David R Bundle

List of Publications by Year in descending order

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		87843	98753
110	5,009	38	67
papers	citations	h-index	g-index
117	117	117	3366
11/	11/	117	3300
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Shiga-like toxins are neutralized by tailored multivalent carbohydrate ligands. Nature, 2000, 403, 669-672.	13.7	853
2	Structure of the O-chain of the phenol-phase soluble cellular lipopolysaccharide of Yersinia enterocolitica serotype O:9. FEBS Journal, 1984, 139, 195-200.	0.2	243
3	Synthetic glycopeptide vaccines combining \hat{l}^2 -mannan and peptide epitopes induce protection against candidiasis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 13526-13531.	3.3	205
4	Assessment in Mice of the Therapeutic Potential of Tailored, Multivalent Shiga Toxin Carbohydrate Ligands. Journal of Infectious Diseases, 2003, 187, 640-649.	1.9	146
5	Micro-Scale Frontal Affinity Chromatography with Mass Spectrometric Detection: A New Method for the Screening of Compound Libraries. Angewandte Chemie - International Edition, 1998, 37, 3383-3387.	7.2	129
6	The solution structure of a trisaccharide-antibody complex: comparison of NMR measurements with a crystal structure. Biochemistry, 1994, 33, 5183-5192.	1.2	109
7	Thiooligosaccharide Conjugate Vaccines Evoke Antibodies Specific for Native Antigens. Angewandte Chemie - International Edition, 2005, 44, 7725-7729.	7.2	88
8	A New Homobifunctionalp-Nitro Phenyl Ester Coupling Reagent for the Preparation of Neoglycoproteins. Organic Letters, 2004, 6, 4407-4410.	2.4	87
9	Structural elucidation of the Brucella melitensis M antigen by high-resolution NMR at 500 MHz. Biochemistry, 1987, 26, 8717-8726.	1.2	83
10	Antigenic determinants of Salmonella serogroups A and D1.Synthesis of trisaccharide glycosides for use as artificial antigens. Carbohydrate Research, 1982, 103, 29-40.	1.1	81
11	Synthesis of Di- to Hexasaccharide 1,2-Linked \hat{l}^2 -Mannopyranan Oligomers, a Terminal S-Linked Tetrasaccharide Congener and the Corresponding BSA Glycoconjugates. Journal of Organic Chemistry, 2001, 66, 8411-8423.	1.7	81
12	Donor substrate specificity of recombinant human blood group A, B and hybrid A/B glycosyltransferases expressed in Escherichia coli. FEBS Journal, 2001, 259, 770-775.	0.2	81
13	The Unique Solution Structure and Immunochemistry of the Candida albicans \hat{l}^2 -1,2-Mannopyranan Cell Wall Antigens. Journal of Biological Chemistry, 2002, 277, 3440-3446.	1.6	80
14	Chemical and Chemoenzymatic Synthesis of S-Linked Ganglioside Analogues and Their Protein Conjugates for Use as Immunogens. Chemistry - A European Journal, 2006, 12, 845-858.	1.7	78
15	In vivo supramolecular templating enhances the activity of multivalent ligands: A potential therapeutic against the Escherichia coli O157 AB5 toxins. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16837-16842.	3.3	77
16	Synthesis of Glycoconjugate Vaccines for Candida albicans Using Novel Linker Methodology. Journal of Organic Chemistry, 2005, 70, 7381-7388.	1.7	74
17	Synthesis of antigenic determinants of the Brucella a antigen, utilizing methyl 4-azido-4,6-dideoxy-α-d-mannopyranoside efficiently derived from d-mannose. Carbohydrate Research, 1988, 174, 239-251.	1.1	71
18	S-Linked Ganglioside Analogues for Use in Conjugate Vaccines. Organic Letters, 2004, 6, 897-900.	2.4	70

