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See Magali Gary-Bobo, Marwan Kobeissi, Fabrice Odobel *et al.*, pp. 6509–6523.

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REVIEWS

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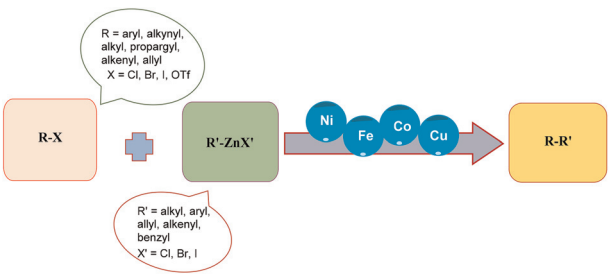
Low-cost transition metal catalysed Negishi coupling: an update

Pulluparambil Xavier Thresia Rinu, Rose Mary Philip and Gopinathan Anilkumar



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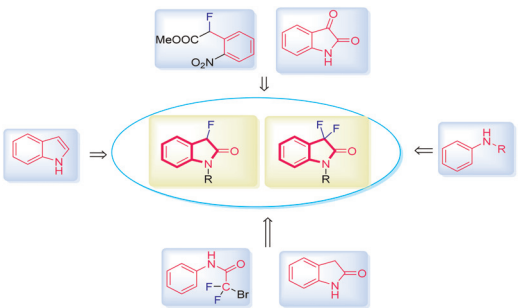
Synthetic strategies for the construction of C3-fluorinated oxindoles

Deeksha, Bittu and Ritesh Singh*



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COMMUNICATIONS

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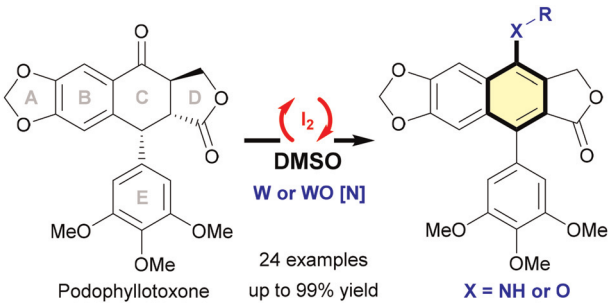
An I_2–DMSO catalytic manifold enabled aromatization for C-ring editing of podophyllotoxone

Peng Yuan, Rui Liu, Hui-Min Zhu, Zhixin Liao, Jia-Chen Xiang* and An-Xin Wu*



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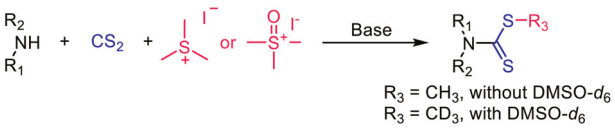
Facile access to *S*-methyl dithiocarbamates with sulfonium or sulfoxonium iodide as a methylation reagent

Huiying Deng, Lingling Xiang, Zhijun Yuan, Bohong Lin, Yiting He, Qi Hou, Yaoping Ruan and Jing Zhang*



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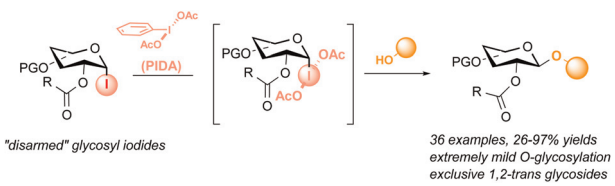
Stereoselective oxidative *O*-glycosylation of disarmed glycosyl iodides with alcohols using PIDA as the promoter

Maria A. Boulogeorgou, Alexandros Toskas, John K. Gallos* and Christos I. Stathakis*



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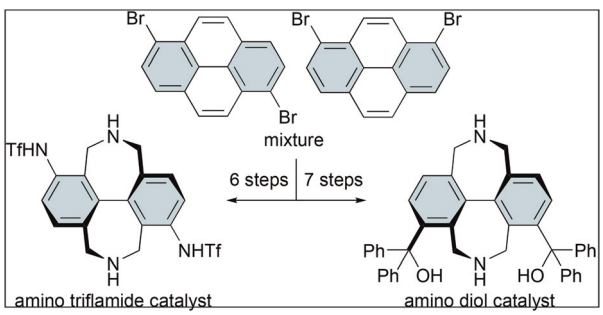
Synthesis of biphenyl-based chiral amine catalysts from dibromopyrenes and their application in enamine catalysis

