Benjamin G Davis

List of Publications by Citations

274 papers	17,376 citations	73 h-index	121 g-index
329 ext. papers	19,139 ext. citations	11.6 avg, IF	6.97 L-index

#	Paper	IF	Citations
274	Selective chemical protein modification. *Nature Communications*, **2014**, 5, 4740	17.4	632
273	Glycoprotein synthesis: an update. *Chemical Reviews*, **2009**, 109, 131-63	68.1	505
272	Synthesis of glycoproteins. *Chemical Reviews*, **2002**, 102, 579-602	68.1	457
271	Chemical modification of proteins at cysteine: opportunities in chemistry and biology. *Chemistry - an Asian Journal*, **2009**, 4, 630-40	4.5	438
270	Glyconanoparticles allow pre-symptomatic in vivo imaging of brain disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 18-23	11.5	435
269	Lectins: tools for the molecular understanding of the glycocode. *Organic and Biomolecular Chemistry*, **2005**, 3, 1593-608	3.9	399
268	Structure of a flavonoid glucosyltransferase reveals the basis for plant natural product modification. *EMBO Journal*, **2006**, 25, 1396-405	13	325
267	Functional divergence in the glutathione transferase superfamily in plants. Identification of two classes with putative functions in redox homeostasis in Arabidopsis thaliana. *Journal of Biological Chemistry*, **2002**, 277, 30859-69	5.4	318
266	Designing logical codon reassignment - Expanding the chemistry in biology. *Chemical Science*, **2015**, 6, 50-69	9.4	300
265	A "tag-and-modify" approach to site-selective protein modification. *Accounts of Chemical Research*, **2011**, 44, 730-41	24.3	287
264	Facile conversion of cysteine and alkyl cysteines to dehydroalanine on protein surfaces: versatile and switchable access to functionalized proteins. *Journal of the American Chemical Society*, **2008**, 130, 5052-3	16.4	280
263	Expanding the diversity of chemical protein modification allows post-translational mimicry. *Nature*, **2007**, 446, 1105-9	50.4	274
262	Allyl sulfides are privileged substrates in aqueous cross-metathesis: application to site-selective protein modification. *Journal of the American Chemical Society*, **2008**, 130, 9642-3	16.4	270
261	A convenient catalyst for aqueous and protein Suzuki-Miyaura cross-coupling. *Journal of the American Chemical Society*, **2009**, 131, 16346-7	16.4	266
260	Methods for converting cysteine to dehydroalanine on peptides and proteins. *Chemical Science*, **2011**, 2, 1666	9.4	241
259	Filled and glycosylated carbon nanotubes for in vivo radioemitter localization and imaging. *Nature Materials*, **2010**, 9, 485-90	27	238
258	Recent developments in oligosaccharide synthesis. *Journal of the Chemical Society, Perkin Transactions 1*, **2000**, 2137-2160		222

257	Palladium-mediated cell-surface labeling. *Journal of the American Chemical Society*, **2012**, 134, 800-3	16.4	195
256	Posttranslational mutagenesis: A chemical strategy for exploring protein side-chain diversity. *Science*, **2016**, 354,	33.3	182
255	'Multicopy multivalent' glycopolymer-stabilized gold nanoparticles as potential synthetic cancer vaccines. *Journal of the American Chemical Society*, **2013**, 135, 9362-5	16.4	174
254	Thiyl glycosylation of olefinic proteins: S-linked glycoconjugate synthesis. *Angewandte Chemie - International Edition*, **2009**, 48, 7798-802	16.4	174
253	Biocatalysis and enzymes in organic synthesis. *Natural Product Reports*, **2001**, 18, 618-40	15.1	169
252	Uptake of unnatural trehalose analogs as a reporter for Mycobacterium tuberculosis. *Nature Chemical Biology*, **2011**, 7, 228-35	11.7	155
251	Hydrogen bonding and cooperativity in isolated and hydrated sugars: mannose, galactose, glucose, and lactose. *Journal of the American Chemical Society*, **2005**, 127, 11414-25	16.4	155
250	Sugar synthesis in a protocellular model leads to a cell signalling response in bacteria. *Nature Chemistry*, **2009**, 1, 377-83	17.6	148
