



Professor Gideon J Davies, FRS, FMedSci

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Professor Gideon Davies, FMedSci, FRS
Department of Chemistry
The University of York
Heslington
York YO10 5DD
U.K.

Email: gideon.davies@york.ac.uk

GIDEON DAVIES. Refereed[†] Publications

2024 shaded

419.	Caseiro, C., McGregor, N.G.S., Alves, V.D., Carvalho, A.L., Romão, M.J., Davies, G.J., Fontes, C.M.G.A., and Bule, P. Family GH157 enzyme exhibits broad linkage tolerance and a dual endo / exo- β -glucanase activity on β -glucans <i>International Journal of Biological Macromolecules</i> . 2024 . accepted for publication.
418.	Thaler, M., Ofman, T.P., Kok, K., Heming, J.J.A., Moran, E., Pickles, I., Leijts, A.A., an den Nieuwendijk, A.M.C.H.v., van den Berg, R.J.B.H.N., Ruijgrok, G., Armstrong, Z., Salgado-Benvindo, C., Ninaber, D.K., Snijder, E.J., van Boeckel, C.A.A., Artola, M., Davies, G.J., Overkleeft, H.S., and Hemert, M.J.v. Epi-cyclophellitol cyclosulfate, a mechanism-based ER α -glucosidase II inhibitor, blocks replication of SARS-CoV-2 and other coronaviruses <i>ACS Central Science</i> . 2024 <i>10</i> , 1594–1608.
417.	Su, Q., Louwerse, M., Lammers, R.F., Maurits, E., Janssen, M., Boot, R.G., Borlandelli, V., Offen, W.A., Linzel, D., Schröder, S.P., Davies, G.J., Overkleeft, H.S., Artola, M., and Aerts, J.M.F.G. Selective Labelling of GBA2 in Cells with Fluorescent β -D-Arabinofuranosyl Cyclitol Aziridines <i>Chem Sci</i> . 2024 <i>15</i> , 15212-15220
416.	Scott, C., McGregor, N., Leadbeater, D., Oates, N., Hoßbach, J., Abood, A., Setchfield, A., Dowle, A., Overkleeft, H., Davies, G.J., and Bruce, N. <i>Parascedosporium putredinis</i> NO1 tailors its secretome for different lignocellulosic substrates <i>Microbiology Spectrum</i> . 2024 <i>12</i> , e03943-03923.
415.	Rajagopal, B.S., Yates, N., Smith, J., Paradisi, A., Tetard-Jones, C., Willats, W.G.T., Marcus, S., Knox, J.P., Firdaus-Raih, M., Henrissat, B., Davies, G.J., Walton, P.H., Parkin, A., and Hemsworth, G.R. Structural Dissection of Two Redox Proteins from the Shipworm Symbiont <i>Teredinibacter turnerae</i> . <i>IUCR J</i> . 2024 <i>11</i> , 260-274.
414.	Ofman, T.P., Heming, J.J.A., Nin-Hill, A., Küllmer, F., Moran, E., Bennett, M., Stenecker, R., Klein, A.-M., Ruijgrok, G., Kok, K., Armstrong, Z.W.B., Aerts, J.M.F.G., van der Marel, G.A., Rovira, C., Davies, G.J., Artola, M., Codée, J.D.C., and Overkleeft, H.S. Conformational and Electronic Variations in 1,2- and 1,6-Cyclophellitols and Their Impact on Retaining α -Glucosidase Inhibition <i>Chemistry - A European Journal</i> . 2024 e202400723.
413.	Liu, Y., Bineva-Todd, G., Meek, R.W., Mazo, L., Piniello, B., Moroz, O., Burnap, S.A., Begum, N., Ohara, A., Roustan, C., Tomita, S., Kjaer, S., Polizzi, K., Struwe, W.B., Rovira, C., Davies, G.J., and Schumann, B. A Bioorthogonal Precision Tool for human N-acetylglucosaminyltransferase V <i>J Am Chem Soc</i> . 2024 <i>146</i> , 26707–26718.
412.	Li, Z., Pickles, I., Sharma, M., Melling, B., Pallasdies, L., Codée, J., Williams, S., Overkleeft, H., and Davies, G. Detection of sulfoquinovosidase activity in cell lysates using activity-based probes <i>Angew Chemie Int Ed</i> . 2024 e202401358.
411.	Koemans, T., Bennett, M., Ferraz, M.J., Armstrong, Z., Artola, M., Aerts, J.M.F.G., Codée, J.D.C., Overkleeft, H.S., and Davies, G.J. Structure-Guided Design of C3-Branched Swainsonine as Potent and Selective Human Golgi α -Mannosidase (GMII) Inhibitor <i>Chem Commun</i> . 2024 <i>60</i> , 11734-11737
410.	Chen, Y., van den Nieuwendijk, A.M.C.H., Wu, L., Moran, E., Skoulikopoulou, F., Riet, V.v., Overkleeft, H.S., Davies, G.J., and Armstrong, Z. The molecular basis for inhibition of heparanases and β -glucuronidases by siastatin B <i>J Am Chem Soc</i> . 2024 <i>146</i> , 125–133.
409.	Bhosale, S., Kandalkar, S., Gilormini, P.-A., Akintola, O., Rowland, R.J., Adabala, P.J.P., King, D., Deen, M.C., Xi, K., Davies, G.J., Voadlo, D.J., and Bennet, A.J. Tunable mechanism-based carbasugar ligands that form a transient covalent intermediate that stabilizes glycoside hydrolases <i>ACS Catalysis</i> . 2024 <i>14</i> , 14769–14779.

