

# Ken Halvorsen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3630153/publications.pdf>

Version: 2024-02-01

34

papers

1,019

citations

567281

15

h-index

454955

30

g-index

43

all docs

43

docs citations

43

times ranked

929

citing authors

#	ARTICLE	IF	CITATIONS
1	DNA nanotechnology approaches for microRNA detection and diagnosis. <i>Nucleic Acids Research</i> , 2019, 47, 10489-10505.	14.5	92
2	Beyond the Fold: Emerging Biological Applications of DNA Origami. <i>ChemBioChem</i> , 2016, 17, 1081-1089.	2.6	79
3	Multiplexed single-molecule force spectroscopy using a centrifuge. <i>Nature Communications</i> , 2016, 7, 11026.	12.8	78
4	Massively Parallel Single-Molecule Manipulation Using Centrifugal Force. <i>Biophysical Journal</i> , 2010, 98, L53-L55.	0.5	71
5	DNA nanoswitches: a quantitative platform for gel-based biomolecular interaction analysis. <i>Nature Methods</i> , 2015, 12, 123-126.	19.0	71
6	Addressable configurations of DNA nanostructures for rewritable memory. <i>Nucleic Acids Research</i> , 2017, 45, 11459-11465.	14.5	66
7	Cellular microRNA detection with miRacles: microRNA- activated conditional looping of engineered switches. <i>Science Advances</i> , 2019, 5, eaau9443.	10.3	66
8	Nanoengineering a single-molecule mechanical switch using DNA self-assembly. <i>Nanotechnology</i> , 2011, 22, 494005.	2.6	60
9	Programmable DNA Nanoswitches for Detection of Nucleic Acid Sequences. <i>ACS Sensors</i> , 2016, 1, 120-123.	7.8	55
10	Exceptional Nuclease Resistance of Paranemic Crossover (PX) DNA and Crossover-Dependent Biostability of DNA Motifs. <i>Journal of the American Chemical Society</i> , 2020, 142, 6814-6821.	13.7	54
11	Binary DNA Nanostructures for Data Encryption. <i>PLoS ONE</i> , 2012, 7, e44212.	2.5	38
12	Programmable low-cost DNA-based platform for viral RNA detection. <i>Science Advances</i> , 2020, 6, .	10.3	37
13	DNA Nanoswitch Barcodes for Multiplexed Biomarker Profiling. <i>Nano Letters</i> , 2021, 21, 469-475.	9.1	29
14	Evolution of DNA origami scaffolds. <i>Materials Letters</i> , 2016, 170, 221-224.	2.6	20
15	Shear Dependent LC Purification of an Engineered DNA Nanoswitch and Implications for DNA Origami. <i>Analytical Chemistry</i> , 2017, 89, 5673-5677.	6.5	20
16	Controlled disassembly of a DNA tetrahedron using strand displacement. <i>Nanoscale Advances</i> , 2019, 1, 969-972.	4.6	19
17	Nuclease Degradation Analysis of DNA Nanostructures Using Gel Electrophoresis. <i>Current Protocols in Nucleic Acid Chemistry</i> , 2020, 82, e115.	0.5	16
18	Integration of a photocleavable element into DNA nanoswitches. <i>Chemical Communications</i> , 2019, 55, 6587-6590.	4.1	14

#	ARTICLE	IF	CITATIONS
19	DNA-Based Smart Reagent for Detecting Alzheimer's Associated MicroRNAs. <i>ACS Sensors</i> , 2021, 6, 3176-3181.	7.8	14
20	A wireless centrifuge force microscope (CFM) enables multiplexed single-molecule experiments in a commercial centrifuge. <i>Review of Scientific Instruments</i> , 2016, 87, 083705.	1.3	13
21	Ribonuclease-Responsive DNA Nanoswitches. <i>Cell Reports Physical Science</i> , 2020, 1, 100117.	5.6	13
22	Click-based functionalization of a 2'-O-propargyl-modified branched DNA nanostructure. <i>Journal of Materials Chemistry B</i> , 2017, 5, 2074-2077.	5.8	12
23	A mini DNA-“RNA hybrid origami nanobrick. <i>Nanoscale Advances</i> , 2021, 3, 4048-4051.	4.6	10
24	Click and photo-release dual-functional nucleic acid nanostructures. <i>Chemical Communications</i> , 2019, 55, 9709-9712.	4.1	9
25	Rapid one-step detection of SARS-CoV-2 RNA. <i>Nature Biomedical Engineering</i> , 2020, 4, 1123-1124.	22.5	9
26	A “smart” tube holder enables real-time sample monitoring in a standard lab centrifuge. <i>PLoS ONE</i> , 2018, 13, e0195907.	2.5	8
27	Hybrid DNA/RNA nanostructures with 2'-5' linkages. <i>Nanoscale</i> , 2020, 12, 21583-21590.	5.6	8
28	DNA Nanotechnology in the Undergraduate Laboratory: Analysis of Molecular Topology Using DNA Nanoswitches. <i>Journal of Chemical Education</i> , 2020, 97, 1448-1453.	2.3	8
29	How to Perform miRacles: A Step-by-Step microRNA Detection Protocol Using DNA Nanoswitches. <i>Current Protocols in Molecular Biology</i> , 2020, 130, e114.	2.9	7
30	Wi-Fi Live-Streaming Centrifuge Force Microscope for Benchtop Single-Molecule Experiments. <i>Biophysical Journal</i> , 2020, 119, 2231-2239.	0.5	5
31	Sequence-selective purification of biological RNAs using DNA nanoswitches. <i>Cell Reports Methods</i> , 2021, 1, 100126.	2.9	5
32	Parallel poly(A) homo- and hetero-duplex formation detection with an adapted DNA nanoswitch technique. <i>Rna</i> , 2020, 26, 1118-1130.	3.5	1
33	Orthogonal Control of DNA Nanoswitches with Mixed Physical and Biochemical Cues. <i>Biochemistry</i> , 2021, 60, 250-253.	2.5	0
34	Single species RNA purification using DNA nanoswitches. <i>Trends in Biochemical Sciences</i> , 2022, , .	7.5	0