

# Michael Famulok

## List of Publications by Year in descending order

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154  
papers

10,353  
citations

26630

56  
h-index

36028

97  
g-index

179  
all docs

179  
docs citations

179  
times ranked

7293  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Functional Aptamers and Aptazymes in Biotechnology, Diagnostics, and Therapy. <i>Chemical Reviews</i> , 2007, 107, 3715-3743.  | 47.7 | 820       |
| 2  | Nucleic Acid Aptamers From Selection in Vitro to Applications in Vivo. <i>Accounts of Chemical Research</i> , 2000, 33, 591-599.   | 15.6 | 421       |
| 3  | RNA aptamers that bind L-arginine with sub-micromolar dissociation constants and high enantioselectivity. <i>Nucleic Acids Research</i> , 1996, 24, 1029-1036.   | 14.5 | 327       |
| 4  | A Versatile Toolbox for Variable DNA Functionalization at High Density. <i>Journal of the American Chemical Society</i> , 2005, 127, 15071-15082.  | 13.7 | 285       |
| 5  | Molecular Recognition of Amino Acids by RNA-Aptamers: An L-Citrulline Binding RNA Motif and Its Evolution into an L-Arginine Binder. <i>Journal of the American Chemical Society</i> , 1994, 116, 1698-1706. | 13.7 | 269       |
| 6  | Aptamer Modules as Sensors and Detectors. <i>Accounts of Chemical Research</i> , 2011, 44, 1349-1358.  | 15.6 | 267       |
| 7  | All you wanted to know about SELEX. <i>Molecular Biology Reports</i> , 1994, 20, 97-107.   | 2.3  | 248       |
| 8  | Oligonucleotide aptamers that recognize small molecules. <i>Current Opinion in Structural Biology</i> , 1999, 9, 324-329.  | 5.7  | 225       |
| 9  | Inhibition of cytohesins by SecinH3 leads to hepatic insulin resistance. <i>Nature</i> , 2006, 444, 941-944.   | 27.8 | 225       |
| 10 | Isolation of RNA Aptamers for Biological Cofactors by In Vitro Selection. <i>Angewandte Chemie International Edition in English</i> , 1994, 33, 1084-1087.   | 4.4  | 199       |
| 11 | Fluorescence-activated cell sorting for aptamer SELEX with cell mixtures. <i>Nature Protocols</i> , 2010, 5, 1993-2004.  | 12.0 | 192       |
| 12 | The Ca <sup>2+</sup> Ion as a Cofactor for a Novel RNA-Cleaving Deoxyribozyme. <i>Angewandte Chemie International Edition in English</i> , 1996, 35, 2837-2841.  | 4.4  | 176       |
| 13 | A novel RNA motif for neomycin recognition. <i>Chemistry and Biology</i> , 1995, 2, 543-552.   | 6.0  | 172       |
| 14 | Sequence-Specific Detection of MicroRNAs by Signal-Amplifying Ribozymes. <i>Journal of the American Chemical Society</i> , 2004, 126, 722-723.   | 13.7 | 169       |
| 15 | Aptamers for allosteric regulation. <i>Nature Chemical Biology</i> , 2011, 7, 519-527.   | 8.0  | 162       |
| 16 | Enrichment of Cell-Targeting and Population-Specific Aptamers by Fluorescence-Activated Cell Sorting. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5190-5193.                                | 13.8 | 160       |
| 17 | A Love-wave biosensor using nucleic acids as ligands. <i>Sensors and Actuators B: Chemical</i> , 2004, 101, 308-315.   | 7.8  | 158       |
| 18 | Protein-dependent ribozymes report molecular interactions in real time. <i>Nature Biotechnology</i> , 2002, 20, 717-722.   | 17.5 | 154       |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | A double-stranded DNA rotaxane. <i>Nature Nanotechnology</i> , 2010, 5, 436-442.  | 31.5 | 145       |
| 20 | Prion-Protein-Specific Aptamer Reduces PrPSc Formation. <i>ChemBioChem</i> , 2002, 3, 717.  | 2.6  | 141       |
| 21 | I-Motif-Programmed Functionalization of DNA Nanocircles. <i>Journal of the American Chemical Society</i> , 2013, 135, 1593-1599.  | 13.7 | 136       |
| 22 | A Ribozyme for the Aldol Reaction. <i>Chemistry and Biology</i> , 2005, 12, 941-950.  | 6.0  | 124       |
| 23 | Characterization and divalent metal-ion dependence of in vitro selected deoxyribozymes which cleave DNA/RNA chimeric oligonucleotides. <i>Journal of Molecular Biology</i> , 1997, 269, 188-202.  | 4.2  | 121       |
| 24 | Reversible Light Switch for Macrocycle Mobility in a DNA Rotaxane. <i>Journal of the American Chemical Society</i> , 2012, 134, 11884-11887.  | 13.7 | 121       |
| 25 | Label-free impedimetric aptasensor for lysozyme detection based on carbon nanotube-modified screen-printed electrodes. <i>Analytical Biochemistry</i> , 2012, 421, 454-459.   | 2.4  | 114       |
| 26 | A SARS-CoV-2 Spike Binding DNA Aptamer that Inhibits Pseudovirus Infection by an RBD-Independent Mechanism**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10279-10285.   | 13.8 | 106       |
| 27 | Novel RNA catalysts for the Michael reaction. <i>Chemistry and Biology</i> , 2001, 8, 459-473.  | 6.0  | 101       |
| 28 | Functionalized DNA: A New Replicable Biopolymer We thank Dr. Andreas Marx, University of Bonn, for helpful advice and discussions. This work was supported by the Fonds der Chemischen Industrie, the Karl-Ziegler Stiftung, and the Deutsche Forschungsgemeinschaft.. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 3990. | 13.8 | 100       |
| 29 | A bio-hybrid DNA rotor-stator nanoengine that moves along predefined tracks. <i>Nature Nanotechnology</i> , 2018, 13, 496-503.  | 31.5 | 100       |
| 30 | Intramers as promising new tools in functional proteomics. <i>Chemistry and Biology</i> , 2001, 8, 931-939.   | 6.0  | 97        |
| 31 | Generation and Enzymatic Amplification of High-Density Functionalized DNA Double Strands. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 3337-3340.   | 13.8 | 96        |
| 32 | Aptamers and SELEX in Chemistry & Biology. <i>Chemistry and Biology</i> , 2014, 21, 1055-1058.  | 6.0  | 90        |
| 33 | A novel ribozyme with ester transferase activity. <i>Chemistry and Biology</i> , 1998, 5, 23-34.  | 6.0  | 86        |
| 34 | Input-Dependent Induction of Oligonucleotide Structural Motifs for Performing Molecular Logic. <i>Journal of the American Chemical Society</i> , 2012, 134, 3508-3516.  | 13.7 | 85        |
| 35 | Interlocked DNA nanostructures controlled by a reversible logic circuit. <i>Nature Communications</i> , 2014, 5, 4940.  | 12.8 | 82        |
| 36 | In Vitro Selection of Specific Ligand-binding Nucleic Acids. <i>Angewandte Chemie International Edition in English</i> , 1992, 31, 979-988.   | 4.4  | 81        |

