

Kurt V Gothelf

List of Publications by Year in descending order

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111
papers

9,883
citations

76326

40
h-index

34986

98
g-index

148
all docs

148
docs citations

148
times ranked

9059
citing authors

#	ARTICLE	IF	CITATIONS
1	Asymmetric 1,3-Dipolar Cycloaddition Reactions. Chemical Reviews, 1998, 98, 863-910.	47.7	1,822
2	Self-assembly of a nanoscale DNA box with a controllable lid. Nature, 2009, 459, 73-76.	27.8	1,464
3	Single-molecule chemical reactions on DNA origami. Nature Nanotechnology, 2010, 5, 200-203.	31.5	478
4	DNA origami: a quantum leap for self-assembly of complex structures. Chemical Society Reviews, 2011, 40, 5636.	38.1	444
5	Chemistries for DNA Nanotechnology. Chemical Reviews, 2019, 119, 6384-6458.	47.7	319
6	Catalytic enantioselective 1,3-dipolar cycloaddition reactions of nitrones. Chemical Communications, 2000,, 1449-1458.	4.1	272
7	A DNA tweezer-actuated enzyme nanoreactor. Nature Communications, 2013, 4, 2127.	12.8	267
8	Toward Reliable Gold Nanoparticle Patterning On Self-Assembled DNA Nanoscaffold. Journal of the American Chemical Society, 2008, 130, 7820-7821.	13.7	266
9	DNA Origami Design of Dolphin-Shaped Structures with Flexible Tails. ACS Nano, 2008, 2, 1213-1218.	14.6	264
10	DNA-programmed assembly of nanostructures. Organic and Biomolecular Chemistry, 2005, 3, 4023.	2.8	255
11	Chiral switching by spontaneous conformational change in adsorbed organic molecules. Nature Materials, 2006, 5, 112-117.	27.5	213
12	Routing of individual polymers in designed patterns. Nature Nanotechnology, 2015, 10, 892-898.	31.5	189
13	Catalytic Enantioselective Addition of Nitro Compounds to Imines—A Simple Approach for the Synthesis of Optically Active 2-Nitro-1±-Amino Esters. Angewandte Chemie - International Edition, 2001, 40, 2992-2995.	13.8	187
14	Active Intracellular Delivery of a Cas9/sgRNA Complex Using Ultrasound-Propelled Nanomotors. Angewandte Chemie - International Edition, 2018, 57, 2657-2661.	13.8	187
15	A Yoctoliter-Scale DNA Reactor for Small-Molecule Evolution. Journal of the American Chemical Society, 2009, 131, 1322-1327.	13.7	183
16	Control of Diastereo- and Enantioselectivity in Metal-Catalyzed 1,3-Dipolar Cycloaddition Reactions of Nitrones with Alkenes. Experimental and Theoretical Investigations. Journal of Organic Chemistry, 1996, 61, 346-355.	3.2	152
17	Template-directed covalent conjugation of DNA to native antibodies, transferrin and other metal-binding proteins. Nature Chemistry, 2014, 6, 804-809.	13.6	152
18	A Highly Diastereoselective and Enantioselective Ti(OTos) ₂ -TADDOLate-Catalyzed 1,3-Dipolar Cycloaddition Reaction of Alkenes with Nitrones. Journal of the American Chemical Society, 1996, 118, 59-64.	13.7	145

