

# Barbara Sacca

## List of Publications by Year in descending order

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53  
papers

3,837  
citations

147566

31  
h-index

149479

56  
g-index

66  
all docs

66  
docs citations

66  
times ranked

4410  
citing authors

#	ARTICLE	IF	CITATIONS
1	DNA origami. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	11.8	382
2	Fluorescence-based melting assays for studying quadruplex ligands. <i>Methods</i> , 2007, 42, 183-195.	1.9	345
3	DNA Origami: The Art of Folding DNA. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 58-66.	7.2	320
4	Kinetics of tetramolecular quadruplexes. <i>Nucleic Acids Research</i> , 2005, 33, 81-94.	6.5	275
5	Orthogonal Protein Decoration of DNA Origami. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9378-9383.	7.2	259
6	The effect of chemical modifications on the thermal stability of different G-quadruplex-forming oligonucleotides. <i>Nucleic Acids Research</i> , 2005, 33, 1182-1192.	6.5	211
7	Replication Fork Velocities at Adjacent Replication Origins Are Coordinately Modified during DNA Replication in Human Cells. <i>Molecular Biology of the Cell</i> , 2007, 18, 3059-3067.	0.9	194
8	Functionalization of DNA nanostructures with proteins. <i>Chemical Society Reviews</i> , 2011, 40, 5910.	18.7	188
9	DNA nanomachines and nanostructures involving quadruplexes. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 3383.	1.5	152
10	Human High Temperature Requirement Serine Protease A1 (HTRA1) Degrades Tau Protein Aggregates. <i>Journal of Biological Chemistry</i> , 2012, 287, 20931-20941.	1.6	103
11	Determinants of amyloid fibril degradation by the PDZ protease HTRA1. <i>Nature Chemical Biology</i> , 2015, 11, 862-869.	3.9	88
12	Endogenous $\gamma$ -H2AX-ATM-Chk2 Checkpoint Activation in Bloom's Syndrome Helicase-Deficient Cells Is Related to DNA Replication Arrested Forks. <i>Molecular Cancer Research</i> , 2007, 5, 713-724.	1.5	81
13	Tailored protein encapsulation into a DNA host using geometrically organized supramolecular interactions. <i>Nature Communications</i> , 2017, 8, 14472.	5.8	73
14	Three-Dimensional DNA Origami as Programmable Anchoring Points for Bioreceptors in Fiber Optic Surface Plasmon Resonance Biosensing. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 23539-23547.	4.0	60
15	New PEGs for Peptide and Protein Modification, Suitable for Identification of the PEGylation Site. <i>Bioconjugate Chemistry</i> , 2001, 12, 62-70.	1.8	56
16	Structural Properties of a Collagenous Heterotrimer that Mimics the Collagenase Cleavage Site of Collagen Type I. <i>Journal of Molecular Biology</i> , 2002, 319, 1235-1242.	2.0	52
17	From Nano to Macro through Hierarchical Self-Assembly: The DNA Paradigm. <i>ChemBioChem</i> , 2016, 17, 1063-1080.	1.3	52
18	The Chain Register in Heterotrimeric Collagen Peptides Affects Triple Helix Stability and Folding Kinetics. <i>Journal of Molecular Biology</i> , 2002, 324, 309-318.	2.0	48

