

Organic & Biomolecular Chemistry

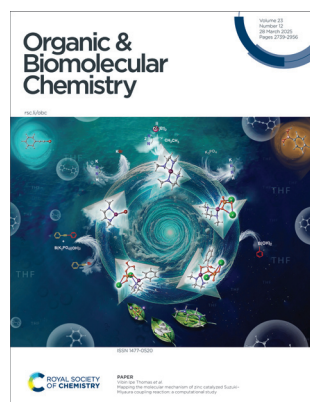
An international journal of synthetic, physical and biomolecular organic chemistry

rsc.li/obc

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 23(12) 2739–2956 (2025)



Cover

See Vibin Ipe Thomas *et al.*, pp. 2828–2835.

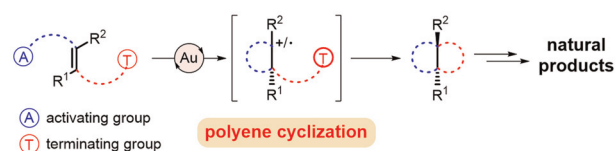
Image reproduced by permission of Vibin Ipe Thomas from *Org. Biomol. Chem.*, 2025, **23**, 2828.

REVIEWS

2749

Gold-catalyzed polyene cyclization and its application in the total synthesis of natural products

Ye Zhang, Wen Bao, Xiao-Ming Zhang, Dao-Yong Zhu and Shao-Hua Wang*



2756

Pretzelanes, [1]rotaxanes and molecular figures-of-eight – crossing the bridge from fundamentals to functional applications

Rebecca L. Spicer and Nicholas H. Evans*



**GOLD
OPEN
ACCESS**

EES Solar

**Exceptional research on solar
energy and photovoltaics**

Part of the EES family

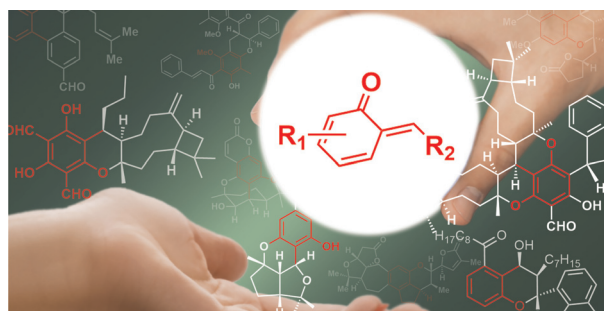
**Join
in** | Publish with us
rsc.li/EESolar

REVIEWS

2775

o-Quinone methides in natural product synthesis: an update

Li-Na Gao, Kuan Zheng, Hui-Yu Chen, Yu-Ning Gao, Zhao-Zhao Li, Chang He, Sha-Hua Huang, Ran Hong, Ming Bian* and Zhen-Jiang Liu*

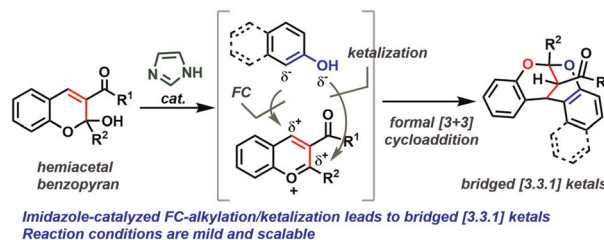


COMMUNICATIONS

2793

Imidazole-catalyzed construction of bridged bicyclo [3.3.1] ketals via formal [3 + 3]-cycloaddition of naphthols and 2-hydroxyl chromene derivatives

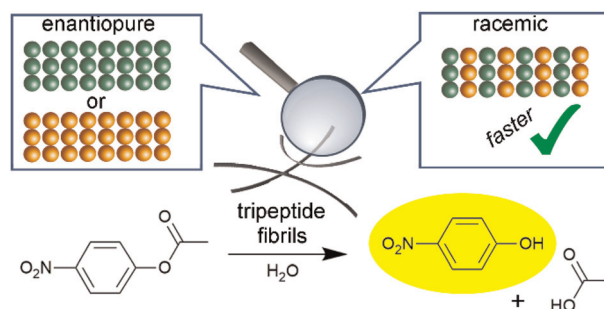
Asha Budakoti, Priyanka Jha, Meenakshi Verma, Prema G. Vasudev and Atul Gupta*