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19	On-Surface Azide-Alkyne Cycloaddition on Cu(111): Does It “Click” in Ultrahigh Vacuum?. Journal of the American Chemical Society, 2013, 135, 2136-2139.	13.7	144
20	Modular DNA-Programmed Assembly of Linear and Branched Conjugated Nanostructures. Journal of the American Chemical Society, 2004, 126, 1044-1046.	13.7	134
21	Development of a genetically encodable FRET system using fluorescent RNA aptamers. Nature Communications, 2018, 9, 18.	12.8	123
22	Intracellular Delivery of a Planar DNA Origami Structure by the Transferrin Receptor Internalization Pathway. Small, 2016, 12, 2634-2640.	10.0	114
23	Site-Selective Conjugation of Native Proteins with DNA. Accounts of Chemical Research, 2017, 50, 1367-1374.	15.6	112
24	Intracellular bacteria engage a STING-TBK1-MVB12b pathway to enable paracrine cGAS-STING signalling. Nature Microbiology, 2019, 4, 701-713.	13.3	100
25	Programming DNA origami patterning with non-canonical DNA-based metallization reactions. Nature Communications, 2019, 10, 5597.	12.8	74
26	Title is missing!. Angewandte Chemie, 2002, 114, 4410-4412.	2.0	70
27	A Modular Approach to DNA-Programmed Self-Assembly of Macromolecular Nanostructures. Chemistry - A European Journal, 2005, 11, 1062-1069.	3.3	64
28	Steering Organizational and Conformational Surface Chirality by Controlling Molecular Chemical Functionality. ACS Nano, 2010, 4, 297-311.	14.6	63
29	A DNA-Mediated Homogeneous Binding Assay for Proteins and Small Molecules. Journal of the American Chemical Society, 2014, 136, 11115-11120.	13.7	61
30	Design and Construction of Double-Decker Tile as a Route to Three-Dimensional Periodic Assembly of DNA. Journal of the American Chemical Society, 2011, 133, 3843-3845.	13.7	57
31	DNA-Templated Covalent Coupling of G4 PAMAM Dendrimers. Journal of the American Chemical Society, 2010, 132, 18054-18056.	13.7	55
32	Single Molecule Atomic Force Microscopy Studies of Photosensitized Singlet Oxygen Behavior on a DNA Origami Template. ACS Nano, 2010, 4, 7475-7480.	14.6	55
33	Docking of Antibodies into the Cavities of DNA Origami Structures. Angewandte Chemie - International Edition, 2017, 56, 14423-14427.	13.8	51
34	Functional Patterning of DNA Origami by Parallel Enzymatic Modification. Bioconjugate Chemistry, 2011, 22, 819-823.	3.6	47
35	A DNA-based system for selecting and displaying the combined result of two input variables. Nature Communications, 2015, 6, 10089.	12.8	47
36	Programmed Switching of Single Polymer Conformation on DNA Origami. ACS Nano, 2016, 10, 2243-2250.	14.6	46

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37	Control of regio-, diastereo-, and enantioselectivity in the [Ti(OTs) ₂ (TADDOLato)]-catalyzed 1,3-dipolar cycloaddition reaction between 3-acryloyloxazolidin-2-one and nitrones. <i>Helvetica Chimica Acta</i> , 1997, 80, 2039-2046.	1.6	44
38	Small molecule induced control in duplex and triplex DNA-directed chemical reactions. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 50-52.	2.8	43
39	Weave Tile Architecture Construction Strategy for DNA Nanotechnology. <i>Journal of the American Chemical Society</i> , 2010, 132, 14481-14486.	13.7	42
40	Enzymatic Ligation of Large Biomolecules to DNA. <i>ACS Nano</i> , 2013, 7, 8098-8104.	14.6	41
41	Alignment of Gold Nanoparticle-Decorated DNA Origami Nanotubes: Substrate Pre patterning versus Molecular Combing. <i>Langmuir</i> , 2015, 31, 12823-12829.	3.5	35
42	LEGO-like DNA Structures. <i>Science</i> , 2012, 338, 1159-1160.	12.6	33
43	A DNA Tile Actuator with Eleven Discrete States. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3983-3987.	13.8	32
44	Chiral Ordering and Conformational Dynamics for a Class of Oligo-phenylene-ethynylenes on Au(111). <i>Journal of Physical Chemistry B</i> , 2007, 111, 5850-5860.	2.6	31
45	DNA-Programmed Glaser-Eglinton Reactions for the Synthesis of Conjugated Molecular Wires. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 10851-10854.	13.8	31
46	Peptide-Directed DNA-Templated Protein Labelling for The Assembly of a Pseudo-Enzyme. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9068-9072.	13.8	30
47	DNA-Templated Introduction of an Aldehyde Handle in Proteins. <i>ChemBioChem</i> , 2016, 17, 1338-1342.	2.6	28
48	Steering On-Surface Reactions by a Self-Assembly Approach. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5026-5030.	13.8	28
49	Dimethyl fumarate is an allosteric covalent inhibitor of the p90 ribosomal S6 kinases. <i>Nature Communications</i> , 2018, 9, 4344.	12.8	28
50	Synthesis and catalytic properties of p-acylthio(phenylacetylene) _n substituted chiral manganese salen complexes. <i>Journal of the Chemical Society, Perkin Transactions 1</i> , 2001, , 2440-2444.	1.3	27
51	DNA-Directed Coupling of Organic Modules by Multiple Parallel Reductive Aminations and Subsequent Cleavage of Selected DNA Sequences. <i>Bioconjugate Chemistry</i> , 2005, 16, 981-985.	3.6	27
52	Self-assembly of aluminium-salen coupled nanostructures from encoded modules with cleavable disulfide DNA-linkers. <i>Chemical Communications</i> , 2004, , 1464-1465.	4.1	26
53	Dynamic Chemistry of Disulfide Terminated Oligonucleotides in Duplexes and Double-Crossover Tiles. <i>ChemBioChem</i> , 2016, 17, 1122-1126.	2.6	24
54	Preparation, Single-Molecule Manipulation, and Energy Transfer Investigation of a Polyfluorene-graft-DNA polymer. <i>Chemistry - A European Journal</i> , 2017, 23, 10511-10515.	3.3	23

