Tom F A De Greef

List of Publications by Year in descending order

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89 papers 9,746 citations

71102 41 h-index 46799 89 g-index

95 all docs 95
docs citations

95 times ranked 8152 citing authors

#	Article	lF	Citations
1	A Synthetic Protocellâ€Based Heparin Scavenger. Small, 2023, 19, e2201790.	10.0	4
2	DNA Input Classification by a Riboregulator-Based Cell-Free Perceptron. ACS Synthetic Biology, 2022, 11, 1510-1520.	3.8	8
3	Protocellular CRISPR/Casâ€Based Diffusive Communication Using Transcriptional RNA Signaling. Angewandte Chemie - International Edition, 2022, 61, .	13.8	14
4	Protocellular CRISPR/Casâ€Based Diffusive Communication Using Transcriptional RNA Signaling. Angewandte Chemie, 2022, 134, .	2.0	0
5	A microfluidic optimal experimental design platform for forward design of cell-free genetic networks. Nature Communications, 2022, 13 , .	12.8	12
6	Assembly of Dynamic Supramolecular Polymers on a DNA Origami Platform. Angewandte Chemie, 2021, 133, 7690-7694.	2.0	0
7	Assembly of Dynamic Supramolecular Polymers on a DNA Origami Platform. Angewandte Chemie - International Edition, 2021, 60, 7612-7616.	13.8	7
8	Dynamic Protease Activation on a Multimeric Synthetic Protein Scaffold via Adaptable DNAâ€Based Recruitment Domains. Angewandte Chemie - International Edition, 2021, 60, 11262-11266.	13.8	5
9	Cell-Free Characterization of Coherent Feed-Forward Loop-Based Synthetic Genetic Circuits. ACS Synthetic Biology, 2021, 10, 1406-1416.	3.8	15
10	Determinants of Ligand-Functionalized DNA Nanostructure–Cell Interactions. Journal of the American Chemical Society, 2021, 143, 10131-10142.	13.7	34
11	A plug-and-play platform of ratiometric bioluminescent sensors for homogeneous immunoassays. Nature Communications, 2021, 12, 4586.	12.8	50
12	Proximity-induced caspase-9 activation on a DNA origami-based synthetic apoptosome. Nature Catalysis, 2020, 3, 295-306.	34.4	62
13	Light-Activated Signaling in DNA-Encoded Sender–Receiver Architectures. ACS Nano, 2020, 14, 15992-16002.	14.6	43
14	Designed Asymmetric Protein Assembly on a Symmetric Scaffold. Angewandte Chemie, 2020, 132, 12211-12219.	2.0	2
15	Engineered Living Materials Based on Adhesin-Mediated Trapping of Programmable Cells. ACS Synthetic Biology, 2020, 9, 475-485.	3.8	40
16	Designed Asymmetric Protein Assembly on a Symmetric Scaffold. Angewandte Chemie - International Edition, 2020, 59, 12113-12121.	13.8	8
17	Dynamic modulation of proximity-induced enzyme activity using supramolecular polymers. Chemical Communications, 2020, 56, 5747-5750.	4.1	3
18	Supramolecular interactions between catalytic species allow rational control over reaction kinetics. Chemical Science, 2019, 10, 9115-9124.	7.4	6

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19	A Multilayer Microfluidic Platform for the Conduction of Prolonged Cell-Free Gene Expression. Journal of Visualized Experiments, 2019, , .	0.3	8
20	Efficient Small-Scale Conjugation of DNA to Primary Antibodies for Multiplexed Cellular Targeting. Bioconjugate Chemistry, 2019, 30, 2384-2392.	3.6	20
21	Counterion-Dependent Mechanisms of DNA Origami Nanostructure Stabilization Revealed by Atomistic Molecular Simulation. ACS Nano, 2019, 13, 10798-10809.	14.6	44
22	Pathway Control in Cooperative vs. Antiâ€Cooperative Supramolecular Polymers. Angewandte Chemie, 2019, 131, 11466-11471.	2.0	22
23	Pathway Control in Cooperative vs. Antiâ€Cooperative Supramolecular Polymers. Angewandte Chemie - International Edition, 2019, 58, 11344-11349.	13.8	58
24	DNA-based communication in populations of synthetic protocells. Nature Nanotechnology, 2019, 14, 369-378.	31.5	243
25	Sigma Factor-Mediated Tuning of Bacterial Cell-Free Synthetic Genetic Oscillators. ACS Synthetic Biology, 2018, 7, 2879-2887.	3.8	29
26	DNA-Based Nanodevices Controlled by Purely Entropic Linker Domains. Journal of the American Chemical Society, 2018, 140, 14725-14734.	13.7	36
27	Affinity Maturation of a Cyclic Peptide Handle for Therapeutic Antibodies Using Deep Mutational Scanning. Journal of Biological Chemistry, 2017, 292, 1477-1489.	3.4	20
28	Antibody-controlled actuation of DNA-based molecular circuits. Nature Communications, 2017, 8, 14473.	12.8	82
29	Smallâ€Moleculeâ€Induced and Cooperative Enzyme Assembly on a 14â€3â€3 Scaffold. ChemBioChem, 2017, 18 331-335.	'2.6	21
30	Incorporation of native antibodies and Fc-fusion proteins on DNA nanostructures via a modular conjugation strategy. Chemical Communications, 2017, 53, 7393-7396.	4.1	44
31	Non-equilibrium supramolecular polymerization. Chemical Society Reviews, 2017, 46, 5476-5490.	38.1	429
32	Hierarchical control of enzymatic actuators using DNA-based switchable memories. Nature Communications, 2017, 8, 1117.	12.8	45
33	Model-driven engineering of supramolecular buffering by multivalency. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12882-12887.	7.1	8
34	A mix-and-read drop-based in vitro two-hybrid method for screening high-affinity peptide binders. Scientific Reports, 2016, 6, 22575.	3.3	12
35	Modulating the Nucleated Selfâ€Assembly of Triâ€Î² ³ â€Peptides Using Cucurbit[<i>n</i>)urils. Chemistry - A European Journal, 2016, 22, 12675-12679.	3.3	4
36	Fragmentation and Coagulation in Supramolecular (Co)polymerization Kinetics. ACS Central Science, 2016, 2, 232-241.	11.3	35