2797

Racemic peptide assembly boosts biocatalysis

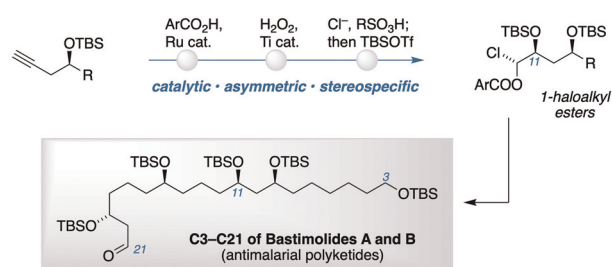
Mari C. Mañas-Torres, Paola Alletto, Simone Adorinni, Attilio V. Vargiu, Luis Álvarez de Cienfuegos and Silvia Marchesan*



2802

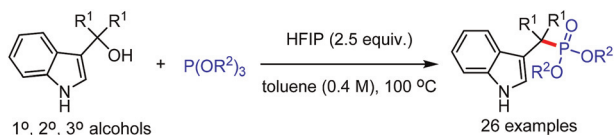
Stereospecific access to α -haloalkyl esters via enol ester epoxides and synthesis of a C3–C21 fragment of bastimolide A

Lucas W. Howell, Jacob N. Hackbarth, Jeffrey S. Abraham and Gregory K. Friestad*



COMMUNICATIONS

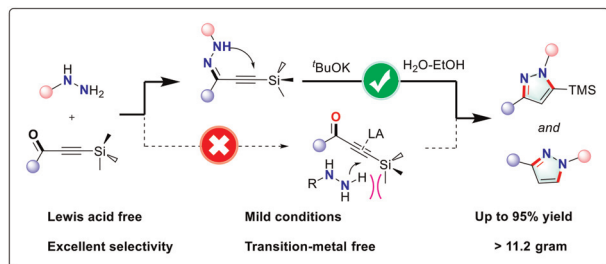
2807



HFIP-promoted phosphorylation of indol-3-yl methanols to access (indol-3-yl)methyl phosphonates

Min Wang, Zhiyu Zhang, Yuting Yang, Yage Xue, Zhengyi Qin, Yaxuan Duan, Huilin Li* and Xuegong She

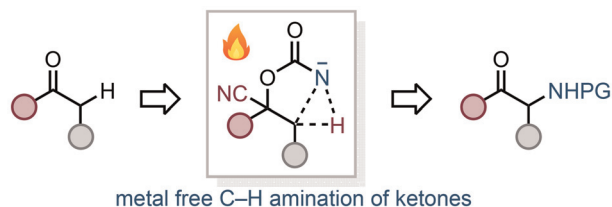
2812



Reagent-assisted regio-divergent cyclization synthesis of pyrazole

Mengdi Pang, Ali Ramazani, Zhengguo Zhang* and Guoying Zhang*

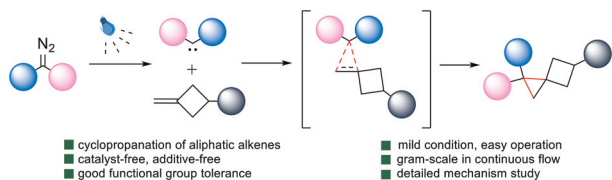
2818



C–H amination of enolizable and nonenolizable ketones

Oksana Holovko-Kamoshenkova, Zdeněk Tošner, Ivana Císařová and Radim Hrdina*

2823



Photoinduced synthesis of functionalized spiro[2.3]hexane via an additive-free approach

Dan Qi, Jinrui Bai, Yue Yao and Chao Liu*

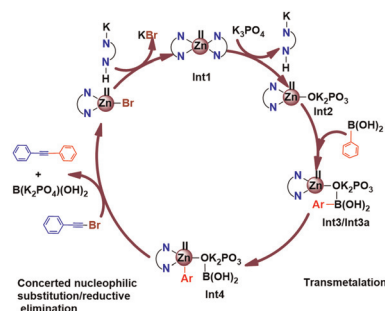


PAPERS

2828

Mapping the molecular mechanism of zinc catalyzed Suzuki–Miyaura coupling reaction: a computational study

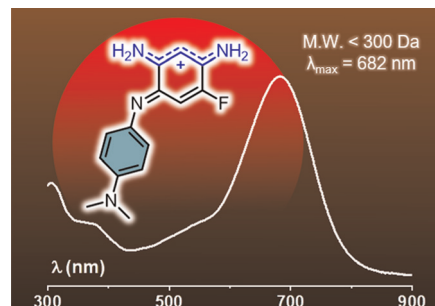
C. Rajalakshmi, Sudheesh Devadas, Manumol M, John B. Kottooran, Kavya S, K. Keerthi Krishnan, Gopinathan Anilkumar and Vibin Ipe Thomas*



