Job Boekhoven

List of Publications by Year
in descending order

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Version: 2024-02-01

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	New Functional Materials Based on Self-Assembling Organogels: From Serendipity towards Design. Angewandte Chemie - International Edition, 2000, 39, 2263-2266.	7.2	1,045
2	Transient assembly of active materials fueled by a chemical reaction. Science, 2015, 349, 1075-1079.	6.0	656
3	Reversible Optical Transcription of Supramolecular Chirality into Molecular Chirality. Science, 2004, 304, 278-281.	6.0	635
4	Design and Application of Selfâ€Assembled Low Molecular Weight Hydrogels. European Journal of Organic Chemistry, 2005, 2005, 3615-3631.	1.2	541
5	Dissipative out-of-equilibrium assembly of man-made supramolecular materials. Chemical Society Reviews, 2017, 46, 5519-5535.	18.7	391
6	Dissipative Selfâ€Assembly of a Molecular Gelator by Using a Chemical Fuel. Angewandte Chemie - International Edition, 2010, 49, 4825-4828.	7.2	373
7	Energy landscapes and functions of supramolecular systems. Nature Materials, 2016, 15, 469-476.	13.3	348
8	Biocatalytic induction of supramolecular order. Nature Chemistry, 2010, 2, 1089-1094.	6.6	324
9	25th Anniversary Article: Supramolecular Materials for Regenerative Medicine. Advanced Materials, 2014, 26, 1642-1659.	11.1	285
10	Responsive Cyclohexane-Based Low-Molecular-Weight Hydrogelators with Modular Architecture. Angewandte Chemie - International Edition, 2004, 43, 1663-1667.	7.2	280
11	Non-equilibrium dissipative supramolecular materials with a tunable lifetime. Nature Communications, 2017, 8, 15895.	5.8	251
12	Catalytic control over supramolecular gel formation. Nature Chemistry, 2013, 5, 433-437.	6.6	246
13	We Can Design Molecular Gelators, But Do We Understand Them?. Langmuir, 2009, 25, 8392-8394.	1.6	217
14	Orthogonal Self-Assembly of Low Molecular Weight Hydrogelators and Surfactants. Journal of the American Chemical Society, 2003, 125, 14252-14253.	6.6	201
15	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
16	Preparation of Nanostructures by Orthogonal Selfâ€Assembly of Hydrogelators and Surfactants. Angewandte Chemie - International Edition, 2008, 47, 2063-2066.	7.2	184
17	Triggered Self-Assembly of Simple Dynamic Covalent Surfactants. Journal of the American Chemical Society, 2009, 131, 11274-11275.	6.6	174
18	The Design of Dissipative Molecular Assemblies Driven by Chemical Reaction Cycles. CheM, 2020, 6, 552-578.	5.8	157

