.1	19
8	Accelerated Ripening in Chemically Fueled Emulsions**. ChemSystemsChem, 2021, 3, e2000034.	1.1	18
9	Chemically fueled materials with a self-immolative mechanism: transient materials with a fast on/off response. Chemical Science, 2021, 12, 9969-9976.	3.7	13
10	Parasitic behavior in competing chemically fueled reaction cycles. Chemical Science, 2021, 12, 7554-7560.	3.7	17
11	Molecular Design of Chemically Fueled Peptideâ€“Polyelectrolyte Coacervate-Based Assemblies. Journal of the American Chemical Society, 2021, 143, 4782-4789.	6.6	59
12	Chemically Fueled Block Copolymer Selfâ€Assembly into Transient Nanoreactors**. ChemSystemsChem, 2021, 3, e2100015.	1.1	40
13	Fuel-Driven Dynamic Combinatorial Libraries. Journal of the American Chemical Society, 2021, 143, 7719-7725.	6.6	27
14	Synthesis and characterization of chemically fueled supramolecular materials driven by carbodiimide-based fuels. Nature Protocols, 2021, 16, 3901-3932.	5.5	21
15	Chemical reaction powered transient polymer hydrogels for controlled formation and free release of pharmaceutical crystals. Chemical Engineering Journal, 2021, 414, 128877.	6.6	12
16	Gelation Kineticsâ€Structure Analysis of pHâ€triggered Low Molecular Weight Hydrogelators. ChemPhysChem, 2021, 22, 2256-2261.	1.0	4
17	Viscoelastic behavior of chemically fueled supramolecular hydrogels under load and influence of reaction side products. Communications Materials, 2021, 2, .	2.9	5
18	Racing toward Fast and Effective ¹⁷O Isotopic Labeling and Nuclear Magnetic Resonance Spectroscopy of N-Formyl-MLF-OH and Associated Building Blocks. Journal of Physical Chemistry B, 2021, 125, 11916-11926.	1.2	6

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19	Emulsions of hydrolyzable oils for the zero-order release of hydrophobic drugs. Journal of Controlled Release, 2021, 339, 498-505.	4.8	17
20	Morphological transitions in chemically fueled self-assembly. Nanoscale, 2021, 13, 19864-19869.	2.8	4
21	How the Choice of Force-Field Affects the Stability and Self-Assembly Process of Supramolecular CTA Fibers. Journal of Chemical Theory and Computation, 2021, , .	2.3	7
22	Molekulare Selbstorganisation 2.0. Nachrichten Aus Der Chemie, 2021, 69, 67-68.	0.0	0
23	Droplet Formation by Chemically Fueled Self-Assembly: The Role of Precursor Hydrophobicity. Journal of Physical Chemistry B, 2021, 125, 13542-13551.	1.2	4
24	Dynamic Vesicles Formed By Dissipative Selfâ€Assembly. ChemSystemsChem, 2020, 2, e1900044.	1.1	53
25	Biomimetic Strainâ€Stiffening Selfâ€Assembled Hydrogels. Angewandte Chemie, 2020, 132, 4860-4864.	1.6	14
26	Biomimetic Strainâ€Stiffening Selfâ€Assembled Hydrogels. Angewandte Chemie - International Edition, 2020, 59, 4830-4834.	7.2	48
27	The Design of Dissipative Molecular Assemblies Driven by Chemical Reaction Cycles. CheM, 2020, 6, 552-578.	5.8	157
28	Transient supramolecular hydrogels formed by catalytic control over molecular self-assembly. Soft Matter, 2020, 16, 9406-9409.	1.2	8
29	Active coacervate droplets as a model for membraneless organelles and protocells. Nature Communications, 2020, 11, 5167.	5.8	135
30	Reciprocal Coupling in Chemically Fueled Assembly: A Reaction Cycle Regulates Self-Assembly and Vice Versa. Journal of the American Chemical Society, 2020, 142, 20837-20844.	6.6	42
31	Regulating Chemically Fueled Peptide Assemblies by Molecular Design. Journal of the American Chemical Society, 2020, 142, 14142-14149.	6.6	50
