Florian Hollfelder

List of Publications by Year
in descending order

151 papers	9,503 citations	44444 50 h-index	49824 91 g-index
176 all docs	176 docs citations	176 times ranked	10011 citing authors

#	Article	IF	Citations
1	Adventures on the Routes of Protein Evolutionâ€"In Memoriam Dan Salah Tawfik (1955â€"2021). Journal of Molecular Biology, 2022, 434, 167462.	2.0	6
2	Droplet-based screening of phosphate transfer catalysis reveals how epistasis shapes MAP kinase interactions with substrates. Nature Communications, 2022, 13, 844.	5.8	10
3	Exploiting protease activation for therapy. Drug Discovery Today, 2022, 27, 1743-1754.	3.2	16
4	Enzymatic <i>N</i>-Allylation of Primary and Secondary Amines Using Renewable Cinnamic Acids Enabled by Bacterial Reductive Aminases. ACS Sustainable Chemistry and Engineering, 2022, 10, 6794-6806.	3.2	9
5	Spatial profiling of early primate gastrulation in utero. Nature, 2022, 609, 136-143.	13.7	56
6	High-throughput total RNA sequencing in single cells using VASA-seq. Nature Biotechnology, 2022, 40, 1780-1793.	9.4	70
7	Functional metagenomic screening identifies an unexpected Î²-glucuronidase. Nature Chemical Biology, 2022, 18, 1096-1103.	3.9	16
8	Growth amplification in ultrahigh-throughput microdroplet screening increases sensitivity of clonal enzyme assays and minimizes phenotypic variation. Lab on A Chip, 2021, 21, 163-173.	3.1	15
9	Multiplexed Affinity Characterization of Protein Binders Directly from a Crude Cell Lysate by Covalent Capture on Suspension Bead Arrays. Analytical Chemistry, 2021, 93, 2166-2173.	3.2	6
10	Cell-free Directed Evolution of a Protease in Microdroplets at Ultrahigh Throughput. ACS Synthetic Biology, 2021, 10, 252-257.	1.9	53
11	Inducible Stem-Cell-Derived Embryos Capture Mouse Morphogenetic Events InÂVitro. Developmental Cell, 2021, 56, 366-382.e9.	3.1	77
12	Controlled Ligand Exchange Between Ruthenium Organometallic Cofactor Precursors and a NaÃ¯ve Protein Scaffold Generates Artificial Metalloenzymes Catalysing Transfer Hydrogenation. Angewandte Chemie - International Edition, 2021, 60, 10919-10927.	7.2	3
13	â€œNADâ€displayâ€ Ultrahighâ€Throughput in Vitro Screening of NAD(H) Dehydrogenases Using Bead Display and Flow Cytometry. Angewandte Chemie - International Edition, 2021, 60, 9015-9021.	7.2	8
14	Controlled Ligand Exchange Between Ruthenium Organometallic Cofactor Precursors and a NaÃ¯ve Protein Scaffold Generates Artificial Metalloenzymes Catalysing Transfer Hydrogenation. Angewandte Chemie, 2021, 133, 11014-11022.	1.6	0
15	â€œNADâ€displayâ€ Ultrahighâ€Throughput in Vitro Screening of NAD(H) Dehydrogenases Using Bead Display and Flow Cytometry. Angewandte Chemie, 2021, 133, 9097-9103.	1.6	1
16	Agarose microgel culture delineates lumenogenesis in naive and primed human pluripotent stem cells. Stem Cell Reports, 2021, 16, 1347-1362.	2.3	16
17	Engineering theÂprotein dynamics of anÂancestral luciferase. Nature Communications, 2021, 12, 3616.	5.8	54
18	A Titratable Cell Lysis-on-Demand System for Droplet-Compartmentalized Ultrahigh-Throughput Screening in Functional Metagenomics and Directed Evolution. ACS Synthetic Biology, 2021, 10, 1882-1894.	1.9	4

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19	Dynamic cell contacts between periportal mesenchyme and ductal epithelium act as a rheostat for liver cell proliferation. Cell Stem Cell, 2021, 28, 1907-1921.e8.	5.2	30