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|----|--|------|-----------|
| 37 | Structural probing and damage selection of citrulline and arginine-specific RNA aptamers identify base positions required for binding. <i>Nucleic Acids Research</i> , 1995, 23, 4769-4776.                    | 14.5 | 81        |
| 38 | In Vitro Selection Analysis of Neomycin Binding RNAs with a Mutagenized Pool of Variants of the 16S rRNA Decoding Region. <i>Biochemistry</i> , 1996, 35, 4265-4270.   | 2.5  | 78        |
| 39 | Selective Targeting and Inhibition of Yeast RNA Polymerase II by RNA Aptamers. <i>Journal of Biological Chemistry</i> , 1997, 272, 27980-27986.  | 3.4  | 74        |
| 40 | Displacement of protein-bound aptamers with small molecules screened by fluorescence polarization. <i>Nature Protocols</i> , 2008, 3, 579-587.   | 12.0 | 74        |
| 41 | Oligonucleotide libraries - variatio delectat. <i>Current Opinion in Chemical Biology</i> , 1998, 2, 320-327.  | 6.1  | 71        |
| 42 | Rapid identification and characterization of hammerhead-ribozyme inhibitors using fluorescence-based technology. <i>Nature Biotechnology</i> , 2001, 19, 56-61.  | 17.5 | 70        |
| 43 | Aptamer-Based Affinity Labeling of Proteins. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9176-9180.   | 13.8 | 70        |
| 44 | Discrimination of Single Mutations in Cancer-Related Gene Fragments with a Surface Acoustic Wave Sensor. <i>Analytical Chemistry</i> , 2006, 78, 4865-4871.  | 6.5  | 67        |
| 45 | Conformational changes in the expression domain of the Escherichia coli thiM riboswitch. <i>Nucleic Acids Research</i> , 2007, 35, 3713-3722.  | 14.5 | 67        |
| 46 | Discriminatory aptamer reveals serum response element transcription regulated by cytohesin-2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 11221-11226. | 7.1  | 66        |
| 47 | Orthogonally Photocontrolled Non-Autonomous DNA Walker. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6948-6951.  | 13.8 | 66        |
| 48 | Structure of an RNA polymerase II-RNA inhibitor complex elucidates transcription regulation by noncoding RNAs. <i>Nature Structural and Molecular Biology</i> , 2006, 13, 44-48.                               | 8.2  | 64        |
| 49 | In vivo-applied functional RNAs as tools in proteomics and genomics research. <i>Trends in Biotechnology</i> , 2002, 20, 462-466.  | 9.3  | 62        |
| 50 | High-Throughput-Compatible Assay for glmS Riboswitch Metabolite Dependence. <i>ChemBioChem</i> , 2006, 7, 602-604.   | 2.6  | 62        |
| 51 | Mechanically Interlocked DNA nanostructures for Functional Devices. <i>Accounts of Chemical Research</i> , 2014, 47, 1700-1709.  | 15.6 | 61        |
| 52 | Supramolecular aptamer nano-constructs for receptor-mediated targeting and light-triggered release of chemotherapeutics into cancer cells. <i>Nature Communications</i> , 2018, 9, 535.                        | 12.8 | 61        |
| 53 | Intramers and Aptamers: Applications in Protein-Function Analyses and Potential for Drug Screening. <i>ChemBioChem</i> , 2005, 6, 19-26.   | 2.6  | 59        |
| 54 | Switchable Reconfiguration of an Interlocked DNA Olympiadane Nanostructure. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7499-7503.  | 13.8 | 59        |

