

# Organic & Biomolecular Chemistry

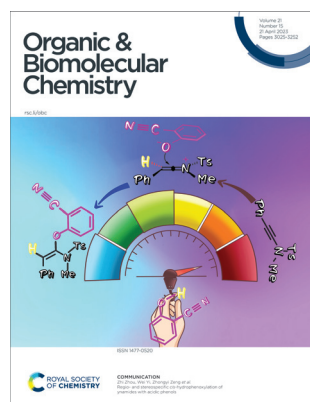
An international journal of synthetic, physical and biomolecular organic chemistry

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## IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 21(15) 3025–3252 (2023)

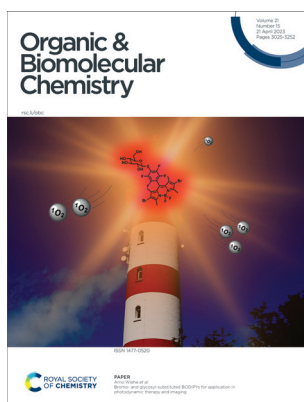


### Cover

See Zhi Zhou, Wei Yi, Zhongyi Zeng *et al.*, pp. 3073–3078.

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### Inside cover

See Arno Wiehe *et al.*, pp. 3105–3120.

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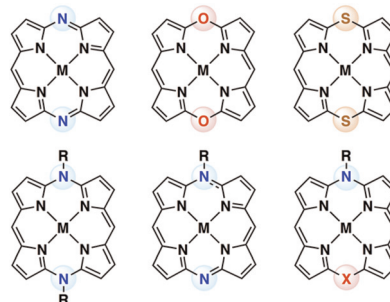
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## REVIEWS

3034

### Recent advances in the synthesis of diazaporphyrins and their chalcogen derivatives

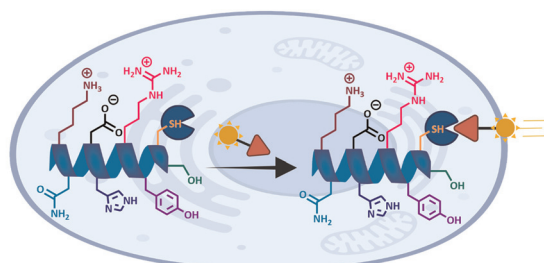
Yoshihiro Matano



3057

### Thia-Michael addition: the route to promising opportunities for fast and cysteine-specific modification

Marzieh Ahangarpour, Iman Kaviani and Margaret A. Brimble\*



☀: fluorophore, affinity prob, drug molecule, reactive tag,...  
◀: Michael acceptor

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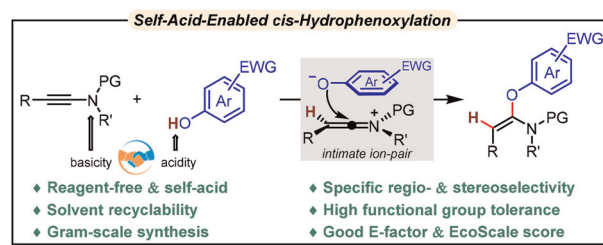


## COMMUNICATIONS

3073

Regio- and stereospecific *cis*-hydrophenoxylation of ynamides with acidic phenols

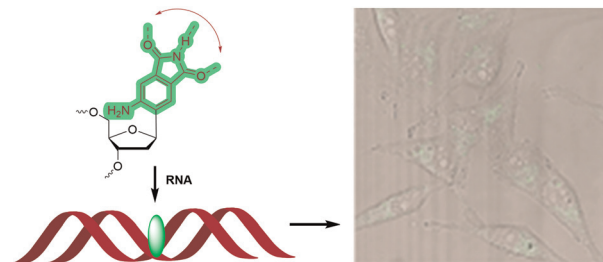
Ting Wang, Yuyan Wan, Mingyao Xu, Yi Wang, Xu-Jia Hong, Hui Gao, Zhi Zhou,\* Wei Yi\* and Zhongyi Zeng\*



3079

## Aminophthalimide as a mimetic of purines and a fluorescent RNA base surrogate for RNA imaging

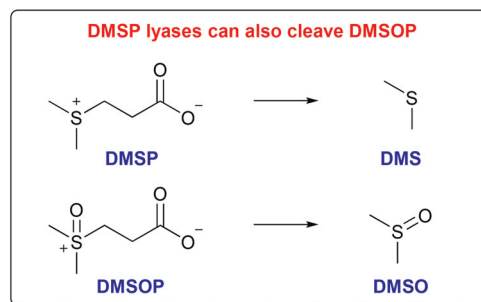
Fabian Lang, Franziska Röncke and Hans-Achim Wagenknecht\*