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19	Bifunctional CD22 Ligands Use Multimeric Immunoglobulins as Protein Scaffolds in Assembly of Immune Complexes on B Cells. Journal of the American Chemical Society, 2008, 130, 7736-7745.	6.6	68
20	Enhanced Immunogenicity of a Tricomponent Mannan Tetanus Toxoid Conjugate Vaccine Targeted to Dendritic Cells via Dectin-1 by Incorporating \hat{l}^2 -Glucan. Journal of Immunology, 2013, 190, 4116-4128.	0.4	68
21	Self-Adjuvanting Glycopeptide Conjugate Vaccine against Disseminated Candidiasis. PLoS ONE, 2012, 7, e35106.	1.1	66
22	Targeting Norovirus Infectionâ€"Multivalent Entry Inhibitor Design Based on NMR Experiments. Chemistry - A European Journal, 2011, 17, 7442-7453.	1.7	62
23	Designing a new antifungal glycoconjugate vaccine. Chemical Society Reviews, 2013, 42, 4327-4344.	18.7	60
24	Thermodynamic and Conformational Implications of Glycosidic Rotamers Preorganized for Binding. Journal of the American Chemical Society, 1998, 120, 5317-5318.	6.6	55
25	Concise and Efficient Synthesis of 2-Acetamido-2-deoxy-β- <scp>d</scp> -hexopyranosides of Diverse Aminosugars from 2-Acetamido-2-deoxy-β- <scp>d</scp> -glucose. Journal of Organic Chemistry, 2009, 74, 580-589.	1.7	54
26	Mild Oxidative One-Pot Allyl Group Cleavage. Organic Letters, 2001, 3, 2835-2838.	2.4	52
27	Preparation of glycoconjugates for use as artificial antigens: A simplified procedure. Carbohydrate Research, 1983, 124, 313-318.	1.1	50
28	Glycosyltransferase-Catalyzed Synthesis of Thiooligosaccharides. Angewandte Chemie - International Edition, 2004, 43, 613-615.	7.2	49
29	Expression of a Recombinant Human Glycosyltransferase from a Synthetic Gene and its Utilization for Synthesis of the Human Blood Group B Trisaccharide. FEBS Journal, 1995, 234, 323-328.	0.2	48
30	The structure of the antigenic lipopolysaccharide O-chains produced by Salmonella urbana and Salmonella godesberg. Carbohydrate Research, 1986, 156, 107-122.	1.1	47
31	Analysis of the lipopolysaccharide of Pseudomonas maltophilia 555. Biochemistry and Cell Biology, 1987, 65, 968-977.	0.9	45
32	Synthesis of Monomeric and Dimeric Repeating Units of the Zwitterionic Typeâ€1 Capsular Polysaccharide from ⟨i⟩Streptococcus pneumoniae⟨/i⟩. Chemistry - A European Journal, 2010, 16, 3476-3488.	1.7	44
33	Affinities of Shiga toxins 1 and 2 for univalent and oligovalent Pk-trisaccharide analogs measured by electrospray ionization mass spectrometry. Glycobiology, 2007, 17, 1127-1137.	1.3	42
34	Synthesis of a \hat{I}^2 1,2-Mannopyranosyl Tetrasaccharide Found in the Phosphomannan Antigen of Candida albicans. Organic Letters, 2000, 2, 2939-2942.	2.4	41
35	A general, efficient and stereospecific route to sphingosine, sphinganines, phytosphingosines and their analogs. Organic and Biomolecular Chemistry, 2006, 4, 1140.	1.5	39
36	Molecular Recognition of Candida albicans $(1\hat{a}\dagger^2)\cdot\hat{l}^2$ -Mannan Oligosaccharides by a Protective Monoclonal Antibody Reveals the Immunodominance of Internal Saccharide Residues. Journal of Biological Chemistry, 2012, 287, 18078-18090.	1.6	39

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37	Molecular Recognition of <i>Brucella</i> A and M Antigens Dissected by Synthetic Oligosaccharide Glycoconjugates Leads to a Disaccharide Diagnostic for Brucellosis. Journal of the American Chemical Society, 2014, 136, 16260-16269.	6.6	39