20	Error-Free Synthetic DNA by Molecular Dictation. Trends in Biotechnology, 2021, 39, 861-865.	4.9	2
21	Ultrahighâ€Throughput Detection of Enzymatic Alcohol Dehydrogenase Activity in Microfluidic Droplets with a Direct Fluorogenic Assay. ChemBioChem, 2021, 22, 3292-3299.	1.3	9
22	Improved RAD51 binders through motif shuffling based on the modularity of BRC repeats. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	12
23	Ultrahigh-throughput screening in microfluidic droplets: a faster route to new enzymes. Trends in Biochemical Sciences, 2021, , .	3.7	6
24	Microfluidic Droplets and Their Applications: Diagnosis, Drug Screening and the Discovery of Therapeutic Enzymes. IFMBE Proceedings, 2020, , 361-368.	0.2	0
25	Ultrahigh throughput screening for enzyme function in droplets. Methods in Enzymology, 2020, 643, 317-343.	0.4	32
26	In vitro evolution of antibody affinity via insertional scanning mutagenesis of an entire antibody variable region. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27307-27318.	3.3	11
27	Accessing unexplored regions of sequence space in directed enzyme evolution via insertion/deletion mutagenesis. Nature Communications, 2020, 11, 3469.	5.8	42
28	UMI-linked consensus sequencing enables phylogenetic analysis of directed evolution. Nature Communications, 2020, 11, 6023.	5.8	25
29	Global fitness landscapes of the Shine-Dalgarno sequence. Genome Research, 2020, 30, 711-723.	2.4	19
30	Split & mix assembly of DNA libraries for ultrahigh throughput on-bead screening of functional proteins. Nucleic Acids Research, 2020, 48, e63-e63.	6.5	12
31	Microfluidic platform for 3D cell culture with live imaging and clone retrieval. Lab on A Chip, 2020, 20, 2580-2591.	3.1	17
32	Deep learning guided image-based droplet sorting for on-demand selection and analysis of single cells and 3D cell cultures. Lab on A Chip, 2020, 20, 889-900.	3.1	68
33	Investigating host-microbiome interactions by droplet based microfluidics. Microbiome, 2020, 8, 141.	4.9	33
34	Controlled Oil/Water Partitioning of Hydrophobic Substrates Extending the Bioanalytical Applications of Droplet-Based Microfluidics. Analytical Chemistry, 2019, 91, 10008-10015.	3.2	20
35	Single-cell activity screening in microfluidic droplets. Methods in Enzymology, 2019, 628, 95-112.	0.4	15
36	Transition-State Interactions in a Promiscuous Enzyme: Sulfate and Phosphate Monoester Hydrolysis by <i>Pseudomonas aeruginosa</i> Arylsulfatase. Biochemistry, 2019, 58, 1363-1378.	1.2	10

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37	High-Throughput, Lysis-Free Screening for Sulfatase Activity Using <i>Escherichia coli</i> Autodisplay in Microdroplets. ACS Synthetic Biology, 2019, 8, 2690-2700.	1.9	25
38	Self-Organization of Mouse Stem Cells into an Extended Potential Blastoid. Developmental Cell, 2019, 51, 698-712.e8.	3.1	157
39	Longâ€Term Perfusion Culture of Monoclonal Embryonic Stem Cells in 3D Hydrogel Beads for Continuous Optical Analysis of Differentiation. Small, 2019, 15, e1804576.	5.2	35
40	Balancing Specificity and Promiscuity in Enzyme Evolution: Multidimensional Activity Transitions in the Alkaline Phosphatase Superfamily. Journal of the American Chemical Society, 2019, 141, 370-387.	6.6	35
41	Structural and Mechanistic Analysis of the Choline Sulfatase from Sinorhizobium melliloti: A Class I Sulfatase Specific for an Alkyl Sulfate Ester. Journal of Molecular Biology, 2018, 430, 1004-1023.	2.0	18
