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### Cover

See Hirokazu Tamamura et al., pp. 4333–4336.

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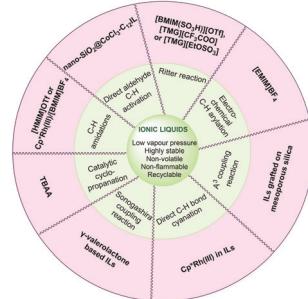
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### Ionic liquids in C–H activation: synthesis and functionalization of heterocycles and carbocycles

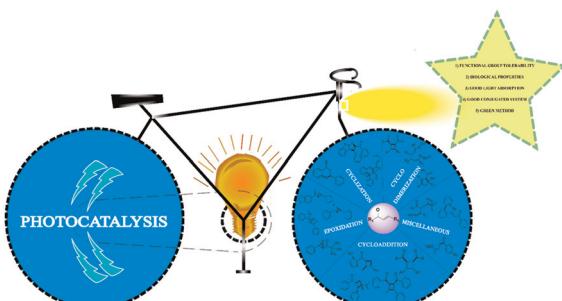
Kamal Kant, Priyadarshini Naik, Jyoti, Nayyef Aljaar and Chandi C. Malakar\*



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### Visible-light irradiation of chalcones: expanding the scope of photocatalysis

Debabrat Goswami, Biswajit Sarma and Binoyargha Dam\*



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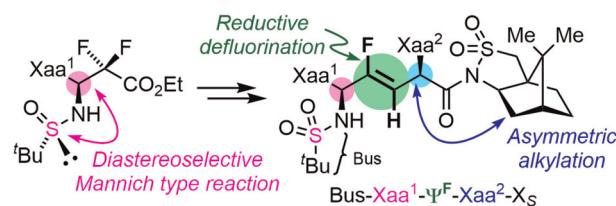
Fundamental questions  
Elemental answers

## COMMUNICATIONS

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**Diastereoselective synthesis of (*Z*)-fluoroalkene dipeptide isosteres utilizing chiral auxiliaries**

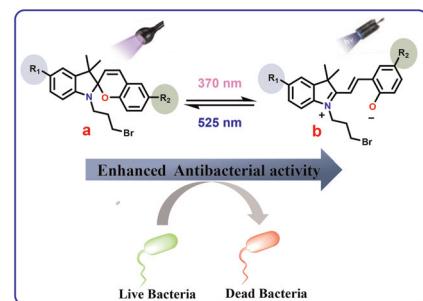
Takuya Kobayakawa, Marisa Arioka, Kenichi Yamamoto, Kohei Tsuji and Hirokazu Tamamura\*



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**Synthesis, photochromic properties, and bioactivity of spiropyrans with electron-donating/withdrawing substituents on indoline and [2H]-chromene rings**

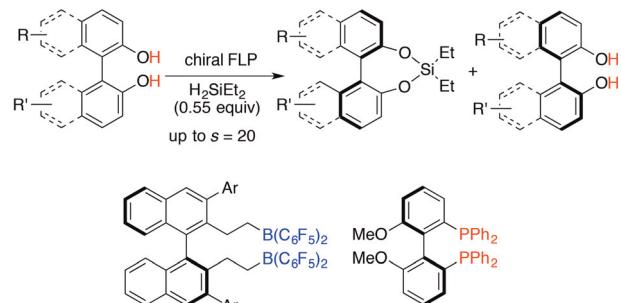
Abir Kayal, Navjot Kaur and Mrinmoy De\*



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**Kinetic resolution of binols and biphenols via dehydrogenative coupling with hydrosilanes catalyzed by chiral FLPs**

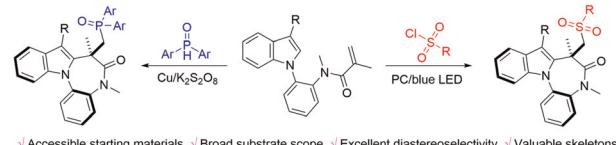
Zijia Zhang, Xiangqing Feng\* and Haifeng Du\*



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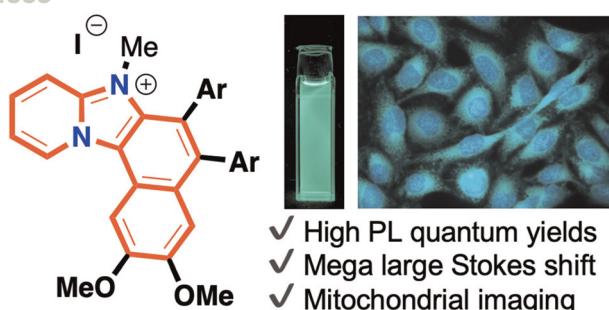
**Diastereoselective radical cascade cyclization to access indole-fused diazepine derivatives**