3083

## Discovery of dimethylsulfoxonium propionate lyases – a missing enzyme relevant to the global sulfur cycle

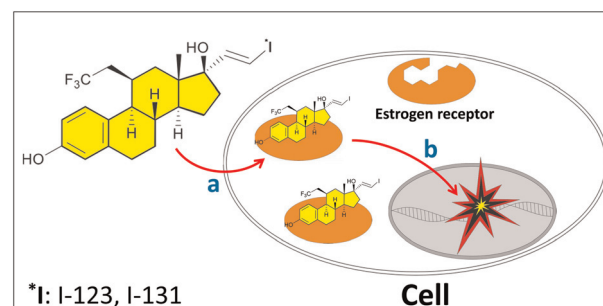
Anuj K. Chhalodia and Jeroen S. Dickschat\*



3090

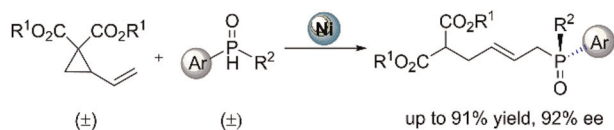
## Synthesis and evaluation of radioiodinated estrogens for diagnosis and therapy of male urogenital tumours

F. Braun, M. Jaschinski, P. Täger, V. Marmann, M. Brandenstein, B. Köditz, T. Fischer, S. Muñoz-Vázquez, B. Zimmermanns, M. Dietlein, F. Sudbrock, P. Krapf, D. Fischer, A. Heidenreich, A. Drzezga, S. Kirsch, M. Pietsch and K. Schomäcker\*



## COMMUNICATIONS

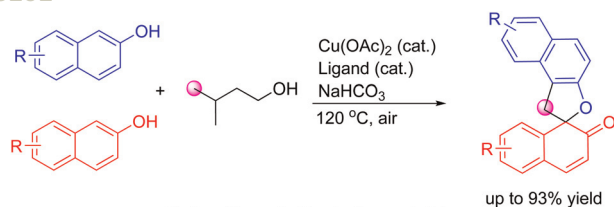
3096



### Nickel-catalysed enantioselective reaction of secondary phosphine oxides and activated vinylcyclopropanes

Zhuo Huang, Xu-Teng Liu, Ranran Cui and Qing-Wei Zhang\*

3101



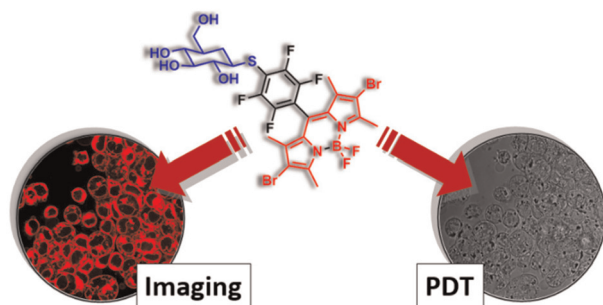
- Readily available starting material
- Using air as a green oxidant
- Easy manipulation

### Cu(II)-catalyzed domino construction of spironaphthalenones by dearomatization of $\beta$ -naphthols and using *N,N*-dimethylaminoethanol as a C1 synthon

Meiqi Geng, Jinqiang Kuang,\* Maozhong Miao and Yongmin Ma\*

## PAPERS

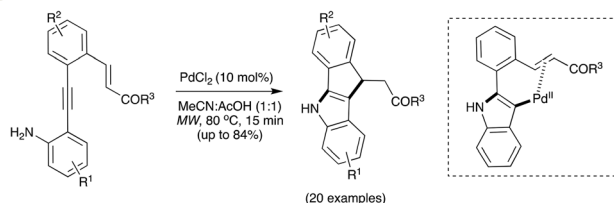
3105



### Bromo- and glycosyl-substituted BODIPYs for application in photodynamic therapy and imaging

Benjamin F. Hohlfeld, Dorika Steen, Gerhard D. Wieland, Katharina Achazi, Nora Kulak, Rainer Haag and Arno Wiehe\*

3121



- ✓ Microwave-assisted intramolecular cascade
- ✓ High atom economy and high-yielding
- ✓ Broad substrate scope and shorter reaction time
- ✓ Formation of two new rings and two new bonds
- ✓ No N-protecting group required
- ✓ No ligand is required

### A microwave-assisted intramolecular aminopalladation-triggered domino sequence: an atom economical route to 5,10-dihydroindeno [1,2-*b*]indoles

