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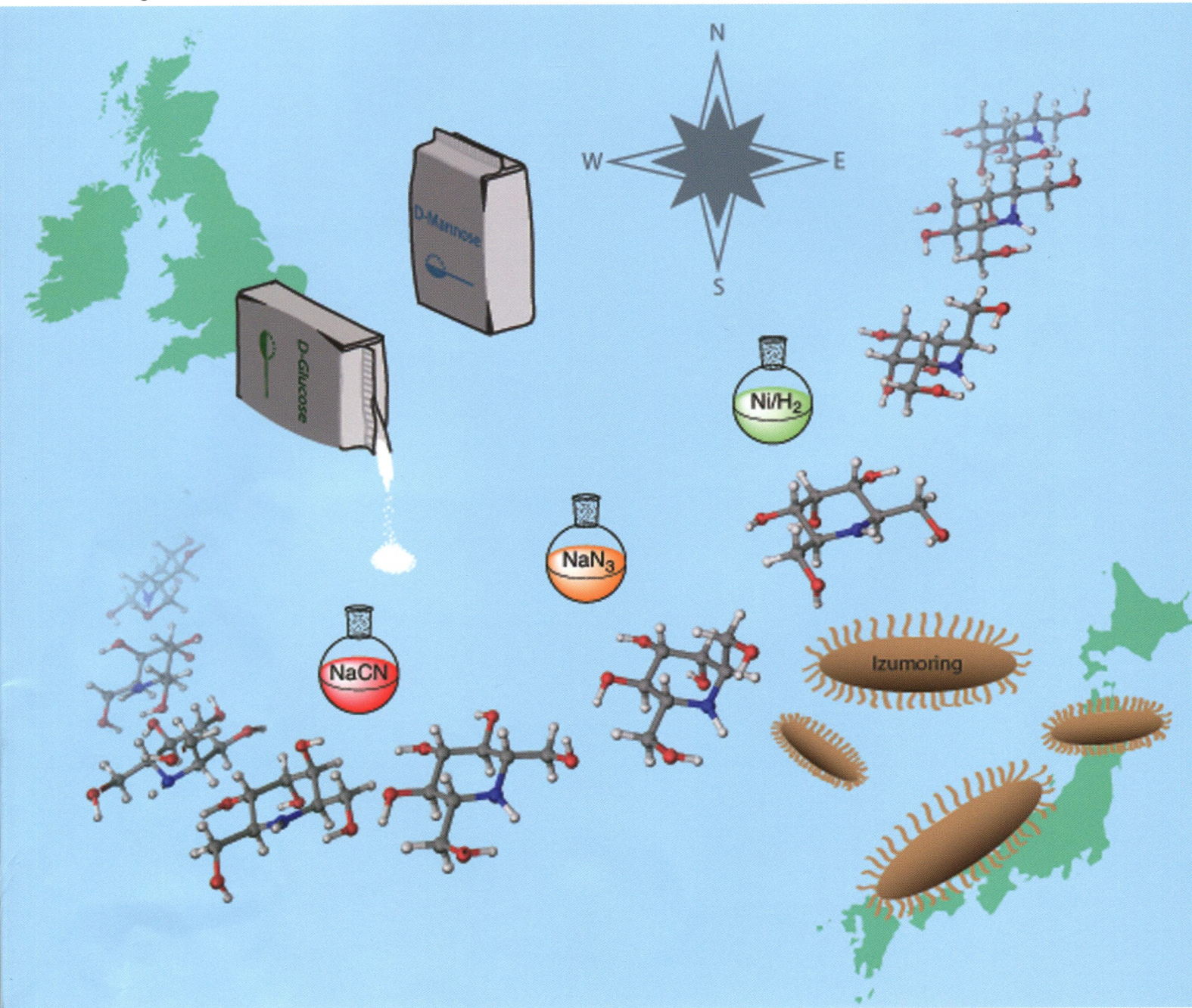

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PAPER

Atsushi Kato, George W. J. Fleet *et al.*

An approach to 8 stereoisomers of homonojirimycin from D-glucose *via* kinetic & thermodynamic azido-γ-lactones

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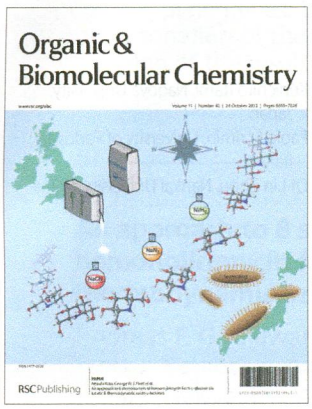

Cover
See Atsushi Kato, George W. J. Fleet *et al.*, pp. 6886–6899.