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55	Electron Transfer Reactions of Self-Assembled Monolayers of Thio(Phenylacetylene) <i>n</i> -Substituted Chiral Metal-Salen Complexes. <i>Langmuir</i> , 2002, 18, 2795-2799.	3.5	22
56	Chemical modifications and reactions in DNA nanostructures. <i>MRS Bulletin</i> , 2017, 42, 897-903.	3.5	22
57	A Reagent for Amine-Directed Conjugation to IgG1 Antibodies. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6539-6544.	13.8	21
58	A Wireframe DNA Cube: Antibody Conjugate for Targeted Delivery of Multiple Copies of Monomethyl Auristatin...E. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 21691-21696.	13.8	21
59	Synthesis of an elongated linear oligo(phenylene ethynylene)-based building block for application in DNA-programmed assembly. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 3442-3447.	2.8	20
60	Amperometric microsensor for measurement of gaseous and dissolved CO ₂ . <i>Sensors and Actuators B: Chemical</i> , 2019, 283, 349-354.	7.8	20
61	Selective Delivery of Doxorubicin to EGFR ⁺ Cancer Cells by Cetuximab-DNA Conjugates. <i>ChemBioChem</i> , 2019, 20, 1014-1018.	2.6	19
62	Construction of a Polyhedral DNA 12-Arm Junction for Self-Assembly of Wireframe DNA Lattices. <i>ACS Nano</i> , 2017, 11, 9041-9047.	14.6	18
63	Small-Molecule Probes for Affinity-Guided Introduction of Biocompatible Handles on Metal-Binding Proteins. <i>Bioconjugate Chemistry</i> , 2018, 29, 3016-3025.	3.6	16
64	Aptamer-Directed Conjugation of DNA to Therapeutic Antibodies. <i>Bioconjugate Chemistry</i> , 2019, 30, 2127-2135.	3.6	16
65	On-demand synthesis of phosphoramidites. <i>Nature Communications</i> , 2021, 12, 2760.	12.8	16
66	Rapid Detection of Drugs in Human Plasma Using a Small-Molecule-Linked Hybridization Chain Reaction. <i>ACS Sensors</i> , 2018, 3, 1706-1711.	7.8	15
67	Steering On-Surface Reactions by a Self-Assembly Approach. <i>Angewandte Chemie</i> , 2017, 129, 5108-5112.	2.0	14
68	AFM Imaging of Hybridization Chain Reaction Mediated Signal Transmission between Two DNA Origami Structures. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13633-13636.	13.8	14
69	A Single Molecule Polyphenylene-Vinylene Photonic Wire. <i>ACS Nano</i> , 2021, 15, 9404-9411.	14.6	14
70	Conjugation of chemical handles and functional moieties to DNA during solid phase synthesis with sulfonyl azides. <i>Nucleic Acids Research</i> , 2022, 50, 7235-7246.	14.5	14
71	Synthesis and biophysical properties of (<sc>I</sc>)-aTNA based G-quadruplexes. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 1540-1544.	2.8	13
72	Imidazole carbamate probes for affinity guided azide-transfer to metal-binding proteins. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 1379-1383.	2.8	13