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19	Self-selection of dissipative assemblies driven by primitive chemical reaction networks. Nature Communications, 2018, 9, 2044.	5.8	147
20	Chemical systems out of equilibrium. Chemical Society Reviews, 2017, 46, 5474-5475.	18.7	136
21	Cell death versus cell survival instructed by supramolecular cohesion of nanostructures. Nature Communications, 2014, 5, 3321.	5.8	135
22	Spatial Structuring of a Supramolecular Hydrogel by using a Visibleâ€Light Triggered Catalyst. Angewandte Chemie - International Edition, 2015, 54, 998-1001.	7.2	135
23	Active coacervate droplets as a model for membraneless organelles and protocells. Nature Communications, 2020, 11, 5167.	5.8	135
24	Light-Driven Dynamic Pattern Formation. Angewandte Chemie - International Edition, 2005, 44, 2373-2376.	7.2	130
25	Two-stage enzyme mediated drug release from LMWG hydrogels. Organic and Biomolecular Chemistry, 2005, 3, 2917.	1.5	128
26	Responsive Vesicles from Dynamic Covalent Surfactants. Angewandte Chemie - International Edition, 2011, 50, 3421-3424.	7.2	125
27	Dynamic Display of Bioactivity through Hostâ€“Guest Chemistry. Angewandte Chemie - International Edition, 2013, 52, 12077-12080.	7.2	114
28	Pathway Dependence in the Fuel-Driven Dissipative Self-Assembly of Nanoparticles. Journal of the American Chemical Society, 2019, 141, 9872-9878.	6.6	114
29	Fuel-Mediated Transient Clustering of Colloidal Building Blocks. Journal of the American Chemical Society, 2017, 139, 9763-9766.	6.6	100
30	A Self-Assembled Delivery Platform with Post-production Tunable Release Rate. Journal of the American Chemical Society, 2012, 134, 12908-12911.	6.6	98
31	Instructing cells with programmable peptide DNA hybrids. Nature Communications, 2017, 8, 15982.	5.8	87
32	Dissipative Selfâ€Assembly of Photoluminescent Silicon Nanocrystals. Angewandte Chemie - International Edition, 2018, 57, 14608-14612.	7.2	80
33	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
34	Alginateâ€“peptide amphiphile coreâ€“shell microparticles as a targeted drug delivery system. RSC Advances, 2015, 5, 8753-8756.	1.7	68
35	Synthetic Selfâ€Assembled Materials in Biological Environments. Advanced Materials, 2016, 28, 4576-4592.	11.1	68
36	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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37	Free-standing supramolecular hydrogel objects by reaction-diffusion. Nature Communications, 2017, 8, 15317.	5.8	67
38	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
39	Catalysis of Supramolecular Hydrogelation. Accounts of Chemical Research, 2016, 49, 1440-1447.	7.6	64
40	New Functional Materials Based on Self-Assembling Organogels: From Serendipity towards Design. Angewandte Chemie - International Edition, 2000, 39, 2263-2266.	7.2	64
41	Crystal-Phase Transitions and Photocatalysis in Supramolecular Scaffolds. Journal of the American Chemical Society, 2017, 139, 6120-6127.	6.6	60
42	Molecular Design of Chemically Fueled Peptideâ€“Polyelectrolyte Coacervate-Based Assemblies. Journal of the American Chemical Society, 2021, 143, 4782-4789.	6.6	59
43	Dissipative assemblies that inhibit their deactivation. Soft Matter, 2018, 14, 4852-4859.	1.2	53
44	Applications of Dissipative Supramolecular Materials with a Tunable Lifetime. ChemNanoMat, 2018, 4, 710-719.	1.5	53
45	Dynamic Vesicles Formed By Dissipative Selfâ€Assembly. ChemSystemsChem, 2020, 2, e1900044.	1.1	53
46	Bio-inspired supramolecular materials by orthogonal self-assembly of hydrogelators and phospholipids. Chemical Science, 2016, 7, 6021-6031.	3.7	52
47	Regulating Chemically Fueled Peptide Assemblies by Molecular Design. Journal of the American Chemical Society, 2020, 142, 14142-14149.	6.6	50
48	Biopolymers and supramolecular polymers as biomaterials for biomedical applications. MRS Bulletin, 2015, 40, 1089-1101.	1.7	49
49	Selfâ€Orienting Hydrogel Microâ€Buckets as Novel Cell Carriers. Angewandte Chemie - International Edition, 2019, 58, 547-551.	7.2	48
50	Biomimetic Strainâ€Stiffening Selfâ€Assembled Hydrogels. Angewandte Chemie - International Edition, 2020, 59, 4830-4834.	7.2	48
51	Responsive Wormlike Micelles from Dynamic Covalent Surfactants. Langmuir, 2012, 28, 13570-13576.	1.6	47
52	Aggregationâ€Driven Reversible Formation of Conjugated Polymers in Water. Angewandte Chemie - International Edition, 2013, 52, 1998-2001.	7.2	47
53	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
54	Gelation Landscape Engineering Using a Multi-Reaction Supramolecular Hydrogelator System. Journal of the American Chemical Society, 2015, 137, 14236-14239.	6.6	46

