

Tom F A De Greef

List of Publications by Year in descending order

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89
papers

9,746
citations

70961

41
h-index

46693

89
g-index

95
all docs

95
docs citations

95
times ranked

8152
citing authors

#	ARTICLE	IF	CITATIONS
1	Supramolecular Polymerization. <i>Chemical Reviews</i> , 2009, 109, 5687-5754.	23.0	2,086
2	Pathway complexity in supramolecular polymerization. <i>Nature</i> , 2012, 481, 492-496.	13.7	812
3	Supramolecular polymers. <i>Nature</i> , 2008, 453, 171-173.	13.7	603
4	How to Distinguish Isodesmic from Cooperative Supramolecular Polymerisation. <i>Chemistry - A European Journal</i> , 2010, 16, 362-367.	1.7	461
5	Non-equilibrium supramolecular polymerization. <i>Chemical Society Reviews</i> , 2017, 46, 5476-5490.	18.7	429
6	Single-Chain Folding of Polymers for Catalytic Systems in Water. <i>Journal of the American Chemical Society</i> , 2011, 133, 4742-4745.	6.6	393
7	Benzene-1,3,5-tricarboxamide: a versatile ordering moiety for supramolecular chemistry. <i>Chemical Society Reviews</i> , 2012, 41, 6125.	18.7	342
8	DNA-based communication in populations of synthetic protocells. <i>Nature Nanotechnology</i> , 2019, 14, 369-378.	15.6	243
9	Controlling Chemical Self-Assembly by Solvent-Dependent Dynamics. <i>Journal of the American Chemical Society</i> , 2012, 134, 13482-13491.	6.6	240
10	Pathway Complexity in π -Conjugated Materials. <i>Chemistry of Materials</i> , 2014, 26, 576-586.	3.2	236
11	Rational design of functional and tunable oscillating enzymatic networks. <i>Nature Chemistry</i> , 2015, 7, 160-165.	6.6	219
12	Polymers with Multiple Hydrogen-Bonded End Groups and Their Blends. <i>Macromolecules</i> , 2008, 41, 4694-4700.	2.2	192
13	Theoretical models of nonlinear effects in two-component cooperative supramolecular copolymerizations. <i>Nature Communications</i> , 2011, 2, 509.	5.8	184
14	An Equilibrium Model for Chiral Amplification in Supramolecular Polymers. <i>Journal of Physical Chemistry B</i> , 2012, 116, 5291-5301.	1.2	175
15	Programmable Supramolecular Polymerizations. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8334-8336.	7.2	126
16	Influence of Selectivity on the Supramolecular Polymerization of AB-Type Polymers Capable of Both AA-A and AA-B Interactions. <i>Journal of the American Chemical Society</i> , 2008, 130, 13755-13764.	6.6	125
17	Programmable chemical reaction networks: emulating regulatory functions in living cells using a bottom-up approach. <i>Chemical Society Reviews</i> , 2015, 44, 7465-7483.	18.7	123
18	Understanding Cooperativity in Hydrogen-Bond-Induced Supramolecular Polymerization: A Density Functional Theory Study. <i>Journal of Physical Chemistry B</i> , 2010, 114, 13667-13674.	1.2	119

