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Organic & Biomolecular Chemistry

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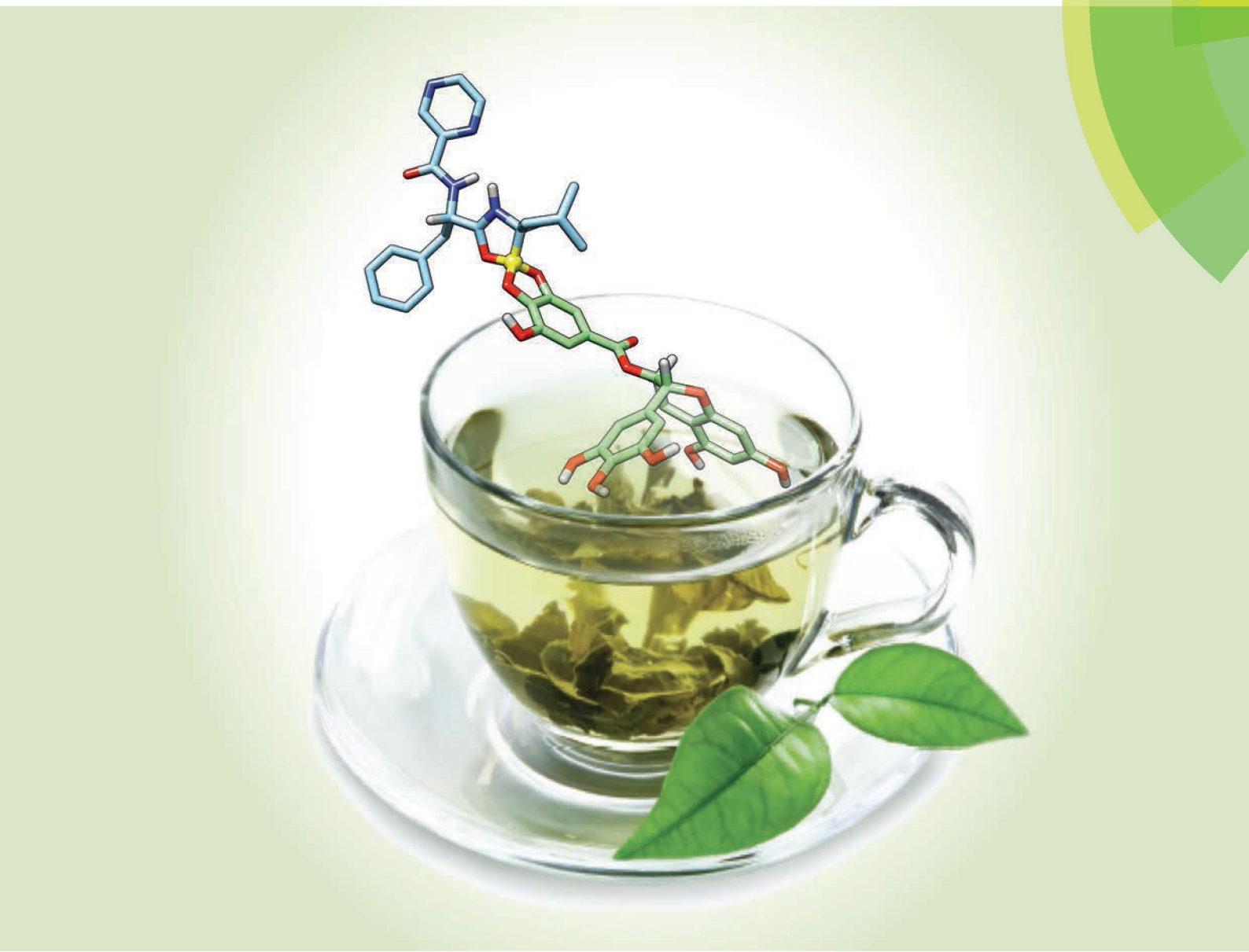

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ROYAL SOCIETY OF CHEMISTRY

PAPER

Nicos A. Petasis *et al.*

Molecular characterization of the boron adducts of the proteasome inhibitor bortezomib with epigallocatechin-3-gallate and related polyphenols

Organic & Biomolecular Chemistry

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Cover
See Nicos A. Petasis *et al.*, pp. 3887–3899.

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Inside cover
See Adiyala Vidyasagar and Kana M. Sureshan, pp. 3900–3910.