Yutong Wang, Xiujuan Huang, Jinglong Chen,\* Jian Xu\* and Qiuling Song\*



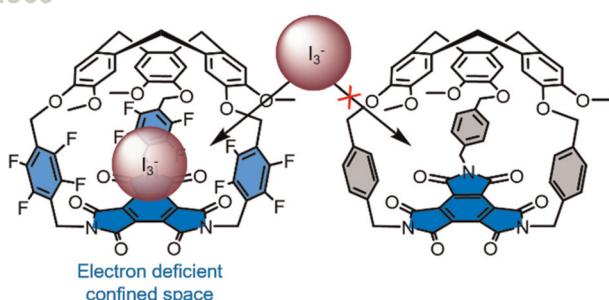
## COMMUNICATIONS

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**Synthesis of naphthalene-fused imidazo[1,2-a]pyridinium salts showing green luminescence with high quantum yields and large Stokes shift**

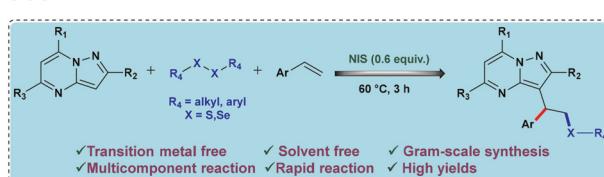
Sota Abe, Tetsuro Katayama,\* Akihiro Furube, Atsushi Tabata, Yasushi Yoshida, Shoko Ueta, Yukihiko Arakawa, Keiji Minagawa, Yasushi Imada and Fumitoshi Yagishita\*

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**Electron-deficient hemicryptophanes for the recognition of anions through anion- $\pi$  interactions**

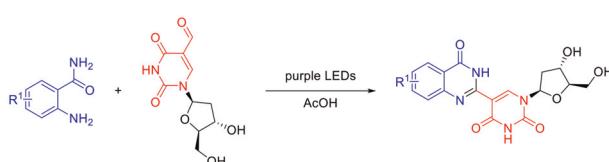
Louise Miton, Pierre-Antoine Dupin, Elise Antonetti, Marion Jean, Paola Nava, Alexandre Martinez\* and Yoann Cotelle\*

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**NIS-promoted carbochalcogenation of styrenes: regioselective C-3 alkylation of pyrazolo[1,5-a]pyrimidines**

Abhinay S. Chillal, Varsha Kumari and Umesh A. Kshirsagar\*

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**Catalyst-free and oxidant-free cyclocondensation of 2-aminobenzamides with glycosides under visible light**

Jian Wang, Tiancheng Gong, Zirui Zhuang, Bing Sun\* and Fang-Lin Zhang\*

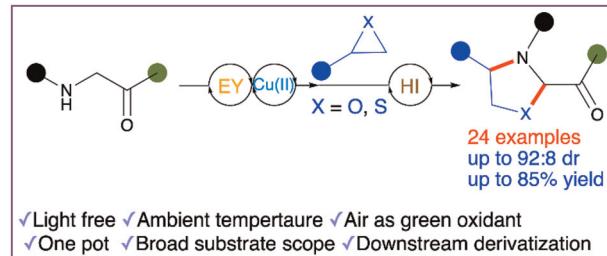


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**EosinY and copper-catalyzed oxidative [2 + 3] annulation of glycine esters with oxiranes and thiiranes under light free conditions**

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**Recognition of GC base pairs of B-DNA by coumarin-based benzimidazopyrimidines**

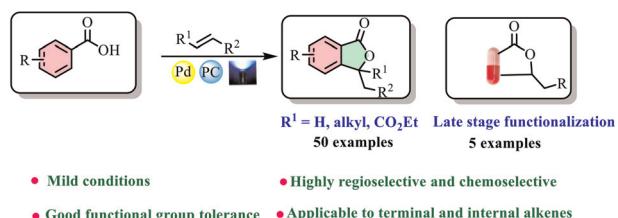
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**Dual palladium-organophotoredox catalyzed C–H olefination–annulation of aryl carboxylic acids**

