Günter Mayer

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8622211/publications.pdf

Version: 2024-02-01

50273 39667 9,601 133 46 94 citations h-index g-index papers 181 181 181 9821 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	An Antibody-Aptamer-Hybrid Lateral Flow Assay for Detection of CXCL9 in Antibody-Mediated Rejection after Kidney Transplantation. Diagnostics, 2022, 12, 308.	2.6	5
2	Split–Combine Click-SELEX Reveals Ligands Recognizing the Transplant Rejection Biomarker CXCL9. ACS Chemical Biology, 2022, 17, 129-137.	3.4	4
3	Dependence of click-SELEX performance on the nature and average number of modified nucleotides. RSC Chemical Biology, 2022, 3, 288-294.	4.1	6
4	Fluorogenic RNA-Based Biosensor to Sense the Glycolytic Flux in Mammalian Cells. ACS Chemical Biology, 2022, 17, 1164-1173.	3.4	7
5	Aptamer loaded superparamagnetic beads for selective capturing and gentle release of activated protein C. Scientific Reports, 2022, 12, 7091.	3.3	2
6	Signal transduction in light-oxygen-voltage receptors lacking the active-site glutamine. Nature Communications, 2022, 13, 2618.	12.8	25
7	Functional and Structural Characterization of Nucleic Acid Ligands That Bind to Activated Coagulation Factor XIII. Journal of Clinical Medicine, 2021, 10, 677.	2.4	5
8	A SARSâ€CoVâ€2 Spike Binding DNA Aptamer that Inhibits Pseudovirus Infection by an RBDâ€Independent Mechanism**. Angewandte Chemie, 2021, 133, 10367-10373.	2.0	16
9	A SARSâ€CoVâ€2 Spike Binding DNA Aptamer that Inhibits Pseudovirus Infection by an RBDâ€Independent Mechanism**. Angewandte Chemie - International Edition, 2021, 60, 10279-10285.	13.8	106
10	A synthetic RNA-based biosensor for fructose-1,6-bisphosphate that reports glycolytic flux. Cell Chemical Biology, 2021, 28, 1554-1568.e8.	5.2	17
11	Controlling Coagulation in Blood with Red Light. Angewandte Chemie, 2021, 133, 22615-22620.	2.0	2
12	Controlling Coagulation in Blood with Red Light. Angewandte Chemie - International Edition, 2021, 60, 22441-22446.	13.8	8
13	Changes in Protein Glycosylation as a Result of Aptamer Interactions with Cancer Cells. Proteomics - Clinical Applications, 2020, 14, 1800186.	1.6	3
14	Dynamic changes in DNA populations revealed by split–combine selection. Chemical Science, 2020, 11, 9577-9583.	7.4	7
15	Aptamerâ€Mediated Reversible Transactivation of Gene Expression by Light. Angewandte Chemie, 2020, 132, 22600-22604.	2.0	6
16	Optoribogenetic control of regulatory RNA molecules. Nature Communications, 2020, 11, 4825.	12.8	17
17	Aptamerâ€Mediated Reversible Transactivation of Gene Expression by Light. Angewandte Chemie - International Edition, 2020, 59, 22414-22418.	13.8	21
18	Selective Modulation of the Protease Activated Protein C Using Exosite Inhibiting Aptamers. Nucleic Acid Therapeutics, 2020, 30, 276-288.	3.6	8

#	Article	IF	CITATIONS
19	ADAPT identifies an ESCRT complex composition that discriminates VCaP from LNCaP prostate cancer cell exosomes. Nucleic Acids Research, 2020, 48, 4013-4027.	14.5	15
20	Robotic assisted generation of $2\hat{a}\in^2$ -deoxy- $2\hat{a}\in^2$ -fluoro-modifed RNA aptamers $\hat{a}\in^\infty$ High performance enabling strategies in aptamer selection. Methods, 2019, 161, 3-9.	3.8	10