38	Synthesis of Tethered Trisaccharides To Probe Inter-Saccharide Flexibility in Carbohydrateâ^Protein Interactions. Journal of Organic Chemistry, 1998, 63, 6288-6301.	1.7	38
39	Synthesis and Immunogenicity of a Glycopolymer Conjugate. Bioconjugate Chemistry, 2011, 22, 274-281.	1.8	38
40	Brucellosis: Improved Diagnostics and Vaccine Insights from Synthetic Glycans. Accounts of Chemical Research, 2017, 50, 2958-2967.	7.6	38
41	Synthesis of ganglioside epitopes for oligosaccharide specific immunoadsorption therapy of Guillian-Barr© syndrome. Organic and Biomolecular Chemistry, 2004, 2, 1199-1212.	1.5	37
42	Heterobifunctional Multivalent Inhibitor-Adaptor Mediates Specific Aggregation between Shiga Toxin and a Pentraxin. Organic Letters, 2005, 7, 4369-4372.	2.4	37
43	Synthetic antigenic determinants of the Brucella A polysaccharide: A disaccharide thioglycoside for block synthesis of pentasaccharide and lower homologues of $\hat{l}\pm 1,2$ -linked 4,6-dideoxy-4-formamido- $\hat{l}\pm 0$ -mannose. Canadian Journal of Chemistry, 1989, 67, 491-496.	0.6	35
44	Synthesis and immunochemical studies on a Candida albicans cluster glycoconjugate vaccine. Organic and Biomolecular Chemistry, 2007, 5, 3477.	1.5	35
45	A \hat{l}^2 -mannan trisaccharide conjugate vaccine aids clearance of Candida albicans in immunocompromised rabbits. Vaccine, 2012, 30, 6263-6269.	1.7	35
46	Design of a <i>Candida albicans</i> Disaccharide Conjugate Vaccine by Reverse Engineering a Protective Monoclonal Antibody. ACS Chemical Biology, 2012, 7, 1754-1763.	1.6	35
47	Block synthesis of two pentasaccharide determinants of the Brucella M antigen using thioglycoside methodologies. Canadian Journal of Chemistry, 1989, 67, 497-502.	0.6	34
48	The design and synthesis of antibody binding site probes: three pentasaccharide analogues of the Brucella A antigen prepared by activation in situ of thioglycosides with bromine. Carbohydrate Research, 1991, 211, 59-75.	1.1	33
49	Observation of the Anti Conformation of a Glycosidic Linkage in an Antibody-Bound Oligosaccharide. Journal of the American Chemical Society, 1998, 120, 10547-10548.	6.6	33
50	Ligand-assisted Aggregation of Proteins. Journal of Biological Chemistry, 2005, 280, 31999-32008.	1.6	33
51	A facile synthesis of methyl 3,6-dideoxy-α-L-xylo-hexopyranoside (colitose). Canadian Journal of Chemistry, 1978, 56, 2686-2690.	0.6	32
52	Synthesis of a Pentasaccharide Epitope for the Investigation of Carbohydrate-Protein Interactions. Journal of Organic Chemistry, 1995, 60, 7316-7327.	1.7	32
53	Novel Solutions for Vaccines and Diagnostics To Combat Brucellosis. ACS Central Science, 2017, 3, 224-231.	5.3	32
54	Efficient Synthesis of 3,6-Dideoxy- \hat{l}^2 -d-arabino-hexopyranosyl-Terminated LacdiNac Glycan Chains of the Trichinellas piralis Parasite. Journal of Organic Chemistry, 2000, 65, 3064-3073.	1.7	31

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55	Chemoenzymatic synthesis of GM3and GM2gangliosides containing a truncated ceramide functionalized for glycoconjugate synthesis and solid phase applications. Organic and Biomolecular Chemistry, 2006, 4, 142-154.	1.5	31