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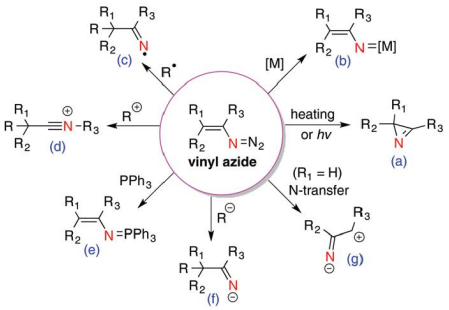
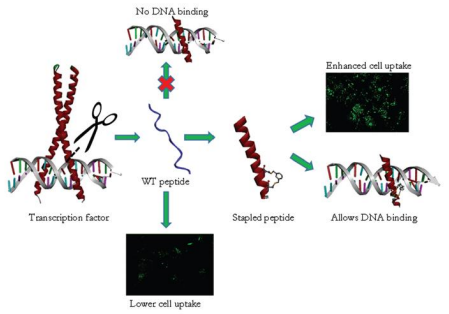
REVIEW



COMMUNICATIONS



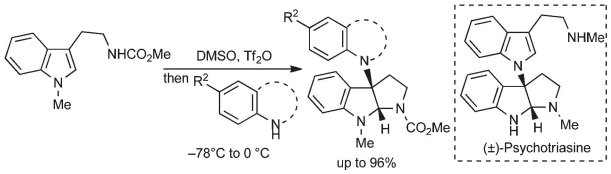
COMMUNICATIONS

3863

DMSO/Tf_2O-mediated cross-coupling of tryptamine with substituted aniline to access C3a–N1′-linked pyrroloindoline alkaloids

Masanori Tayu, Takako Ishizaki, Kazuhiro Higuchi* and Tomomi Kawasaki*

The cross-coupling of tryptamine with substituted aniline to C3a–nitrogen-linked pyrroloindolines has been developed *via* the consecutive cyclization of tryptamine with DMSO/Tf_2O and the substitution of 3a-pyrroloindolylthionium intermediate with aniline.

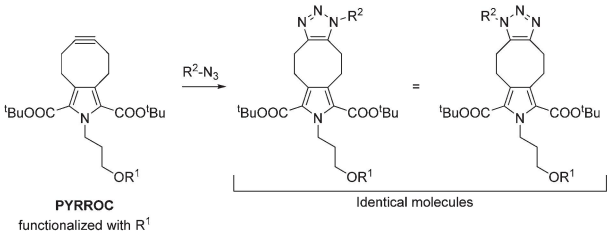


3866

PYRROC: the first functionalized cycloalkyne that facilitates isomer-free generation of organic molecules by SPAAC

Corinna Gröst and Thorsten Berg*

PYRROC is the first functionalized cycloalkyne which cannot form isomers in the strain-promoted cycloaddition with azides, and displays unprecedented rate accelerations and rate constants in aqueous buffer.

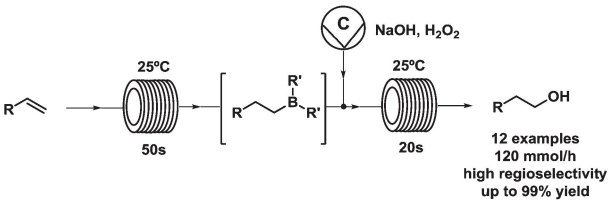


3871

Development of a flow method for the hydroboration/oxidation of olefins

José A. Souto,* Robert A. Stockman and Steven V. Ley

A method for the continuous preparation of alcohols by hydroboration/oxidation of olefins using flow techniques is described.

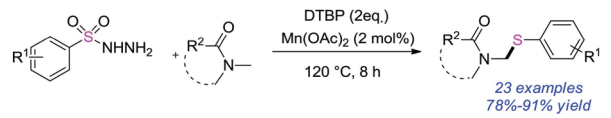


3878

Manganese catalysed sulfenylation of *N*-methyl amides with arenesulfonyl hydrazides

Jinwei Sun, Yi Wang* and Yi Pan

A convenient oxidative sulfenylation method for the formation of various sulfenyl amides has been reported.



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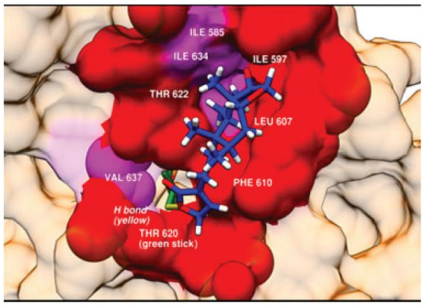

Crispene E, a *cis*-clerodane diterpene inhibits STAT3 dimerization in breast cancer cells

Julia Mantaj, S. M. Abdur Rahman,* Bishwajit Bokshi, Choudhury M. Hasan, Paul J. M. Jackson, Richard B. Parsons and Khondaker M. Rahman*

Crispene E inhibited STAT3 dimerization in a cell-free fluorescent polarization assay and was found to have significant toxicity against STAT3-dependent MDA-MB 231 breast cancer cell line and selectively inhibited the expression of STAT3 and STAT3 target genes.