32	Electrochemically assisted hydrogel deposition, shaping and detachment. Electrochimica Acta, 2020, 350, 136352.	2.6	6
33	Transient Supramolecular Hydrogels Formed by Agingâ€Induced Seeded Selfâ€Assembly of Molecular Hydrogelators. Advanced Science, 2020, 7, 1902487.	5.6	30
34	Active droplets in a hydrogel release drugs with a constant and tunable rate. Materials Horizons, 2020, 7, 1397-1403.	6.4	37
35	Locally pH controlled and directed growth of supramolecular gel microshapes using electrocatalytic nanoparticles. Chemical Communications, 2019, 55, 9092-9095.	2.2	10
36	Controlled Fabrication of Micropatterned Supramolecular Gels by Directed Selfâ€Assembly of Small Molecular Gelators. Small, 2019, 15, e1804154.	5.2	11

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37	Pathway Dependence in the Fuel-Driven Dissipative Self-Assembly of Nanoparticles. Journal of the American Chemical Society, 2019, 141, 9872-9878.	6.6	114
38	Control over the formation of supramolecular material objects using reactionâ€œdiffusion. Soft Matter, 2019, 15, 4276-4283.	1.2	17
39	Continuous nonenzymatic cross-replication of DNA strands with <i>in situ</i> activated DNA oligonucleotides. Chemical Science, 2019, 10, 5807-5814.	3.7	26
40	Dissipative Selfâ€Assembly of Peptides. Israel Journal of Chemistry, 2019, 59, 898-905.	1.0	20
41	Systems Chemistry: Out of Equilibrium. ChemSystemsChem, 2019, 1, 6-6.	1.1	0
42	Tuning gelled lyotropic liquid crystals (LLCs) â€œ probing the influence of different low molecular weight gelators on the phase diagram of the system H2O/NaClâ€œGenapol LA070. Soft Matter, 2019, 15, 3111-3121.	1.2	17
43	Access to Metastable Gel States Using Seeded Selfâ€Assembly of Lowâ€Molecularâ€Weight Gelators. Angewandte Chemie - International Edition, 2019, 58, 3800-3803.	7.2	47
44	Hierarchically Compartmentalized Supramolecular Gels through Multilevel Self-Sorting. Journal of the American Chemical Society, 2019, 141, 2847-2851.	6.6	44
45	Selfâ€Orienting Hydrogel Microâ€Buckets as Novel Cell Carriers. Angewandte Chemie - International Edition, 2019, 58, 547-551.	7.2	48
46	Effect of homogeneous acidic catalyst on mechanical strength of trishydrazone hydrogels: Characterization and optimization studies. Arabian Journal of Chemistry, 2018, 11, 635-644.	2.3	4
47	Directed Nanoscale Selfâ€Assembly of Low Molecular Weight Hydrogelators Using Catalytic Nanoparticles. Advanced Materials, 2018, 30, e1707408.	11.1	20
48	Macromol. Biosci. 2/2018. Macromolecular Bioscience, 2018, 18, 1870004.	2.1	0
49	Macromolecular Coating Enables Tunable Selectivity in a Porous PDMS Matrix. Macromolecular Bioscience, 2018, 18, 1700311.	2.1	8
50	Collection of amino acids and DNA from fingerprints using hydrogels. Analyst, The, 2018, 143, 900-905.	1.7	11
51	Aniline Catalysed Hydrazone Formation Reactions Show a Large Variation in Reaction Rates and Catalytic Effects. Advanced Synthesis and Catalysis, 2018, 360, 2571-2576.	2.1	15
52	Unique properties of supramolecular biomaterials through nonequilibrium self-assembly. , 2018, , 235-250.		10
53	Complexity from small molecules. Nature Nanotechnology, 2018, 13, 979-980.	15.6	0
54	Self-selection of dissipative assemblies driven by primitive chemical reaction networks. Nature Communications, 2018, 9, 2044.	5.8	147