249	Conversion of cysteine into dehydroalanine enables access to synthetic histones bearing diverse post-translational modifications. *Angewandte Chemie - International Edition*, **2012**, 51, 1835-9	16.4	146
248	Olefin cross-metathesis on proteins: investigation of allylic chalcogen effects and guiding principles in metathesis partner selection. *Journal of the American Chemical Society*, **2010**, 132, 16805-11	16.4	146
247	Chemical modification of biocatalysts. *Current Opinion in Biotechnology*, **2003**, 14, 379-86	11.4	146
246	Glyco-SeS: selenenylsulfide-mediated protein glycoconjugation--a new strategy in post-translational modification. *Angewandte Chemie - International Edition*, **2004**, 43, 828-33	16.4	144
245	Exploring and exploiting the therapeutic potential of glycoconjugates. *Chemistry - A European Journal*, **2006**, 12, 656-65	4.8	141
244	Olefin metathesis for site-selective protein modification. *ChemBioChem*, **2009**, 10, 959-69	3.8	135
243	Sensing the anomeric effect in a solvent-free environment. *Nature*, **2011**, 469, 76-9	50.4	130
242	Recent developments in glycoconjugates. *Journal of the Chemical Society Perkin Transactions 1*, **1999**, 3215		123
241	QuaNCAT: quantitating proteome dynamics in primary cells. *Nature Methods*, **2013**, 10, 343-6	21.6	117
240	Mechanistic evidence for a front-side, SNi-type reaction in a retaining glycosyltransferase. *Nature Chemical Biology*, **2011**, 7, 631-8	11.7	117

239	The crystal structure of two macrolide glycosyltransferases provides a blueprint for host cell antibiotic immunity. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 5336-41	11.5	114
238	High-purity discrete PEG-oligomer crystals allow structural insight. *Angewandte Chemie - International Edition*, **2009**, 48, 1248-52	16.4	112
237	From disulfide- to thioether-linked glycoproteins. *Angewandte Chemie - International Edition*, **2008**, 47, 2244-7	16.4	111
236	The direct formation of glycosyl thiols from reducing sugars allows one-pot protein glycoconjugation. *Angewandte Chemie - International Edition*, **2006**, 45, 4007-11	16.4	108
235	Virus-like glycodendrinanoparticles displaying quasi-equivalent nested polyvalency upon glycoprotein platforms potently block viral infection. *Nature Communications*, **2012**, 3, 1303	17.4	105
234	An endoglycosidase with alternative glycan specificity allows broadened glycoprotein remodelling. *Journal of the American Chemical Society*, **2012**, 134, 8030-3	16.4	105
233	Chemical intervention in plant sugar signalling increases yield and resilience. *Nature*, **2016**, 540, 574-578	50.4	105
232	Palladium-mediated site-selective Suzuki-Miyaura protein modification at genetically encoded aryl halides. *Chemical Communications*, **2011**, 47, 1698-700	5.8	104
231	Removal of amorphous carbon for the efficient sidewall functionalisation of single-walled carbon nanotubes. *Chemical Communications*, **2007**, 5090-2	5.8	104
230	The building blocks of cellulose: the intrinsic conformational structures of cellobiose, its epimer, lactose, and their singly hydrated complexes. *Journal of the American Chemical Society*, **2009**, 131, 11117-23	16.4	103
229	Systemic inflammatory response reactivates immune-mediated lesions in rat brain. *Journal of Neuroscience*, **2009**, 29, 4820-8	6.6	103
228	An autonomous molecular assembler for programmable chemical synthesis. *Nature Chemistry*, **2016**, 8, 542-8	17.6	103
227	Biochemistry. Mimicking posttranslational modifications of proteins. *Science*, **2004**, 303, 480-2	33.3	102
226	Inhibition of SnRK1 by metabolites: tissue-dependent effects and cooperative inhibition by glucose 1-phosphate in combination with trehalose 6-phosphate. *Plant Physiology and Biochemistry*, **2013**, 63, 89-98	5.4	101
225	DNA modification under mild conditions by Suzuki-Miyaura cross-coupling for the generation of functional probes. *Angewandte Chemie - International Edition*, **2013**, 52, 10553-8	16.4	98
