

# Organic & Biomolecular Chemistry

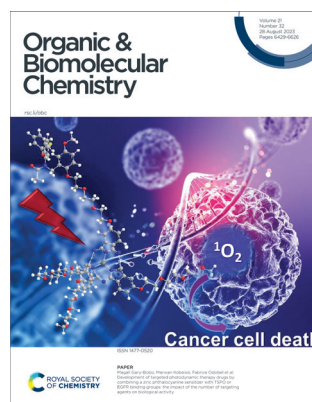
An international journal of synthetic, physical and biomolecular organic chemistry

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### Cover

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

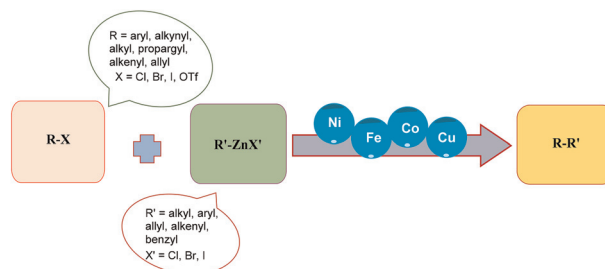
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### Low-cost transition metal catalysed Negishi coupling: an update

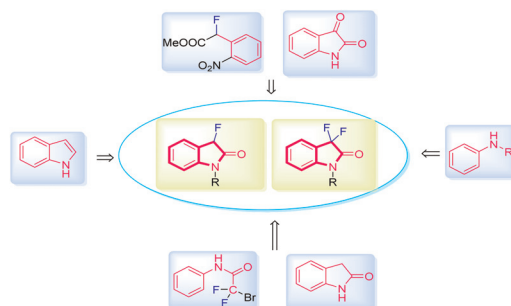
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### Synthetic strategies for the construction of C3-fluorinated oxindoles

Deeksha, Bittu and Ritesh Singh\*



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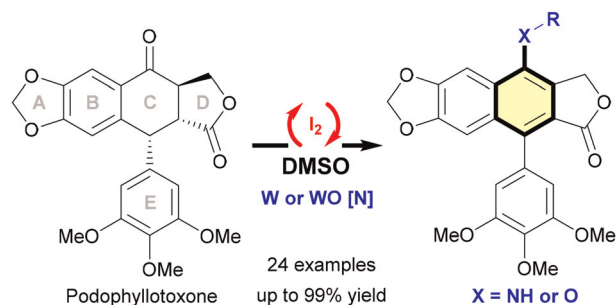


## COMMUNICATIONS

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An I<sub>2</sub>–DMSO catalytic manifold enabled aromatization for C-ring editing of podophyllotoxone

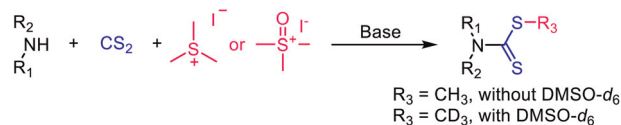
Peng Yuan, Rui Liu, Hui-Min Zhu, Zhixin Liao, Jia-Chen Xiang\* and An-Xin Wu\*



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

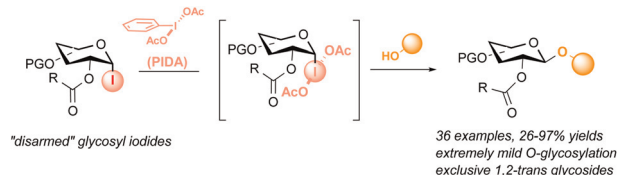
Huiying Deng, Lingling Xiang, Zhijun Yuan, Bohong Lin, Yiting He, Qi Hou, Yaoping Ruan and Jing Zhang\*



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

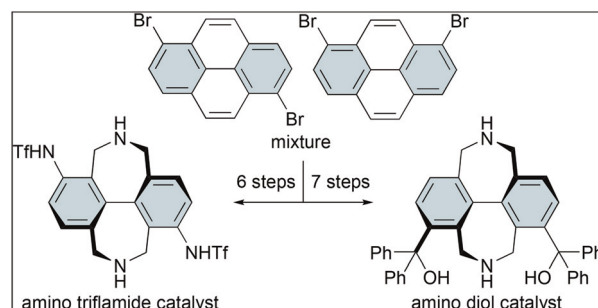
Maria A. Boulogeorgou, Alexandros Toskas, John K. Gallos\* and Christos I. Stathakis\*



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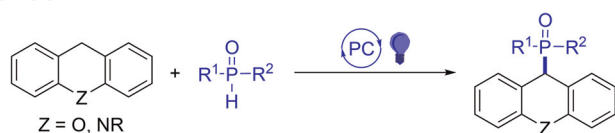
## Synthesis of biphenyl-based chiral amine catalysts from dibromopyrenes and their application in enamine catalysis