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55	Dissipative assemblies that inhibit their deactivation. Soft Matter, 2018, 14, 4852-4859.	1.2	53
56	Functional Bioinorganic Hybrids from Enzymes and Luminescent Silicon-Based Nanoparticles. Langmuir, 2018, 34, 6556-6569.	1.6	16
57	Dissipative Selfâ€Assembly of Photoluminescent Silicon Nanocrystals. Angewandte Chemie - International Edition, 2018, 57, 14608-14612.	7.2	80
58	Vereinigung von Kunst und Wissenschaft: Die 53. BÃ¼rgenstockâ€Konferenz. Angewandte Chemie, 2018, 130, 10163-10166.	1.6	0
59	Merging Art and Scienceâ€"The 53rd BÃ¼rgenstock Conference. Angewandte Chemie - International Edition, 2018, 57, 10011-10014.	7.2	0
60	Dissipative Selbstassemblierung photolumineszierender Siliciumnanokristalle. Angewandte Chemie, 2018, 130, 14817-14822.	1.6	18
61	Applications of Dissipative Supramolecular Materials with a Tunable Lifetime. ChemNanoMat, 2018, 4, 710-719.	1.5	53
62	A nano-fibrous platform of copolymer patterned surfaces for controlled cell alignment. RSC Advances, 2018, 8, 21777-21785.	1.7	4
63	Crosslinkerâ€Induced Effects on the Gelation Pathway of a Low Molecular Weight Hydrogel. Advanced Materials, 2017, 29, 1603769.	11.1	21
64	Crystal-Phase Transitions and Photocatalysis in Supramolecular Scaffolds. Journal of the American Chemical Society, 2017, 139, 6120-6127.	6.6	60
65	Biocatalytic Self-Assembly of Tripeptide Gels and Emulsions. Langmuir, 2017, 33, 4986-4995.	1.6	26
66	Synthesis of a Doubleâ€Network Supramolecular Hydrogel by Having One Network Catalyse the Formation of the Second. Chemistry - A European Journal, 2017, 23, 2018-2021.	1.7	23
67	Chemical signal activation of an organocatalyst enables control over soft material formation. Nature Communications, 2017, 8, 879.	5.8	21
68	Chemical systems out of equilibrium. Chemical Society Reviews, 2017, 46, 5474-5475.	18.7	136
69	Non-equilibrium dissipative supramolecular materials with a tunable lifetime. Nature Communications, 2017, 8, 15895.	5.8	251
70	Compartmentalizing Supramolecular Hydrogels Using Aqueous Multiâ€phase Systems. Angewandte Chemie - International Edition, 2017, 56, 14923-14927.	7.2	32
71	Instructing cells with programmable peptide DNA hybrids. Nature Communications, 2017, 8, 15982.	5.8	87
72	Dissipative out-of-equilibrium assembly of man-made supramolecular materials. Chemical Society Reviews, 2017, 46, 5519-5535.	18.7	391

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73	Fuel-Mediated Transient Clustering of Colloidal Building Blocks. Journal of the American Chemical Society, 2017, 139, 9763-9766.	6.6	100
74	Free-standing supramolecular hydrogel objects by reaction-diffusion. Nature Communications, 2017, 8, 15317.	5.8	67
75	Negatively Charged Lipid Membranes Catalyze Supramolecular Hydrogel Formation. Journal of the American Chemical Society, 2016, 138, 8670-8673.	6.6	32
76	Synthetic Selfâ€Assembled Materials in Biological Environments. Advanced Materials, 2016, 28, 4576-4592.	11.1	68
77	A tenascin-C mimetic peptide amphiphile nanofiber gel promotes neurite outgrowth and cell migration of neurosphere-derived cells. Acta Biomaterialia, 2016, 37, 50-58.	4.1	74
78	Bio-inspired supramolecular materials by orthogonal self-assembly of hydrogelators and phospholipids. Chemical Science, 2016, 7, 6021-6031.	3.7	52
79	A facile approach for the fabrication of 2D supermicelle networks. Chemical Communications, 2016, 52, 12360-12363.	2.2	5