Yuki Uwaso, Naoki Yokoyama and Taichi Kano*



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COMMUNICATIONS

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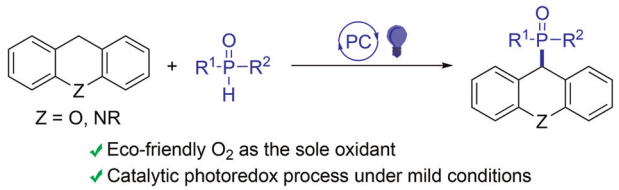

Visible light irradiated photocatalytic C(sp^3)–H phosphorylation of xanthenes and 9,10-dihydroacridines with P(O)–H compounds

Mingjun Liu, Jiarui Zhu, Xuming Jiang, Xiangyun Yang and Qian Chen*

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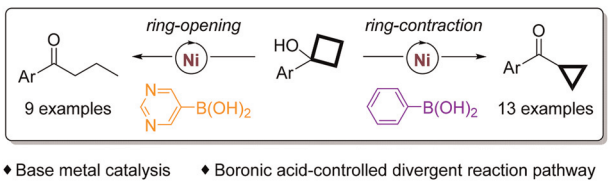

Aryl boronic acid-controlled divergent ring-contraction and ring-opening/isomerization reaction of *tert*-cyclobutanols enabled by nickel catalysis

Zhichang He, Zhengwen Wang, Zhao Gao, Hongwei Qian, Wangqiannan Ding, Hongwei Jin, Yunkui Liu and Bingwei Zhou*

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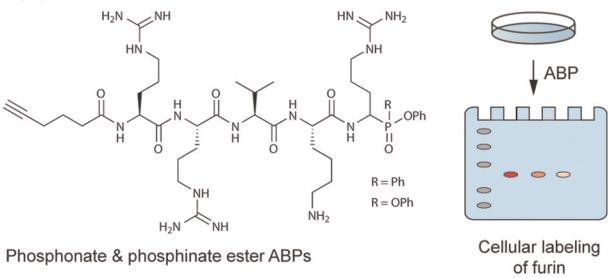

Furin-targeting activity-based probes with phosphonate and phosphinate esters as warheads

Shanping Ji and Steven H. L. Verhelst*

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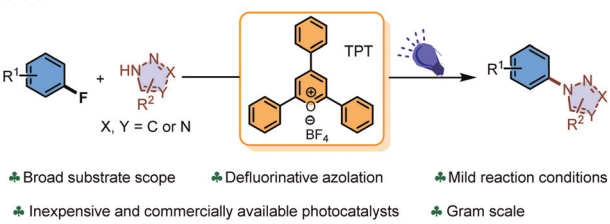

Organic photoredox-catalyzed oxidative azolation of unactivated fluoroarenes

Guodong Ju, Yalong Li and Yingsheng Zhao*

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PAPERS

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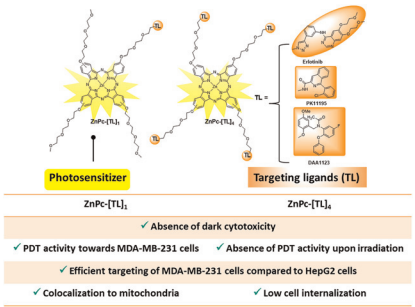
Development of targeted photodynamic therapy drugs by combining a zinc phthalocyanine sensitizer with TSPO or EGFR binding groups: the impact of the number of targeting agents on biological activity

Isabelle Toubia, Christophe Nguyen, Stéphane Diring, Mélanie Onofre, Morgane Daurat, Corentin Gauthier, Magali Gary-Bobo,* Marwan Kobeissi* and Fabrice Odobel*



