

Kurt V Gothelf

List of Publications by Year in descending order

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111
papers

9,883
citations

76322

40
h-index

34984

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. <i>Chemical Reviews</i> , 1998, 98, 863-910.	47.7	1,822
2	Self-assembly of a nanoscale DNA box with a controllable lid. <i>Nature</i> , 2009, 459, 73-76.	27.8	1,464
3	Single-molecule chemical reactions on DNA origami. <i>Nature Nanotechnology</i> , 2010, 5, 200-203.	31.5	478
4	DNA origami: a quantum leap for self-assembly of complex structures. <i>Chemical Society Reviews</i> , 2011, 40, 5636.	38.1	444
5	Chemistries for DNA Nanotechnology. <i>Chemical Reviews</i> , 2019, 119, 6384-6458.	47.7	319
6	Catalytic enantioselective 1,3-dipolar cycloaddition reactions of nitrones. <i>Chemical Communications</i> , 2000, , 1449-1458.	4.1	272
7	A DNA tweezer-actuated enzyme nanoreactor. <i>Nature Communications</i> , 2013, 4, 2127.	12.8	267
8	Toward Reliable Gold Nanoparticle Patterning On Self-Assembled DNA Nanoscaffold. <i>Journal of the American Chemical Society</i> , 2008, 130, 7820-7821.	13.7	266
9	DNA Origami Design of Dolphin-Shaped Structures with Flexible Tails. <i>ACS Nano</i> , 2008, 2, 1213-1218.	14.6	264
10	DNA-programmed assembly of nanostructures. <i>Organic and Biomolecular Chemistry</i> , 2005, 3, 4023.	2.8	255
11	Chiral switching by spontaneous conformational change in adsorbed organic molecules. <i>Nature Materials</i> , 2006, 5, 112-117.	27.5	213
12	Routing of individual polymers in designed patterns. <i>Nature Nanotechnology</i> , 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 α -Nitro- β -Amino Esters. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 2992-2995.	13.8	187
14	Active Intracellular Delivery of a Cas9/sgRNA Complex Using Ultrasound-Propelled Nanomotors. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2657-2661.	13.8	187
15	A Yoctoliter-Scale DNA Reactor for Small-Molecule Evolution. <i>Journal of the American Chemical Society</i> , 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. <i>Journal of Organic Chemistry</i> , 1996, 61, 346-355.	3.2	152
17	Template-directed covalent conjugation of DNA to native antibodies, transferrin and other metal-binding proteins. <i>Nature Chemistry</i> , 2014, 6, 804-809.	13.6	152
18	A Highly Diastereoselective and Enantioselective $Ti(OTf)_2$ -TADDOLate-Catalyzed 1,3-Dipolar Cycloaddition Reaction of Alkenes with Nitrones. <i>Journal of the American Chemical Society</i> , 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?. <i>Journal of the American Chemical Society</i> , 2013, 135, 2136-2139.	13.7	144
20	Modular DNA-Programmed Assembly of Linear and Branched Conjugated Nanostructures. <i>Journal of the American Chemical Society</i> , 2004, 126, 1044-1046.	13.7	134
21	Development of a genetically encodable FRET system using fluorescent RNA aptamers. <i>Nature Communications</i> , 2018, 9, 18.	12.8	123
22	Intracellular Delivery of a Planar DNA Origami Structure by the Transferrin Receptor Internalization Pathway. <i>Small</i> , 2016, 12, 2634-2640.	10.0	114
23	Site-Selective Conjugation of Native Proteins with DNA. <i>Accounts of Chemical Research</i> , 2017, 50, 1367-1374.	15.6	112
24	Intracellular bacteria engage a STING-TBK1-MVB12b pathway to enable paracrine cGAS-STING signalling. <i>Nature Microbiology</i> , 2019, 4, 701-713.	13.3	100
25	Programming DNA origami patterning with non-canonical DNA-based metallization reactions. <i>Nature Communications</i> , 2019, 10, 5597.	12.8	74
26	Title is missing!. <i>Angewandte Chemie</i> , 2002, 114, 4410-4412.	2.0	70
27	A Modular Approach to DNA-Programmed Self-Assembly of Macromolecular Nanostructures. <i>Chemistry - A European Journal</i> , 2005, 11, 1062-1069.	3.3	64
28	Steering Organizational and Conformational Surface Chirality by Controlling Molecular Chemical Functionality. <i>ACS Nano</i> , 2010, 4, 297-311.	14.6	63