Tanvi Jandial, Anish Gupta, Gowsia Jan, Muthu Karuppasamy, Subbiah Nagarajan, C. Uma Maheswari and Vellaisamy Sridharan\*

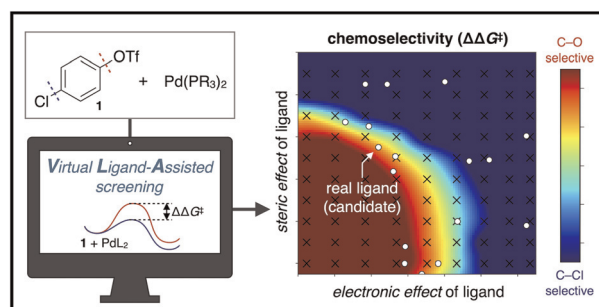


## PAPERS

3132

## Highly chemoselective ligands for Suzuki–Miyaura cross-coupling reaction based on virtual ligand-assisted screening

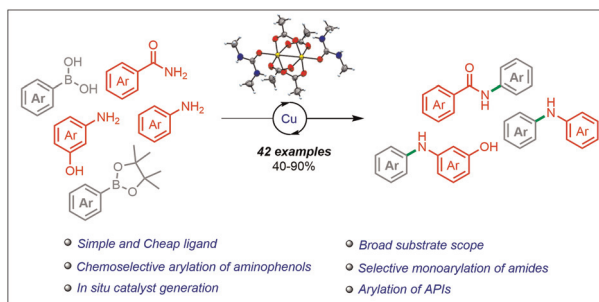
Wataru Matsuoka,\* Yu Harabuchi, Yuuya Nagata and Satoshi Maeda\*



3143

*N,N'*-Dimethylurea as an efficient ligand for the synthesis of pharma-relevant motifs through Chan–Lam cross-coupling strategy

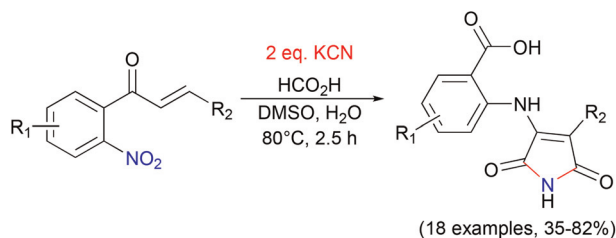
Rakhee Saikia, Sanghamitra Das, Arzu Almin, Abhijit Mahanta, Bipul Sarma, Ashim J. Thakur and Utpal Bora\*



3156

## Synthesis of 2-carboxyaniline-substituted maleimides from 2'-nitrochalcones

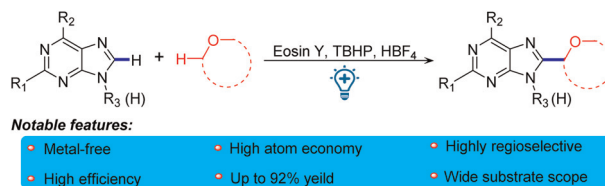
Nicolai A. Aksenov,\* Dmitrii A. Aksenov, Daniil D. Ganusenko, Igor A. Kurenkov, Alexander V. Leontiev and Alexander V. Aksenov



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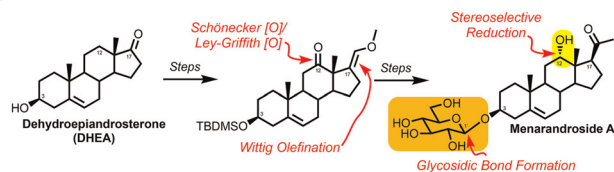
Visible light-induced direct alkylation of the purine C<sub>8</sub>–H bond with ethers

Changtong Lu, Gary Hstand and Dongen Lin\*



## PAPERS

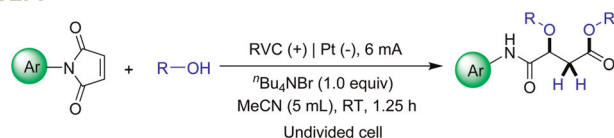
3172



### Synthesis of menarandroside A from dehydroepiandrosterone

Samuel D. Offei, Hadi D. Arman and Francis K. Yoshimoto\*

3177

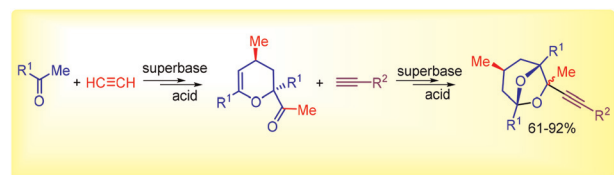


- ✓ *n*Bu<sub>4</sub>NBr as the redox catalyst and electrolyte
- ✓ Metal- and oxidant-free
- ✓ At room temperature, open to air
- ✓ Detailed mechanism study

