

W Bruce Turnbull

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

3,802
citations

249298

26
h-index

139680

61
g-index

88
all docs

88
docs citations

88
times ranked

5434
citing authors

#	ARTICLE	IF	CITATIONS
1	Microbial carbohydrate-binding toxins – From etiology to biotechnological application. <i>Biotechnology Advances</i> , 2022, 59, 107951.	6.0	6
2	Protein-conjugated microbubbles for the selective targeting of <i>S. aureus</i> biofilms. <i>Biofilm</i> , 2022, 4, 100074.	1.5	5
3	Challenges in the use of sortase and other peptide ligases for site-specific protein modification. <i>Chemical Society Reviews</i> , 2022, 51, 4121-4145.	18.7	41
4	In-Depth Characterization of a Re-Engineered Cholera Toxin Manufacturing Process Using Growth-Decoupled Production in <i>Escherichia coli</i> . <i>Toxins</i> , 2022, 14, 396.	1.5	2
5	C-type cytochrome-initiated reduction of bacterial lytic polysaccharide monoxygenases. <i>Biochemical Journal</i> , 2021, 478, 2927-2944.	1.7	9
6	Piggybacking on the Cholera Toxin: Identification of a CTB-Binding Protein as an Approach for Targeted Delivery of Proteins to Motor Neurons. <i>Bioconjugate Chemistry</i> , 2021, 32, 2205-2212.	1.8	10
7	Exploiting the Structural Metamorphosis of Polymers to “Wrap” Micron-Sized Spherical Objects. <i>Chemistry - A European Journal</i> , 2021, , .	1.7	0
8	Glycan-Gold Nanoparticles as Multifunctional Probes for Multivalent Lectin-Carbohydrate Binding: Implications for Blocking Virus Infection and Nanoparticle Assembly. <i>Journal of the American Chemical Society</i> , 2020, 142, 18022-18034.	6.6	49
9	A versatile cholera toxin conjugate for neuronal targeting and tracing. <i>Chemical Communications</i> , 2020, 56, 6098-6101.	2.2	9
10	Rapid sodium periodate cleavage of an unnatural amino acid enables unmasking of a highly reactive α -oxo aldehyde for protein bioconjugation. <i>Organic and Biomolecular Chemistry</i> , 2020, 18, 4000-4003.	1.5	8
11	Chemoenzymatic synthesis of 3-deoxy-3-fluoro-fucose and its enzymatic incorporation into glycoconjugates. <i>Chemical Communications</i> , 2020, 56, 6408-6411.	2.2	8
12	Biochemical characterisation of an α 1,4 galactosyltransferase from <i>Neisseria weaveri</i> for the synthesis of α 1,4-linked galactosides. <i>Organic and Biomolecular Chemistry</i> , 2020, 18, 3142-3148.	1.5	7
13	Enzymatic synthesis of <i>N</i> -acetylglucosamine from lactose enabled by recombinant α 1,4-galactosyltransferases. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 5920-5924.	1.5	14
14	Synthetic glycobiology. <i>Interface Focus</i> , 2019, 9, 20190004.	1.5	5
15	A “catch-and-release” receptor for the cholera toxin. <i>Faraday Discussions</i> , 2019, 219, 112-127.	1.6	7
16	Directed Assembly of Homopentameric Cholera Toxin B-Subunit Proteins into Higher-Order Structures Using Coiled-Coil Appendages. <i>Journal of the American Chemical Society</i> , 2019, 141, 5211-5219.	6.6	18
17	Multidimensional micro- and nano-printing technologies: general discussion. <i>Faraday Discussions</i> , 2019, 219, 73-76.	1.6	0
18	Glycan interactions on glycocalyx mimetic surfaces: general discussion. <i>Faraday Discussions</i> , 2019, 219, 183-188.	1.6	0

