

# Ron Orbach

## List of Publications by Year in descending order

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32  
papers

3,273  
citations

201385

27  
h-index

414034

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g-index

34  
all docs

34  
docs citations

34  
times ranked

3545  
citing authors

#	ARTICLE	IF	CITATIONS
1	Surfing on Membrane Waves: Microvilli, Curved Membranes, and Immune Signaling. <i>Frontiers in Immunology</i> , 2020, 11, 2187.	2.2	41
2	Purification of Ciliary Tubulin from <i>Chlamydomonas reinhardtii</i> . <i>Current Protocols in Protein Science</i> , 2020, 100, e107.	2.8	2
3	The dynamic and structural properties of axonemal tubulins support the high length stability of cilia. <i>Nature Communications</i> , 2019, 10, 1838.	5.8	50
4	Continuous variables logic via coupled automata using a DNAzyme cascade with feedback. <i>Chemical Science</i> , 2017, 8, 2161-2168.	3.7	24
5	Gossypol-Cross-Linked Boronic Acid-Modified Hydrogels: A Functional Matrix for the Controlled Release of an Anticancer Drug. <i>Langmuir</i> , 2015, 31, 2237-2242.	1.6	26
6	Catalytic nucleic acids (DNAzymes) as functional units for logic gates and computing circuits: from basic principles to practical applications. <i>Chemical Communications</i> , 2015, 51, 4144-4160.	2.2	129
7	Programmed DNAzyme-Triggered Dissolution of DNA-Based Hydrogels: Means for Controlled Release of Biocatalysts and for the Activation of Enzyme Cascades. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 8923-8931.	4.0	80
8	Ternary DNA computing using 3 $\times$ 3 multiplication matrices. <i>Chemical Science</i> , 2015, 6, 1288-1292.	3.7	37
9	pH-Stimulated DNA Hydrogels Exhibiting Shape-Memory Properties. <i>Advanced Materials</i> , 2015, 27, 73-78.	11.1	328
10	Multiplexed Analysis of Genes and of Metal Ions Using Enzyme/DNAzyme Amplification Machineries. <i>Analytical Chemistry</i> , 2014, 86, 11326-11333.	3.2	44
11	Switchable Bifunctional Stimuli-Triggered Poly(N-isopropylacrylamide)/DNA Hydrogels. <i>Angewandte Chemie</i> , 2014, 126, 10298-10302.	1.6	24
12	Ion-Responsive Hemin-G-quadruplexes for Switchable DNAzyme and Enzyme Functions. <i>Chemistry - A European Journal</i> , 2014, 20, 5619-5624.	1.7	46
13	A full-adder based on reconfigurable DNA-hairpin inputs and DNAzyme computing modules. <i>Chemical Science</i> , 2014, 5, 3381.	3.7	80
14	DNAzyme-based 2:1 and 4:1 multiplexers and 1:2 demultiplexer. <i>Chemical Science</i> , 2014, 5, 1074.	3.7	78
15	Reversible Ag <sup>+</sup> -crosslinked DNA hydrogels. <i>Chemical Communications</i> , 2014, 50, 4065.	2.2	138
16	Switchable Bifunctional Stimuli-Triggered Poly(N-isopropylacrylamide)/DNA Hydrogels. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 10134-10138.	7.2	163
17	Autonomous Replication of Nucleic Acids by Polymerization/Nicking Enzyme/DNAzyme Cascades for the Amplified Detection of DNA and the Aptamer-Cocaine Complex. <i>Analytical Chemistry</i> , 2013, 85, 8196-8203.	3.2	78
18	Self-Assembly of Luminescent Ag Nanocluster-Functionalized Nanowires. <i>Langmuir</i> , 2013, 29, 13066-13071.	1.6	46

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19	Switchable Catalytic Acrylamide Hydrogels Cross-Linked by Hemin/G-Quadruplexes. <i>Nano Letters</i> , 2013, 13, 1298-1302.	4.5	165
20	Fluorescent DNA Hydrogels Composed of Nucleic Acid-Stabilized Silver Nanoclusters. <i>Small</i> , 2013, 9, 3748-3752.	5.2	69
21	Detection of Metal Ions ( $\text{Cu}^{2+}$ , $\text{Hg}^{2+}$ ) and Cocaine by Using Ligation DNAzyme Machinery. <i>Chemistry - A European Journal</i> , 2012, 18, 16030-16036.	1.7	66
22	Amplified Detection of DNA through the Enzyme-Free Autonomous Assembly of Hemin/G-Quadruplex DNAzyme Nanowires. <i>Analytical Chemistry</i> , 2012, 84, 1042-1048.	3.2	309
23	Nucleic Acid Driven DNA Machineries Synthesizing $\text{Mg}^{2+}$ -Dependent DNAzymes: An Interplay between DNA Sensing and Logic-Gate Operations. <i>Chemistry - A European Journal</i> , 2012, 18, 14689-14694.	1.7	58
24	Logic reversibility and thermodynamic irreversibility demonstrated by DNAzyme-based Toffoli and Fredkin logic gates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 21228-21233.	3.3	82
25	The Rheological and Structural Properties of Fmoc-Peptide-Based Hydrogels: The Effect of Aromatic Molecular Architecture on Self-Assembly and Physical Characteristics. <i>Langmuir</i> , 2012, 28, 2015-2022.	1.6	158
26	Self-assembly of DNA nanotubes with controllable diameters. <i>Nature Communications</i> , 2011, 2, 540.	5.8	74
27	Electrified Au Nanoparticle Sponges with Controlled Hydrophilic/Hydrophobic Properties. <i>ACS Nano</i> , 2011, 5, 299-306.	7.3	27
28	Amplified Analysis of DNA by the Autonomous Assembly of Polymers Consisting of DNAzyme Wires. <i>Journal of the American Chemical Society</i> , 2011, 133, 17149-17151.	6.6	324
29	Structural investigation of PEG-fibrinogen conjugates. <i>Journal of Materials Science: Materials in Medicine</i> , 2010, 21, 73-80.	1.7	31
30	Probing the Inner Cavities of Hydrogels by Proton Diffusion. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19500-19505.	1.5	29
31	pH-Stimulated Concurrent Mechanical Activation of Two DNA "Tweezers": A "SET" RESET Logic Gate System. <i>Nano Letters</i> , 2009, 9, 4510-4514.	4.5	170
32	Self-Assembled Fmoc-Peptides as a Platform for the Formation of Nanostructures and Hydrogels. <i>Biomacromolecules</i> , 2009, 10, 2646-2651.	2.6	297