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73	Oligo(naphthylene-ethynylene) Molecular Rods. European Journal of Organic Chemistry, 2013, 2013, 2813-2822.	2.4	12
74	Two-Dimensional Coordination Networks from Cyclic Dipeptides. Journal of the American Chemical Society, 2020, 142, 19814-19818.	13.7	12
75	Highly stable triple helix formation by homopyrimidine (<scp>l</scp>)-acyclic threoninol nucleic acids with single stranded DNA and RNA. Organic and Biomolecular Chemistry, 2015, 13, 2366-2374.	2.8	11
76	Quantitative Detection of Digoxin in Plasma Using Small-Molecule Immunoassay in a Recyclable Gravity-Driven Microfluidic Chip. Advanced Science, 2019, 6, 1802051.	11.2	11
77	Gene assembly<i>via</i>one-pot chemical ligation of DNA promoted by DNA nanostructures. Chemical Communications, 2018, 54, 4529-4532.	4.1	10
78	Considerations on Probe Design for Affinity-Guided Protein Conjugation. ChemBioChem, 2019, 20, 2711-2728.	2.6	10
79	Revealing the structural detail of individual polymers using a combination of electrospray deposition and UHV-STM. Chemical Communications, 2017, 53, 1168-1171.	4.1	9
80	Toehold-Mediated Strand Displacement in a Triplex Forming Nucleic Acid Clamp for Reversible Regulation of Polymerase Activity and Protein Expression. Chemistry - A European Journal, 2019, 25, 12303-12307.	3.3	9
81	Multiplexed DNA detection with DNA tweezers in a one-pot reaction. Materials Science for Energy Technologies, 2019, 2, 503-508.	1.8	9
82	Introduction of an Aldehyde Handle on Nanobodies by Affinity-Guided Labeling. Bioconjugate Chemistry, 2020, 31, 1295-1300.	3.6	9
83	Asymmetric Metal-Catalyzed 1,3-Dipolar Cycloaddition Reactions. , 0, , 211-247.		8
84	Docking of Antibodies into the Cavities of DNA Origami Structures. Angewandte Chemie, 2017, 129, 14615-14619.	2.0	8
85	A DNA-Based Assay for Digoxin Detection. Biosensors, 2018, 8, 19.	4.7	8
86	Formation of i-motifs from acyclic (<scp>l</scp>)-threoninol nucleic acids. Organic and Biomolecular Chemistry, 2019, 17, 7655-7659.	2.8	8
87	Disulphide-mediated site-directed modification of proteins. Organic and Biomolecular Chemistry, 2020, 18, 4717-4722.	2.8	8
88	A Reagent for Amine-Directed Conjugation to IgG1 Antibodies. Angewandte Chemie, 2021, 133, 6613-6618.	2.0	8
89	Asymmetric Reactions. Chemistry of Heterocyclic Compounds (New York, 1951): A Series of Monographs, 2003, , 817-899.	0.0	7
90	Suspending DNA Origami Between Four Gold Nanodots. Small, 2016, 12, 169-173.	10.0	7