21	The mRNA repressor TRIM71 cooperates with Nonsense-Mediated Decay factors to destabilize the mRNA of CDKN1A/p21. Nucleic Acids Research, 2019, 47, 11861-11879.	14.5	22
22	Eine rezeptorgeleitete Designstrategie zur Identifikation von Clickmeren. Angewandte Chemie, 2019, 131, 10864-10868.	2.0	2
23	A blue light receptor that mediates RNA binding and translational regulation. Nature Chemical Biology, 2019, 15, 1085-1092.	8.0	76
24	Copper-Catalyzed Alkyne-Azide Cycloaddition on the Solid Phase for the Preparation of Fully Click-Modified Nucleic Acids. Methods in Molecular Biology, 2019, 1973, 177-183.	0.9	0
25	A Receptorâ€Guided Design Strategy for Ligand Identification. Angewandte Chemie - International Edition, 2019, 58, 10752-10755.	13.8	18
26	Aptamers as Therapeutic Agents: Has the Initial Euphoria Subsided?. Molecular Diagnosis and Therapy, 2019, 23, 301-309.	3.8	37
27	Targeting hormone refractory prostate cancer by in vivo selected DNA libraries in an orthotopic xenograft mouse model. Scientific Reports, 2019, 9, 4976.	3.3	14
28	Translocation of a Cell Surface Spliceosomal Complex Induces Alternative Splicing Events and Lymphoma Cell Necrosis. Cell Chemical Biology, 2019, 26, 756-764.e6.	5.2	5
29	Aptasensor for Quantifying Pancreatic Polypeptide. ACS Omega, 2019, 4, 2948-2956.	3.5	4
30	Poly-ligand profiling differentiates trastuzumab-treated breast cancer patients according to their outcomes. Nature Communications, 2018, 9, 1219.	12.8	20
31	Identification and characterization of nucleobase-modified aptamers by click-SELEX. Nature Protocols, 2018, 13, 1153-1180.	12.0	70
32	Advances in the Study of Aptamer–Protein Target Identification Using the Chromatographic Approach. Journal of Proteome Research, 2018, 17, 2174-2181.	3.7	20
33	Systematic evaluation of cell-SELEX enriched aptamers binding to breast cancer cells. Biochimie, 2018, 145, 53-62.	2.6	46
34	RNA Aptamers Recognizing Murine CCL17 Inhibit T Cell Chemotaxis and Reduce Contact Hypersensitivity InÂVivo. Molecular Therapy, 2018, 26, 95-104.	8.2	20
35	Activity Pattern Analysis Indicates Increased but Balanced Systemic Coagulation Activity in Response to Surgical Trauma. TH Open, 2018, 02, e350-e356.	1.4	10
36	Aptamers: novelty tools for cancer biology. Oncotarget, 2018, 9, 26934-26953.	1.8	34

#	Article	IF	Citations
37	Systematic evaluation of error rates and causes in short samples in next-generation sequencing. Scientific Reports, 2018, 8, 10950.	3.3	224
38	Poly-ligand profiling (PLP) to differentiate pancreatic cancer patients who benefit from gemcitabine+evofosfamide versus gemcitabine+placebo treatment Journal of Clinical Oncology, 2018, 36, 12067-12067.	1.6	2
39	Plasma Exosome Profiling of Cancer Patients by a Next Generation Systems Biology Approach. Scientific Reports, 2017, 7, 42741.	3.3	38
40	Aptamers as Valuable Molecular Tools in Neurosciences. Journal of Neuroscience, 2017, 37, 2517-2523.	3 . 6	32
41	Customised nucleic acid libraries for enhanced aptamer selection and performance. Current Opinion in Biotechnology, 2017, 48, 111-118.	6.6	49
42	Photoâ€Tethers for the (Multiâ€)Cyclic, Conformational Caging of Long Oligonucleotides. Angewandte Chemie - International Edition, 2017, 56, 359-363.	13.8	34