42	Plasmodium dihydrofolate reductase is a second enzyme target for the antimalarial action of triclosan. Scientific Reports, 2018, 8, 1038.	1.6	31
43	Ultrahigh-Throughput Screening of Single-Cell Lysates for Directed Evolution and Functional Metagenomics. Methods in Molecular Biology, 2018, 1685, 297-309.	0.4	16
44	Novel peptide-dendrimer/lipid/oligonucleotide ternary complexes for efficient cellular uptake and improved splice-switching activity. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 132, 29-40.	2.0	17
45	Evolutionary repurposing of a sulfatase: A new Michaelis complex leads to efficient transition state charge offset. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7293-E7302.	3.3	34
46	Exploring sequence space in search of functional enzymes using microfluidic droplets. Current Opinion in Chemical Biology, 2017, 37, 137-144.	2.8	88
47	Divergent synthesis of biflavonoids yields novel inhibitors of the aggregation of amyloid Î² (1â€“42). Organic and Biomolecular Chemistry, 2017, 15, 4554-4570.	1.5	11
48	Specificity Effects of Amino Acid Substitutions in Promiscuous Hydrolases: Contextâ€Dependence of Catalytic Residue Contributions to Local Fitness Landscapes in Nearby Sequence Space. ChemBioChem, 2017, 18, 1001-1015.	1.3	17
49	Quantitative Affinity Determination by Fluorescence Anisotropy Measurements of Individual Nanoliter Droplets. Analytical Chemistry, 2017, 89, 1092-1101.	3.2	27
50	Combinatorial Synthesis of Structurally Diverse Triazole-Bridged Flavonoid Dimers and Trimers. Molecules, 2016, 21, 1230.	1.7	16
51	Functional Trade-Offs in Promiscuous Enzymes Cannot Be Explained by Intrinsic Mutational Robustness of the Native Activity. PLoS Genetics, 2016, 12, e1006305.	1.5	28
52	A Shorter Route to Antibody Binders via Quantitative in vitro Bead-Display Screening and Consensus Analysis. Scientific Reports, 2016, 6, 36391.	1.6	14
53	The role of protein dynamics in the evolution of new enzyme function. Nature Chemical Biology, 2016, 12, 944-950.	3.9	252
54	Efficient Transfection of siRNA by Peptide Dendrimerâ€“Lipid Conjugates. ChemBioChem, 2016, 17, 2223-2229.	1.3	22

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55	Ultrahigh-throughputâ€“directed enzyme evolution by absorbance-activated droplet sorting (AADS). Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7383-E7389.	3.3	210
56	A Short Practical Guide to the Quantitative Analysis of Engineered Enzymes. , 2016, , 3-20.		0
57	Handicapâ€Recover Evolution Leads to a Chemically Versatile, Nucleophileâ€Permissive Protease. ChemBioChem, 2015, 16, 1866-1869.	1.3	9
58	Bioinspired genotypeâ€“phenotype linkages: mimicking cellular compartmentalization for the engineering of functional proteins. Interface Focus, 2015, 5, 20150035.	1.5	12
59	Directed evolution of anti-HER2 DARPins by SNAP display reveals stability/function trade-offs in the selection process. Protein Engineering, Design and Selection, 2015, 28, 269-279.	1.0	26
60	Ultrahigh-throughput discovery of promiscuous enzymes by picodroplet functional metagenomics. Nature Communications, 2015, 6, 10008.	5.8	225
61	Combinatorial Screening Identifies Novel Promiscuous Matrix Metalloproteinase Activities that Lead to Inhibition of the Therapeutic Target IL-13. Chemistry and Biology, 2015, 22, 1442-1452.	6.2	10
62	A Method to Quantify FRET Stoichiometry with Phasor Plot Analysis and Acceptor Lifetime Ingrowth. Biophysical Journal, 2015, 108, 999-1002.	0.2	21
63	Enzyme engineering in biomimetic compartments. Current Opinion in Structural Biology, 2015, 33, 42-51.	2.6	56