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55	Self-assembled interpenetrating networks by orthogonal self assembly of surfactants and hydrogelators. Faraday Discussions, 2009, 143, 345.	1.6	45
56	Hierarchically Compartmentalized Supramolecular Gels through Multilevel Self-Sorting. Journal of the American Chemical Society, 2019, 141, 2847-2851.	6.6	44
57	Dynamic covalent assembly of stimuli responsive vesicle gels. Chemical Communications, 2012, 48, 9837.	2.2	43
58	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
59	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
60	Chemically Fueled Block Copolymer Selfâ€Assembly into Transient Nanoreactors**. ChemSystemsChem, 2021, 3, e2100015.	1.1	40
61	Programmed Morphological Transitions of Multisegment Assemblies by Molecular Chaperone Analogues. Angewandte Chemie - International Edition, 2011, 50, 12285-12289.	7.2	38
62	Active droplets in a hydrogel release drugs with a constant and tunable rate. Materials Horizons, 2020, 7, 1397-1403.	6.4	37
63	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
64	Chemical-gradient directed self-assembly of hydrogel fibers. Soft Matter, 2013, 9, 1556-1561.	1.2	35
65	Negatively Charged Lipid Membranes Catalyze Supramolecular Hydrogel Formation. Journal of the American Chemical Society, 2016, 138, 8670-8673.	6.6	32
66	Compartmentalizing Supramolecular Hydrogels Using Aqueous Multiâ€phase Systems. Angewandte Chemie - International Edition, 2017, 56, 14923-14927.	7.2	32
67	Transient Supramolecular Hydrogels Formed by Agingâ€Induced Seeded Selfâ€Assembly of Molecular Hydrogelators. Advanced Science, 2020, 7, 1902487.	5.6	30
68	Micellization Behavior of Aromatic Moiety Bearing Hybrid Fluorocarbon Sulfonate Surfactants. Langmuir, 2012, 28, 3397-3402.	1.6	28
69	Fuel-Driven Dynamic Combinatorial Libraries. Journal of the American Chemical Society, 2021, 143, 7719-7725.	6.6	27
70	Supramolecular Protein Immobilization on Lipid Bilayers. Chemistry - A European Journal, 2015, 21, 18466-18473.	1.7	26
71	Supramolecular assembly of multifunctional maspin-mimetic nanostructures as a potent peptide-based angiogenesis inhibitor. Acta Biomaterialia, 2015, 12, 1-10.	4.1	26
72	Biocatalytic Self-Assembly of Tripeptide Gels and Emulsions. Langmuir, 2017, 33, 4986-4995.	1.6	26

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73	Continuous nonenzymatic cross-replication of DNA strands with in situ activated DNA oligonucleotides. Chemical Science, 2019, 10, 5807-5814.	3.7	26
74	Carbodiimide-fueled catalytic reaction cycles to regulate supramolecular processes. Chemical Communications, 2022, 58, 1284-1297.	2.2	25
75	Size control and compartmentalization in self-assembled nano-structures of a multisegment amphiphile. Chemical Communications, 2010, 46, 3490.	2.2	23
76	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
77	Catalytic control over the formation of supramolecular materials. Organic and Biomolecular Chemistry, 2014, 12, 6292-6296.	1.5	22
78	Crosslinkerâ€Induced Effects on the Gelation Pathway of a Low Molecular Weight Hydrogel. Advanced Materials, 2017, 29, 1603769.	11.1	21
79	Chemical signal activation of an organocatalyst enables control over soft material formation. Nature Communications, 2017, 8, 879.	5.8	21
80	Synthesis and characterization of chemically fueled supramolecular materials driven by carbodiimide-based fuels. Nature Protocols, 2021, 16, 3901-3932.	5.5	21
81	Directed Nanoscale Selfâ€Assembly of Low Molecular Weight Hydrogelators Using Catalytic Nanoparticles. Advanced Materials, 2018, 30, e1707408.	11.1	20
82	Dissipative Selfâ€Assembly of Peptides. Israel Journal of Chemistry, 2019, 59, 898-905.	1.0	20
83	A Method to Quench Carbodiimideâ€Fueled Selfâ€Assembly. ChemSystemsChem, 2021, 3, e2000037.	1.1	19
84	Memory, switches, and an OR-port through bistability in chemically fueled crystals. Nature Communications, 2022, 13, .	5.8	19
85	Dissipative Selbstassemblierung photolumineszierender Siliciumnanokristalle. Angewandte Chemie, 2018, 130, 14817-14822.	1.6	18
86	Accelerated Ripening in Chemically Fueled Emulsions**. ChemSystemsChem, 2021, 3, e2000034.	1.1	18
87	Control over the formation of supramolecular material objects using reactionâ€“diffusion. Soft Matter, 2019, 15, 4276-4283.	1.2	17
88	Tuning gelled lyotropic liquid crystals (LLCs) â€“ probing the influence of different low molecular weight gelators on the phase diagram of the system H2O/NaClâ€“Genapol LA070. Soft Matter, 2019, 15, 3111-3121.	1.2	17
89	Parasitic behavior in competing chemically fueled reaction cycles. Chemical Science, 2021, 12, 7554-7560.	3.7	17
90	Emulsions of hydrolyzable oils for the zero-order release of hydrophobic drugs. Journal of Controlled Release, 2021, 339, 498-505.	4.8	17