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19	Length-dependent energetics of (CTG) <sub>n</sub> and (CAG) <sub>n</sub> trinucleotide repeats. <i>Nucleic Acids Research</i> , 2005, 33, 4065-4077.	6.5	47
20	Characterizing the Effect of Multivalent Conjugates Composed of A $\beta$ -Specific Ligands and Metal Nanoparticles on Neurotoxic Fibrillar Aggregation. <i>ACS Nano</i> , 2016, 10, 7582-7597.	7.3	46
21	A Facile Method for Preparation of Tailored Scaffolds for DNA-Origami. <i>Small</i> , 2014, 10, 73-77.	5.2	44
22	Hierarchical Assembly of DNA Filaments with Designer Elastic Properties. <i>ACS Nano</i> , 2018, 12, 44-55.	7.3	44
23	Dendritic DNA Building Blocks for Amplified Detection Assays and Biomaterials. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 5996-6000.	7.2	43
24	Synthetic heterotrimeric collagen peptides as mimics of cell adhesion sites of the basement membrane. <i>Biopolymers</i> , 2004, 76, 34-47.	1.2	41
25	Incorporation of integrins into artificial planar lipid membranes: characterization by plasmon-enhanced fluorescence spectroscopy. <i>Analytical Biochemistry</i> , 2004, 333, 216-224.	1.1	41
26	High-Throughput, Real-Time Monitoring of the Self-Assembly of DNA Nanostructures by FRET Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 2135-2137.	7.2	39
27	Reversible Reconfiguration of DNA Origami Nanochambers Monitored by Single-Molecule FRET. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3592-3597.	7.2	39
28	Binding and Docking of Synthetic Heterotrimeric Collagen Type IV Peptides with $\alpha$ 1 $\beta$ 1 Integrin. <i>ChemBioChem</i> , 2002, 3, 904-907.	1.3	36
29	Studies of the Local Conformational Properties of the Cell-Adhesion Domain of Collagen Type IV in Synthetic Heterotrimeric Peptides. <i>Biochemistry</i> , 2003, 42, 3429-3436.	1.2	36
30	Manipulating Enzymes Properties with DNA Nanostructures. <i>Molecules</i> , 2019, 24, 3694.	1.7	30
31	Temperature-dependent FRET spectroscopy for the high-throughput analysis of self-assembled DNA nanostructures in real time. <i>Nature Protocols</i> , 2009, 4, 271-285.	5.5	27
32	Synthesis of heterotrimeric collagen peptides containing the $\alpha$ 1 $\beta$ 1 integrin recognition site of collagen type IV. <i>Journal of Peptide Science</i> , 2002, 8, 192-204.	0.8	26
33	Sites of high local frustration in DNA origami. <i>Nature Communications</i> , 2019, 10, 1061.	5.8	26
34	Enzyme-functionalized DNA nanostructures as tools for organizing and controlling enzymatic reactions. <i>MRS Bulletin</i> , 2017, 42, 920-924.	1.7	24
35	DNA Origami Voltage Sensors for Transmembrane Potentials with Single-Molecule Sensitivity. <i>Nano Letters</i> , 2021, 21, 8634-8641.	4.5	22
36	DNA and RNA Quadruplex ligands. <i>Nucleic Acids Symposium Series</i> , 2008, 52, 7-8.	0.3	16

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37	The role of DNA nanostructures in the catalytic properties of an allosterically regulated protease. <i>Science Advances</i> , 2022, 8, eabk0425.	4.7	16
38	Functional Tethered Bilayer Lipid Membranes. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2004, , 239-253.	0.5	14
39	Conformation-dependent side reactions in interstrand-disulfide bridging of trimeric collagenous peptides by regioselective cysteine chemistry. <i>Journal of Peptide Science</i> , 2002, 8, 205-210.	0.8	11
40	The collective behavior of spring-like motifs tethered to a DNA origami nanostructure. <i>Nanoscale</i> , 2017, 9, 4486-4496.	2.8	11
41	Analysis of the Self-Assembly of 4Å—4 DNA Tiles by Temperature-Dependent FRET Spectroscopy. <i>ChemPhysChem</i> , 2009, 10, 3239-3248.	1.0	9
42	Site-Directed, On-Surface Assembly of DNA Nanostructures. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 12039-12043.	7.2	9
43	Nanolattices of Switchable DNA-Based Motors. <i>Small</i> , 2012, 8, 3000-3008.	5.2	8
44	Synthetic DNA filaments: from design to applications. <i>Biological Chemistry</i> , 2018, 399, 773-785.	1.2	8
45	Pumilio2 Promotes Growth of Mature Neurons. <i>International Journal of Molecular Sciences</i> , 2021, 22, 8998.	1.8	8
46	Self-Assembled Artificial DNA Nanocompartments and Their Bioapplications. <i>Small</i> , 2023, 19, .	5.2	8
47	Insights into the Structure and Energy of DNA Nanoassemblies. <i>Molecules</i> , 2020, 25, 5466.	1.7	6
48	Covalent Tethering of Protruding Arms for Addressable DNA Nanostructures. <i>Small</i> , 2011, 7, 2887-2898.	5.2	5
49	Site-specific facet protection of gold nanoparticles inside a 3D DNA origami box: a tool for molecular plasmonics. <i>Chemical Communications</i> , 2021, 57, 3151-3153.	2.2	5
50	Irregular model DNA particles self-assemble into a regular structure. <i>Soft Matter</i> , 2017, 13, 8894-8902.	1.2	4
51	Nucleic Acids Nanotechnology. <i>Methods</i> , 2014, 67, 103-104.	1.9	0
52	The primordial life of DNA dynamic networks. <i>Nature Catalysis</i> , 2020, 3, 865-866.	16.1	0
53	Nanotechnology and the Unique Role of DNA. , 2017, , 1-26.		0