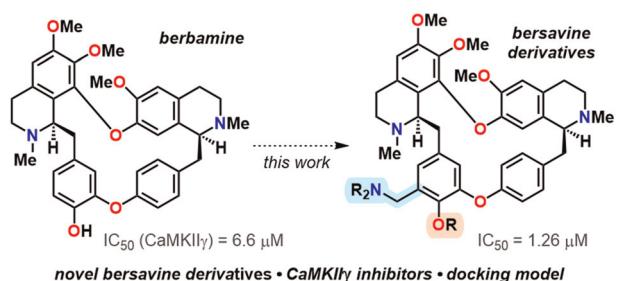
A Anagha Varma and Purushothaman Gopinath\*



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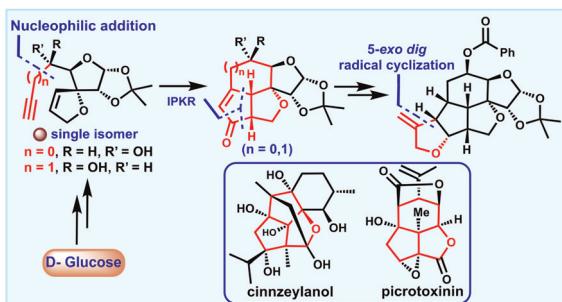
**Semisynthesis of bersavine and berbamine derivatives that target the CaMKII $\gamma$ :cMyc axis for lymphoma therapy**

Berkley Lujan, Mingfeng Zhang, Yujie Cao, Arnav Kacker, Lina Mai, Shunquan Wu, Taylor Alexander, Wendong Huang\* and Kevin G. M. Kou\*



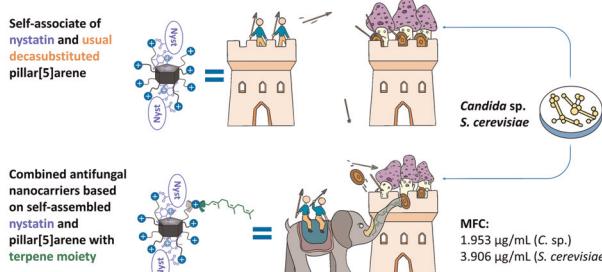
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**A versatile approach toward enantiospecific synthesis of sugar-linked oxapolyquinanes via IPKR**  
Kanchan Maurya and Krishna P. Kalaiappan\*

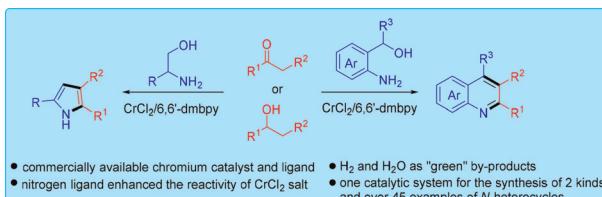
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**Combined antifungal nanocarriers based on self-assembled nystatin and pillar[5]arene with a terpene moiety**

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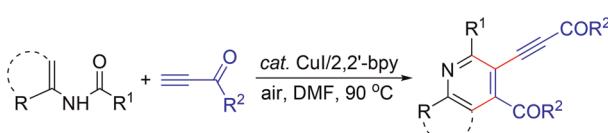
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**Sustainable synthesis of quinolines and pyrroles enabled by chromium-catalyzed acceptorless dehydrogenative coupling using a bipyridine ligand**

Wantong Yue, Qing Chen, Chuanqi Liu, Xiaoqian Wang, Zhao Du, Yilei Wang and Zhihua Peng\*

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**A copper-catalyzed tandem cyclization reaction of *N*-acyl enamines and electron-deficient alkynes: direct synthesis of alkynyl substituted pyridines**

Ying Gao, Ju-Yin Peng, Yu-Na Zhang,\* Xiao-Liang Zhao and Yu-Long Zhao\*

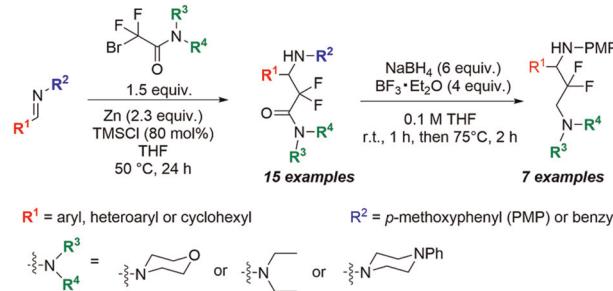


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**Synthesis of  $\alpha,\alpha$ -difluoro- $\beta$ -amino amides using aldimines and bromodifluoroacetamides via the Reformatsky reaction**