224	Multi-molecule reaction of serum albumin can occur through thiol-yne coupling. *Chemical Communications*, **2011**, 47, 11086-8	5.8	92
223	Optimal Synthetic Glycosylation of a Therapeutic Antibody. *Angewandte Chemie - International Edition*, **2016**, 55, 2361-7	16.4	92
222	Rapid cross-metathesis for reversible protein modifications via chemical access to Se-allyl-selenocysteine in proteins. *Journal of the American Chemical Society*, **2013**, 135, 12156-9	16.4	90

221	Self-liganded Suzuki-Miyaura coupling for site-selective protein PEGylation. *Angewandte Chemie - International Edition*, **2013**, 52, 3916-21	16.4	90
220	Chemical modification in the creation of novel biocatalysts. *Current Opinion in Chemical Biology*, **2011**, 15, 211-9	9.7	88
219	Glycodendriproteins: a synthetic glycoprotein mimic enzyme with branched sugar-display potently inhibits bacterial aggregation. *Journal of the American Chemical Society*, **2004**, 126, 4750-1	16.4	87
218	IR-spectral signatures of aromatic-sugar complexes: probing carbohydrate-protein interactions. *Angewandte Chemie - International Edition*, **2007**, 46, 3644-8	16.4	86
217	Enhanced aqueous Suzuki-Miyaura coupling allows site-specific polypeptide 18F-labeling. *Journal of the American Chemical Society*, **2013**, 135, 13612-5	16.4	85
216	A nonself sugar mimic of the HIV glycan shield shows enhanced antigenicity. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 17107-12	11.5	85
215	Glyco- and peptidomimetics from three-component Joullié–Ugi coupling show selective antiviral activity. *Journal of the American Chemical Society*, **2005**, 127, 506-7	16.4	84
214	Glycomethanethiosulfonates: powerful reagents for protein glycosylation. *Tetrahedron: Asymmetry*, **2000**, 11, 245-262		84
213	Probing the breadth of macrolide glycosyltransferases: in vitro remodeling of a polyketide antibiotic creates active bacterial uptake and enhances potency. *Journal of the American Chemical Society*, **2005**, 127, 9336-7	16.4	82
212	LEAPT: lectin-directed enzyme-activated prodrug therapy. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 14527-32	11.5	82
211	The imitation game--a computational chemical approach to recognizing life. *Nature Biotechnology*, **2006**, 24, 1203-6	44.5	79
210	Investigation of the interaction between peanut agglutinin and synthetic glycopolymeric multivalent ligands. *Organic and Biomolecular Chemistry*, **2005**, 3, 1476-80	3.9	78
209	Glycosyl disulfides: novel glycosylating reagents with flexible aglycon alteration. *Journal of Organic Chemistry*, **2005**, 70, 9740-54	4.2	78
208	Highly diastereoselective additions to polyhydroxylated pyrrolidine cyclic imines: ready elaboration of aza-sugar scaffolds to create diverse carbohydrate-processing enzyme probes. *Chemistry - A European Journal*, **2003**, 9, 3397-414	4.8	78
207	Realizing the Promise of Chemical Glycobiology. *Chemical Science*, **2013**, 4, 3381-3394	9.4	77
206	Carbohydrate-derived amino-alcohol ligands for asymmetric alkynylation of aldehydes. *Organic Letters*, **2006**, 8, 207-10	6.2	76
205	Site-selective glycosylation of proteins: creating synthetic glycoproteins. *Nature Protocols*, **2007**, 2, 3185-94	18.2	75
204	A silver-lined anniversary of Fleet iminosugars: 1984–2009, from DIM to DRAM to LABNAc. *Tetrahedron: Asymmetry*, **2009**, 20, 652-671		74

203	The allylic chalcogen effect in olefin metathesis. *Beilstein Journal of Organic Chemistry*, **2010**, 6, 1219-28	2.5	73
202	Controlled Site-Selective Glycosylation of Proteins by a Combined Site-Directed Mutagenesis and Chemical Modification Approach. *Journal of Organic Chemistry*, **1998**, 63, 9614-9615	4.2	73
201	Glycosyl phenylthiosulfonates (glyco-PTS): novel reagents for glycoprotein synthesis. *Organic and Biomolecular Chemistry*, **2003**, 1, 3642-4	3.9	72
200	Enabling olefin metathesis on proteins: chemical methods for installation of S-allyl cysteine. *Chemical Communications*, **2009**, 3714-6	5.8	71