29	A DNA-Mediated Homogeneous Binding Assay for Proteins and Small Molecules. <i>Journal of the American Chemical Society</i> , 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. <i>Journal of the American Chemical Society</i> , 2011, 133, 3843-3845.	13.7	57
31	DNA-Templated Covalent Coupling of G4 PAMAM Dendrimers. <i>Journal of the American Chemical Society</i> , 2010, 132, 18054-18056.	13.7	55
32	Single Molecule Atomic Force Microscopy Studies of Photosensitized Singlet Oxygen Behavior on a DNA Origami Template. <i>ACS Nano</i> , 2010, 4, 7475-7480.	14.6	55
33	Docking of Antibodies into the Cavities of DNA Origami Structures. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14423-14427.	13.8	51
34	Functional Patterning of DNA Origami by Parallel Enzymatic Modification. <i>Bioconjugate Chemistry</i> , 2011, 22, 819-823.	3.6	47
35	A DNA-based system for selecting and displaying the combined result of two input variables. <i>Nature Communications</i> , 2015, 6, 10089.	12.8	47
36	Programmed Switching of Single Polymer Conformation on DNA Origami. <i>ACS Nano</i> , 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 Prepatterning 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-ethynyls 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-EGM. <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 (I)-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. <i>European Journal of Organic Chemistry</i> , 2013, 2013, 2813-2822.	2.4	12
74	Two-Dimensional Coordination Networks from Cyclic Dipeptides. <i>Journal of the American Chemical Society</i> , 2020, 142, 19814-19818.	13.7	12
75	Highly stable triple helix formation by homopyrimidine (<sc>l</sc>)-acyclic threoninol nucleic acids with single stranded DNA and RNA. <i>Organic and Biomolecular Chemistry</i> , 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. <i>Advanced Science</i> , 2019, 6, 1802051.	11.2	11
77	Gene assembly via one-pot chemical ligation of DNA promoted by DNA nanostructures. <i>Chemical Communications</i> , 2018, 54, 4529-4532.	4.1	10
78	Considerations on Probe Design for Affinity-Guided Protein Conjugation. <i>ChemBioChem</i> , 2019, 20, 2711-2728.	2.6	10
79	Revealing the structural detail of individual polymers using a combination of electrospray deposition and UHV-STM. <i>Chemical Communications</i> , 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. <i>Chemistry - A European Journal</i> , 2019, 25, 12303-12307.	3.3	9
81	Multiplexed DNA detection with DNA tweezers in a one-pot reaction. <i>Materials Science for Energy Technologies</i> , 2019, 2, 503-508.	1.8	9
82	Introduction of an Aldehyde Handle on Nanobodies by Affinity-Guided Labeling. <i>Bioconjugate Chemistry</i> , 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. <i>Angewandte Chemie</i> , 2017, 129, 14615-14619.	2.0	8
85	A DNA-Based Assay for Digoxin Detection. <i>Biosensors</i> , 2018, 8, 19.	4.7	8
86	Formation of i-motifs from acyclic (<sc>l</sc>)-threoninol nucleic acids. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 7655-7659.	2.8	8
87	Disulphide-mediated site-directed modification of proteins. <i>Organic and Biomolecular Chemistry</i> , 2020, 18, 4717-4722.	2.8	8
88	A Reagent for Amine-Directed Conjugation to IgG1 Antibodies. <i>Angewandte Chemie</i> , 2021, 133, 6613-6618.	2.0	8
89	Asymmetric Reactions. <i>Chemistry of Heterocyclic Compounds (New York, 1951): A Series of Monographs</i> , 2003, , 817-899.	0.0	7
90	Suspending DNA Origami Between Four Gold Nanodots. <i>Small</i> , 2016, 12, 169-173.	10.0	7

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91	Peptide-Directed DNA-Templated Protein Labelling for The Assembly of a Pseudo-gM. <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. <i>Angewandte Chemie</i> , 2021, 133, 21859-21864.	2.0	0
110	Affinity-Guided Site-Selective Labeling of Nanobodies with Aldehyde Handles. <i>Methods in Molecular Biology</i> , 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. <i>Angewandte Chemie</i> , 0, , .	2.0	0