64	Measuring Fast and Slow Enzyme Kinetics in Stationary Droplets. Analytical Chemistry, 2015, 87, 11915-11922.	3.2	11
65	Interfacing Microwells with Nanoliter Compartments: A Sampler Generating High-Resolution Concentration Gradients for Quantitative Biochemical Analyses in Droplets. Analytical Chemistry, 2015, 87, 624-632.	3.2	39
66	Reverse evolution leads to genotypic incompatibility despite functional and active site convergence. ELife, 2015, 4, .	2.8	65
67	Evolution of enzyme catalysts caged in biomimetic gel-shell beads. Nature Chemistry, 2014, 6, 791-796.	6.6	140
68	One in a Million: Flow Cytometric Sorting of Single Cell-Lysate Assays in Monodisperse Picolitre Double Emulsion Droplets for Directed Evolution. Analytical Chemistry, 2014, 86, 2526-2533.	3.2	170
69	An experimental framework for improved selection of binding proteins using SNAP display. Journal of Immunological Methods, 2014, 405, 47-56.	0.6	24
70	Enzyme Promiscuity and Evolution of New Protein Functions. , 2014, , 524-538.		0
71	USER Friendly DNA Recombination (USERec): Gene Library Construction Requiring Minimal Sequence Homology. Methods in Molecular Biology, 2014, 1179, 213-224.	0.4	2
72	A single mutation in the core domain of the lac repressor reduces leakiness. Microbial Cell Factories, 2013, 12, 67.	1.9	31

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73	Ultrarapid Generation of Femtoliter Microfluidic Droplets for Single-Molecule-Counting Immunoassays. ACS Nano, 2013, 7, 5955-5964.	7.3	188
74	Just (protein) engineering?. Current Opinion in Structural Biology, 2013, 23, 569-570.	2.6	2
75	Efficient, crosswise catalytic promiscuity among enzymes that catalyze phosphoryl transfer. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 417-424.	1.1	47
76	Oneâ€Pot Deracemization of <i>sec</i>â€Alcohols: Enantioconvergent Enzymatic Hydrolysis of Alkyl Sulfates Using Stereocomplementary Sulfatases. Angewandte Chemie, 2013, 125, 3359-3361.	1.6	6
77	Flexibility and Reactivity in Promiscuous Enzymes. ChemBioChem, 2013, 14, 285-292.	1.3	40
78	Peptide Dendrimer/Lipid Hybrid Systems Are Efficient DNA Transfection Reagents: Structureâ€"Activity Relationships Highlight the Role of Charge Distribution Across Dendrimer Generations. ACS Nano, 2013, 7, 4668-4682.	7.3	78
79	Droplets as Reaction Compartments for Protein Nanotechnology. Methods in Molecular Biology, 2013, 996, 269-286.	0.4	13
80	A Fully Unsupervised Compartment-on-Demand Platform for Precise Nanoliter Assays of Time-Dependent Steady-State Enzyme Kinetics and Inhibition. Analytical Chemistry, 2013, 85, 4761-4769.	3.2	85
81	In vitro affinity screening of protein and peptide binders by megavalent bead surface display. Protein Engineering, Design and Selection, 2013, 26, 713-724.	1.0	38
82	Oneâ€Pot Deracemization of <i>sec</i>â€Alcohols: Enantioconvergent Enzymatic Hydrolysis of Alkyl Sulfates Using Stereocomplementary Sulfatases. Angewandte Chemie - International Edition, 2013, 52, 3277-3279.	7.2	27
83	Monodisperse Water-in-Oil-in-Water (W/O/W) Double Emulsion Droplets as Uniform Compartments for High-Throughput Analysis via Flow Cytometry. Micromachines, 2013, 4, 402-413.	1.4	43
84	Mutations in Mll2, an H3K4 Methyltransferase, Result in Insulin Resistance and Impaired Glucose Tolerance in Mice. PLoS ONE, 2013, 8, e61870.	1.1	35
85	SNAP Display - an In Vitro Method for the Selection of Protein Binders. Current Pharmaceutical Design, 2013, 19, 5421-5428.	0.9	12