43	Photoâ€Tethers for the (Multiâ€)Cyclic, Conformational Caging of Long Oligonucleotides. Angewandte Chemie, 2017, 129, 365-369.	2.0	18
44	Activation of the <i>glmS</i> Ribozyme Confers Bacterial Growth Inhibition. ChemBioChem, 2017, 18, 435-440.	2.6	24
45	InÂVitro Selection of Cell-Internalizing DNA Aptamers in a Model System of Inflammatory Kidney Disease. Molecular Therapy - Nucleic Acids, 2017, 8, 198-210.	5.1	22
46	Fluoroâ€Carbaâ€Sugars are Glycomimetic Activators of the <i>glmS</i> Ribozyme. Chemistry - A European Journal, 2017, 23, 12604-12612.	3.3	13
47	Reporter Gene-Based Screening for TPP Riboswitch Activators. Methods in Molecular Biology, 2017, 1520, 227-235.	0.9	9
48	Selection and Biosensor Application of Aptamers for Small Molecules. Frontiers in Chemistry, 2016, 4, 25.	3.6	183
49	<i>In Vitro</i> Evaluation of Aptamer-Based Reversible Inhibition of Anticoagulant Activated Protein C as a Novel Supportive Hemostatic Approach. Nucleic Acid Therapeutics, 2016, 26, 355-362.	3. 6	17
50	\hat{l}^2 -Conglutin dual aptamers binding distinct aptatopes. Analytical and Bioanalytical Chemistry, 2016, 408, 875-884.	3.7	25
51	Click Reaction on Solid Phase Enables High Fidelity Synthesis of Nucleobase-Modified DNA. Bioconjugate Chemistry, 2016, 27, 500-503.	3. 6	19
52	Preparation of SELEX Samples for Next-Generation Sequencing. Methods in Molecular Biology, 2016, 1380, 77-84.	0.9	19
53	Sensitive detection of cancer cells using light-mediated apta-PCR. Methods, 2016, 97, 104-109.	3.8	15
54	Selection of Aptamers for Metabolite Sensing and Construction of Optical Nanosensors. Methods in Molecular Biology, 2016, 1380, 3-19.	0.9	7

#	Article	IF	Citations
55	Aptamer-Based Enzyme Capture Assay for Measurement of Plasma Thrombin Levels. Methods in Molecular Biology, 2016, 1380, 179-189.	0.9	3
56	Adaptive dynamic artificial poly-ligand targeting (ADAPT) of low-abundance exosome-associated proteins in blood plasma Journal of Clinical Oncology, 2016, 34, e23070-e23070.	1.6	0
57	Adaptive dynamic artificial poly-ligand targeting (ADAPT) of the plasma exosome proteome: A highly multiplexed non-invasive diagnostic discovery platform Journal of Clinical Oncology, 2016, 34, e23058-e23058.	1.6	0
58	A Versatile Approach Towards Nucleobaseâ€Modified Aptamers. Angewandte Chemie - International Edition, 2015, 54, 10971-10974.	13.8	129
59	(Dis)similar Analogues of Riboswitch Metabolites as Antibacterial Lead Compounds. Journal of Medicinal Chemistry, 2015, 58, 3275-3286.	6.4	29
60	Selective Aptamerâ€Based Control of Intraneuronal Signaling. Angewandte Chemie - International Edition, 2015, 54, 5369-5373.	13.8	9
61	Modular Assembly of Cell-targeting Devices Based on an Uncommon G-quadruplex Aptamer. Molecular Therapy - Nucleic Acids, 2015, 4, e251.	5.1	32
62	Aptasensor platform based on carbon nanofibers enriched screen printed electrodes for impedimetric detection of thrombin. Journal of Electroanalytical Chemistry, 2015, 758, 12-19.	3.8	21
63	Capture and Release (CaR): a simplified procedure for one-tube isolation and concentration of single-stranded DNA during SELEX. Chemical Communications, 2015, 51, 1135-1138.	4.1	8