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19	New directions in surface functionalization and characterization: general discussion. Faraday Discussions, 2019, 219, 252-261.	1.6	0
20	Preparation of multivalent glycan micro- and nano-arrays: general discussion. Faraday Discussions, 2019, 219, 128-137.	1.6	1
21	Probing Multivalent Protein-Carbohydrate Interactions by Quantum Dot-Förster Resonance Energy Transfer. Methods in Enzymology, 2018, 598, 71-100.	0.4	3
22	Carbohydrate inhibitors of cholera toxin. Beilstein Journal of Organic Chemistry, 2018, 14, 484-498.	1.3	23
23	Molecular Recognition-Mediated Transformation of Single-Chain Polymer Nanoparticles into Crosslinked Polymer Films. Angewandte Chemie, 2017, 129, 13093-13098.	1.6	3
24	Molecular Recognition-Mediated Transformation of Single-Chain Polymer Nanoparticles into Crosslinked Polymer Films. Angewandte Chemie - International Edition, 2017, 56, 12913-12918.	7.2	25
25	Dissecting Multivalent Lectin-Carbohydrate Recognition Using Polyvalent Multifunctional Glycan-Quantum Dots. Journal of the American Chemical Society, 2017, 139, 11833-11844.	6.6	54
26	Confirmation of a Protein-Protein Interaction in the Pantothenate Biosynthetic Pathway by Using Sortase-Mediated Labelling. ChemBioChem, 2016, 17, 753-758.	1.3	10
27	Mechanistic Investigations into the Application of Sulfoxides in Carbohydrate Synthesis. Chemistry - A European Journal, 2016, 22, 3916-3928.	1.7	26
28	Compact, Polyvalent Mannose Quantum Dots as Sensitive, Ratiometric FRET Probes for Multivalent Protein-Ligand Interactions. Angewandte Chemie, 2016, 128, 4816-4820.	1.6	16
29	Compact, Polyvalent Mannose Quantum Dots as Sensitive, Ratiometric FRET Probes for Multivalent Protein-Ligand Interactions. Angewandte Chemie - International Edition, 2016, 55, 4738-4742.	7.2	55
30	Compact, Polyvalent Mannose Quantum Dots as Sensitive, Ratiometric FRET Probes for Multivalent Protein-Ligand Interactions (Angew. Chem. 15/2016). Angewandte Chemie, 2016, 128, 4920-4920.	1.6	0
31	Tetra- versus Pentavalent Inhibitors of Cholera Toxin. ChemistryOpen, 2015, 4, 471-477.	0.9	14
32	Templating carbohydrate-functionalised polymer-scaffolded dynamic combinatorial libraries with lectins. Organic and Biomolecular Chemistry, 2015, 13, 2756-2761.	1.5	29
33	Depsipeptide substrates for sortase-mediated N-terminal protein ligation. Nature Protocols, 2014, 9, 253-262.	5.5	43
34	Innenteilbild: A Protein-Based Pentavalent Inhibitor of the Cholera Toxin B-Subunit (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.6	0
35	A Protein-Based Pentavalent Inhibitor of the Cholera Toxin B-Subunit. Angewandte Chemie - International Edition, 2014, 53, 8323-8327.	7.2	57
36	Discovery of novel FabF ligands inspired by platensimycin by integrating structure-based design with diversity-oriented synthetic accessibility. Organic and Biomolecular Chemistry, 2014, 12, 486-494.	1.5	25

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37	Multivalent glycoconjugates as anti-pathogenic agents. <i>Chemical Society Reviews</i> , 2013, 42, 4709-4727.	18.7	464
38	Bacterial toxininhibitors based on multivalent scaffolds. <i>Chemical Society Reviews</i> , 2013, 42, 4613-4622.	18.7	115
39	Methylthioxylose â€“ a jewel in the mycobacterial crown?. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 5698.	1.5	13
40	Efficient Nâ€“terminal Labeling of Proteins by Use of Sortase. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9377-9380.	7.2	114
41	Towards a Structural Basis for the Relationship Between Blood Group and the Severity of El Tor Cholera. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 5143-5146.	7.2	33
42	Stereoselective glycosylations using oxathiane spiroketal glycosyl donors. <i>Carbohydrate Research</i> , 2012, 348, 6-13.	1.1	27
43	Design, synthesis and in vitro evaluation of novel bivalent S-adenosylmethionine analogues. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 278-284.	1.0	9
44	Do Glycosyl Sulfonium Ions Engage in Neighbouringâ€“Group Participation? A Study of Oxathiane Glycosyl Donors and the Basis for their Stereoselectivity. <i>Chemistry - A European Journal</i> , 2012, 18, 321-333.	1.7	45
45	Mechanistic Studies on a Sulfoxide Transfer Reaction Mediated by Diphenyl Sulfoxide/Triflic Anhydride. <i>Chemistry - A European Journal</i> , 2012, 18, 2987-2997.	1.7	28
46	Monovalent and Multivalent Inhibitors of Bacterial Toxins. , 2012, , 78-91.		2
47	A hop, skip and jump. <i>Nature Chemistry</i> , 2011, 3, 267-268.	6.6	5
48	Studies on the synthesis of Lewis-y oligosaccharides. <i>Carbohydrate Research</i> , 2011, 346, 2113-2120.	1.1	15
49	Conformerâ€“Independent Ureidoimidazole Motifsâ€“Tools to Probe Conformational and Tautomeric Effects on the Molecular Recognition of Triply Hydrogenâ€“Bonded Heterodimers. <i>Chemistry - A European Journal</i> , 2011, 17, 14508-14517.	1.7	26
50	Benzyne arylation of oxathiane glycosyl donors. <i>Beilstein Journal of Organic Chemistry</i> , 2010, 6, 19.	1.3	23
51	The Influence of Ligand Valency on Aggregation Mechanisms for Inhibiting Bacterial Toxins. <i>ChemBioChem</i> , 2009, 10, 329-337.	1.3	59
52	A natural carbohydrate substrate for Mycobacterium tuberculosis methionine sulfoxide reductase A. <i>Chemical Communications</i> , 2009, , 110-112.	2.2	15
53	Stereoselective glycosylation using oxathiane glycosyl donors. <i>Chemical Communications</i> , 2009, , 5841.	2.2	78
54	Neighbouring group participation vs. addition to oxacarbenium ions: studies on the synthesis of mycobacterial oligosaccharides. <i>Organic and Biomolecular Chemistry</i> , 2009, 7, 4842.	1.5	51