[†] Gideon Davies has 16 unrefereed book chapters that are not included in this list.

408.	Arumapperuma, T., Lee, M., Sharma, M., Zhang, Y., Snow, A., Lingford, J., Goddard-Borger, E., Davies, G.J., and Williams, S. Capture-and-release of a sulfoquinovose-binding protein on sulfoquinovose-modified agarose <i>OrgBioMol Chem.</i> 2024 <i>22</i> , 3237-3244
407.	Artola, M., Aerts, J.M.F.G., van der Marel, G.A., Rovira, C., Codée, J.D.C., Davies, G.J., and Overkleeft, H.S. From mechanism-based retaining glycosidase inhibitors to activity-based glycosidase profiling <i>J Am Chem Soc.</i> 2024 <i>146</i> , 24729–24741.
406.	Walton, P.H., Davies, G.J., Diaz, D.E., and Franco-Cairo, J.P. The Histidine Brace: Nature's Copper Alternative to Haem? <i>FEBS Lett.</i> 2023 <i>597</i> , 485-494.
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403.	Sharma, M., Kaur, A., Soler, N.M., Lingford, J.P., Epa, R., Goddard-Borger, E.D., Davies, G.J., and Williams, S.J. Defining the molecular architecture, metal dependence, and distribution of metal-dependent class II sulfofructose-1-phosphate aldolases <i>J Biol Chem.</i> 2023 <i>299</i> , 105338.
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401.	Moroz, O.V., Blagova, E., Lebedev, A.A., Skov, L.K., Pache, R.A., Schnorr, K.M., Kiemer, L., Friis, E.P., Nyman-Grarup, S., Ming, L., Ye, L., Klausen, M., Cohn, M.T., Schmidt, E.G.W., Davies, G.J., and Wilson, K.S. Module walking using an SH3-like cell wall binding domain leads to a new GH family of muramidases <i>Acta Crystallogr.</i> 2023 <i>D79</i> , 706-720.
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399.	Males, A., Kok, K., Nin-Hill, A., Beukel, S.v.d., Beenakker, T.J.M., van der Marel, G.A., Codée, J.D.C., Overkleeft, H.S., Rovira, C., Davies, G.J., and Artola, M. Cyclosulfamidate Mannose-Configured Cyclitol Allows Specific Allele-Dependent Inhibition of GH47 α -D-Mannosidases Through a Bump-Hole Strategy <i>Chem Sci.</i> 2023 <i>14</i> , 13581–13586.
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397.	Li, J., Sharma, M., Meek, R., Alhifithi, A., Armstrong, Z., Soler, N.M., Goddard-Borger, E.D., Blaza, J., Davies, G.J., and Williams, S.J. Molecular basis of sulfolactate synthesis by sulfolactaldehyde dehydrogenase from <i>Rhizobium leguminosarum</i> <i>Chem Sci.</i> 2023 <i>14</i> , 11429-11440.
396.	Kuo, C.-L., Su, Q., van den Nieuwendijk, A.M.C.H., Beenakker, T.J.M., Offen, W.A., Willems, L.I., Boot, R.G., Sarris, A.J., Marques, A.R.A., Codée, J.D.C., van der Marel, G.A., Florea, B.I., Davies, G.J., Overkleeft, H.S., and Aerts, J.M.F.G. The Development of a Broad-Spectrum Retaining β -Exo-Galactosidase Activity-Based Probe <i>Org BioMol Chem.</i> 2023 <i>21</i> , 7813-7820.
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