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91	Peptide-Directed DNA-Templated Protein Labelling for The Assembly of a Pseudo-C ₆₀ . <i>Angewandte Chemie</i> , 2019, 131, 9166-9170.	2.0	7
92	Functionalized Acyclic (<sc>I</sc>)-Threoninol Nucleic Acid Four-Way Junction with High Stability In Vitro and In Vivo. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	7
93	Protein-Induced Fluorescence Enhancement and Quenching in a Homogeneous DNA-Based Assay for Rapid Detection of Small-Molecule Drugs in Human Plasma. <i>ACS Sensors</i> , 2022, 7, 856-865.	7.8	7
94	Affinity-Guided Conjugation to Antibodies for Use in Positron Emission Tomography. <i>Bioconjugate Chemistry</i> , 2019, 30, 881-887.	3.6	6
95	Albumin Biomolecular Drug Designs Stabilized through Improved Thiol Conjugation and a Modular Locked Nucleic Acid Functionalized Assembly. <i>Bioconjugate Chemistry</i> , 2022, 33, 333-342.	3.6	6
96	Attachment of Alkyltrichlorosilanes to the Terminal 3,5-Dihydroxyphenyl Moiety of a Self-assembled Thiol Monolayer on Gold. <i>Journal of Colloid and Interface Science</i> , 2002, 255, 356-362.	9.4	5
97	Phosphines as Efficient Dioxygen Scavengers in Nitrous Oxide Sensors. <i>ACS Sensors</i> , 2017, 2, 695-702.	7.8	5
98	Single-Molecule Doping: Conductance Changed By Transition Metal Centers in Salen Molecules. <i>Advanced Electronic Materials</i> , 2021, 7, 2100252.	5.1	5
99	Protein-Templated Reactions Using DNA-Antibody Conjugates. <i>Small</i> , 2023, 19, e2200971.	10.0	5
100	Self-Assembling DNA Nanostructures for Patterned Molecular Assembly. , 0, , 79-97.		4
101	Rearrangement of <i>S</i>-((2-Aminoethyl) Thiophosphates to <i>N</i>-((2-Mercaptoethyl)phosphoramidates. <i>European Journal of Organic Chemistry</i> , 2007, 2007, 5826-5833.	2.4	4
102	Supramolecular Corrals on Surfaces Resulting from Aromatic Interactions of Nonplanar Triazoles. <i>ACS Nano</i> , 2017, 11, 8302-8310.	14.6	4
103	Controlled aggregation of DNA functionalized poly(phenylene-vinylene). <i>Chemical Communications</i> , 2018, 54, 5534-5537.	4.1	4
104	Influence of CH \cdots N Interaction in the Self-Assembly of an Oligo(isoquinolyne-ethynylyne) Molecule with Distinct Conformational States. <i>Langmuir</i> , 2017, 33, 10782-10791.	3.5	3
105	AFM Imaging of Hybridization Chain Reaction Mediated Signal Transmission between Two DNA Origami Structures. <i>Angewandte Chemie</i> , 2017, 129, 13821-13824.	2.0	3
106	Preparation of Maleimide-Modified Oligonucleotides from the Corresponding Amines Using <i>N</i>-Methoxycarbonylmaleimide. <i>Bioconjugate Chemistry</i> , 2022, 33, 1254-1260.	3.6	2
107	Extended DNA Tile Actuators. <i>ChemPlusChem</i> , 2012, 77, 636-642.	2.8	1
108	Catalytic Asymmetric 1,3-Dipolar Cycloaddition Reactions of Azomethine Ylides-A Simple Approach to Optically Active Highly Functionalized Proline Derivatives. , 2002, 41, 4236.		1

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109	A Wireframe DNA Cube: Antibody Conjugate for Targeted Delivery of Multiple Copies of Monomethyl Auristatinâ€¦E. Angewandte Chemie, 2021, 133, 21859-21864.	2.0	0
110	Affinity-Guided Site-Selective Labeling of Nanobodies with Aldehyde Handles. Methods in Molecular Biology, 2022, 2446, 345-356.	0.9	0
111	Functionalized Acyclic (L)â€¦Threoninol Nucleic Acid Four Way Junction with High Stability in Vitro and in Vivo. Angewandte Chemie, 0, , .	2.0	0