64	An Aptamer to the MAP Kinase Insert Region. ACS Chemical Biology, 2015, 10, 320-327.	3 . 4	5
65	Novel TPP-riboswitch activators bypass metabolic enzyme dependency. Frontiers in Chemistry, 2014, 2, 53.	3.6	17
66	Cell-Specific Aptamers for Nano-medical Applications. Nucleic Acids and Molecular Biology, 2014, , 261-283.	0.2	0
67	The promise of riboswitches as potential antibacterial drug targets. International Journal of Medical Microbiology, 2014, 304, 79-92.	3.6	65
68	Multifunctional Nucleic Acids for Tumor Cell Treatment. Nucleic Acid Therapeutics, 2014, 24, 171-177.	3.6	23
69	Aptamers and SELEX in Chemistry & Eiology. Chemistry and Biology, 2014, 21, 1055-1058.	6.0	90
70	By-Product Formation in Repetitive PCR Amplification of DNA Libraries during SELEX. PLoS ONE, 2014, 9, e114693.	2.5	73
71	Cyplecksins Are Covalent Inhibitors of the Pleckstrin Homology Domain of Cytohesin. Angewandte Chemie - International Edition, 2013, 52, 9529-9533.	13.8	8
72	A Selective Inhibitor of Heme Biosynthesis in Endosymbiotic Bacteria Elicits Antifilarial Activity InÂVitro. Chemistry and Biology, 2013, 20, 177-187.	6.0	24

#	Article	IF	CITATIONS
73	Aptamerâ€Guided Caging for Selective Masking of Protein Domains. Angewandte Chemie - International Edition, 2013, 52, 11912-11915.	13.8	18
74	Dressed for success – applying chemistry to modulate aptamer functionality. Chemical Science, 2013, 4, 60-67.	7.4	62
75	d(GGGT) ₄ and r(GGGU) ₄ are both HIV-1 inhibitors and interleukin-6 receptor aptamers. RNA Biology, 2013, 10, 216-227.	3.1	39
76	Interleukin-6 receptor specific RNA aptamers for cargo delivery into target cells. RNA Biology, 2012, 9, 67-80.	3.1	58
77	Molecular Mechanism for Inhibition of G Protein-Coupled Receptor Kinase 2 by a Selective RNA Aptamer. Structure, 2012, 20, 1300-1309.	3.3	51
78	Caged glucosamine-6-phosphate for the light-control of riboswitch activity. Photochemical and Photobiological Sciences, 2012, 11, 489-492.	2.9	11
79	Thrombin inhibition profiles in healthy individuals and thrombophilic patients. Thrombosis and Haemostasis, 2012, 107, 848-853.	3.4	36
80	Functional Detection of Proteins by Caged Aptamers. ACS Chemical Biology, 2012, 7, 360-366.	3.4	22
81	Lightâ€Controlled Tools. Angewandte Chemie - International Edition, 2012, 51, 8446-8476.	13.8	799
82	Aptamerâ€Based Affinity Labeling of Proteins. Angewandte Chemie - International Edition, 2012, 51, 9176-9180.	13.8	70
83	Chemical Maturation of a Bivalent Aptamer by Single Domain Variation. ChemBioChem, 2012, 13, 631-634.	2.6	17
84	Label-free impedimetric aptasensor for lysozyme detection based on carbon nanotube-modified screen-printed electrodes. Analytical Biochemistry, 2012, 421, 454-459.	2.4	114
85	Carba-sugars Activate the glmS-Riboswitch of <i>Staphylococcus aureus</i> . ACS Chemical Biology, 2011, 6, 675-678.	3.4	66
86	Repression of the genome organizer SATB1 in regulatory T cells is required for suppressive function and inhibition of effector differentiation. Nature Immunology, 2011, 12, 898-907.	14.5	179
87	Aptamer-based modulation of blood coagulation. Hamostaseologie, 2011, 31, 258-263.	1.9	35