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55	Multivalency and Cooperativity in Supramolecular Chemistry. ChemInform, 2005, 36, no.	0.1	0
56	Multivalency and Cooperativity in Supramolecular Chemistry. Accounts of Chemical Research, 2005, 38, 723-732.	7.6	609
57	Identification of the 5-Methylthiopentosyl Substituent in Mycobacterium tuberculosis Lipoarabinomannan. Angewandte Chemie - International Edition, 2004, 43, 3918-3922.	7.2	67
58	Thermodynamics of Binding of 2-Methoxy-3-isopropylpyrazine and 2-Methoxy-3-isobutylpyrazine to the Major Urinary Protein. Journal of the American Chemical Society, 2004, 126, 1675-1681.	6.6	107
59	Dissecting the Cholera Toxin α Ganglioside GM1 Interaction by Isothermal Titration Calorimetry. Journal of the American Chemical Society, 2004, 126, 1047-1054.	6.6	179
60	On the Value of: Can Low Affinity Systems Be Studied by Isothermal Titration Calorimetry?. Journal of the American Chemical Society, 2003, 125, 14859-14866.	6.6	658
61	Large-Scale Millisecond Intersubunit Dynamics in the B Subunit Homopentamer of the Toxin Derived from Escherichia coli O157. Journal of the American Chemical Society, 2003, 125, 13058-13062.	6.6	18
62	Chemically Defined Sialoside Scaffolds for Investigation of Multivalent Interactions with Sialic Acid Binding Proteins. Journal of Organic Chemistry, 2003, 68, 8485-8493.	1.7	48
63	Design and synthesis of glycodendrimers. Reviews in Molecular Biotechnology, 2002, 90, 231-255.	2.9	209
64	Glycodendrimers based on cellobiosyl-derived monomers. Canadian Journal of Chemistry, 2002, 80, 983-991.	0.6	11
65	Large Oligosaccharide-Based Glycodendrimers Synthetic Carbohydrate Dendrimers, Part 9: for Part 8, see: W. B. Turnbull, A. R. Pease, J. F. Stoddart, ChemBioChem 2000, 1, 70-74. Chemistry - A European Journal, 2002, 8, 2988.	1.7	77
66	Large Oligosaccharide-Based Glycodendrimers. ChemInform, 2002, 33, 80-80.	0.1	0
67	Toward the Synthesis of Large Oligosaccharide-Based Dendrimers. ChemBioChem, 2000, 1, 70-74.	1.3	36
68	Thio-oligosaccharides of sialic acid - synthesis of an α (2 \rightarrow 3) sialyl galactoside via a gulofuranose/galactopyranose approach. Journal of the Chemical Society, Perkin Transactions 1, 2000, 1859-1866.	1.3	24
69	Dynamic processes in solids: Three large-amplitude processes revealed in a simple quaternary ammonium salt. Magnetic Resonance in Chemistry, 1995, 33, 841-843.	1.1	3