56	Synthesis and Immunochemical characterization of <i>S</i> â€linked Glycoconjugate Vaccines against <i>Candida albicans</i> . Chemistry - A European Journal, 2008, 14, 6474-6482.	1.7	30
57	A Novel Linker Methodology for the Synthesis of Tailored Conjugate Vaccines Composed of Complex Carbohydrate Antigens and Specific T _H â€Cell Peptide Epitopes. Chemistry - A European Journal, 2008, 14, 5908-5917.	1.7	29
58	Crystal state and solution conformation of the B blood group trisaccharide α-l-Fucp-(1â†'2)-[α-d-Galp]-(1â†'3)]-β-d-Galp-OCH3. FEBS Journal, 1999, 259, 295-303.	0.2	28
59	Artificial carbohydrate antigens: the synthesis of a tetrasaccharide hapten, a Shigella flexneri O-antigen repeating unit. Carbohydrate Research, 1980, 80, 75-85.	1.1	27
60	A structurally diversified linker enhances the immune response to a small carbohydrate hapten. Glycoconjugate Journal, 2011, 28, 149-164.	1.4	27
61	Synthesis and structure–activity relationships of di- and trisaccharide inhibitors for Shiga-like toxin Type 1. Journal of the Chemical Society, Perkin Transactions 1, 2001, , 838-853.	1.3	26
62	An Entropically Efficient Supramolecular Inhibition Strategy for Shiga Toxins. Angewandte Chemie - International Edition, 2008, 47, 672-676.	7.2	26
63	"Doubleâ€Click―Protocol for Synthesis of Heterobifunctional Multivalent Ligands: Toward a Focused Library of Specific Norovirus Inhibitors. Chemistry - A European Journal, 2011, 17, 7438-7441.	1.7	26
64	Constrained H-Type 2 Blood Group Trisaccharide Synthesized in a Bioactive Conformation via Intramolecular Glycosylation. Journal of Organic Chemistry, 1999, 64, 9080-9089.	1.7	25
65	Monoclonal Antibody-Defined Specific C Epitope of Brucella O-Polysaccharide Revisited. Vaccine Journal, 2015, 22, 979-982.	3.2	24
66	The design, synthesis and evaluation of high affinity macrocyclic carbohydrate inhibitors. Organic and Biomolecular Chemistry, 2005, 3, 2723.	1.5	23
67	The Crystal Structure of Shiga Toxin Type 2 with Bound Disaccharide Guides the Design of a Heterobifunctional Toxin Inhibitor. Journal of Biological Chemistry, 2014, 289, 885-894.	1.6	23
68	Improved Serodiagnosis of Bovine Brucellosis by Novel Synthetic Oligosaccharide Antigens Representing the Capping M Epitope Elements of Brucella O-Polysaccharide. Journal of Clinical Microbiology, 2015, 53, 1204-1210.	1.8	22
69	Displacement of sugar chlorosulphates by bromide, azide, and acetate; a convenient synthesis of methyl 3,6-dideoxy-l ² -D-ribo-hexopyranoside. Journal of the Chemical Society Perkin Transactions 1, 1979, , 2751-2755.	0.9	19
70	Design and Synthesis of a Universal Antigen to Detect Brucellosis. Angewandte Chemie - International Edition, 2013, 52, 7181-7185.	7.2	19
71	Efficient stereoselective synthesis of 1-thio- \hat{l}^2 -mannopyranosides. Journal of the Chemical Society, Perkin Transactions 1, 2001, , 832-837.	1.3	18
72	Synthesis of a Candida albicans tetrasaccharide spanning the $\hat{l}^21,2$ -mannan phosphodiester \hat{l}_{\pm} -mannan junction. Organic and Biomolecular Chemistry, 2012, 10, 8348.	1.5	18

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73	A Three Component Synthetic Vaccine Containing a \hat{I}^2 -Mannan T-Cell Peptide Epitope and a \hat{I}^2 -Glucan Dendritic Cell Ligand. Molecules, 2018, 23, 1961.	1.7	18
74	Identification of the A and M antigens of Brucella as the O-polysaccharides of smooth lipopolysaccharides. Canadian Journal of Microbiology, 1987, 33, 979-981.	0.8	17