88	Aptamer Modules as Sensors and Detectors. Accounts of Chemical Research, 2011, 44, 1349-1358.	15.6	267
89	RNA diagnostics: realâ€time RTâ€PCR strategies and promising novel target RNAs. Wiley Interdisciplinary Reviews RNA, 2011, 2, 32-41.	6.4	26
90	Profiling of Active Thrombin in Human Blood by Supramolecular Complexes. Angewandte Chemie - International Edition, 2011, 50, 6075-6078.	13.8	73

#	Article	lF	CITATIONS
91	Plug and Play with RNA. Angewandte Chemie - International Edition, 2011, 50, 12400-12401.	13.8	1
92	ADLOC: An Aptamerâ€Displacement Assay Based on Luminescent Oxygen Channeling. Chemistry - A European Journal, 2010, 16, 11100-11107.	3.3	15
93	An Aptamer Targeting the Apicalâ€Loop Domain Modulates priâ€miRNA Processing. Angewandte Chemie - International Edition, 2010, 49, 4674-4677.	13.8	49
94	Evolution of specific RNA motifs derived from pan-protein interacting precursors. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 3793-3796.	2.2	4
95	Fluorescence-activated cell sorting for aptamer SELEX with cell mixtures. Nature Protocols, 2010, 5, 1993-2004.	12.0	192
96	Dependence of aptamer activity on opposed terminal extensions: improvement of light-regulation efficiency. Nucleic Acids Research, 2010, 38, 2111-2118.	14.5	72
97	Casein Kinase 2 Dependent Phosphorylation of Neprilysin Regulates Receptor Tyrosine Kinase Signaling to Akt. PLoS ONE, 2010, 5, e13134.	2.5	22
98	The nuclear receptor PPARγ selectively inhibits Th17 differentiation in a T cell–intrinsic fashion and suppresses CNS autoimmunity. Journal of Experimental Medicine, 2009, 206, 2079-2089.	8.5	287
99	Differential Regulation of Protein Subdomain Activity with Caged Bivalent Ligands. ChemBioChem, 2009, 10, 654-657.	2.6	40
100	A RNAâ€Based Approach towards Smallâ€Molecule Inhibitors. ChemBioChem, 2009, 10, 1993-1996.	2.6	13
101	Tiny Tags on RNA. ChemBioChem, 2009, 10, 2145-2146.	2.6	0
102	Electrochemical Sensing of Aptamerâ€Protein Interactions Using a Magnetic Particle Assay and Singleâ€Use Sensor Technology. Electroanalysis, 2009, 21, 1278-1284.	2.9	36
103	The Chemical Biology of Aptamers. Angewandte Chemie - International Edition, 2009, 48, 2672-2689.	13.8	512
104	An RNA Aptamer that Induces Transcription. Chemistry and Biology, 2009, 16, 173-180.	6.0	48
105	An Exosite-Specific ssDNA Aptamer Inhibits the Anticoagulant Functions of Activated Protein C and Enhances Inhibition by Protein C Inhibitor. Chemistry and Biology, 2009, 16, 442-451.	6.0	54
106	From selection to caged aptamers: Identification of light-dependent ssDNA aptamers targeting cytohesin. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 6561-6564.	2.2	18
107	Structure–activity relationships of a caged thrombin binding DNA aptamer: Insight gained from molecular dynamics simulation studies. Journal of Structural Biology, 2009, 166, 241-250.	2.8	31
108	In Vitro Selection of Conformational Probes for Riboswitches. Methods in Molecular Biology, 2009, 540, 291-300.	0.9	7

#	Article	IF	CITATIONS
109	In Vitro Selection of ssDNA Aptamers Using Biotinylated Target Proteins. Methods in Molecular Biology, 2009, 535, 19-32.	0.9	16