80	Catalysis of Supramolecular Hydrogelation. Accounts of Chemical Research, 2016, 49, 1440-1447.	7.6	64
81	A toolbox for controlling the properties and functionalisation of hydrazone-based supramolecular hydrogels. Journal of Materials Chemistry B, 2016, 4, 852-858.	2.9	43
82	Energy landscapes and functions of supramolecular systems. Nature Materials, 2016, 15, 469-476.	13.3	348
83	Biopolymers and supramolecular polymers as biomaterials for biomedical applications. MRS Bulletin, 2015, 40, 1089-1101.	1.7	49
84	Supramolecular Protein Immobilization on Lipid Bilayers. Chemistry - A European Journal, 2015, 21, 18466-18473.	1.7	26
85	Alginateâ€"peptide amphiphile coreâ€"shell microparticles as a targeted drug delivery system. RSC Advances, 2015, 5, 8753-8756.	1.7	68
86	Gelation Landscape Engineering Using a Multi-Reaction Supramolecular Hydrogelator System. Journal of the American Chemical Society, 2015, 137, 14236-14239.	6.6	46
87	Transient assembly of active materials fueled by a chemical reaction. Science, 2015, 349, 1075-1079.	6.0	656
88	Spatial Structuring of a Supramolecular Hydrogel by using a Visibleâ€Light Triggered Catalyst. Angewandte Chemie - International Edition, 2015, 54, 998-1001.	7.2	135
89	Supramolecular assembly of multifunctional maspin-mimetic nanostructures as a potent peptide-based angiogenesis inhibitor. Acta Biomaterialia, 2015, 12, 1-10.	4.1	26
90	Spatial and Directional Control over Selfâ€Assembly Using Catalytic Micropatterned Surfaces. Angewandte Chemie - International Edition, 2014, 53, 4132-4136.	7.2	67

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91	Cell death versus cell survival instructed by supramolecular cohesion of nanostructures. Nature Communications, 2014, 5, 3321.	5.8	135
92	Variable gelation time and stiffness of low-molecular-weight hydrogels through catalytic control over self-assembly. Nature Protocols, 2014, 9, 977-988.	5.5	64
93	25th Anniversary Article: Supramolecular Materials for Regenerative Medicine. Advanced Materials, 2014, 26, 1642-1659.	11.1	285
94	Catalytic control over the formation of supramolecular materials. Organic and Biomolecular Chemistry, 2014, 12, 6292-6296.	1.5	22
95	Post-Assembly Functionalization of Supramolecular Nanostructures with Bioactive Peptides and Fluorescent Proteins by Native Chemical Ligation. Bioconjugate Chemistry, 2014, 25, 707-717.	1.8	36
96	Binding of an intravascular delivery vehicle for prevention of arterial restenosis is contingent on tertiary structure. Journal of the American College of Surgeons, 2013, 217, S137.	0.2	0
97	Chemical-gradient directed self-assembly of hydrogel fibers. Soft Matter, 2013, 9, 1556-1561.	1.2	35
98	Aggregationâ€Driven Reversible Formation of Conjugated Polymers in Water. Angewandte Chemie - International Edition, 2013, 52, 1998-2001.	7.2	47
99	Catalytic control over supramolecular gel formation. Nature Chemistry, 2013, 5, 433-437.	6.6	246
100	The Lost Work in Dissipative Self-Assembly. International Journal of Thermophysics, 2013, 34, 1229-1238.	1.0	16
101	Dynamic Display of Bioactivity through Hostâ€“Guest Chemistry. Angewandte Chemie, 2013, 125, 12299-12302.	1.6	11
102	Dynamic Display of Bioactivity through Hostâ€“Guest Chemistry. Angewandte Chemie - International Edition, 2013, 52, 12077-12080.	7.2	114