Yuki Uwaso, Naoki Yokoyama and Taichi Kano\*



## COMMUNICATIONS

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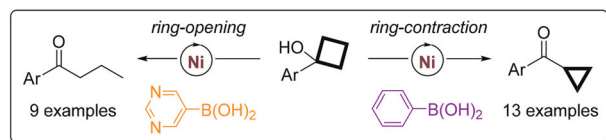


- ✓ Eco-friendly  $O_2$  as the sole oxidant
- ✓ Catalytic photoredox process under mild conditions

### 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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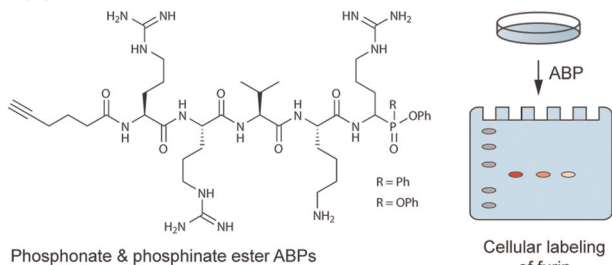


- ◆ Base metal catalysis
- ◆ Boronic acid-controlled divergent reaction pathway

### 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\*

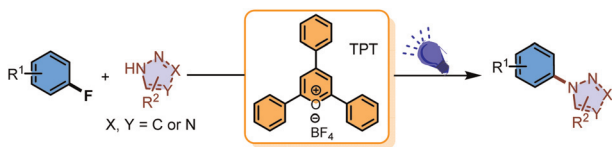
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### Furin-targeting activity-based probes with phosphonate and phosphinate esters as warheads

Shanping Ji and Steven H. L. Verhelst\*

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- ♣ Broad substrate scope
- ♣ Defluorinative azolation
- ♣ Mild reaction conditions
- ♣ Inexpensive and commercially available photocatalysts
- ♣ Gram scale

### Organic photoredox-catalyzed oxidative azolation of unactivated fluoroarenes

Guodong Ju, Yalong Li and Yingsheng Zhao\*

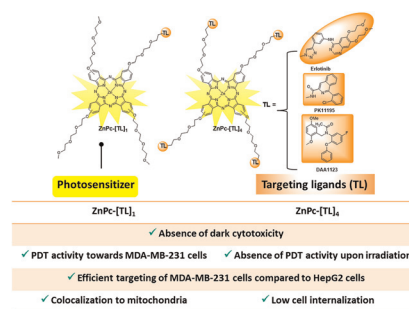


## PAPERS

6509

### 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

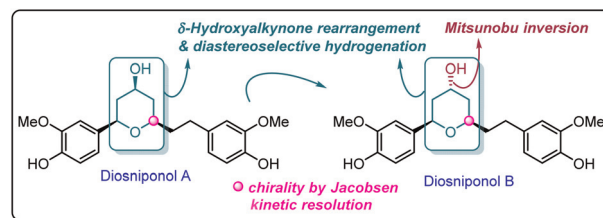
Isabelle Toubia, Christophe Nguyen, Stéphane Diring, Mélanie Onofre, Morgane Daurat, Corentin Gauthier, Magali Gary-Bobo,\* Marwan Kobeissi\* and Fabrice Odobel\*



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### Asymmetric total synthesis of diosniponols A and B

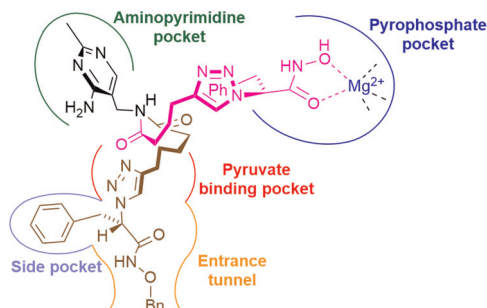
Deepak Saini, Dashrath Jangid and Rodney A. Fernandes\*



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

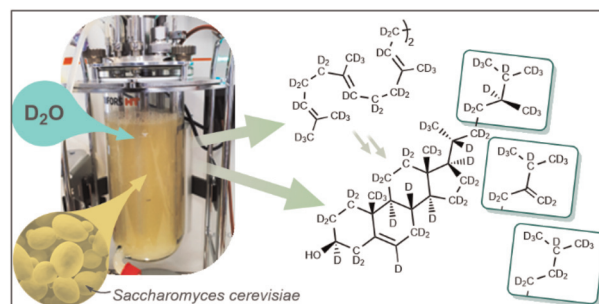
Alex H. Y. Chan, Terence C. S. Ho and Finian J. Leeper\*