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19	Helicity Induction and Amplification in an Oligo(<i>p</i> -phenylenevinylene) Assembly through Hydrogen-Bonded Chiral Acids. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 8206-8211.	7.2	118
20	Interaction of 14-3-3 proteins with the Estrogen Receptor Alpha F domain provides a drug target interface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8894-8899.	3.3	114
21	Symmetry Breaking in the Self-Assembly of Partially Fluorinated Benzene-1,3,5-tricarboxamides. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11297-11301.	7.2	105
22	Dynamic Supramolecular Polymers Based on Benzene-1,3,5-tricarboxamides: The Influence of Amide Connectivity on Aggregate Stability and Amplification of Chirality. <i>Chemistry - A European Journal</i> , 2010, 16, 810-821.	1.7	93
23	Kinetic Analysis as a Tool to Distinguish Pathway Complexity in Molecular Assembly: An Unexpected Outcome of Structures in Competition. <i>Journal of the American Chemical Society</i> , 2015, 137, 12677-12688.	6.6	92
24	Self-Assembly of Ureido-Pyrimidinone Dimers into One-Dimensional Stacks by Lateral Hydrogen Bonding. <i>Chemistry - A European Journal</i> , 2010, 16, 1601-1612.	1.7	90
25	Insights into Templated Supramolecular Polymerization: Binding of Naphthalene Derivatives to ssDNA Templates of Different Lengths. <i>Journal of the American Chemical Society</i> , 2009, 131, 1222-1231.	6.6	86
26	Folding Polymers with Pendant Hydrogen Bonding Motifs in Water: The Effect of Polymer Length and Concentration on the Shape and Size of Single-Chain Polymeric Nanoparticles. <i>Macromolecules</i> , 2014, 47, 2947-2954.	2.2	85
27	Antibody-controlled actuation of DNA-based molecular circuits. <i>Nature Communications</i> , 2017, 8, 14473.	5.8	82
28	The influence of ethylene glycol chains on the thermodynamics of hydrogen-bonded supramolecular assemblies in apolar solvents. <i>Chemical Communications</i> , 2008, , 4306.	2.2	69
29	Macrocyclization of enzyme-based supramolecular polymers. <i>Chemical Science</i> , 2010, 1, 79.	3.7	68
30	Competitive Intramolecular Hydrogen Bonding in Oligo(ethylene oxide) Substituted Quadruple Hydrogen Bonded Systems. <i>Journal of Organic Chemistry</i> , 2010, 75, 598-610.	1.7	62
31	Proximity-induced caspase-9 activation on a DNA origami-based synthetic apoptosome. <i>Nature Catalysis</i> , 2020, 3, 295-306.	16.1	62
32	Solution ¹ H NMR Confirmation of Folding in Shorto-Phenylene Ethynylene Oligomers. <i>Journal of the American Chemical Society</i> , 2005, 127, 17235-17240.	6.6	60
33	The Mechanism of Ureido-Pyrimidinone:2,7-Diamido-Naphthyridine Complexation and the Presence of Kinetically Controlled Pathways in Multicomponent Hydrogen-Bonded Systems. <i>Journal of the American Chemical Society</i> , 2008, 130, 5479-5486.	6.6	59
34	Supramolecular Control over Split-Luciferase Complementation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8899-8903.	7.2	58
35	Pathway Control in Cooperative vs. Anti-Cooperative Supramolecular Polymers. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11344-11349.	7.2	58
36	Model-driven optimization of multicomponent self-assembly processes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 17205-17210.	3.3	57