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37	Regulating Competing Supramolecular Interactions Using Ligand Concentration. Journal of the American Chemical Society, 2016, 138, 6852-6860.	13.7	17
38	Supramolecular Control over Split‣uciferase Complementation. Angewandte Chemie, 2016, 128, 9045-9049.	2.0	26
39	Supramolecular Control over Splitâ€Luciferase Complementation. Angewandte Chemie - International Edition, 2016, 55, 8899-8903.	13.8	58
40	Precision and Sensitivity in Detailed-Balance Reaction Networks. SIAM Journal on Applied Mathematics, 2016, 76, 2123-2153.	1.8	0
41	Programmable Supramolecular Polymerizations. Angewandte Chemie - International Edition, 2015, 54, 8334-8336.	13.8	126
42	Rational design of functional and tunable oscillating enzymatic networks. Nature Chemistry, 2015, 7, 160-165.	13.6	219
43	Supramolecular Buffering by Ring–Chain Competition. Journal of the American Chemical Society, 2015, 137, 1501-1509.	13.7	18
44	Programmable chemical reaction networks: emulating regulatory functions in living cells using a bottom-up approach. Chemical Society Reviews, 2015, 44, 7465-7483.	38.1	123
45	Kinetic Analysis as a Tool to Distinguish Pathway Complexity in Molecular Assembly: An Unexpected Outcome of Structures in Competition. Journal of the American Chemical Society, 2015, 137, 12677-12688.	13.7	92
46	Automated Design of Programmable Enzyme-Driven DNA Circuits. ACS Synthetic Biology, 2015, 4, 735-745.	3.8	18
47	How to make an oscillator. ELife, 2015, 4, e12260.	6.0	12
48	Pathway Complexity in π-Conjugated Materials. Chemistry of Materials, 2014, 26, 576-586.	6.7	236
49	Threshold Sensing through a Synthetic Enzymatic Reaction–Diffusion Network. Angewandte Chemie - International Edition, 2014, 53, 8066-8069.	13.8	46
50	Alternation and tunable composition in hydrogen bonded supramolecular copolymers. Chemical Communications, 2014, 50, 2455-2457.	4.1	16
51	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. Macromolecules, 2014, 47, 2947-2954.	4.8	85
52	<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. Molecular Pharmacology, 2014, 85, 520-530.	2.3	22
53	Reversible blocking of antibodies using bivalent peptide–DNA conjugates allows protease-activatable targeting. Chemical Science, 2013, 4, 1442.	7.4	55
54	Ultrasensitivity by Molecular Titration in Spatially Propagating Enzymatic Reactions. Biophysical Journal, 2013, 105, 1057-1066.	0.5	25