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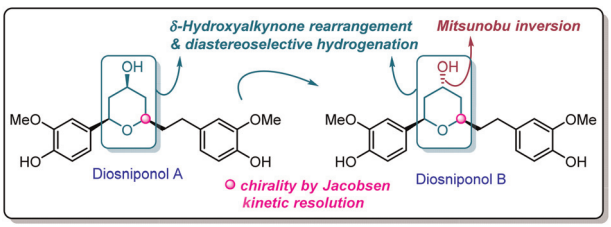
Asymmetric total synthesis of diosniponols A and B

Deepak Saini, Dashrath Jangid and Rodney A. Fernandes*



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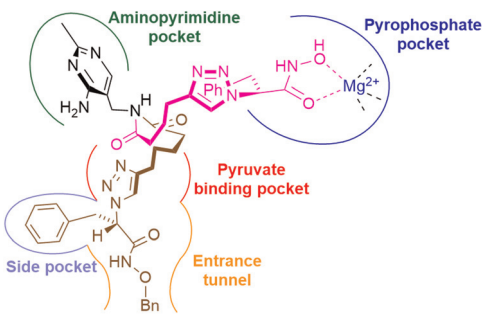
Open-chain thiamine analogues as potent inhibitors of thiamine pyrophosphate (TPP)-dependent enzymes

Alex H. Y. Chan, Terence C. S. Ho and Finian J. Leeper*



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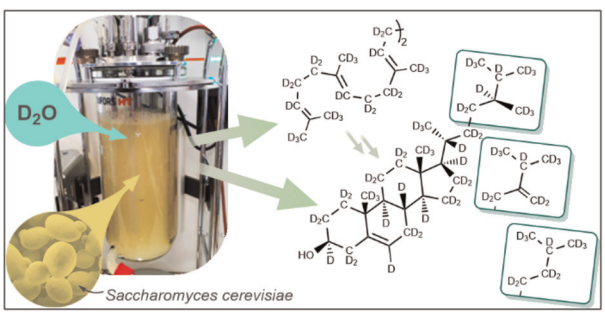
Deuterated squalene and sterols from modified *Saccharomyces cerevisiae*

Carl Recsei, Robert A. Russell, Marina Cagnes and Tamim Darwish*



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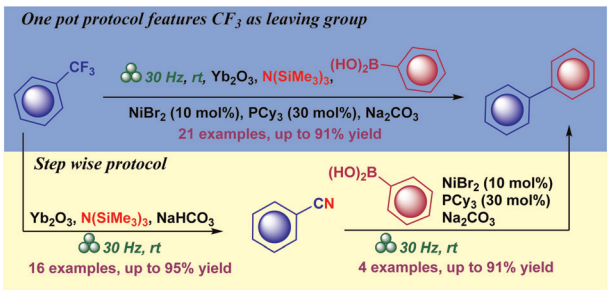

Mechanochemical arylative detrifluoromethylation of trifluoromethylarenes

Satenik Mkrtchyan, Mohanad Shkoor, Sehrish Sarfaraz, Khurshid Ayub and Viktor O. Iaroshenko*

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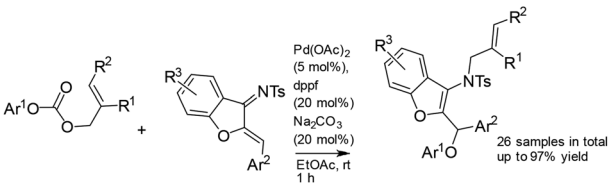

Pd-catalyzed decarboxylative 1,4-addition reactions of benzofuran-based azadienes with allyl phenyl carbonates

Lu-Yu Cai, Xiu-Qing Song, Kuo Wang, Yue Zhang and Hong-Wu Zhao*

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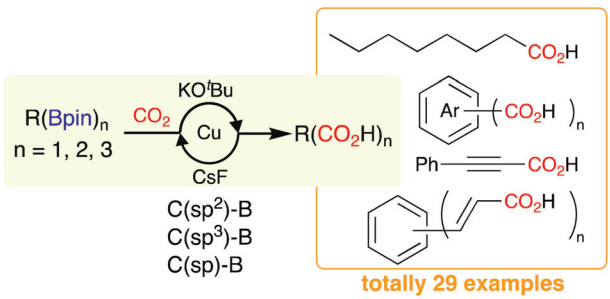