2836

Small far-red cationic benzoquinone diimine dyes

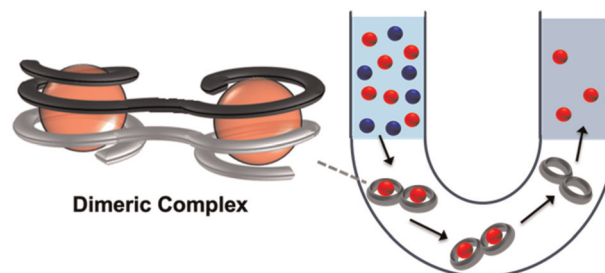
Tatiana Munteanu, Carmelo Naim, Gabriel Canard, Denis Jacquemin,* Olivier Siri* and Simon Pascal*



2845

Foldameric receptors with domain-swapping cavities capable of selectively binding and transporting monosaccharides

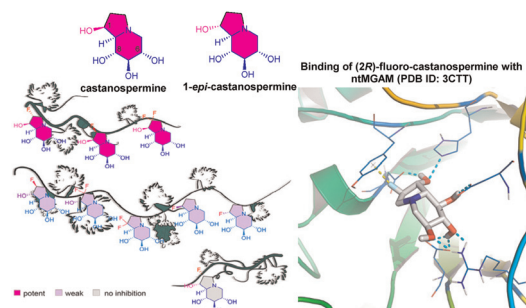
Geunmoo Song, Seungwon Lee and Kyu-Sung Jeong*



2854

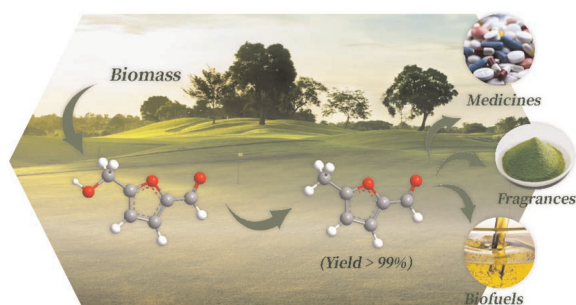
C-2 fluorinated castanospermines as potent and specific α -glucosidase inhibitors: synthesis and structure–activity relationship study

Yi-Xian Li, Ming Zhang, Yuna Shimadate, Atsushi Kato,* Jun-Zhe Wang, Yue-Mei Jia, George W. J. Fleet and Chu-Yi Yu*



PAPERS

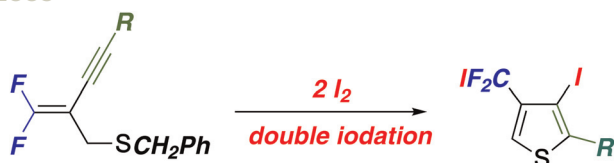
2878



Reductive deoxygenation of alcohols by PMHS assisted by iodide

Xiang Ye, Jihong Zhang, Haikuan Yang, Shusheng Yang, Qiong Ren* and Yang Peng*

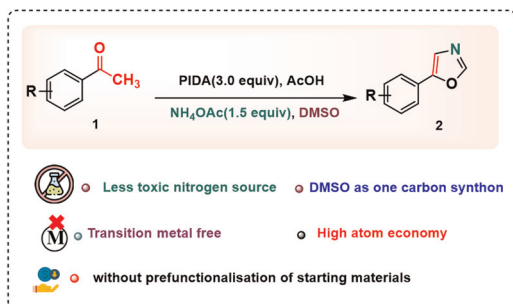
2883



First synthesis of (difluoroiodomethyl)thiophenes through double iodination of 2-(difluoromethylene)but-3-yn-1-yl benzyl sulfides

Daiki Komatsu and Takeshi Hanamoto*

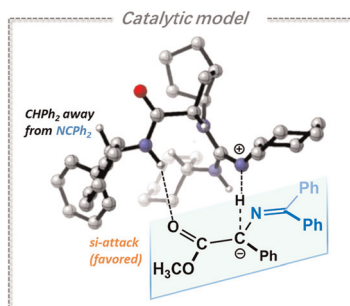
2891



PIDA mediated oxidative annulation of aryl methyl ketones: a facile approach for the chemoselective synthesis of 5-substituted oxazoles