199	Structural dissection and high-throughput screening of mannosylglycerate synthase. *Nature Structural and Molecular Biology*, **2005**, 12, 608-14	17.6	71
198	Can Carbon Nanotubes Deliver on Their Promise in Biology? Harnessing Unique Properties for Unparalleled Applications. *ACS Central Science*, **2016**, 2, 190-200	16.8	71
197	Mechanistic insight into enzymatic glycosyl transfer with retention of configuration through analysis of glycomimetic inhibitors. *Angewandte Chemie - International Edition*, **2010**, 49, 1234-7	16.4	69
196	Selective Radical Trifluoromethylation of Native Residues in Proteins. *Journal of the American Chemical Society*, **2018**, 140, 1568-1571	16.4	68
195	Selective Metal-Site-Guided Arylation of Proteins. *Journal of the American Chemical Society*, **2016**, 138, 8678-81	16.4	68
194	Free fructose is conformationally locked. *Journal of the American Chemical Society*, **2013**, 135, 2845-52	16.4	66
193	Carbohydrate molecular recognition: a spectroscopic investigation of carbohydrate-aromatic interactions. *Physical Chemistry Chemical Physics*, **2007**, 9, 4444-51	3.6	65
192	A glycosynthase catalyst for the synthesis of flavonoid glycosides. *Angewandte Chemie - International Edition*, **2007**, 46, 3885-8	16.4	65
191	Selective electrochemical glycosylation by reactivity tuning. *Organic and Biomolecular Chemistry*, **2004**, 2, 2195-202	3.9	65
190	Biosynthesis of the tunicamycin antibiotics proceeds via unique exo-glycal intermediates. *Nature Chemistry*, **2012**, 4, 539-46	17.6	64
189	A coordinated synthesis and conjugation strategy for the preparation of homogeneous glycoconjugate vaccine candidates. *Angewandte Chemie - International Edition*, **2011**, 50, 4127-32	16.4	64
188	Novel cyclic sugar imines: carbohydrate mimics and easily elaborated scaffolds for aza-sugars. *Organic Letters*, **2002**, 4, 103-6	6.2	64
187	Controlled polymer synthesis--from biomimicry towards synthetic biology. *Chemical Society Reviews* , **2010**, 39, 286-300	58.5	62
186	F-Trifluoromethylation of Unmodified Peptides with 5-F-(Trifluoromethyl)dibenzothiophenium Trifluoromethanesulfonate. *Journal of the American Chemical Society*, **2018**, 140, 1572-1575	16.4	61

185	A carbohydrate-antioxidant hybrid polymer reduces oxidative damage in spermatozoa and enhances fertility. *Nature Chemical Biology*, **2005**, 1, 270-4	11.7	61
184	Synthesis of modified proteins via functionalization of dehydroalanine. *Current Opinion in Chemical Biology*, **2018**, 46, 71-81	9.7	60
183	A type 2 biomarker separates relapsing-remitting from secondary progressive multiple sclerosis. *Neurology*, **2014**, 83, 1492-9	6.5	60
182	Site-selective chemoenzymatic construction of synthetic glycoproteins using endoglycosidases. *Chemical Science*, **2010**, 1, 709	9.4	59
181	Potent fluoro-oligosaccharide probes of adhesion in Toxoplasmosis. *ChemBioChem*, **2009**, 10, 2522-9	3.8	59
180	Rewriting the bacterial glycocalyx via Suzuki-Miyaura cross-coupling. *Chemical Communications*, **2013**, 49, 2747-9	5.8	57
179	Atomic-scale detection of organic molecules coupled to single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2007**, 129, 10966-7	16.4	55
178	Phosphine-free Suzuki-Miyaura cross-coupling in aqueous media enables access to 2-C-aryl-glycosides. *Organic Letters*, **2012**, 14, 1728-31	6.2	51
177	Nitrogen inversion as a diastereomeric relay in azasugar synthesis: the first synthesis of adenophorine. *Angewandte Chemie - International Edition*, **2003**, 42, 3788-92	16.4	51
176	High-throughput mass-spectrometry monitoring for multisubstrate enzymes: determining the kinetic parameters and catalytic activities of glycosyltransferases. *ChemBioChem*, **2005**, 6, 346-57	3.8	51
175	Selenenylsulfide-linked homogeneous glycopeptides and glycoproteins: synthesis of human "hepatic Se metabolite A". *Angewandte Chemie - International Edition*, **2012**, 51, 1432-6	16.4	49