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37	Reversible blocking of antibodies using bivalent peptide-DNA conjugates allows protease-activatable targeting. <i>Chemical Science</i> , 2013, 4, 1442.	3.7	55
38	Controlled Supramolecular Oligomerization of C_3 -Symmetrical Molecules in Water: The Impact of Hydrophobic Shielding. <i>Chemistry - A European Journal</i> , 2011, 17, 5193-5203.	1.7	51
39	A plug-and-play platform of ratiometric bioluminescent sensors for homogeneous immunoassays. <i>Nature Communications</i> , 2021, 12, 4586.	5.8	50
40	Small sized perylene-bisimide assemblies controlled by both cooperative and anti-cooperative assembly processes. <i>Chemical Communications</i> , 2013, 49, 5532.	2.2	47
41	Threshold Sensing through a Synthetic Enzymatic Reaction-Diffusion Network. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8066-8069.	7.2	46
42	Hierarchical control of enzymatic actuators using DNA-based switchable memories. <i>Nature Communications</i> , 2017, 8, 1117.	5.8	45
43	Incorporation of native antibodies and Fc-fusion proteins on DNA nanostructures via a modular conjugation strategy. <i>Chemical Communications</i> , 2017, 53, 7393-7396.	2.2	44
44	Counterion-Dependent Mechanisms of DNA Origami Nanostructure Stabilization Revealed by Atomistic Molecular Simulation. <i>ACS Nano</i> , 2019, 13, 10798-10809.	7.3	44
45	Light-Activated Signaling in DNA-Encoded Sender-Receiver Architectures. <i>ACS Nano</i> , 2020, 14, 15992-16002.	7.3	43
46	Engineered Living Materials Based on Adhesin-Mediated Trapping of Programmable Cells. <i>ACS Synthetic Biology</i> , 2020, 9, 475-485.	1.9	40
47	The impact of the amide connectivity on the assembly and dynamics of benzene-1,3,5-tricarboxamides in the solid state. <i>Chemical Science</i> , 2011, 2, 2040.	3.7	39
48	DNA-Based Nanodevices Controlled by Purely Entropic Linker Domains. <i>Journal of the American Chemical Society</i> , 2018, 140, 14725-14734.	6.6	36
49	Cooperative Two-Component Self-Assembly of Mono- and Ditopic Monomers. <i>Macromolecules</i> , 2011, 44, 6581-6587.	2.2	35
50	Fragmentation and Coagulation in Supramolecular (Co)polymerization Kinetics. <i>ACS Central Science</i> , 2016, 2, 232-241.	5.3	35
51	Determinants of Ligand-Functionalized DNA Nanostructure-Cell Interactions. <i>Journal of the American Chemical Society</i> , 2021, 143, 10131-10142.	6.6	34
52	Sigma Factor-Mediated Tuning of Bacterial Cell-Free Synthetic Genetic Oscillators. <i>ACS Synthetic Biology</i> , 2018, 7, 2879-2887.	1.9	29
53	Spacer-length-dependent association in polymers with multiple hydrogen-bonded end groups. <i>Journal of Polymer Science Part A</i> , 2011, 49, 4253-4260.	2.5	28
54	Supramolecular Control over Split-Luciferase Complementation. <i>Angewandte Chemie</i> , 2016, 128, 9045-9049.	1.6	26

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55	Ultrasensitivity by Molecular Titration in Spatially Propagating Enzymatic Reactions. <i>Biophysical Journal</i> , 2013, 105, 1057-1066.	0.2	25
56	Photodimerization Processes in Self-Assembled Chiral Oligo(<i>p</i> -phenylenevinylene) Bolaamphiphiles. <i>Chemistry - an Asian Journal</i> , 2009, 4, 910-917.	1.7	23
57	<i>Bcrp1;Mdr1a/b;Mrp2</i> Combination Knockout Mice: Altered Disposition of the Dietary Carcinogen PhIP (2-Amino-1-Methyl-6-Phenylimidazo[4,5- <i>b</i>]Pyridine) and Its Genotoxic Metabolites. <i>Molecular Pharmacology</i> , 2014, 85, 520-530.	1.0	22
58	Pathway Control in Cooperative vs. Anti-Cooperative Supramolecular Polymers. <i>Angewandte Chemie</i> , 2019, 131, 11466-11471.	1.6	22
59	Small-Molecule-Induced and Cooperative Enzyme Assembly on a 14-β Scaffold. <i>ChemBioChem</i> , 2017, 18, 331-335.	1.3	21
60	Affinity Maturation of a Cyclic Peptide Handle for Therapeutic Antibodies Using Deep Mutational Scanning. <i>Journal of Biological Chemistry</i> , 2017, 292, 1477-1489.	1.6	20
61	Efficient Small-Scale Conjugation of DNA to Primary Antibodies for Multiplexed Cellular Targeting. <i>Bioconjugate Chemistry</i> , 2019, 30, 2384-2392.	1.8	20
62	Supramolecular Buffering by Ring-Chain Competition. <i>Journal of the American Chemical Society</i> , 2015, 137, 1501-1509.	6.6	18
63	Automated Design of Programmable Enzyme-Driven DNA Circuits. <i>ACS Synthetic Biology</i> , 2015, 4, 735-745.	1.9	18
64	Regulating Competing Supramolecular Interactions Using Ligand Concentration. <i>Journal of the American Chemical Society</i> , 2016, 138, 6852-6860.	6.6	17
65	Directional interactions in semiflexible single-chain polymer folding. <i>Soft Matter</i> , 2012, 8, 7610.	1.2	16
66	Evaporative self-assembly of single-chain, polymeric nanoparticles. <i>Chemical Communications</i> , 2013, 49, 3122.	2.2	16
67	Alternation and tunable composition in hydrogen bonded supramolecular copolymers. <i>Chemical Communications</i> , 2014, 50, 2455-2457.	2.2	16
68	Cell-Free Characterization of Coherent Feed-Forward Loop-Based Synthetic Genetic Circuits. <i>ACS Synthetic Biology</i> , 2021, 10, 1406-1416.	1.9	15
69	Protocellular CRISPR/Cas-Based Diffusive Communication Using Transcriptional RNA Signaling. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	14
70	A mix-and-read drop-based in vitro two-hybrid method for screening high-affinity peptide binders. <i>Scientific Reports</i> , 2016, 6, 22575.	1.6	12
71	How to make an oscillator. <i>ELife</i> , 2015, 4, e12260.	2.8	12
72	A microfluidic optimal experimental design platform for forward design of cell-free genetic networks. <i>Nature Communications</i> , 2022, 13, .	5.8	12