Mohankumar Devaraju and Jagadeesh Prasad Dasappa*

2896



DFT study on Rh(III)/guanidine-catalyzed asymmetric N–H bond insertion of benzophenone imines

Jiaying Xu, Qi Wei, Changwei Hu and Zhishan Su*

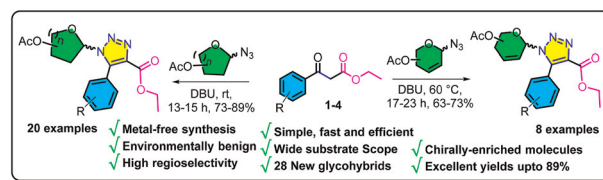


PAPERS

2904

Organobase-catalyzed efficient synthesis of 4-acyl-5-aryl tri-substituted triazole linked *N*-glycosides as glycohybrids

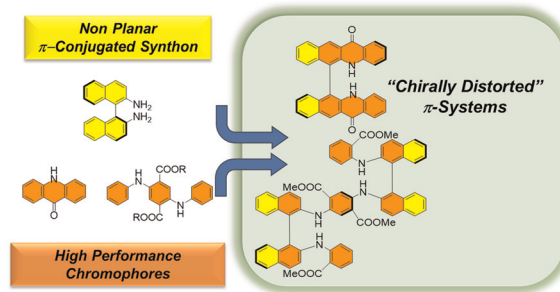
Yogesh Yadav, Kavita Singh, Rajdeep Tyagi and Ram Sagar*



2918

Flexible and rigid "chirally distorted" π -systems: binaphthyl conjugates as organic CPL-active chromophores

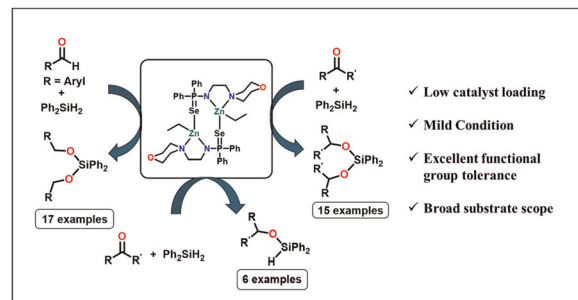
Giovanni Preda, Elisa Maria Ciccarello, Alessio Bianchi, Francesco Zinna, Chiara Botta, Lorenzo Di Bari and Dario Pasini*



2925

Efficient hydrosilylation of carbonyls by zinc alkyl complexes supported by flexible amidophosphinochalcogenide ligands

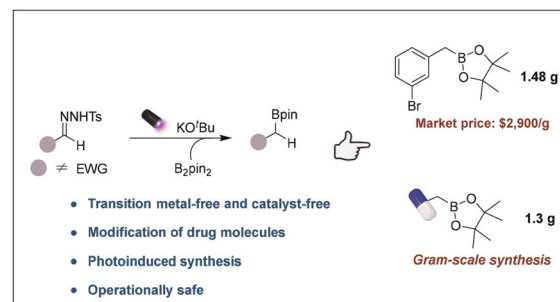
Kulsum Bano, Ravi Kumar, Archana Jain* and Tarun K. Panda*

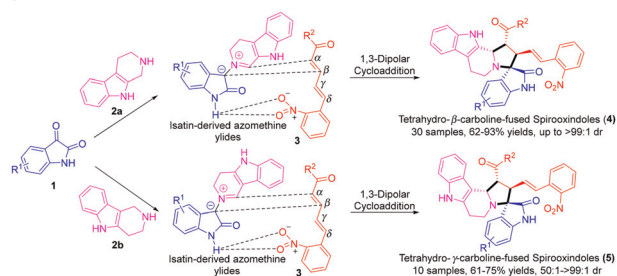


2935

Photoinduced borylation of *N*-tosylhydrazones and application in drug derivation

Weijie Wang, Qingguang Zhang, Mengmeng Guo, Miaomiao Zhuo, Wei-Dong Zhang,* Qun Wang* and Yu Zhang*





Diastereoselective three-component 1,3-dipolar cycloaddition: concise synthesis of functionalized tetrahydrocarboline-fused spirooxindoles

Yongchao Wang,* Lihua Zheng, Rongmei Zi, Yanqin Niu, Shuyuan Yang, Donghua Hu* and Jianwei Dong*