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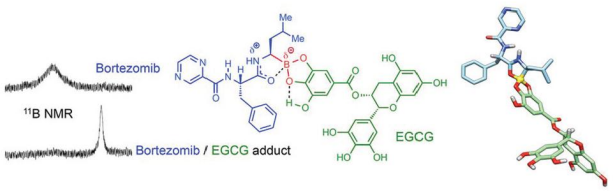
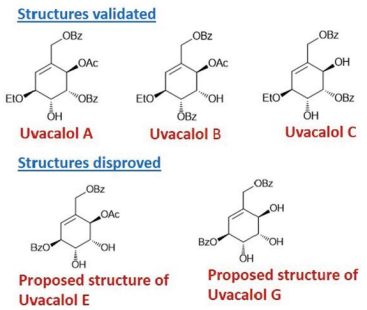


Molecular characterization of the boron adducts of the proteasome inhibitor bortezomib with epigallocatechin-3-gallate and related polyphenols

Stephen J. Glynn, Kevin J. Gaffney, Marcos A. Sainz, Stan G. Louie and Nicos A. Petasis*

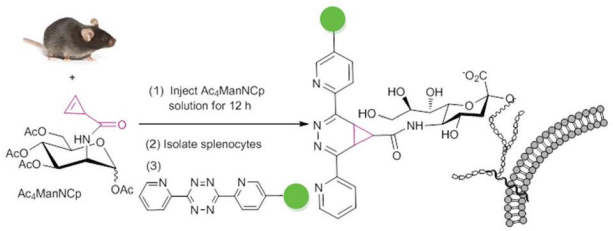
Green tea polyphenol EGCG antagonizes Bortezomib's anticancer activity through a stable intramolecular cyclic borate adduct involving the adjacent amide bond.



Total syntheses of five uvacalols: structural validation of uvacalol A, uvacalol B and uvacalol C and disproval of the structures of uvacalol E and uvacalol G

Adiyala Vidyasagar and Kana M. Sureshan*

The first total syntheses of five uvacalols have been achieved from chiral pool starting material D-mannitol. This study validates the structures of uvacalol A, B and C, it also disproves the structures of uvacalol E and G.



Rapid probing of sialylated glycoproteins *in vitro* and *in vivo via* metabolic oligosaccharide engineering of a minimal cyclopropene reporter

De-Cai Xiong, Jingjing Zhu, Ming-Jie Han, Hui-Xin Luo, Cong Wang, Yang Yu, Yuqian Ye, Guihua Tai and Xin-Shan Ye*

A minimal and efficient cyclopropene chemical handle was identified both *in vitro* and *in vivo*.

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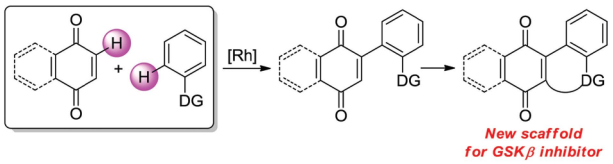

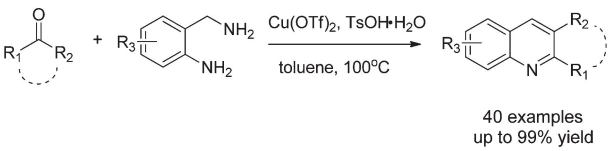

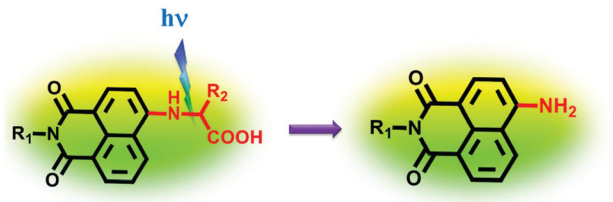

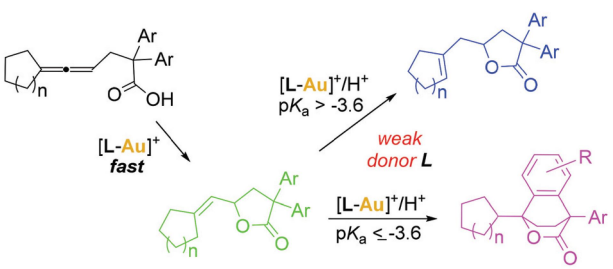

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