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|----|--|------|-----------|
| 55 | A ribozyme with michaelase activity. <i>Bioorganic and Medicinal Chemistry</i> , 2003, 11, 235-249.  | 3.0  | 58        |
| 56 | Aptamers that bind to the antibiotic moenomycin A. <i>Bioorganic and Medicinal Chemistry</i> , 2001, 9, 2557-2563.   | 3.0  | 54        |
| 57 | RNA Ligands That Distinguish Metabolite-Induced Conformations in the TPP Riboswitch. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 557-560.                   | 13.8 | 54        |
| 58 | Synthesis, incorporation efficiency, and stability of disulfide bridged functional groups at RNA 5' ends. <i>Bioorganic and Medicinal Chemistry</i> , 2000, 8, 1317-1329.    | 3.0  | 52        |
| 59 | RNA aptamers selectively modulate protein recruitment to the cytoplasmic domain of $\hat{A}$ -secretase BACE1 in vitro. <i>Rna</i> , 2006, 12, 1650-1660.                    | 3.5  | 51        |
| 60 | Aptamers in nanoland. <i>Nature</i> , 2006, 439, 667-669.  | 27.8 | 50        |
| 61 | In vitro selection of allosteric ribozymes: theory and experimental validation <sup>11</sup> Edited by R. Huber. <i>Journal of Molecular Biology</i> , 2001, 312, 1177-1190. | 4.2  | 49        |
| 62 | Aptamer Displacement Identifies Alternative Small-Molecule Target Sites that Escape Viral Resistance. <i>Chemistry and Biology</i> , 2007, 14, 804-812.                      | 6.0  | 49        |
| 63 | An Aptamer Targeting the Apical Loop Domain Modulates pri-miRNA Processing. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 4674-4677.                          | 13.8 | 49        |
| 64 | Design Strategy for DNA Rotaxanes with a Mechanically Reinforced PX100 Axle. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6771-6775.                         | 13.8 | 48        |
| 65 | Temporal and Reversible Control of a DNAzyme by Orthogonal Photoswitching. <i>Journal of the American Chemical Society</i> , 2018, 140, 16868-16872.                         | 13.7 | 48        |
| 66 | In vitro selection of a viomycin-binding RNA pseudoknot. <i>Chemistry and Biology</i> , 1997, 4, 357-366.  | 6.0  | 47        |
| 67 | An Allosteric Ribozyme Regulated by Doxycycline. <i>Angewandte Chemie - International Edition</i> , 2000, 39, 4369-4373.   | 13.8 | 45        |
| 68 | DNA Minicircles with Gaps for Versatile Functionalization. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 967-970.   | 13.8 | 45        |
| 69 | Logic Gating by Macrocyclic Displacement Using a Double-Stranded DNA [3]Rotaxane Shuttle. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 10372-10376.          | 13.8 | 45        |
| 70 | Switchable Reconfiguration of a Seven-Ring Interlocked DNA Catenane Nanostructure. <i>Nano Letters</i> , 2015, 15, 7133-7137.  | 9.1  | 45        |
| 71 | Pseudo-complementary PNA actuators as reversible switches in dynamic DNA nanotechnology. <i>Nucleic Acids Research</i> , 2013, 41, 4729-4739.                                | 14.5 | 41        |
| 72 | Functional tuning of nucleic acids by chemical modifications: Tailored oligonucleotides as drugs, devices, and diagnostics. <i>Chemical Record</i> , 2003, 3, 51-60.         | 5.8  | 40        |