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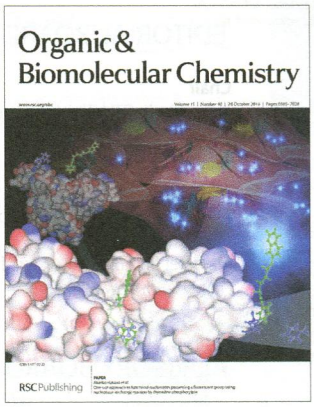

Inside cover
See Akihiko Hatano *et al.*, pp. 6900–6905.

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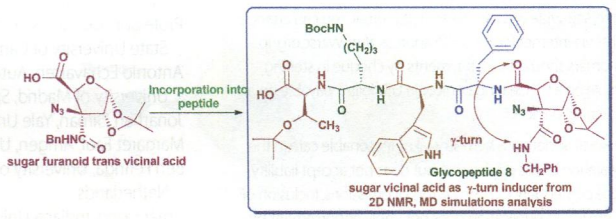
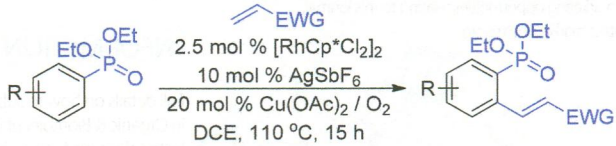
COMMUNICATIONS





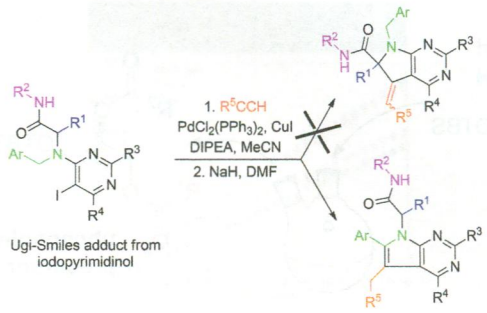
Федеральное государственное бюджетное учреждение науки Центральная научная библиотека Уральского отделения Российской академии наук (ЦНБ УрО РАН)

6883

Pyrrolo[2,3-*d*]pyrimidine synthesis through activation of *N*-benzyl groups by distal amides

Laurent El Kaïm,* Laurence Grimaud* and Simon Wagschal*

A new activation mode of CH_2–benzylamino groups has been observed during the preparation of pyrrolopyrimidines from Ugi–Smiles adducts of hydroxypyrimidines. The cyclization proceeds via a formal deprotonation of the *N*-benzyl group followed by trapping of the resulting anion by the alkyne moiety.

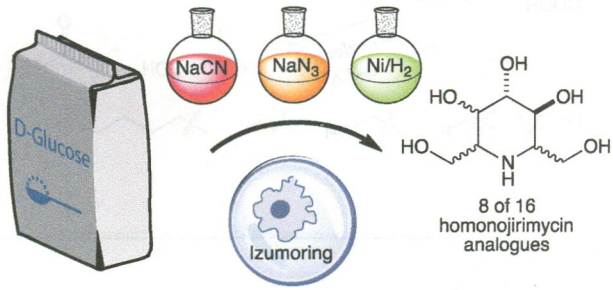


6886

An approach to 8 stereoisomers of homonojirimycin from D-glucose *via* kinetic & thermodynamic azido-γ-lactones

Andreas F. G. Glawar, Sarah F. Jenkinson, Scott J. Newberry, Amber L. Thompson, Shinpei Nakagawa, Akihide Yoshihara, Kazuya Akimitsu, Ken Izumori, Terry D. Butters, Atsushi Kato* and George W. J. Fleet*

A sweet combination of synthesis and biotechnology paves the way from D-glucose towards eight of the 16 stereoisomers of homonojirimycin.

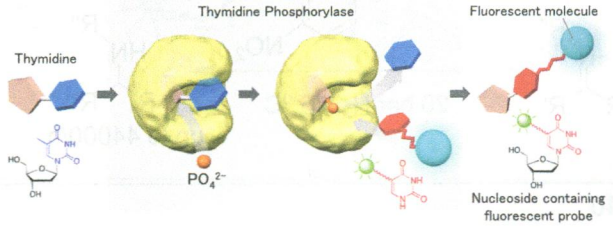


6900

One-pot approach to functional nucleosides possessing a fluorescent group using nucleobase-exchange reaction by thymidine phosphorylase

Akihiko Hatano,* Masayuki Kurosu, Susumu Yonaha, Munehiro Okada and Sanae Uehara

Thymidine phosphorylase mediates nucleobase-exchange reactions to convert unnatural nucleosides possessing a large functional group such as a fluorescent molecule, coumarin or pyrene, linked *via* an alkyl chain at the C5 position of uracil.