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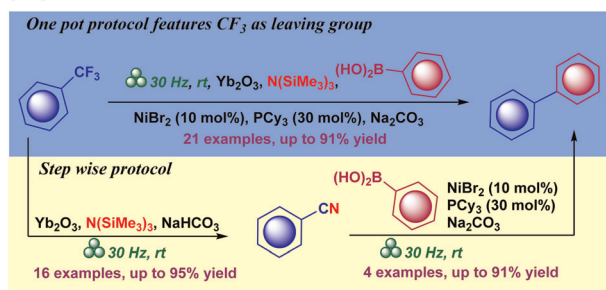
### Deuterated squalene and sterols from modified *Saccharomyces cerevisiae*

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



## PAPERS

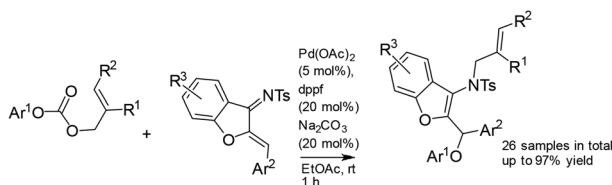
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### Mechanochemical arylation of trifluoromethylarenes

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

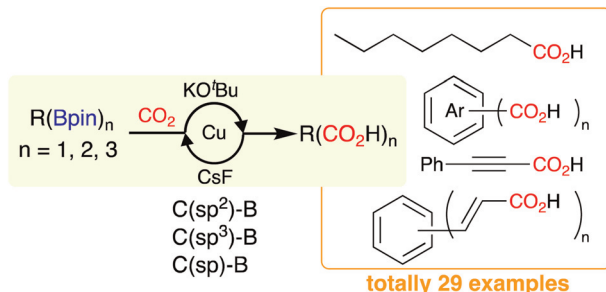
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### Pd-catalyzed decarboxylative 1,4-addition reactions of benzofuran-based azadienes with allyl phenyl carbonates

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

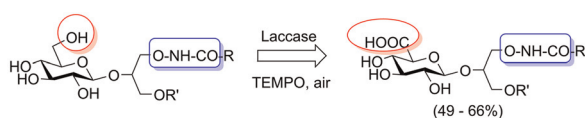
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### Cu-catalyzed carboxylation of organoboronic acid pinacol esters with $\text{CO}_2$

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

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R = alkyl chain; R' = NH-CO-R or CO-R

**Chemistry:** crucial oxidation step in the presence of N-oxyamides.

**Biology:** both carboxyl and N-oxyamide group improve the antiproliferative activity.

### Synthesis of N-oxyamide analogues of protein kinase B (Akt) targeting anionic glycosylcerolipids 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\*



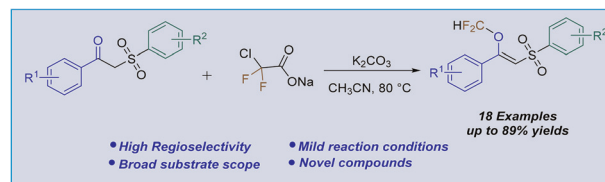


## PAPERS

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### A regioselective synthesis of $\beta$ -difluoromethoxy vinyl sulfones *via* *O*-difluoromethylation of $\beta$ -ketosulfones using sodium chlorodifluoroacetate

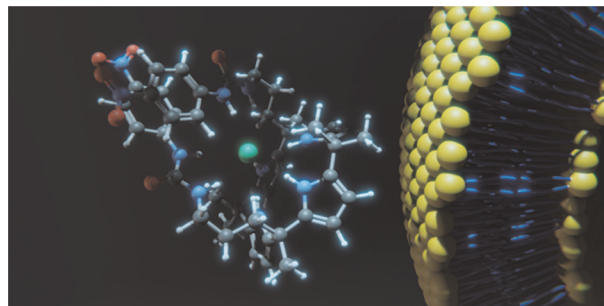
Km Ishu, Neha Sharma Prabhakar and Krishna Nand Singh\*



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

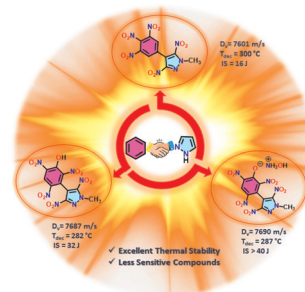
Małgorzata Pamuła, Evgeny Bulatov, Luis Martinez-Crespo, Anniina Kiesilä, Julia Naulapää, Elina Kalenius and Kaisa Helttunen\*



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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\*