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|----|---|------|-----------|
| 73 | Polyamide Struts for DNA Architectures. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 4382-4384.   | 13.8 | 38        |
| 74 | Post-synthetic Spin-Labeling of RNA through Click Chemistry for PELDOR Measurements. <i>Chemistry - A European Journal</i> , 2016, 22, 12113-12121.   | 3.3  | 38        |
| 75 | Plasma Exosome Profiling of Cancer Patients by a Next Generation Systems Biology Approach. <i>Scientific Reports</i> , 2017, 7, 42741.  | 3.3  | 38        |
| 76 | Regeneration of Burnt Bridges on a DNA Catenane Walker. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 16366-16370.   | 13.8 | 37        |
| 77 | Reporter Ribozymes for Real-Time Analysis of Domain-Specific Interactions in Biomolecules: HIV-1 Reverse Transcriptase and the Primer-Template Complex. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 4263-4266. | 13.8 | 36        |
| 78 | Electrochemical Sensing of Aptamer-Protein Interactions Using a Magnetic Particle Assay and Single-Use Sensor Technology. <i>Electroanalysis</i> , 2009, 21, 1278-1284.   | 2.9  | 36        |
| 79 | Real-Time Characterization of Ribozymes by Fluorescence Resonance Energy Transfer (FRET). <i>Angewandte Chemie - International Edition</i> , 1999, 38, 1300-1303.   | 13.8 | 35        |
| 80 | Building objects from nucleic acids for a nanometer world. <i>Biochimie</i> , 2008, 90, 1096-1107.  | 2.6  | 35        |
| 81 | A novel family of structurally stable double stranded DNA catenanes. <i>Chemical Communications</i> , 2014, 50, 6091-6093.  | 4.1  | 35        |
| 82 | Allosteric Control of Oxidative Catalysis by a DNA Rotaxane Nanostructure. <i>Journal of the American Chemical Society</i> , 2017, 139, 16044-16047.  | 13.7 | 35        |
| 83 | A Y2 Receptor Mimetic Aptamer Directed against Neuropeptide Y. <i>Journal of Biological Chemistry</i> , 2002, 277, 11416-11422.   | 3.4  | 34        |
| 84 | Targeting Multifunctional Proteins by Virtual Screening: Structurally Diverse Cytohesin Inhibitors with Differentiated Biological Functions. <i>ACS Chemical Biology</i> , 2010, 5, 839-849.                                    | 3.4  | 34        |
| 85 | A Novel Class of Small Functional Peptides that Bind and Inhibit Human $\beta$ -Thrombin Isolated by mRNA Display. <i>Chemistry and Biology</i> , 2003, 10, 69-79.  | 6.0  | 33        |
| 86 | Synthetic Ribozymes and the First Deoxyribozyme. <i>Angewandte Chemie International Edition in English</i> , 1995, 34, 1189-1192.   | 4.4  | 32        |
| 87 | Daisy Chain Rotaxanes Made from Interlocked DNA Nanostructures. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5512-5516.   | 13.8 | 31        |
| 88 | In vitro selection of RNA aptamers that bind special elongation factor SelB, a protein with multiple RNA-binding sites, reveals one major interaction domain at the carboxyl terminus. <i>Rna</i> , 1999, 5, 1180-1190.         | 3.5  | 31        |
| 89 | Expanding the Toolbox of Photoswitches for DNA Nanotechnology Using Arylazopyrazoles. <i>Chemistry - A European Journal</i> , 2018, 24, 1062-1066.  | 3.3  | 30        |
| 90 | In vitro-Selektion spezifisch ligandenbindender Nucleinsäuren. <i>Angewandte Chemie</i> , 1992, 104, 1001-1011.   | 2.0  | 29        |