174	A simple method for the quantitative analysis of resin bound thiol groups. *Tetrahedron Letters*, **2001**, 42, 8531-8533	2	49
173	Concepts of Catalysis in Site-Selective Protein Modifications. *Journal of the American Chemical Society*, **2019**, 141, 8005-8013	16.4	48
172	Core-shell PbI2@WS2 inorganic nanotubes from capillary wetting. *Angewandte Chemie - International Edition*, **2009**, 48, 1230-3	16.4	48
171	Carbohydrate□romatic interactions: A computational and IR spectroscopic investigation of the complex, methyl □-fucopyranoside□toluene, isolated in the gas phase. *Chemical Physics Letters*, **2009**, 471, 17-21	2.5	48
170	Fluoroglycoproteins: ready chemical site-selective incorporation of fluorosugars into proteins. *Chemical Communications*, **2010**, 46, 8142-4	5.8	47
169	Direct deprotected glycosyl-asparagine ligation. *Chemical Communications*, **2006**, 1401-3	5.8	46
168	Dissecting tunicamycin biosynthesis by genome mining: cloning and heterologous expression of a minimal gene cluster. *Chemical Science*, **2010**, 1, 581	9.4	45

167	Conformational choice and selectivity in singly and multiply hydrated monosaccharides in the gas phase. *Chemistry - A European Journal*, **2008**, 14, 8947-55	4.8	45
166	The three Mycobacterium tuberculosis antigen 85 isoforms have unique substrates and activities determined by non-active site regions. *Journal of Biological Chemistry*, **2014**, 289, 25041-53	5.4	44
165	Group epitope mapping considering relaxation of the ligand (GEM-CRL): including longitudinal relaxation rates in the analysis of saturation transfer difference (STD) experiments. *Journal of Magnetic Resonance*, **2010**, 203, 1-10	3	44
164	Peptide templated glycosylation reactions. *Tetrahedron: Asymmetry*, **2000**, 11, 231-243		44
163	Glyco-SeS: Selenenylsulfide-Mediated Protein GlycoconjugationÂ New Strategy in Post-Translational Modification. *Angewandte Chemie*, **2004**, 116, 846-851	3.6	42
162	Tetrazoles of manno- and rhamno-pyranoses: Contrasting inhibition of mannosidases by [4.3.0] but of rhamnosidase by [3.3.0] bicyclic tetrazoles. *Tetrahedron*, **1999**, 55, 4489-4500	2.4	42
161	An antibacterial vaccination strategy based on a glycoconjugate containing the core lipopolysaccharide tetrasaccharide Hep2Kdo2. *Nature Chemistry*, **2016**, 8, 242-9	17.6	41
160	Conversion of Cysteine into Dehydroalanine Enables Access to Synthetic Histones Bearing Diverse Post-Translational Modifications. *Angewandte Chemie*, **2012**, 124, 1871-1875	3.6	41
159	Chemical mutagenesis: selective post-expression interconversion of protein amino acid residues. *Current Opinion in Chemical Biology*, **2010**, 14, 781-9	9.7	41
158	Glycosyldisulfides: a new class of solution and solid phase glycosyl donors. *Chemical Communications*, **2001**, 189-190	5.8	41
157	Functional and informatics analysis enables glycosyltransferase activity prediction. *Nature Chemical Biology*, **2018**, 14, 1109-1117	11.7	41
156	Generation of a synthetic GlcNAcylated nucleosome reveals regulation of stability by H2A-Thr101 GlcNAcylation. *Nature Communications*, **2015**, 6, 7978	17.4	40
155	Synthetic phosphorylation of p38□recapitulates protein kinase activity. *Journal of the American Chemical Society*, **2014**, 136, 1698-701	16.4	40
154	Site-selective chemical protein glycosylation protects from autolysis and proteolytic degradation. *Carbohydrate Research*, **2009**, 344, 1508-14	2.9	40
153	Carbohydrate-derived aminoalcohol ligands for asymmetric Reformatsky reactions. *Tetrahedron: Asymmetry*, **2005**, 16, 213-221		40
152	Light-driven post-translational installation of reactive protein side chains. *Nature*, **2020**, 585, 530-537	50.4	40
151	Chemical approaches to mapping the function of post-translational modifications. *FEBS Journal*, **2008**, 275, 1949-59	5.7	39
150	Glycoviruses: chemical glycosylation retargets adenoviral gene transfer. *Angewandte Chemie - International Edition*, **2005**, 44, 1057-1061	16.4	39