75	A carbohydrate vaccine exceeds the sum of its parts. Nature Chemical Biology, 2007, 3, 605-606.	3.9	17
76	Synthesis of three trisaccharide congeners to investigate frame shifting of \hat{l}^2 1,2-mannan homo-oligomers in an antibody binding site. Carbohydrate Research, 2012, 357, 7-15.	1.1	17
77	The synthesis of antibody binding-site probes: a hexasaccharide and two pentasaccharides related to the Brucella A antigen and prepared by in situ activation of thioglycosides with bromine. Carbohydrate Research, 1992, 216, 67-78.	1.1	16
78	Efficient synthesis of d-xylo and d-ribo-phytosphingosines from methyl 2-amino-2-deoxy-Î ² -d-hexopyranosides. Carbohydrate Research, 2009, 344, 2120-2126.	1.1	16
79	Supramolecular Complexing of Membane Siglec CD22 Mediated by a Polyvalent Heterobifunctional Ligand that Templates on IgM. Bioconjugate Chemistry, 2011, 22, 546-550.	1.8	16
80	Synthesis of monodeoxy and mono-O-methyl congeners of methyl \hat{l}^2 -d-mannopyranosyl- $(1\hat{a}^*_1)$ - \hat{l}^2 -d-mannopyranoside for epitope mapping of anti-Candida albicans antibodies. Carbohydrate Research, 2009, 344, 555-569.	1.1	14
81	A novel glycosyl donor for synthesis of 2-acetamido-4-amino-2,4,6-trideoxy-α-d-galactopyranosides. Carbohydrate Research, 2010, 345, 2323-2327.	1.1	14
82	Oligosaccharides and Peptide Displayed on an Amphiphilic Polymer Enable Solid Phase Assay of Hapten Specific Antibodies. Bioconjugate Chemistry, 2014, 25, 685-697.	1.8	14
83	Synthesis of a 1,3 \hat{l}^2 -glucan hexasaccharide designed to target vaccines to the dendritic cell receptor, Dectin-1. Carbohydrate Research, 2015, 408, 96-106.	1.1	14
84	Synthesis of antifungal vaccines by conjugation of \hat{l}^2 -1,2 trimannosides with T-cell peptides and covalent anchoring of neoglycopeptide to tetanus toxoid. Carbohydrate Research, 2015, 403, 123-134.	1.1	13
85	A Tethered Disaccharide Trapped As Its anti Conformer Calibrates the Karplus Relationship for 3JC,H Coupling Constants. Journal of the American Chemical Society, 2001, 123, 4362-4363.	6.6	12
86	Impact of the Nature and Size of the Polymeric Backbone on the Ability of Heterobifunctional Ligands to Mediate Shiga Toxin and Serum Amyloid P Component Ternary Complex Formation. Toxins, 2011, 3, 1065-1088.	1.5	12
87	Poly(N-vinyl-2-pyrrolidone-co-vinyl alcohol), a Versatile Amphiphilic Polymeric Scaffold for Multivalent Probes. Organic Letters, 2013, 15, 5190-5193.	2.4	12
88	Antigenic determinant of Salmonella serogroup B. Synthesis of a trisaccharide glycoside for use as an artificial antigen. Carbohydrate Research, 1984, 133, 333-338.	1.1	10
89	Clustering of P ^K -trisaccharides on amphiphilic cyclodextrin reveals unprecedented affinity for the Shiga-like toxin Stx2. Chemical Communications, 2017, 53, 10528-10531.	2.2	10
90	A practical route to 3,6-dideoxyhexoses. Tetrahedron: Asymmetry, 2000, 11, 465-479.	1.8	9

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91	Synthesis of three tethered trisaccharides to probe entropy contributions in carbohydrate-protein interactions. Israel Journal of Chemistry, 2000, 40, 189-208.	1.0	9
92	Synthesis of disaccharide congeners of the Trichinella spiralis glycan and binding site mapping of two monoclonal antibodies. Canadian Journal of Chemistry, 2002, 80, 1141-1161.	0.6	9