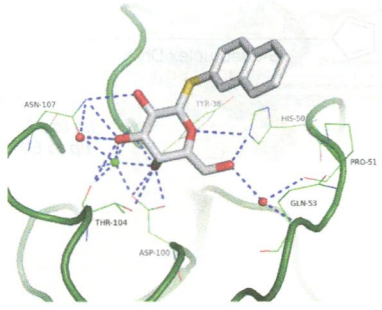


6906

Aromatic thioglycoside inhibitors against the virulence factor LecA from *Pseudomonas aeruginosa*

Jacques Rodrigue, Géraldine Ganne, Bertrand Blanchard, Catherine Saucier, Denis Giguère, Tze Chieh Shiao, Annabelle Varrot, Anne Imberty* and René Roy*

Inhibitors of the LecA (PA-IL) virulence factor from the pathogenic *P. aeruginosa* were studied, which led identification of compound **11** as the best inhibitor.



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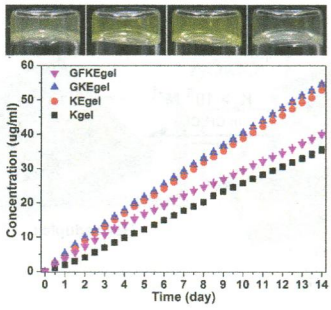

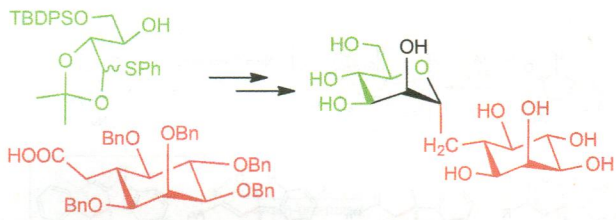

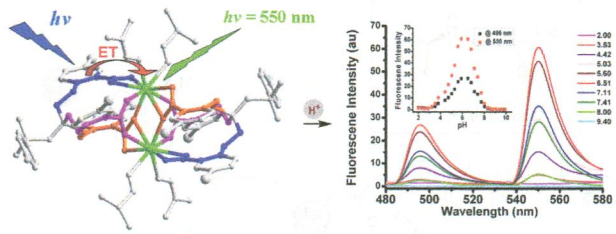

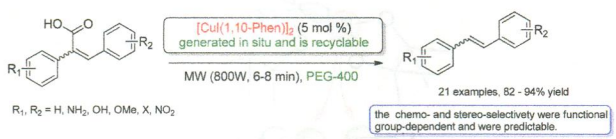

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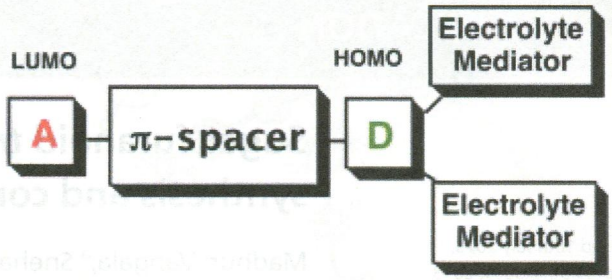
7011

The effect of donor-modification in organic light-harvesting motifs: triphenylamine donors appended with polymerisable thienyl subunits

Catherine Bonnier, Devin D. Machin, Omar K. Abdi, Kiyoshi C. D. Robson and Bryan D. Koivisto*

Seven organic triphenylamine-based dyes suitable for dye-sensitized solar cell applications are reported. The donor has been modified with polymerisable thienyl subunits, resulting in device efficiencies ranging from 5.51 to 6.65%.

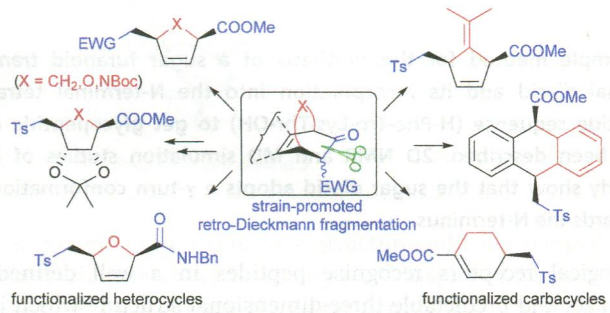


7016

Strain-promoted retro-Dieckmann-type condensation on [2.2.2]- and [2.2.1]bicyclic systems: a fragmentation reaction for the preparation of functionalized heterocycles and carbocycles

Elena Moreno-Clavijo, Antonio J. Moreno-Vargas,* Ana T. Carmona and Inmaculada Robina*

Fragmentation reaction of functionalized [2.2.2]- and [2.2.1]bicyclic systems leading to substituted five/six membered carbo- and heterocycles is broadly studied.



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