149	Chemical and chemoenzymatic synthesis of glycosyl-amino acids and glycopeptides related to Trypanosoma cruzi mucins. *Organic and Biomolecular Chemistry*, **2007**, 5, 2645-57	3.9	38
148	Spectral signatures and structural motifs in isolated and hydrated monosaccharides: phenyl alpha- and beta-l-fucopyranoside. *Physical Chemistry Chemical Physics*, **2006**, 8, 129-36	3.6	38
147	Synthetic post-translational modification of histones. *Current Opinion in Chemical Biology*, **2018**, 45, 35-47	7.7	37
146	Tuning the cavity of cyclodextrins: altered sugar adaptors in protein pores. *Journal of the American Chemical Society*, **2011**, 133, 1987-2001	16.4	37
145	Surface plasmon resonance imaging of glycoarrays identifies novel and unnatural carbohydrate-based ligands for potential ricin sensor development. *Chemical Science*, **2011**, 2, 1952	9.4	37
144	Hydration of sugars in the gas phase: regioselectivity and conformational choice in N-acetyl glucosamine and glucose. *Chemistry - A European Journal*, **2009**, 15, 13427-34	4.8	37
143	5-epi-Deoxyrhamnojirimycin is a potent inhibitor of an □-rhamnosidase: 5-epi-deoxymannojirimycin is not a potent inhibitor of an □-mannosidase. *Tetrahedron: Asymmetry*, **1998**, 9, 2947-2960		37
142	Solvent interactions and conformational choice in a core N-glycan segment: gas phase conformation of the central, branching trimannose unit and its singly hydrated complex. *Journal of the American Chemical Society*, **2008**, 130, 10691-6	16.4	37
141	Ligand amplification in a dynamic combinatorial glycopeptide library. *Chemical Communications*, **2005**, 4264-6	5.8	37
140	Covalent assembly of nanoparticles as a peptidase-degradable platform for molecular MRI. *Nature Communications*, **2017**, 8, 14254	17.4	36
139	Sugars and proteins: New strategies in synthetic biology. *Pure and Applied Chemistry*, **2009**, 81, 285-298	2.1	36
138	Detailed insights from microarray and crystallographic studies into carbohydrate recognition by microneme protein 1 (MIC1) of Toxoplasma gondii. *Protein Science*, **2009**, 18, 1935-47	6.3	34
137	Adding water to sugar: a spectroscopic and computational study of alpha- and beta-phenylxyloside in the gas phase. *Physical Chemistry Chemical Physics*, **2005**, 7, 2474-80	3.6	34
136	Single-molecule interrogation of a bacterial sugar transporter allows the discovery of an extracellular inhibitor. *Nature Chemistry*, **2013**, 5, 651-9	17.6	33
135	Direct radiolabelling of proteins at cysteine using [18F]-fluorosugars. *Chemical Communications*, **2011**, 47, 10010-2	5.8	33
134	Building up key segments of N-glycans in the gas phase: intrinsic structural preferences of the alpha(1,3) and alpha(1,6) dimannosides. *Journal of the American Chemical Society*, **2006**, 128, 1976-81	16.4	33
133	Unique regulation of the active site of the serine esterase S-formylglutathione hydrolase. *Journal of Molecular Biology*, **2006**, 359, 422-32	6.5	33
132	Exploring carbohydrate-peptide interactions in the gas phase: structure and selectivity in complexes of pyranosides with N-acetylphenylalanine methylamide. *Journal of the American Chemical Society*, **2011**, 133, 4548-57	16.4	32

131	Tetrazoles of manno- and rhamno- furanoses. *Tetrahedron*, **1999**, 55, 4501-4520	2.4	32
130	Structures of DPAGT1 Explain Glycosylation Disease Mechanisms and Advance TB Antibiotic Design. *Cell*, **2018**, 175, 1045-1058.e16	56.2	32
129	Palladium-mediated enzyme activation suggests multiphase initiation of glycogenesis. *Nature*, **2018**, 563, 235-240	50.4	31
128	Rationally designed short polyisoprenol-linked PglB substrates for engineered polypeptide and protein N-glycosylation. *Journal of the American Chemical Society*, **2014**, 136, 566-9	16.4	30
127	Synthetic polymers for simultaneous bacterial sequestration and quorum sense interference. *Angewandte Chemie - International Edition*, **2011**, 50, 9852-6	16.4	30