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55	Evaporative self-assembly of single-chain, polymeric nanoparticles. Chemical Communications, 2013, 49, 3122.	4.1	16
56	Small sized perylene-bisimide assemblies controlled by both cooperative and anti-cooperative assembly processes. Chemical Communications, 2013, 49, 5532.	4.1	47
57	Model-driven optimization of multicomponent self-assembly processes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17205-17210.	7.1	57
58	Interaction of 14-3-3 proteins with the Estrogen Receptor Alpha F domain provides a drug target interface. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8894-8899.	7.1	114
59	Directional interactions in semiflexible single-chain polymer folding. Soft Matter, 2012, 8, 7610.	2.7	16
60	Symmetry Breaking in the Selfâ€Assembly of Partially Fluorinated Benzeneâ€1,3,5â€tricarboxamides. Angewandte Chemie - International Edition, 2012, 51, 11297-11301.	13.8	105
61	The origin of isotope-induced helical-sense bias in supramolecular polymers of benzene-1,3,5-tricarboxamides. Physical Chemistry Chemical Physics, 2012, 14, 13997.	2.8	3
62	An Equilibrium Model for Chiral Amplification in Supramolecular Polymers. Journal of Physical Chemistry B, 2012, 116, 5291-5301.	2.6	175
63	Controlling Chemical Self-Assembly by Solvent-Dependent Dynamics. Journal of the American Chemical Society, 2012, 134, 13482-13491.	13.7	240
64	Pathway complexity in supramolecular polymerization. Nature, 2012, 481, 492-496.	27.8	812
65	Benzene-1,3,5-tricarboxamide: a versatile ordering moiety for supramolecular chemistry. Chemical Society Reviews, 2012, 41, 6125.	38.1	342
66	The impact of the amide connectivity on the assembly and dynamics of benzene-1,3,5-tricarboxamides in the solid state. Chemical Science, 2011, 2, 2040.	7.4	39
67	Cooperative Two-Component Self-Assembly of Mono- and Ditopic Monomers. Macromolecules, 2011, 44, 6581-6587.	4.8	35
68	Single-Chain Folding of Polymers for Catalytic Systems in Water. Journal of the American Chemical Society, 2011, 133, 4742-4745.	13.7	393
69	Theoretical models of nonlinear effects in two-component cooperative supramolecular copolymerizations. Nature Communications, 2011, 2, 509.	12.8	184
70	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–MS. Chromatographia, 2011, 74, 215-226.	1.3	4
71	Spacerâ€lengthâ€dependent association in polymers with multipleâ€hydrogenâ€bonded end groups. Journal of Polymer Science Part A, 2011, 49, 4253-4260.	2.3	28
72	Controlled Supramolecular Oligomerization of <i>C₃</i> ‧ymmetrical Molecules in Water: The Impact of Hydrophobic Shielding. Chemistry - A European Journal, 2011, 17, 5193-5203.	3.3	51

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73	Selfâ€Assembly of Ureidoâ€Pyrimidinone Dimers into Oneâ€Dimensional Stacks by Lateral Hydrogen Bonding. Chemistry - A European Journal, 2010, 16, 1601-1612.	3.3	90
74	How to Distinguish Isodesmic from Cooperative Supramolecular Polymerisation. Chemistry - A European Journal, 2010, 16, 362-367.	3.3	461
75	Dynamic Supramolecular Polymers Based on Benzeneâ€1,3,5â€tricarboxamides: The Influence of Amide Connectivity on Aggregate Stability and Amplification of Chirality. Chemistry - A European Journal, 2010, 16, 810-821.	3.3	93
76	Understanding Cooperativity in Hydrogen-Bond-Induced Supramolecular Polymerization: A Density Functional Theory Study. Journal of Physical Chemistry B, 2010, 114, 13667-13674.	2.6	119
77	Competitive Intramolecular Hydrogen Bonding in Oligo(ethylene oxide) Substituted Quadruple Hydrogen Bonded Systems. Journal of Organic Chemistry, 2010, 75, 598-610.	3.2	62
78	Macrocyclization of enzyme-based supramolecular polymers. Chemical Science, 2010, 1, 79.	7.4	68
79	Photodimerization Processes in Selfâ€Assembled Chiral Oligo(<i>p</i> a€phenylenevinylene) Bolaamphiphiles. Chemistry - an Asian Journal, 2009, 4, 910-917.	3.3	23
80	Supramolecular Polymerization. Chemical Reviews, 2009, 109, 5687-5754.	47.7	2,086
81	Insights into Templated Supramolecular Polymerization: Binding of Naphthalene Derivatives to ssDNA Templates of Different Lengths. Journal of the American Chemical Society, 2009, 131, 1222-1231.	13.7	86
82	The influence of ethylene glycol chains on the thermodynamics of hydrogen-bonded supramolecular assemblies in apolar solvents. Chemical Communications, 2008, , 4306.	4.1	69
83	Polymers with Multiple Hydrogen-Bonded End Groups and Their Blends. Macromolecules, 2008, 41, 4694-4700.	4.8	192
84	Supramolecular polymers. Nature, 2008, 453, 171-173.	27.8	603
85	Influence of Selectivity on the Supramolecular Polymerization of AB-Type Polymers Capable of Both A·A and A·B Interactions. Journal of the American Chemical Society, 2008, 130, 13755-13764.	13.7	125
86	The Mechanism of Ureido-Pyrimidinone:2,7-Diamido-Naphthyridine Complexation and the Presence of Kinetically Controlled Pathways in Multicomponent Hydrogen-Bonded Systems. Journal of the American Chemical Society, 2008, 130, 5479-5486.	13.7	59
87	Helicity Induction and Amplification in an Oligo(<i>p</i> â€phenylenevinylene) Assembly through Hydrogenâ€Bonded Chiral Acids. Angewandte Chemie - International Edition, 2007, 46, 8206-8211.	13.8	118
88	Toward poly(aminophthalimide), structures of dimers and trimers. Tetrahedron, 2007, 63, 6642-6653.	1.9	10
89	Solution1H NMR Confirmation of Folding in Shorto-Phenylene Ethynylene Oligomers. Journal of the American Chemical Society, 2005, 127, 17235-17240.	13.7	60