103	Dynamic covalent assembly of stimuli responsive vesicle gels. Chemical Communications, 2012, 48, 9837.	2.2	43
104	A Self-Assembled Delivery Platform with Post-production Tunable Release Rate. Journal of the American Chemical Society, 2012, 134, 12908-12911.	6.6	98
105	Responsive Wormlike Micelles from Dynamic Covalent Surfactants. Langmuir, 2012, 28, 13570-13576.	1.6	47
106	Micellization Behavior of Aromatic Moiety Bearing Hybrid Fluorocarbon Sulfonate Surfactants. Langmuir, 2012, 28, 3397-3402.	1.6	28
107	Responsive Vesicles from Dynamic Covalent Surfactants. Angewandte Chemie - International Edition, 2011, 50, 3421-3424.	7.2	125
108	Programmed Morphological Transitions of Multisegment Assemblies by Molecular Chaperone Analogues. Angewandte Chemie - International Edition, 2011, 50, 12285-12289.	7.2	38

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109	Dissipative Selfâ€Assembly of a Molecular Gelator by Using a Chemical Fuel. Angewandte Chemie - International Edition, 2010, 49, 4825-4828.	7.2	373
110	Biocatalytic induction of supramolecular order. Nature Chemistry, 2010, 2, 1089-1094.	6.6	324
111	Size control and compartmentalization in self-assembled nano-structures of a multisegment amphiphile. Chemical Communications, 2010, 46, 3490.	2.2	23
112	Self-assembled interpenetrating networks by orthogonal self assembly of surfactants and hydrogelators. Faraday Discussions, 2009, 143, 345.	1.6	45
113	Triggered Self-Assembly of Simple Dynamic Covalent Surfactants. Journal of the American Chemical Society, 2009, 131, 11274-11275.	6.6	174
114	Quantitatively Interpreting Thermal Behavior of Self-Associating Systems. Journal of Physical Chemistry B, 2009, 113, 15597-15601.	1.2	14
115	We Can Design Molecular Gelators, But Do We Understand Them?. Langmuir, 2009, 25, 8392-8394.	1.6	217
116	Preparation of Nanostructures by Orthogonal Selfâ€Assembly of Hydrogelators and Surfactants. Angewandte Chemie - International Edition, 2008, 47, 2063-2066.	7.2	184
117	Design and Application of Selfâ€Assembled Low Molecular Weight Hydrogels. European Journal of Organic Chemistry, 2005, 2005, 3615-3631.	1.2	541
118	Light-Driven Dynamic Pattern Formation. Angewandte Chemie - International Edition, 2005, 44, 2373-2376.	7.2	130
119	Two-stage enzyme mediated drug release from LMWG hydrogels. Organic and Biomolecular Chemistry, 2005, 3, 2917.	1.5	128
120	Entrapment and release of quinoline derivatives using a hydrogel of a low molecular weight gelator. Journal of Controlled Release, 2004, 97, 241-248.	4.8	194
121	Reversible Optical Transcription of Supramolecular Chirality into Molecular Chirality. Science, 2004, 304, 278-281.	6.0	635
122	Responsive Cyclohexane-Based Low-Molecular-Weight Hydrogelators with Modular Architecture. Angewandte Chemie - International Edition, 2004, 43, 1663-1667.	7.2	280
123	Orthogonal Self-Assembly of Low Molecular Weight Hydrogelators and Surfactants. Journal of the American Chemical Society, 2003, 125, 14252-14253.	6.6	201
124	New Functional Materials Based on Self-Assembling Organogels: From Serendipity towards Design. Angewandte Chemie - International Edition, 2000, 39, 2263-2266.	7.2	1,045
125	New Functional Materials Based on Self-Assembling Organogels: From Serendipity towards Design. Angewandte Chemie - International Edition, 2000, 39, 2263-2266.	7.2	64
126	A Dynamic Model for Cellular Membranes. ChemistryViews, 0, , .	0.0	0