110	Monitoring the progression of the in vitro selection of nucleic acid aptamers by denaturing high-performance liquid chromatography. Analytical and Bioanalytical Chemistry, 2008, 390, 1033-1037.	3.7	30
111	Construction of DNA Architectures with RNA Hairpins. Angewandte Chemie - International Edition, 2008, 47, 971-973.	13.8	28
112	Enrichment of Cellâ€Targeting and Populationâ€Specific Aptamers by Fluorescenceâ€Activated Cell Sorting. Angewandte Chemie - International Edition, 2008, 47, 5190-5193.	13.8	160
113	Secondary structures and functional requirements for thiM riboswitches from Desulfovibrio vulgaris, Erwinia carotovora and Rhodobacter spheroides. Biological Chemistry, 2008, 389, 127-134.	2.5	15
114	An RNA molecule that specifically inhibits G-protein-coupled receptor kinase 2 in vitro. Rna, 2008, 14, 524-534.	3 . 5	49
115	Conformational changes in the expression domain of the Escherichia coli thiM riboswitch. Nucleic Acids Research, 2007, 35, 3713-3722.	14.5	67
116	A New Anticoagulantâ^'Antidote Pair:Â Control of Thrombin Activity by Aptamers and Porphyrins. Journal of the American Chemical Society, 2007, 129, 3036-3037.	13.7	47
117	Functional Aptamers and Aptazymes in Biotechnology, Diagnostics, and Therapy. Chemical Reviews, 2007, 107, 3715-3743.	47.7	820
118	Light-Stimulated Patterning of Cells. ChemBioChem, 2007, 8, 857-858.	2.6	0
119	Multidomain Targeting Generates a Highâ€Affinity Thrombinâ€Inhibiting Bivalent Aptamer. ChemBioChem, 2007, 8, 2223-2226.	2.6	123
120	RNA Ligands That Distinguish Metabolite-Induced Conformations in the TPP Riboswitch. Angewandte Chemie - International Edition, 2007, 46, 557-560.	13.8	54
121	Aptamer Displacement Identifies Alternative Small-Molecule Target Sites that Escape Viral Resistance. Chemistry and Biology, 2007, 14, 804-812.	6.0	49
122	Aptamers in nanoland. Nature, 2006, 439, 667-669.	27.8	50
123	High-Throughput-Compatible Assay for glmS Riboswitch Metabolite Dependence. ChemBioChem, 2006, 7, 602-604.	2.6	62
124	Biologically Active Molecules with a "Light Switch― Angewandte Chemie - International Edition, 2006, 45, 4900-4921.	13.8	1,028
124	Biologically Active Molecules with a "Light Switch― Angewandte Chemie - International Edition, 2006, 45, 4900-4921. An Anticoagulant with Light-Triggered Antidote Activity. Angewandte Chemie - International Edition, 2006, 45, 6748-6750.	13.8	1,028

#	Article	IF	CITATIONS
127	Light-Induced Formation of G-Quadruplex DNA Secondary Structures. ChemBioChem, 2005, 6, 1966-1970.	2.6	68
128	Light Regulation of Aptamer Activity:Â An Anti-Thrombin Aptamer with Caged Thymidine Nucleobases. Journal of the American Chemical Society, 2005, 127, 822-823.	13.7	167
129	Sensing complex regulatory networks by conformationally controlled hairpin ribozymes. Nucleic Acids Research, 2004, 32, 3212-3219.	14.5	27
130	Aptamers in Research and Drug Development. BioDrugs, 2004, 18, 351-359.	4.6	30
131	Aptamers that bind to the antibiotic moenomycin A. Bioorganic and Medicinal Chemistry, 2001, 9, 2557-2563.	3.0	54
132	Intramers as promising new tools in functional proteomics. Chemistry and Biology, 2001, 8, 931-939.	6.0	97
133	Nucleic Acid AptamersFrom Selection in Vitro to Applications in Vivo. Accounts of Chemical Research, 2000, 33, 591-599.	15.6	421