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|-----|---|------|-----------|
| 91  | Anti-Proliferative Effect of Cytohesin Inhibition in Gefitinib-Resistant Lung Cancer Cells. PLoS ONE, 2012, 7, e41179.  | 2.5  | 29        |
| 92  | Construction of DNA Architectures with RNA Hairpins. Angewandte Chemie - International Edition, 2008, 47, 971-973.  | 13.8 | 28        |
| 93  | A Homogeneous Fluorescence Resonance Energy Transfer System for Monitoring the Activation of a Protein Switch in Real Time. Journal of the American Chemical Society, 2011, 133, 8372-8379. | 13.7 | 28        |
| 94  | Sensing complex regulatory networks by conformationally controlled hairpin ribozymes. Nucleic Acids Research, 2004, 32, 3212-3219.  | 14.5 | 27        |
| 95  | Competitive regulation of modular allosteric aptazymes by a small molecule and oligonucleotide effector. Rna, 2005, 11, 1514-1520.  | 3.5  | 27        |
| 96  | Photocleavable Initiator Nucleotide Substrates for an Aldolase Ribozyme. Journal of Organic Chemistry, 2008, 73, 5069-5077.   | 3.2  | 24        |
| 97  | A Selective Inhibitor of Heme Biosynthesis in Endosymbiotic Bacteria Elicits Antifilarial Activity In Vitro. Chemistry and Biology, 2013, 20, 177-187.                                      | 6.0  | 24        |
| 98  | Affinity-Based Labeling of Cytohesins with a Bifunctional SecinH3 Photoaffinity Probe. Angewandte Chemie - International Edition, 2008, 47, 9565-9568.                                      | 13.8 | 23        |
| 99  | Interlocked DNA topologies for nanotechnology. Current Opinion in Biotechnology, 2017, 48, 159-167.   | 6.6  | 23        |
| 100 | Structural characterization of a flavin-specific RNA aptamer by chemical probing. Bioorganic and Medicinal Chemistry Letters, 1996, 6, 1157-1162.   | 2.2  | 22        |
| 101 | Kinetic Binding Analysis of Aptamers Targeting HIV-1 Proteins by a Combination of a Microbalance Array and Mass Spectrometry (MAMS). Journal of Proteome Research, 2009, 8, 3568-3577.      | 3.7  | 22        |
| 102 | High-Yield Spin Labeling of Long RNAs for Electron Paramagnetic Resonance Spectroscopy. Biochemistry, 2018, 57, 2923-2931.  | 2.5  | 22        |
| 103 | DNA aptamer-mediated regulation of the hairpin ribozyme by human $\alpha$ -thrombin. Blood Cells, Molecules, and Diseases, 2007, 38, 19-24.   | 1.4  | 21        |
| 104 | Ignore the nonsense. Nature, 2007, 447, 42-43.  | 27.8 | 21        |
| 105 | Studying the Conformation of a Receptor Tyrosine Kinase in Solution by Inhibitor-Based Spin Labeling. Angewandte Chemie - International Edition, 2017, 56, 8417-8421.                       | 13.8 | 21        |
| 106 | Inhibition of Cytohesins Protects against Genetic Models of Motor Neuron Disease. Journal of Neuroscience, 2015, 35, 9088-9105.   | 3.6  | 20        |
| 107 | Poly-ligand profiling differentiates trastuzumab-treated breast cancer patients according to their outcomes. Nature Communications, 2018, 9, 1219.  | 12.8 | 20        |
| 108 | Green fluorescent RNA. Nature, 2004, 430, 976-977.  | 27.8 | 19        |

