

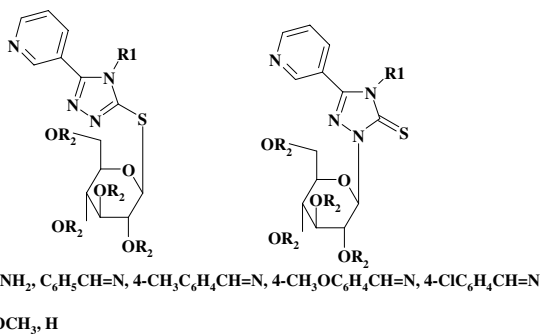
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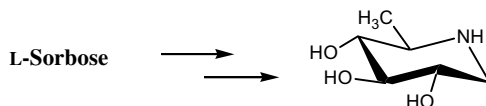
Nasser S. A. M. Khalil



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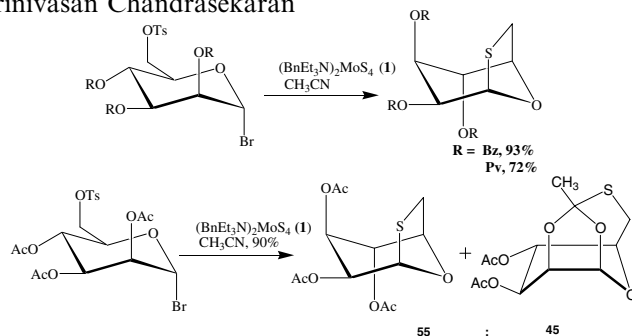
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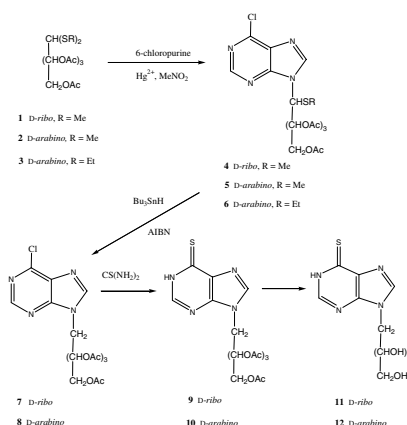
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Derek Horton,* Sheela Thomas and Judith Gallucci

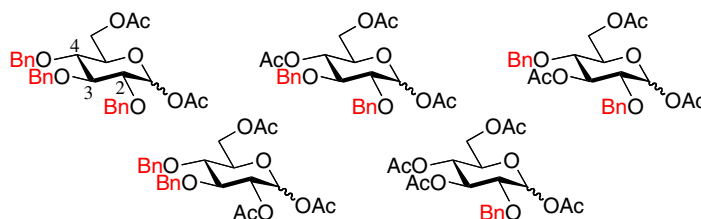
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Facile and regioselective preparation of partly O-benzylated D-glucopyranose acetates via acid-mediated simultaneous debenzylation–acetolysis

Yang Cao, Yasunori Okada and Hidetoshi Yamada*

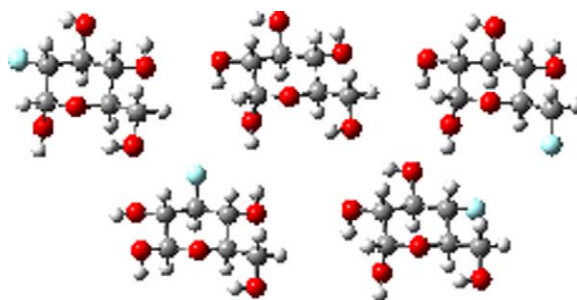
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Fluoro-substitution effects in deoxyfluoro-D-glucose derivatives: random conformational search and quantum chemical calculation

Jin-Ming Zhou,* Jun-Hong Zhou, Hua-Bei Zhang, Xi-Cheng Dong and Min-Bo Chen*

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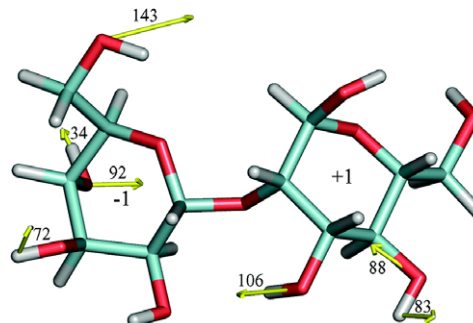


Docking studies on glycoside hydrolase Family 47 endoplasmic reticulum α -(1 \rightarrow 2)-mannosidase I to elucidate the pathway to the substrate transition state

Chandrika Mulakala, Wim Nerinckx and Peter J. Reilly*

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Computed forces in pN on α -D-mannopyranosyl-(1 \rightarrow 2)- α -D-mannopyranose exerted by the active site of yeast α -(1 \rightarrow 2)-mannosidase.



Inhibition of influenza-virus-induced cytopathy by sialylglycoconjugates

pp 2246–2253

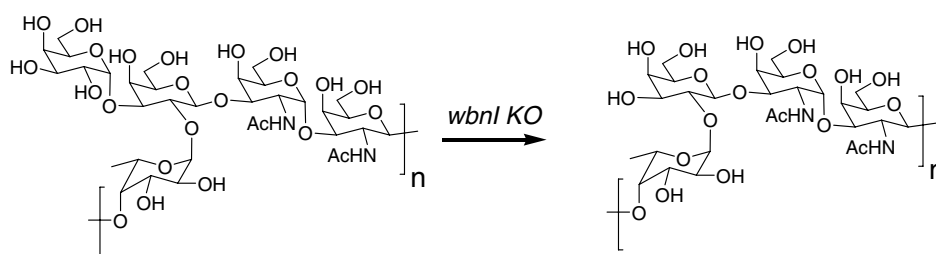
Takashi Terabayashi,* Minoru Morita, Masaki Ueno, Tadashi Nakamura and Tadasu Urashima

Gangliosides, GM4, GM3, GD1a, and sialylparagloboside and a synthesized GM3 analogue (*N*-3'-sialyllactosyl-laurinamide) inhibited the cytopathy of MDCK cells induced by infection with the influenza virus A/PR/8/34.