93	The synthesis of a multivalent heterobifunctional ligand for specific interaction with Shiga toxin 2 produced by E. coli O157:H7. Carbohydrate Research, 2013, 378, 4-14.	1.1	9
94	Synthesis of threeSalmonellaepitopes for biosensor studies of carbohydrate—antibody interactions. Canadian Journal of Chemistry, 2002, 80, 1131-1140.	0.6	8
95	Developing high affinity oligosaccharide inhibitors: conformational pre-organization paired with functional group modification. Organic and Biomolecular Chemistry, 2005, 3, 2733.	1.5	8
96	Synthesis of modified Trichinella spiralis disaccharide epitopes and a comparison of their recognition by chemical mapping and saturation transfer difference NMR. Carbohydrate Research, 2014, 383, 1-13.	1,1	8
97	Synthetic glycoconjugates characterize the fine specificity of Brucella A and M monoclonal antibodies. Organic and Biomolecular Chemistry, 2017, 15, 3874-3883.	1.5	8
98	Modulation of antibody affinity by synthetic modifications of the most exposed pyranose residue of a trisaccharide epitope. Bioorganic and Medicinal Chemistry, 1994, 2, 1221-1229.	1.4	7
99	Synthesis of monodeoxy and mono-O-methyl congeners of methyl \hat{l}^2 -d-mannopyranosyl- $(1\hat{a}^{\dagger}^2)$ - \hat{l}^2 -d-mannopyranoside for epitope mapping of anti-Candida albicans antibodies. Carbohydrate Research, 2009, 344, 1397-1411.	1.1	6
100	Synthesis of 4,6-dideoxy-4-formamido- \hat{l}_{\pm} -D-mannose containing tri-, tetra-, and penta-saccharides, antigenic determinants of the Brucella A and M antigens. Journal of the Chemical Society Chemical Communications, 1987, , 1648-1650.	2.0	5
101	Synthesis of a trisaccharide repeat of the zwitterionic Sp1 capsular polysaccharide utilizing 2-azido-4-benzylamino-4N,3-O-carbonyl-2,4,6-trideoxy-d-galactopyranosyl trichloroacetimidate. Carbohydrate Research, 2013, 378, 26-34.	1.1	5
102	Evaluation of a focused virtual library of heterobifunctional ligands for Clostridium difficile toxins. Organic and Biomolecular Chemistry, 2015, 13, 283-298.	1.5	4
103	A Uniquely Small, Protective Carbohydrate Epitope May Yield a Conjugate Vaccine for <i>Candida albicans</i> . ACS Symposium Series, 2008, , 163-183.	0.5	3
104	Designing a Candida albicans Conjugate Vaccine by Reverse Engineering Protective Monoclonal Antibodies., 2012,, 121-145.		2
105	The Unique Solution Structure and Immunochemistry of the Candida albicans \hat{Al}^2 1, 2-Mannopyranan Cell Wall Antigen. , 0, , 145-187.		1
106	Eliciting carbohydrate-specific immune response against sialosides: success and challenges. Future Medicinal Chemistry, 2011, 3, 519-534.	1,1	1
107	The Tip of Brucella O-Polysaccharide Is a Potent Epitope in Response to Brucellosis Infection and Enables Short Synthetic Antigens to Be Superior Diagnostic Reagents. Microorganisms, 2022, 10, 708.	1.6	1

 $R\tilde{A}\frac{1}{4}cktitelbild: Design and Synthesis of a Universal Antigen to Detect Brucellosis (Angew. Chem.) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50 to 10 to 10$

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#	Article	IF	CITATIONS
109	Temporary Conversion of Protein Amino Groups to Azides: A Synthetic Strategy for Glycoconjugate Vaccines. Methods in Molecular Biology, 2015, 1331, 145-157.	0.4	O
110	Protein Scaffolds for Multivalent Display of Highâ€Affinity CD22 Ligands. FASEB Journal, 2008, 22, 810.1.	0.2	0