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91	The Lost Work in Dissipative Self-Assembly. International Journal of Thermophysics, 2013, 34, 1229-1238.	1.0	16
92	Functional Bioinorganic Hybrids from Enzymes and Luminescent Silicon-Based Nanoparticles. Langmuir, 2018, 34, 6556-6569.	1.6	16
93	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
94	Evolution and Singleâ€Droplet Analysis of Fuelâ€Driven Compartments by Dropletâ€Based Microfluidics. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
95	Quantitatively Interpreting Thermal Behavior of Self-Associating Systems. Journal of Physical Chemistry B, 2009, 113, 15597-15601.	1.2	14
96	Biomimetic Strainâ€Stiffening Selfâ€Assembled Hydrogels. Angewandte Chemie, 2020, 132, 4860-4864.	1.6	14
97	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
98	Chemical reaction powered transient polymer hydrogels for controlled formation and free release of pharmaceutical crystals. Chemical Engineering Journal, 2021, 414, 128877.	6.6	12
99	Dynamic Display of Bioactivity through Hostâ€“Guest Chemistry. Angewandte Chemie, 2013, 125, 12299-12302.	1.6	11
100	Collection of amino acids and DNA from fingerprints using hydrogels. Analyst, The, 2018, 143, 900-905.	1.7	11
101	Controlled Fabrication of Micropatterned Supramolecular Gels by Directed Selfâ€Assembly of Small Molecular Gelators. Small, 2019, 15, e1804154.	5.2	11
102	Unique properties of supramolecular biomaterials through nonequilibrium self-assembly. , 2018, , 235-250.		10
103	Locally pH controlled and directed growth of supramolecular gel microshapes using electrocatalytic nanoparticles. Chemical Communications, 2019, 55, 9092-9095.	2.2	10
104	Macromolecular Coating Enables Tunable Selectivity in a Porous PDMS Matrix. Macromolecular Bioscience, 2018, 18, 1700311.	2.1	8
105	Transient supramolecular hydrogels formed by catalytic control over molecular self-assembly. Soft Matter, 2020, 16, 9406-9409.	1.2	8
106	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
107	Electrochemically assisted hydrogel deposition, shaping and detachment. Electrochimica Acta, 2020, 350, 136352.	2.6	6
108	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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109	Evolution and Singleâ€Droplet Analysis of Fuelâ€Driven Compartments by Dropletâ€Based Microfluidics. Angewandte Chemie, 2022, 134, .	1.6	6
110	A facile approach for the fabrication of 2D supermicelle networks. Chemical Communications, 2016, 52, 12360-12363.	2.2	5
111	Viscoelastic behavior of chemically fueled supramolecular hydrogels under load and influence of reaction side products. Communications Materials, 2021, 2, .	2.9	5
112	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
113	A nano-fibrous platform of copolymer patterned surfaces for controlled cell alignment. RSC Advances, 2018, 8, 21777-21785.	1.7	4
114	Gelation Kineticsâ€Structure Analysis of pHâ€triggered Low Molecular Weight Hydrogelators. ChemPhysChem, 2021, 22, 2256-2261.	1.0	4
115	Morphological transitions in chemically fueled self-assembly. Nanoscale, 2021, 13, 19864-19869.	2.8	4
116	Droplet Formation by Chemically Fueled Self-Assembly: The Role of Precursor Hydrophobicity. Journal of Physical Chemistry B, 2021, 125, 13542-13551.	1.2	4
117	A rotating bioreactor for the production of biofilms at the solidâ€“air interface. Biotechnology and Bioengineering, 2022, 119, 895-906.	1.7	4
118	Tunable induced circular dichroism in gels. Chirality, 2022, 34, 550-558.	1.3	4
119	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
120	Macromol. Biosci. 2/2018. Macromolecular Bioscience, 2018, 18, 1870004.	2.1	0
121	Complexity from small molecules. Nature Nanotechnology, 2018, 13, 979-980.	15.6	0
122	Vereinigung von Kunst und Wissenschaft: Die 53. BÃ¼rgenstockâ€Konferenz. Angewandte Chemie, 2018, 130, 10163-10166.	1.6	0
123	Merging Art and Scienceâ€”The 53rd BÃ¼rgenstock Conference. Angewandte Chemie - International Edition, 2018, 57, 10011-10014.	7.2	0
124	Systems Chemistry: Out of Equilibrium. ChemSystemsChem, 2019, 1, 6-6.	1.1	0
125	A Dynamic Model for Cellular Membranes. ChemistryViews, 0, , .	0.0	0
126	Molekulare Selbstorganisation 2.0. Nachrichten Aus Der Chemie, 2021, 69, 67-68.	0.0	0