# **Organic & Biomolecular Chemistry**

An international journal of synthetic, physical and biomolecular organic chemistry

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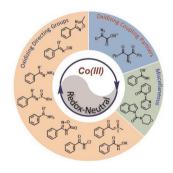
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Redox-neutral C-H annulation strategies for the synthesis of heterocycles via high-valent Cp\*Co(III) catalysis

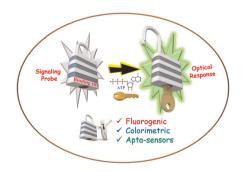
Nilanjan Bhaduri and Amit B. Pawar\*



#### 3942

An overview on the development of different optical sensing platforms for adenosine triphosphate (ATP) recognition

Subramaniyam Sivagnanam, Prasenjit Mahato\* and Priyadip Das\*



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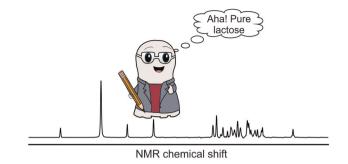


# **COMMUNICATIONS**

#### 3984

Resolving the complexity in human milk oligosaccharides using pure shift NMR methods and CASPER

Marshall J. Smith, Emma L. Gates, Göran Widmalm, Ralph W. Adams, Gareth A. Morris and Mathias Nilsson\*



# 3991

Demethyl oxidative halogenation of diacyl dimethylsulfonium methylides

Duo Fu, Changmeng Xi and Jiaxi Xu\*

$$R^{1}$$
 $R^{2}$ 
 $R^{2$ 

Catalyst-free, one-pot halogenation creating a halo quaternary carbon

#### 3997

Synthesis of nucleoside oligophosphates by electrophilic activation of phosphorothioate

Shogo Hasegawa, Masahito Inagaki, Shunichi Kato, Zhenmin Li, Yasuaki Kimura\* and Hiroshi Abe\*

#### 4002

Catalytic asymmetric CO<sub>2</sub> utilization reaction for the enantioselective synthesis of chiral 2-oxazolidinones

Ryuichi Nishiyori, Taiki Mori and Seiji Shirakawa\*

# **COMMUNICATIONS**

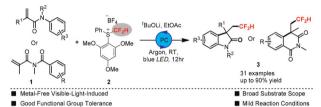
#### 4007

- novel product skeleton & facile introduction of extra 4-alkylidenyl motifs
- high chemoselectivity & diastereoselectivity
- $\begin{tabular}{ll} \clubsuit & \textbf{metal-free conditions in EtOH with $H_2$O as the only by-product} \end{tabular}$
- $\mbox{\ref{scales}}$  employment of  $\alpha,\beta,\gamma,\delta$  -unsaturated dicyanoalkenes as novel hydride acceptor

Chemoselective and diastereoselective construction of 4-alkylidene-tetrahydroquinoline *via* a redox-neutral vinylogous cascade [1,7]-hydride transfer/6-*endo-trig* cyclization strategy

Yufeng Wang, Qiang Li, Xiaopei Song, Jing Wang, Xiangcong Yin, Shuai-Shuai Li\* and Liang Wang\*

#### 4013



Visible-light photoredox-catalyzed radical aryldifluoromethylation of *N*-arylacrylamides with *S*-(difluoromethyl)sulfonium salt

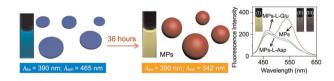
Ya-Shi Zhao, Sheng-Jie Huang, Yuan-Qing Gu and Guo-Kai Liu\*

#### 4018

Microwave-promoted radical addition/cyclization of biaryl vinyl ketones with diacyl peroxides in water under metal-free conditions

Xingyu Yang, Gan Zhang, Jingwen Zhou, Chao Zhou,\* Lei Wang and Pinhua Li\*

#### 4022



Efficient detection of L-aspartic acid and L-glutamic acid by self-assembled fluorescent microparticles with AIE and FRET activities

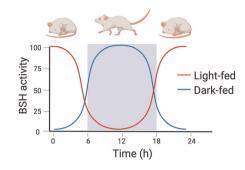
Wen-Juan Qu,\* Tingting Liu, Yongping Chai, Dongyan Ji, Yu-Xin Che, Jian-Peng Hu, Hong Yao, Qi Lin, Tai-Bao Wei and Bingbing Shi\*

### **PAPERS**

#### 4028

# Profiling rhythmicity of bile salt hydrolase activity in the gut lumen with a rapid fluorescence assay

Chathuri J. Kombala, Neha Agrawal, Agne Sveistyte, Ilia N. Karatsoreos, Hans P. A. Van Dongen and Kristoffer R. Brandvold\*