86	Picoliter Cell Lysate Assays in Microfluidic Droplet Compartments for Directed Enzyme Evolution. Chemistry and Biology, 2012, 19, 1001-1009.	6.2	195
87	peri-Dimethylamino substituent effects on proton transfer at carbon in Î±-naphthylacetateesters: a model for mandelate racemase. Organic and Biomolecular Chemistry, 2012, 10, 590-596.	1.5	2
88	Kinetic and computational evidence for an intermediate in the hydrolysis of sulfonate esters. Organic and Biomolecular Chemistry, 2012, 10, 8095.	1.5	18
89	Assembling Linear DNA Templates for In Vitro Transcription and Translation. Methods in Molecular Biology, 2012, 815, 67-78.	0.4	0
90	A simple method to evaluate the biochemical compatibility of oil/surfactant mixtures for experiments in microdroplets. Lab on A Chip, 2012, 12, 4185.	3.1	27

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91	SNAP Display: In Vitro Protein Evolution in Microdroplets. Methods in Molecular Biology, 2012, 805, 101-111.	0.4	15
92	Monitoring a Reaction at Submillisecond Resolution in Picoliter Volumes. Analytical Chemistry, 2011, 83, 1462-1468.	3.2	53
93	Controlling the contents of microdroplets by exploiting the permeability of PDMS. Lab on A Chip, 2011, 11, 1132.	3.1	35
94	Directed Evolution of a Gatekeeper Domain in Nonribosomal Peptide Synthesis. Chemistry and Biology, 2011, 18, 1290-1299.	6.2	74
95	From fascination to function. Current Opinion in Biotechnology, 2011, 22, 473-474.	3.3	0
96	SNAP Dendrimers: Multivalent Protein Display on Dendrimerâ€Like DNA for Directed Evolution. ChemBioChem, 2011, 12, 2208-2216.	1.3	24
97	Microdroplets in Microfluidics: An Evolving Platform for Discoveries in Chemistry and Biology. Angewandte Chemie - International Edition, 2010, 49, 5846-5868.	7.2	903
98	What makes an enzyme promiscuous?. Current Opinion in Chemical Biology, 2010, 14, 200-207.	2.8	176
99	Microfluidic droplets: new integrated workflows for biological experiments. Current Opinion in Chemical Biology, 2010, 14, 548-555.	2.8	155
100	Hitting a moving target?â€"Understanding how conformational diversity impacts enzymatic catalysis. Current Opinion in Chemical Biology, 2010, 14, 634-635.	2.8	2
101	Isothermal DNA amplification using the T4 replisome: circular nicking endonuclease-dependent amplification and primase-based whole-genome amplification. Nucleic Acids Research, 2010, 38, e201-e201.	6.5	26
102	An efficient, multiply promiscuous hydrolase in the alkaline phosphatase superfamily. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2740-2745.	3.3	87
103	A double droplet trap system for studying mass transport across a droplet-droplet interface. Lab on A Chip, 2010, 10, 1281.	3.1	138
104	An efficient method to assemble linear DNA templates for in vitro screening and selection systems. Nucleic Acids Research, 2009, 37, e122-e122.	6.5	22
105	Fluid Phase Endocytosis Contributes to Transfection of DNA by PEI-25. Molecular Therapy, 2009, 17, 1411-1417.	3.7	74
106	Mapping catalytic promiscuity in the alkaline phosphatase superfamily. Pure and Applied Chemistry, 2009, 81, 731-742.	0.9	57
107	Combining Medium Effects and Cofactor Catalysis: Metalâ€Coordinated Synzymes Accelerate Phosphate Transfer by 10⁸. Chemistry - A European Journal, 2009, 15, 12371-12380.	1.7	22
108	Mapping the Limits of Substrate Specificity of the Adenylation Domain of TycA. ChemBioChem, 2009, 10, 671-682.	1.3	51