Formation of a new O-polysaccharide in *Escherichia coli* O86 via disruption of a glycosyltransferase gene involved in O-unit assembly

pp 2254–2260

Wen Yi, Lizhi Zhu, Hongjie Guo, Mei Li, Jianjun Li and Peng George Wang*

**Physicochemical properties and antitumor activities of water-soluble native and sulfated hyperbranched mushroom polysaccharides**

pp 2261–2269

Yongzhen Tao, Lina Zhang* and Peter C. K. Cheung

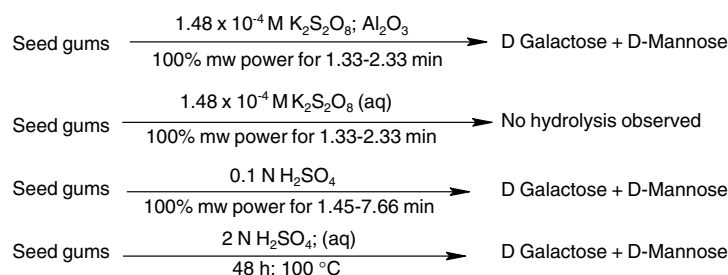
A water-soluble β -glucan extracted from the sclerotia of an edible fungus, *Pleurotus tuber-regium*, was fractionated into eight fractions, five of which were sulfated. Their physicochemical properties were determined, and the polysaccharides were evaluated for their antitumor activities. Water solubility and introduction of sulfate groups were the main factors in enhancing antitumor activity.

Microwave-promoted hydrolysis of plant seed gums on alumina support

pp 2270–2274

Vandana Singh,* Ashutosh Tiwari, Premlata Kumari and Stuti Tiwari

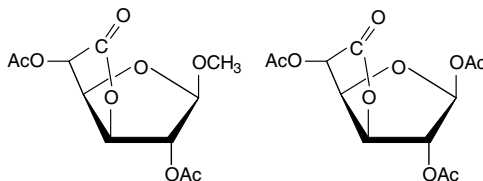
Eight different seed gums were fully hydrolyzed under microwave irradiation using potassium persulfate on alumina support. Solid-supported microwave hydrolysis is compared with the microwave-promoted aqueous hydrolysis using $K_2S_2O_8/0.1\text{ N H}_2\text{SO}_4$ and with conventional hydrolysis procedure.



Conformations of methyl 2,5-di-*O*-acetyl- β -D-glucofuranosidurono-6,3-lactone and 1,2,5-tri-*O*-acetyl- β -D-glucofuranurono-6,3-lactone in the crystal structure and in solution

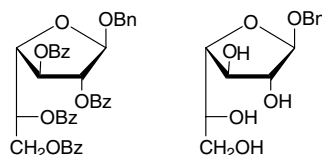
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Beata Liberek,* Dorota Tuwalska, Iwona do Santos-Zounon, Antoni Konitz, Artur Sikorski and Zygfryd Smiatacz


NOTES
Facile synthesis of benzyl β -D-galactofuranoside. A convenient intermediate for the synthesis of D-galactofuranose-containing molecules

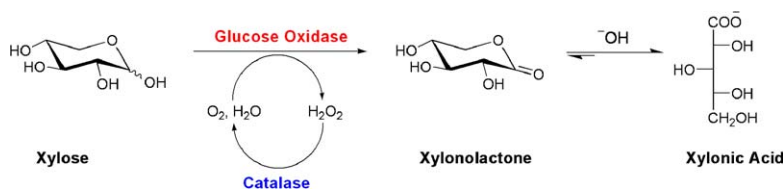
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Karina Mariño, Luciana Baldoni and Carla Marino*


Enzymatic synthesis of aldonic acids

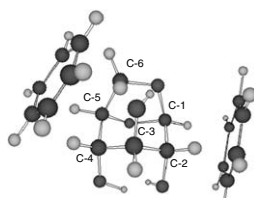
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F. Pezzotti and M. Therisod*



Thermal stabilization of levoglucosan in aromatic substances

pp 2293–2297

Takashi Hosoya, Haruo Kawamoto* and Shiro Saka


 Thermal degradation of levoglucosan (1,6-anhydro- β -D-glucopyranose) was effectively suppressed in the presence of some aromatic compounds probably due to inhibition of thermal motion of levoglucosan through CH- π interaction.

*Corresponding author

⁺ Supplementary data available via ScienceDirect

COVER

Image represents a key process of malaria parasites multiplying in, and rupturing from the human blood cell. The parasite surface is coated with glycosylphosphatidylinositols (GPIs), which have been identified as the malaria toxin by a collaborative effort between the research groups headed by Peter Seeberger (Swiss Federal Institute of Technology (ETH) Zürich, Switzerland) and Louis Schofield (Walter and Eliza Hall Institute of Medical Research, Australia). The space filling model represents the native GPI molecule from malaria parasite that has been chemically synthesized by the Seeberger group. Professor Peter Seeberger was presented with the Carbohydrate Research Award at the 13th European Carbohydrate Symposium (Bratislava, 2005).

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