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73	Toward poly(aminophthalimide), structures of dimers and trimers. <i>Tetrahedron</i> , 2007, 63, 6642-6653.	1.0	10
74	Model-driven engineering of supramolecular buffering by multivalency. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12882-12887.	3.3	8
75	A Multilayer Microfluidic Platform for the Conduction of Prolonged Cell-Free Gene Expression. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	8
76	Designed Asymmetric Protein Assembly on a Symmetric Scaffold. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12113-12121.	7.2	8
77	DNA Input Classification by a Riboregulator-Based Cell-Free Perceptron. <i>ACS Synthetic Biology</i> , 2022, 11, 1510-1520.	1.9	8
78	Assembly of Dynamic Supramolecular Polymers on a DNA Origami Platform. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7612-7616.	7.2	7
79	Supramolecular interactions between catalytic species allow rational control over reaction kinetics. <i>Chemical Science</i> , 2019, 10, 9115-9124.	3.7	6
80	Dynamic Protease Activation on a Multimeric Synthetic Protein Scaffold via Adaptable DNA-Based Recruitment Domains. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11262-11266.	7.2	5
81	Analysis of 2-Amino-1-methyl-6-phenylimidazo[4,5-b]pyridine and Its Phase I and Phase II Metabolites in Mouse Urine Using LC-UV-MS. <i>Chromatographia</i> , 2011, 74, 215-226.	0.7	4
82	Modulating the Nucleated Self-Assembly of Tri ² -Peptides Using Cucurbit[<i>n</i>]urils. <i>Chemistry - A European Journal</i> , 2016, 22, 12675-12679.	1.7	4
83	A Synthetic Protocell-Based Heparin Scavenger. <i>Small</i> , 2023, 19, e2201790.	5.2	4
84	The origin of isotope-induced helical-sense bias in supramolecular polymers of benzene-1,3,5-tricarboxamides. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 13997.	1.3	3
85	Dynamic modulation of proximity-induced enzyme activity using supramolecular polymers. <i>Chemical Communications</i> , 2020, 56, 5747-5750.	2.2	3
86	Designed Asymmetric Protein Assembly on a Symmetric Scaffold. <i>Angewandte Chemie</i> , 2020, 132, 12211-12219.	1.6	2
87	Precision and Sensitivity in Detailed-Balance Reaction Networks. <i>SIAM Journal on Applied Mathematics</i> , 2016, 76, 2123-2153.	0.8	0
88	Assembly of Dynamic Supramolecular Polymers on a DNA Origami Platform. <i>Angewandte Chemie</i> , 2021, 133, 7690-7694.	1.6	0
89	Protocellular CRISPR/Cas-Based Diffusive Communication Using Transcriptional RNA Signaling. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	0