#### 4039

# A fluoro-alkene mimic of Gly-trans-Pro produces a stable collagen triple helix

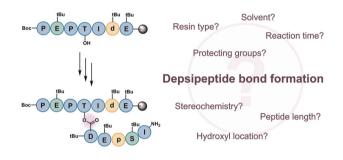
Paul J. Arcoria and Felicia A. Etzkorn\*

Gly-Pro fluoro-alkene in collagen

#### 4052

# Factors influencing on-resin depsipeptide bond formation: case studies on daptomycin- and brevicidine-derived sequences

Dennise Palpal-latoc, Margaret A. Brimble, Paul W. R. Harris\* and Aimee J. Horsfall\*



#### 4061

# Tetramate derivatives by chemoselective Dieckmann ring closure of allo-phenylserines, and their antibacterial activity

Liban Saney, Kirsten E. Christensen, Miroslav Genov, Alexander Pretsch, Dagmar Pretsch and Mark G. Moloney\*

# **PAPERS**

#### 4072

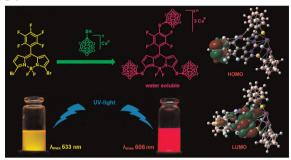


- Inherently chiral calix[4] arenes via gold(I)-catalysed hydroarylations of alkynes
- Highly regioselective 6-endo-dig annulations
- Broad scope (> 15 examples) and expedient access to difunctionalised chiral
- Preliminary results for the enantioselective reaction

# Gold(1)-catalysed hydroarylations of alkynes for the synthesis of inherently chiral calix[4] arenes

Gabriele Giovanardi, Gabriele Scarica, Valentina Pirovano, Andrea Secchi\* and Gianpiero Cera\*

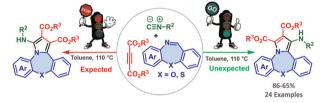
### 4084



# **BODIPY** derivatives modified with carborane clusters: synthesis, characterization and DFT studies

Andrei V. Zaitsev, Sergey S. Kiselev, Alexander F. Smol'yakov, Yury V. Fedorov, Elena G. Kononova, Yurii A. Borisov and Valentina A. Ol'shevskaya\*

#### 4095



# The new synthesis of pyrrole-fused dibenzo [b,f][1,4]oxazepine/thiazepines by the pseudo-Joullié-Ugi reaction via an unexpected route with high chemoselectivity

Mohammad Taghi Nazeri, Masoomeh Ahmadi, Maryam Ghasemi, Ahmad Shaabani\* and Behrouz Notash

#### 4109

- Mild reaction conditions
- Visible light as eco-friendly energy source
- Amibient air as the sole oxidant Metal-, strong oxidant- and external photocatalyst-free

# A visible-light-mediated cascade reaction of quinoxalin-2(1H)-ones, alkenes, and sulfinic acids

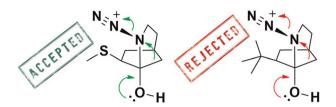
Sha Peng, Long-Yong Xie and Luo Yang\*

# **PAPERS**

#### 4114

Substituent effects on intramolecular Schmidt reactions: a theoretical study on the formation of bridged lactams

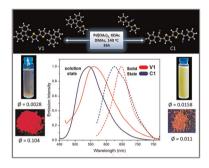
Guilherme L. Kosteczka, Rafael N. Soek, Wagner E. Richter and Renan B. Campos\*



### 4123

Solid-state red-emissive (cyano)vinylene heteroaromatics *via* Pd-catalysed C-H homocoupling

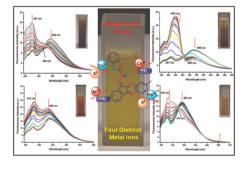
Atul B. Nipate and M. Rajeswara Rao\*



#### 4130

Synthesis of a quinoxaline-hydrazinobenzothiazole based probe—single point detection of Cu<sup>2+</sup>, Co<sup>2+</sup>, Ni<sup>2+</sup> and Hg<sup>2+</sup> ions in real water samples

Denzil Britto Christopher Leslee, Udhayadharshini Venkatachalam, Jayapratha Gunasekaran, Sekar Karuppannan and Shanmuga Bharathi Kuppannan\*



### 4144

An expedient copper-catalysed asymmetric synthesis of  $\gamma\text{-lactones}$  and  $\gamma\text{-lactams}.$  Application to the synthesis of lucidulactone A

O. Stephen Ojo, David L. Hughes and Christopher J. Richards\*