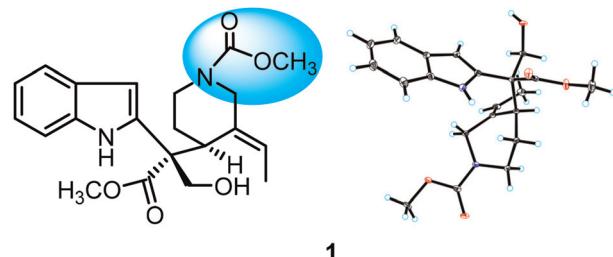
Ryota Ozawa and Tetsuya Yamamoto\*



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**Alstoscholarisine M, a 6,7-seco-vallesamine monoterpenoid indole alkaloid with antimicrobial activity from *Alstonia scholaris***

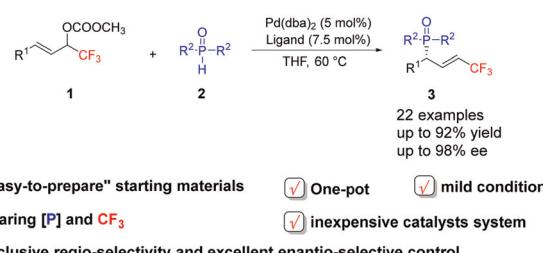
Hao-Fei Yu, Lan-Chun Zhang,  
Khalid-Hassan Mohamed, Lei Li, Jian-Neng Yao,  
Ya-Ping Liu, Xiao-Nian Li, Cai-Feng Ding,\*  
Rong-Ping Zhang\* and Xiao-Dong Luo\*



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**Palladium-catalyzed regio- and enantio-selective trifluoromethylated allylic alkylation of diphenylphosphine oxides**

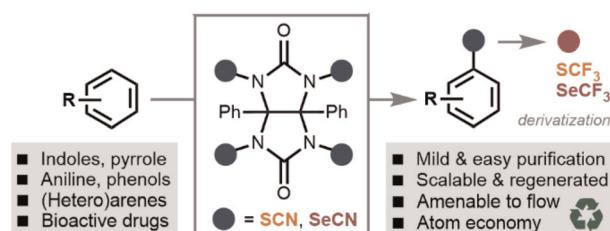
Shuaibo Zhang, Yunzhe Liu, Luyang Sun,  
Bangzhong Wang, Jinfeng Zhao, Jingping Qu and  
Yuhan Zhou\*



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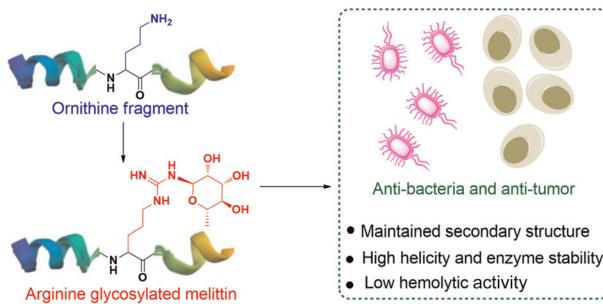
**Electrophilic glycoluril-based reagents for atom-economic thiocyanation and selenocyanation of (hetero)arenes**

Paula Casasús, Jordi Mestre, Roksana Radłowska,  
Miguel Bernús and Omar Boutureira\*



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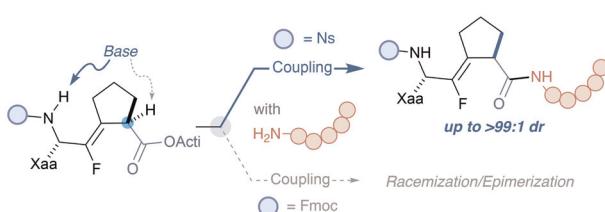
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### Arginine N-glycosylation of melittin enhances its bacteriostatic activity and antiproliferative therapeutic index

Xiantao Yang, Linji Li, Rong Li, Xiang Li, Shuna Li,\* Chunli Su\* and Hongli Liao\*