### Electrocatalytic ring-opening dihydroalkoxylation of *N*-aryl maleimides with alcohols under metal- and oxidant-free conditions

Zhang Zhang, Ying-Chun Wang,\* Hai-Tao Tang, Ying-Ming Pan and Xiu-Jin Meng\*

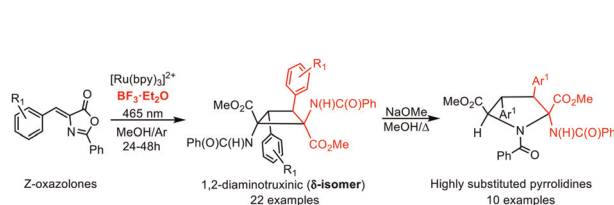
3183



### Concise assembly of 7-ethynyl-6,8-dioxabicyclo[3.2.1]octanes from acetylenes and ketones

Elena Yu. Schmidt, Ivan A. Bidusenko, Nadezhda I. Protsuk, Igor A. Ushakov and Boris A. Trofimov\*

3203



### Synthesis of 1,2-diaminotruxinic $\delta$ -cyclobutanes by $\text{BF}_3$ -controlled [2 + 2]-photocycloaddition of 5(4*H*)-oxazolones and stereoselective expansion of $\delta$ -cyclobutanes to give highly substituted pyrrolidines-2,5-dicarboxylates

Sonia Sierra, Rosa López, Enrique Gómez-Bengoa, Larry R. Falvello and Esteban P. Urriolabeitia\*



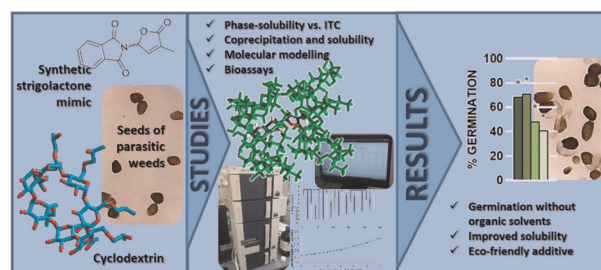


## PAPERS

3214

### Host–guest complexation of phthalimide-derived strigolactone mimics with cyclodextrins. Application in agriculture against parasitic weeds

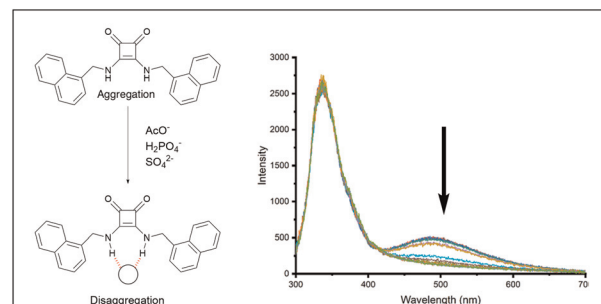
Antonio Cala Peralta, Francisco J. R. Mejías, Jesús Ayuso, Carlos Rial, José M. G. Molinillo, José A. Álvarez, Stefan Schwaiger and Francisco A. Macías\*



3226

### Squaramides for colorimetric and fluorescent anion sensing

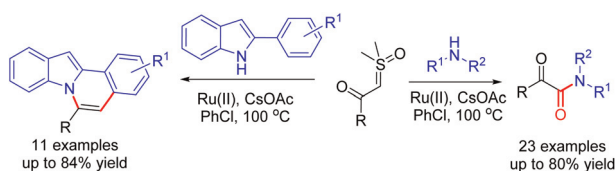
Jakob D. E. Lane and Katrina A. Jolliffe\*



3235

### Ru(II)-catalyzed oxidative coupling of sulfoxonium ylides with amines: efficient synthesis of $\alpha$ -ketoamides and indolo[2,1-a]isoquinolines

Sumi Changmai, Tribeni Gogoi, Jyotshna Phukon, Bipul Das and Sanjib Gogoi\*



3245

### Synthesis and ring-opening metathesis polymerisation of *o*-alkoxy benzothiadiazole paracyclophane-1,9-dienes

Yurachat Janpatompong, Venukrishnan Komanduri, Raja U. Khan and Michael L. Turner\*

