

# Jonathan Bath

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

47  
papers

4,115  
citations

26  
h-index

49  
g-index

49  
ext. papers

4,533  
ext. citations

15.8  
avg, IF

5.53  
L-index

#	Paper	IF	Citations
47	DNA nanomachines. <i>Nature Nanotechnology</i> , <b>2007</b> , 2, 275-84	28.7	836
46	Direct observation of stepwise movement of a synthetic molecular transporter. <i>Nature Nanotechnology</i> , <b>2011</b> , 6, 166-9	28.7	308
45	A DNA-based molecular motor that can navigate a network of tracks. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 169-73	28.7	286
44	A free-running DNA motor powered by a nicking enzyme. <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 44, 4358-61	16.4	275
43	Remote toehold: a mechanism for flexible control of DNA hybridization kinetics. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 2177-82	16.4	206
42	Self-assembly of chiral DNA nanotubes. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 16342-3	16.4	187
41	Coordinated chemomechanical cycles: a mechanism for autonomous molecular motion. <i>Physical Review Letters</i> , <b>2008</b> , 101, 238101	7.4	163
40	Role of <i>Bacillus subtilis</i> SpoIIIE in DNA transport across the mother cell-prespore division septum. <i>Science</i> , <b>2000</b> , 290, 995-7	33.3	156
39	Reversible logic circuits made of DNA. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 20080-3	16.4	137
38	A programmable molecular robot. <i>Nano Letters</i> , <b>2011</b> , 11, 982-7	11.5	132
37	Multistep DNA-templated reactions for the synthesis of functional sequence controlled oligomers. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 7948-51	16.4	123
36	Programmable energy landscapes for kinetic control of DNA strand displacement. <i>Nature Communications</i> , <b>2014</b> , 5, 5324	17.4	121
35	Guiding the folding pathway of DNA origami. <i>Nature</i> , <b>2015</b> , 525, 82-6	50.4	110
34	DNA transport in bacteria. <i>Nature Reviews Molecular Cell Biology</i> , <b>2001</b> , 2, 538-45	48.7	104
33	An autonomous molecular assembler for programmable chemical synthesis. <i>Nature Chemistry</i> , <b>2016</b> , 8, 542-8	17.6	103
32	Topological selectivity in Xer site-specific recombination. <i>Cell</i> , <b>1997</b> , 88, 855-64	56.2	102
31	Mechanism for a directional, processive, and reversible DNA motor. <i>Small</i> , <b>2009</b> , 5, 1513-6	11	101

30	A Free-Running DNA Motor Powered by a Nicking Enzyme. <i>Angewandte Chemie</i> , <b>2005</b> , 117, 4432-4435	3.6	80
29	Optimizing DNA nanotechnology through coarse-grained modeling: a two-footed DNA walker. <i>ACS Nano</i> , <b>2013</b> , 7, 2479-90	16.7	78
28	Programmable one-pot multistep organic synthesis using DNA junctions. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 1446-9	16.4	71
27	Sequence-specific synthesis of macromolecules using DNA-templated chemistry. <i>Chemical Communications</i> , <b>2012</b> , 48, 5614-6	5.8	67
26	Combinatorial displacement of DNA strands: application to matrix multiplication and weighted sums. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 1189-92	16.4	59
25	Design of hidden thermodynamic driving for non-equilibrium systems via mismatch elimination during DNA strand displacement. <i>Nature Communications</i> , <b>2020</b> , 11, 2562	17.4	31
24	Peptide Assembly Directed and Quantified Using Megadalton DNA Nanostructures. <i>ACS Nano</i> , <b>2019</b> , 13, 9927-9935	16.7	28
23	Small molecule signals that direct the route of a molecular cargo. <i>Small</i> , <b>2012</b> , 8, 3593-7	11	26
22	Topology of Xer recombination on catenanes produced by lambda integrase. <i>Journal of Molecular Biology</i> , <b>1999</b> , 289, 873-83	6.5	26
21	Dimensions and Global Twist of Single-Layer DNA Origami Measured by Small-Angle X-ray Scattering. <i>ACS Nano</i> , <b>2018</b> , 12, 5791-5799	16.7	25
20	Multistep DNA-Templated Reactions for the Synthesis of Functional Sequence Controlled Oligomers. <i>Angewandte Chemie</i> , <b>2010</b> , 122, 8120-8123	3.6	23
19	DNA monofunctionalization of quantum dots. <i>ChemBioChem</i> , <b>2009</b> , 10, 1781-3	3.8	21
18	A clocked finite state machine built from DNA. <i>Chemical Communications</i> , <b>2013</b> , 49, 237-9	5.8	20
17	Modelling DNA origami self-assembly at the domain level. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 165103.9	3.9	20
16	Chiral DNA Origami Nanotubes with Well-Defined and Addressable Inside and Outside Surfaces. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 7687-7690	16.4	18
15	A DNA network as an information processing system. <i>International Journal of Molecular Sciences</i> , <b>2012</b> , 13, 5125-37	6.3	12
14	Design and assembly of double-crossover linear arrays of micrometre length using rolling circle replication. <i>Nanotechnology</i> , <b>2005</b> , 16, 1574-1577	3.4	12
13	DNA origami signposts for identifying proteins on cell membranes by electron cryotomography. <i>Cell</i> , <b>2021</b> , 184, 1110-1121.e16	56.2	11

12	Templated self-assembly of wedge-shaped DNA arrays. <i>Tetrahedron</i> , <b>2008</b> , 64, 8530-8534	2.4	9
11	Combinatorial Displacement of DNA Strands: Application to Matrix Multiplication and Weighted Sums. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 1227-1230	3.6	7
10	Chiral DNA Origami Nanotubes with Well-Defined and Addressable Inside and Outside Surfaces. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 7813-7816	3.6	6
9	Controlling the Bioreceptor Spatial Distribution at the Nanoscale for Single Molecule Counting in Microwell Arrays. <i>ACS Sensors</i> , <b>2019</b> , 4, 2327-2335	9.2	5
8	Strategies for Constructing and Operating DNA Origami Linear Actuators. <i>Small</i> , <b>2021</b> , 17, e2007704	11	3
7	DNA nanomachines <b>2009</b> , 124-133		2
6	Rational design of hidden thermodynamic driving through DNA mismatch repair		2
5	Molecular machinery built from DNA <b>2013</b> ,		1
4	A DNA molecular printer capable of programmable positioning and patterning in two dimensions.. <i>Science Robotics</i> , <b>2022</b> , 7, eabn5459	18.6	1
3	Reconfigurable T-junction DNA Origami. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 15942-15946	16.4	0
2	Reconfigurable T-junction DNA Origami. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 16076-16080	3.6	
1	A Geometrical Allosteric DNA Switch. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 189-189	0.9	