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109	Efficient Catalytic Promiscuity for Chemically Distinct Reactions. Angewandte Chemie - International Edition, 2009, 48, 3692-3694.	7.2	56
110	The potential of microfluidic water-in-oil droplets in experimental biology. Molecular BioSystems, 2009, 5, 1392.	2.9	131
111	Kinetic Analysis of Î²-Phosphoglucomutase and Its Inhibition by Magnesium Fluoride. Journal of the American Chemical Society, 2009, 131, 1575-1588.	6.6	33
112	Removal of background signals from fluorescence thermometry measurements in PDMS microchannels using fluorescence lifetime imaging. Lab on A Chip, 2009, 9, 3437.	3.1	28
113	Simultaneous Determination of Gene Expression and Enzymatic Activity in Individual Bacterial Cells in Microdroplet Compartments. Journal of the American Chemical Society, 2009, 131, 15251-15256.	6.6	151
114	An integrated cell culture lab on a chip: modular microdevices for cultivation of mammalian cells and delivery into microfluidic microdroplets. Lab on A Chip, 2009, 9, 1576.	3.1	76
115	Static microdroplet arrays: a microfluidic device for droplet trapping, incubation and release for enzymatic and cell-based assays. Lab on A Chip, 2009, 9, 692-698.	3.1	303
116	Simultaneous measurement of reactions in microdroplets filled by concentration gradients. Lab on A Chip, 2009, 9, 1707.	3.1	65
117	Continuous-Flow Polymerase Chain Reaction of Single-Copy DNA in Microfluidic Microdroplets. Analytical Chemistry, 2009, 81, 302-306.	3.2	240
118	Controlling the Retention of Small Molecules in Emulsion Microdroplets for Use in Cell-Based Assays. Analytical Chemistry, 2009, 81, 3008-3016.	3.2	182
119	Towards biological experimentation in microfludic microdroplets. Houille Blanche, 2009, 95, 127-133.	0.3	0
120	An Integrated Device for Monitoring Timeâ€Dependent in vitro Expression From Single Genes in Picolitre Droplets. ChemBioChem, 2008, 9, 439-446.	1.3	172
121	The Human Histone Acetyltransferase P/CAF is a Promiscuous Histone Propionyltransferase. ChemBioChem, 2008, 9, 499-503.	1.3	60
122	Relating Chemical and Biological Diversity Space: A Tunable System for Efficient Gene Transfection. ChemBioChem, 2008, 9, 1960-1967.	1.3	11
123	Directed evolution of a histone acetyltransferase â€“ enhancing thermostability, whilst maintaining catalytic activity and substrate specificity. FEBS Journal, 2008, 275, 5635-5647.	2.2	11
124	Enzymes under the nanoscope. Nature, 2008, 456, 45-47.	13.7	25
125	Microdroplets: A sea of applications?. Lab on A Chip, 2008, 8, 1244.	3.1	579
126	A New Member of the Alkaline Phosphatase Superfamily with a Formylglycine Nucleophile: Structural and Kinetic Characterisation of a Phosphonate Monoester Hydrolase/Phosphodiesterase from Rhizobium leguminosarum. Journal of Molecular Biology, 2008, 384, 120-136.	2.0	65

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127	Anionic Charge Is Prioritized over Geometry in Aluminum and Magnesium Fluoride Transition State Analogs of Phosphoryl Transfer Enzymes. Journal of the American Chemical Society, 2008, 130, 3952-3958.	6.6	77
128	Efficient Catalytic Promiscuity in an Enzyme Superfamily: An Arylsulfatase Shows a Rate Acceleration of 1013 for Phosphate Monoester Hydrolysis. Journal of the American Chemical Society, 2008, 130, 16547-16555.	6.6	84
129	Development of Quantitative Cell-Based Enzyme Assays in Microdroplets. Analytical Chemistry, 2008, 80, 3890-3896.	3.2	191