Cu-catalyzed carboxylation of organoboronic acid pinacol esters with CO_2

Chihiro Maeda,* Takumi Cho, Ren Kumemoto and Tadashi Ema*

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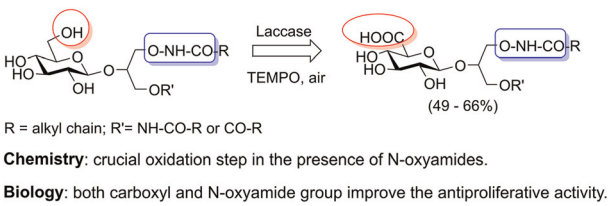

Synthesis of *N*-oxyamide analogues of protein kinase B (Akt) targeting anionic glycoglycerolipids and their antiproliferative activity on human ovarian carcinoma cells

Marco Zuccolo, Giulia Orsini, Martina Quaglia, Luca Mirra, Cristina Corno, Nives Carenini, Paola Perego and Diego Colombo*

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PAPERS

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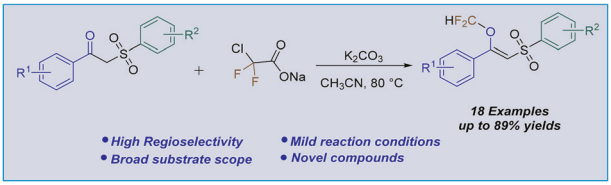
A regioselective synthesis of β-difluoromethoxy vinyl sulfones *via* *O*-difluoromethylation of β-ketosulfones using sodium chlorodifluoroacetate

Km Ishu, Neha Sharma Prabhakar and Krishna Nand Singh*



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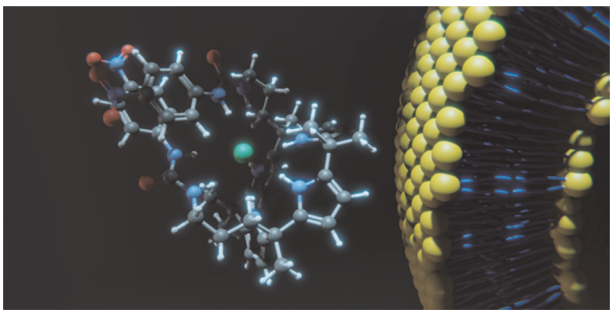
Anion binding and transport with *meso*-alkyl substituted two-armed calix[4]pyrroles bearing urea and hydroxyl groups

Małgorzata Pamuła, Evgeny Bulatov, Luis Martínez-Crespo, Anniina Kiesilä, Julia Naulapää, Elina Kalenius and Kaisa Helttunen*



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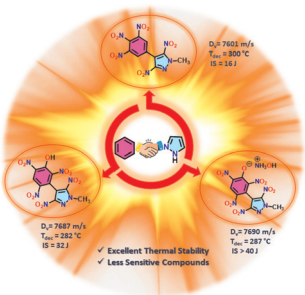
Polynitro-functionalized 4-phenyl-1*H*-pyrazoles as heat-resistant explosives

Krishna Pandey, Prachi Bhatia, Khwaja Mohammad, Vikas D. Ghule and Dheeraj Kumar*



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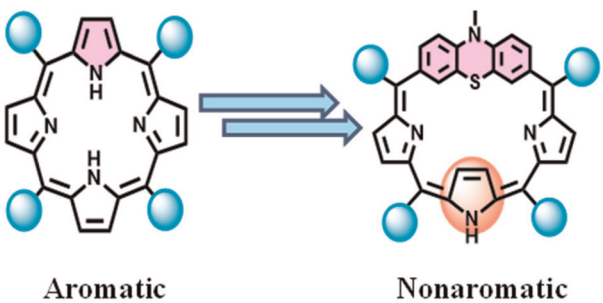
Synthesis of stable nonaromatic phenothiazinophyrins

Neha Tripathi, Avisikta Sinha and Mangalampalli Ravikanth*