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|-----|--|------|-----------|
| 109 | Assembly of dsDNA nanocircles into dimeric and oligomeric aggregates. <i>Chemical Communications</i> , 2010, 46, 4154.   | 4.1  | 19        |
| 110 | Exploring Chemical Space with Aptamers. <i>Journal of Medicinal Chemistry</i> , 2009, 52, 6951-6957.   | 6.4  | 18        |
| 111 | Design, assembly, characterization, and operation of double-stranded interlocked DNA nanostructures. <i>Nature Protocols</i> , 2019, 14, 2818-2855.  | 12.0 | 18        |
| 112 | Orthogonally Photocontrolled Non-Autonomous DNA Walker. <i>Angewandte Chemie</i> , 2019, 131, 7022-7025.   | 2.0  | 18        |
| 113 | Catalysis Based on Nucleic Acid Structures. <i>Topics in Current Chemistry</i> , 1999, , 101-131.  | 4.0  | 17        |
| 114 | Aptamers That Recognize the Lipid Moiety of the Antibiotic Moenomycin A. <i>Biological Chemistry</i> , 2003, 384, 1497-500.  | 2.5  | 16        |
| 115 | A trifluoromethylphenyl diazirine-based SecinH3 photoaffinity probe. <i>Chemical Communications</i> , 2012, 48, 1272-1274.   | 4.1  | 16        |
| 116 | A SARS-CoV-2 Spike Binding DNA Aptamer that Inhibits Pseudovirus Infection by an RBD-Independent Mechanism**. <i>Angewandte Chemie</i> , 2021, 133, 10367-10373.   | 2.0  | 16        |
| 117 | Secondary structures and functional requirements for thiM riboswitches from <i>Desulfovibrio vulgaris</i> , <i>Erwinia carotovora</i> and <i>Rhodobacter sphaeroides</i> . <i>Biological Chemistry</i> , 2008, 389, 127-134.   | 2.5  | 15        |
| 118 | ADLOC: An Aptamer-Displacement Assay Based on Luminescent Oxygen Channeling. <i>Chemistry - A European Journal</i> , 2010, 16, 11100-11107.  | 3.3  | 15        |
| 119 | Interlocked DNA Nanojoints for Reversible Thermal Sensing. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12455-12459.   | 13.8 | 15        |
| 120 | ADAPT identifies an ESCRT complex composition that discriminates VCaP from LNCaP prostate cancer cell exosomes. <i>Nucleic Acids Research</i> , 2020, 48, 4013-4027.   | 14.5 | 15        |
| 121 | Allosteric aptamers and aptazymes as probes for screening approaches. <i>Current Opinion in Molecular Therapeutics</i> , 2005, 7, 137-43.  | 2.8  | 15        |
| 122 | Bringing picomolar protein detection into proximity. <i>Nature Biotechnology</i> , 2002, 20, 448-449.  | 17.5 | 14        |
| 123 | Functional Nucleic Acids in High Throughput Screening and Drug Discovery. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2007, 10, 698-705.  | 1.1  | 13        |
| 124 | A Self-Regulating DNA Rotaxane Linear Actuator Driven by Chemical Energy. <i>Journal of the American Chemical Society</i> , 2021, 143, 13292-13298.  | 13.7 | 11        |
| 125 | An Allosteric Ribozyme Regulated by Doxycycline This work was supported by Aventis Gencell and by a grant from the Volkswagen Foundation (Priority program "conformational control") to M.F. We thank M. Blind, G. Mayer, D. Proske, and G. Sengle (Universität Bonn) for helpful discussions as well as J. Crouzet, J. F. Mayaux, and M. Finer (Aventis Gencell) for support.. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 3503. | 13.8 | 10        |
| 126 | Reporter-Ribozyme zur Echtzeit-Analyse domÄnspezifischer Interaktionen in BiomolekÄlen: reverse Transkriptase von HIV-1 und der Primer-Templatkomplex. <i>Angewandte Chemie</i> , 2002, 114, 4440-4444.  | 2.0  | 10        |