126	Site-selective traceless Staudinger ligation for glycoprotein synthesis reveals scope and limitations. *ChemBioChem*, **2011**, 12, 1383-6	3.8	30
125	Site-selective glycosylation of subtilisin Bacillus lentus causes dramatic increases in esterase activity. *Bioorganic and Medicinal Chemistry*, **2000**, 8, 1537-44	3.4	30
124	Genetic Incorporation of Olefin Cross-Metathesis Reaction Tags for Protein Modification. *Journal of the American Chemical Society*, **2018**, 140, 14599-14603	16.4	30
123	'Naked' and hydrated conformers of the conserved core pentasaccharide of N-linked glycoproteins and its building blocks. *Journal of the American Chemical Society*, **2013**, 135, 16895-903	16.4	29
122	Conformational change and selectivity in explicitly hydrated carbohydrates. *Tetrahedron: Asymmetry*, **2009**, 20, 718-722		29
121	Chemically modified "polar patch" mutants of subtilisin in peptide synthesis with remarkably broad substrate acceptance: designing combinatorial biocatalysts. *Chemistry - A European Journal*, **2002**, 8, 4129-37	4.8	29
120	Controlled site-selective protein glycosylation for precise glycan structure-catalytic activity relationships. *Bioorganic and Medicinal Chemistry*, **2000**, 8, 1527-35	3.4	29
119	Synthetic Nucleosomes Reveal that GlcNAcylation Modulates Direct Interaction with the FACT Complex. *Angewandte Chemie - International Edition*, **2016**, 55, 8918-22	16.4	29
118	Self-Liganded Suzuki–Miyaura Coupling for Site-Selective Protein PEGylation. *Angewandte Chemie*, **2013**, 125, 4008-4013	3.6	28
117	Substrate and metal ion promiscuity in mannosylglycerate synthase. *Journal of Biological Chemistry*, **2011**, 286, 15155-64	5.4	28
116	The Direct Formation of Glycosyl Thiols from Reducing Sugars Allows One-Pot Protein Glycoconjugation. *Angewandte Chemie*, **2006**, 118, 4111-4115	3.6	28
115	A tuneable method for N-debenzylation of benzylamino alcohols. *Organic Letters*, **2005**, 7, 2361-4	6.2	28
114	F-Trifluoromethanesulfinate Enables Direct C-H F-Trifluoromethylation of Native Aromatic Residues in Peptides. *Journal of the American Chemical Society*, **2020**, 142, 1180-1185	16.4	28

113	From Chemical Mutagenesis to Post-Expression Mutagenesis: A 50 Year Odyssey. *Angewandte Chemie - International Edition*, **2016**, 55, 5896-903	16.4	27
112	ESI-MS assay of M. tuberculosis cell wall antigen 85 enzymes permits substrate profiling and design of a mechanism-based inhibitor. *Journal of the American Chemical Society*, **2011**, 133, 13232-5	16.4	27
111	Peptide secondary structures in the gas phase: consensus motif of N-linked glycoproteins. *Journal of the American Chemical Society*, **2009**, 131, 1282-7	16.4	27
110	Tailoring the substrate specificity of the beta-glycosidase from the thermophilic archaeon Sulfolobus solfataricus. *FEBS Letters*, **2001**, 509, 355-60	3.8	27
109	DNA Modification under Mild Conditions by Suzuki–Miyaura Cross-Coupling for the Generation of Functional Probes. *Angewandte Chemie*, **2013**, 125, 10747-10752	3.6	26
108	Carbohydrate hydration: heavy water complexes of α- and β-anomers of glucose, galactose, fucose and xylose. *Physical Chemistry Chemical Physics*, **2011**, 13, 18671-8	3.6	26
107	Accessible sugars as asymmetric olefin epoxidation organocatalysts: glucosaminide ketones in the synthesis of terminal epoxides. *Organic and Biomolecular Chemistry*, **2009**, 7, 4285-8	3.9	26
106	Isotopic hydration of cellobiose: vibrational spectroscopy and dynamical simulations. *Journal of Physical Chemistry A*, **2011**, 115, 9498-509	2.8	25
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104	Chemical polyglycosylation and nanolitre detection enables single-molecule recapitulation of bacterial sugar export. *Nature Chemistry*, **2016**, 8, 461-9	17.6	25
103	Drug delivery systems based on sugar-macromolecule conjugates. *Current Opinion in Drug Discovery & Development*, **2002**, 5, 279-88		25
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