130	Cross-talk between Histone Modifications in Response to Histone Deacetylase Inhibitors. Journal of Biological Chemistry, 2007, 282, 4408-4416.	1.6	177
131	Polyethylene Imine Derivatives (â€˜Synzymes') Accelerate Phosphate Transfer in the Absence of Metal. Journal of the American Chemical Society, 2007, 129, 7611-7619.	6.6	43
132	Molecular Recognition of DNA by Rigid [n]-Polynorbornane-Derived Bifunctional Intercalators:Â Synthesis and Evaluation of Their Binding Properties. Journal of Medicinal Chemistry, 2007, 50, 2326-2340.	2.9	45
133	A Covalent Chemical Genotypeâ€"Phenotype Linkage for in vitro Protein Evolution. ChemBioChem, 2007, 8, 2191-2194.	1.3	33
134	An optimized ATP/PPi-exchange assay in 96-well format for screening of adenylation domains for applications in combinatorial biosynthesis. Biotechnology Journal, 2007, 2, 232-240.	1.8	37
135	A Trojan horse transition state analogue generated by MgF3- formation in an enzyme active site. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14732-14737.	3.3	69
136	New genotypeâ€"phenotype linkages for directed evolution of functional proteins. Current Opinion in Structural Biology, 2005, 15, 472-478.	2.6	125
137	Intramolecular general acid catalysis of sulfate transfer Â— Nucleophilic attack by oxyanions on the SO3Â– group. Canadian Journal of Chemistry, 2005, 83, 1629-1636.	0.6	4
138	Conference: Highlights from the 37th ESF/EUCHEM Conference on Stereochemistry, BÃ¼rgenstock, Switzerland, April 2002. Chemical Communications, 2002, , xviii-xix.	2.2	0
139	The antibiotic microcin B17 is a DNA gyrase poison: characterisation of the mode of inhibition11Edited by J. Karn. Journal of Molecular Biology, 2001, 307, 1223-1234.	2.0	135
140	On the Magnitude and Specificity of Medium Effects in Enzyme-like Catalysts for Proton Transfer. Journal of Organic Chemistry, 2001, 66, 5866-5874.	1.7	72
141	In vitro characterization of DNA gyrase inhibition by microcin B17 analogs with altered bisheterocyclic sites. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 7712-7717.	3.3	43
142	Nonspecific Catalysis By Protein Surfaces. Applied Biochemistry and Biotechnology, 2000, 83, 173-182.	1.4	15
143	Characterization of Proton-Transfer Catalysis by Serum Albumins. Journal of the American Chemical Society, 2000, 122, 1022-1029.	6.6	79
144	Vesicles Accelerate Proton Transfer from Carbon up to 850-fold. Organic Letters, 2000, 2, 127-130.	2.4	48

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145	Impaired Transition State Complementarity in the Hydrolysis ofO-Arylphosphorothioates by Protein-Tyrosine Phosphatasesâ€. Biochemistry, 1999, 38, 12111-12123.	1.2	63
146	Efficient Catalysis of Proton Transfer by Synzymes. Journal of the American Chemical Society, 1997, 119, 9578-9579.	6.6	75
147	Catalysis of the Kemp elimination by antibodies elicited against a cationic hapten. Bioorganic and Medicinal Chemistry Letters, 1997, 7, 2497-2502.	1.0	37
148	Off-the-shelf proteins that rival tailor-made antibodies as catalysts. Nature, 1996, 383, 60-63.	13.7	177
149	The nature of the transition state for enzyme-catalyzed phosphoryl transfer. Hydrolysis of O-aryl phosphorothioates by alkaline phosphatase. Biochemistry, 1995, 34, 12255-12264.	1.2	151
150	Simple but efficient models for nuclease catalysis. Pure and Applied Chemistry, 1994, 66, 687-694.	0.9	11
151	Electrostatic catalysis of the hydrolysis of a phosphate diester in water. Journal of the Chemical Society Chemical Communications, 1992, , 1770.	2.0	5