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|-----|---|------|-----------|
| 127 | Inspired by DNA. <i>Nature Nanotechnology</i> , 2010, 5, 634-635.   | 31.5 | 10        |
| 128 | Single-Stranded Tile Stoppers for Interlocked DNA Architectures. <i>ChemBioChem</i> , 2016, 17, 1146-1149.  | 2.6  | 9         |
| 129 | MOLECULAR BIOLOGY: RNAs Turn On in Tandem. <i>Science</i> , 2004, 306, 233-234.   | 12.6 | 8         |
| 130 | Cyplecksins Are Covalent Inhibitors of the Pleckstrin Homology Domain of Cytohesin. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 9529-9533.                         | 13.8 | 8         |
| 131 | Daisy Chain Rotaxanes Made from Interlocked DNA Nanostructures. <i>Angewandte Chemie</i> , 2016, 128, 5602-5606.  | 2.0  | 8         |
| 132 | Anti-innexin 2 aptamers specifically inhibit the heterologous interaction of the innexin 2 and innexin 3 carboxyl-termini in vitro. <i>Biological Chemistry</i> , 2007, 388, 561-8. | 2.5  | 7         |
| 133 | In Vitro Selection of Conformational Probes for Riboswitches. <i>Methods in Molecular Biology</i> , 2009, 540, 291-300.   | 0.9  | 7         |
| 134 | RNA-aptamers that modulate the RhoGEF activity of Tiam1. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 6239-6246.   | 3.0  | 7         |
| 135 | Molecular Architecture of a Network of Potential Intracellular EGFR Modulators: ARNO, CaM, Phospholipids, and the Juxtamembrane Segment. <i>Structure</i> , 2020, 28, 54-62.e5.     | 3.3  | 7         |
| 136 | Biopolymers Chemical and biological approaches for understanding form and function Editorial Overview. <i>Current Opinion in Chemical Biology</i> , 2000, 4, 599-601.               | 6.1  | 6         |
| 137 | Regeneration of Burnt Bridges on a DNA Catenane Walker. <i>Angewandte Chemie</i> , 2020, 132, 16508-16512.  | 2.0  | 6         |
| 138 | Pan-Selective Aptamers for the Family of Small GTPases. <i>ChemBioChem</i> , 2012, 13, 1433-1437.   | 2.6  | 5         |
| 139 | In Vitro Activity of wALADin Benzimidazoles against Different Life Cycle Stages of Plasmodium Parasites. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 654-658.          | 3.2  | 5         |
| 140 | Translocation of a Cell Surface Spliceosomal Complex Induces Alternative Splicing Events and Lymphoma Cell Necrosis. <i>Cell Chemical Biology</i> , 2019, 26, 756-764.e6.           | 5.2  | 5         |
| 141 | Nucleic acid based tools for pharmacology and nano-engineering. <i>Comptes Rendus Chimie</i> , 2011, 14, 819-825.   | 0.5  | 4         |
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