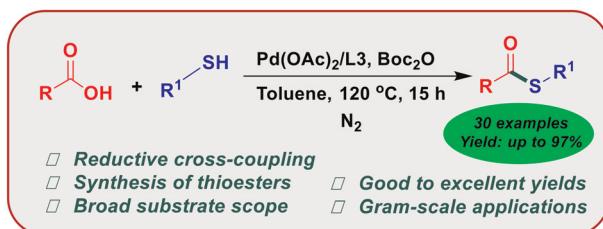
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### Racemization-free peptide bond formation via 2-nitrobenzensulfonyl strategy for diastereoselective synthesis of (Z)-fluoroalkene-type peptidomimetics

Chihiro Iio, Kohei Sato, Nobuyuki Mase and Tetsuo Narumi\*

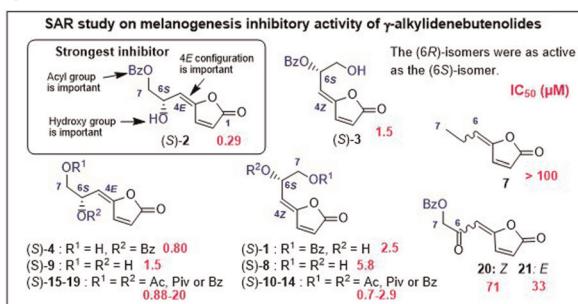
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### Palladium-catalyzed reductive cross-coupling reaction of carboxylic acids with thiols: an alternative strategy to access thioesters

Yen-Ting Chang, Rekha Bai, Yang-Ting Hsia, Indrajit Karmakar, Satpal Singh Badsara,\* Sunwoo Lee\* and Chin-Fa Lee\*

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### Synthesis and biological evaluation of $\gamma$ -alkylidenebutenolides isolated from *Melodorum fruticosum*: the role of the propylidene-type side chain structure on anti-melanogenic activity

Katsuki Takashima, Yoshiaki Manse, Riko Suzuki, Nanami Masuda, Yuki Fukuda, Risa Fukuda, Shinsuke Marumoto, Fumihiro Ishikawa, Toshio Morikawa\* and Genzoh Tanabe\*

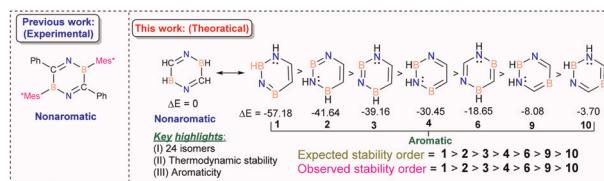


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## Charge-driven stability and aromaticity of $C_2N_2B_2H_4$ isomers: insights from a combined DFT and machine learning study

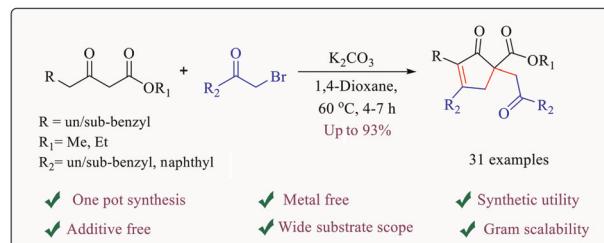
Sajid Imran, Yuan Gao, Wenhao Wang and Jun Zhu\*



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## Accessing polysubstituted 2-cyclopentenones via base-mediated annulation of $\beta$ -keto esters and phenacyl bromides

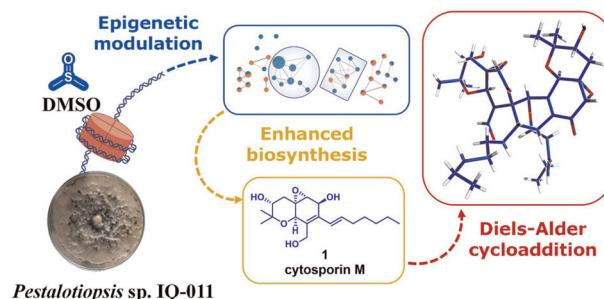
Mohit Kumar, Vincent Paul, Rama Krishna Gamidi and Beeran Senthilkumar\*



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Enrique Aguilar-Ramírez, José Rivera-Chávez,\* Mario Yair Miranda-Rosas and Diego Martínez-Otero



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## Beyond classic acetylene chemistry: base-mediated self-organization of acetylenes with nitriles toward rarely functionalized dihydropyridinimines

Inna V. Tatarinova, Natal'ya A. Lobanova, Igor A. Ushakov, Elena Yu. Schmidt and Boris A. Trofimov\*

