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Cover
See Arun K. Ghosh and Monika Yadav, pp. 5768–5774.

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REVIEWS

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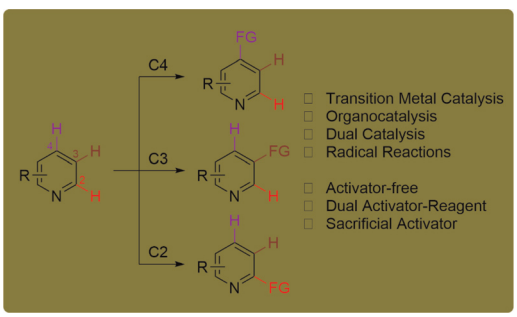
C–H functionalization of pyridines

Susmita Maity, Asish Bera, Ayantika Bhattacharjya and Pradip Maity*



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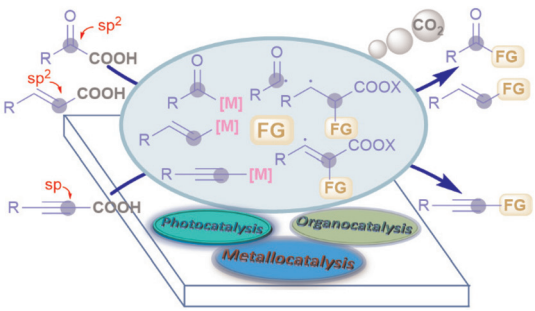
Recent advances in catalytic decarboxylative transformations of carboxylic acid groups attached to a non-aromatic sp^2 or sp carbon

Ajijur Rahaman, Shivani Singh Chauhan and Sukalyan Bhadra*



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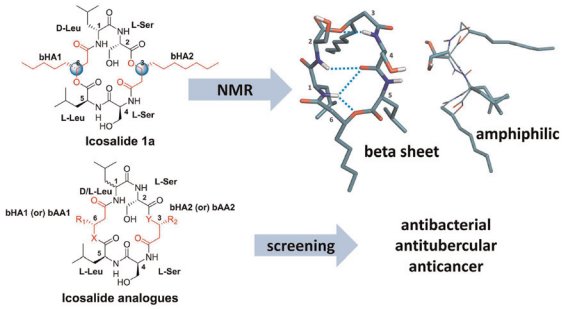
COMMUNICATIONS

5725

Total synthesis, structure elucidation and expanded bioactivity of icosalide A: effect of lipophilicity and ester to amide substitution on its bioactivity

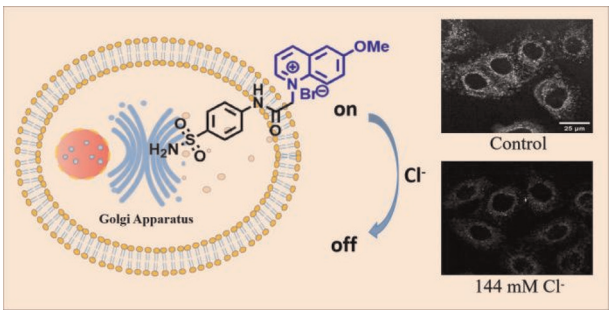
Abha Dangi, Bharat Pande, Sonia Agrawal, Dhiman Sarkar, Koteswara Rao Vamkudoth and Udaya Kiran Marelli*



5732

Synthesis of a Golgi-targeting fluorescent probe for the selective detection of chloride anions

Min Yuan, Jinhui Hu* and Wen-Hua Chen*



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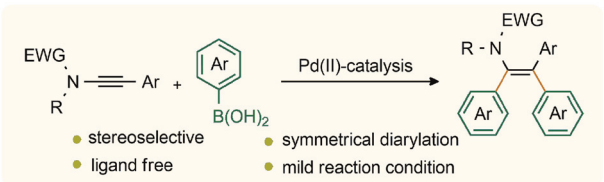
Two-component symmetrical diarylation of ynamides

Aradhana Sahoo, Shubham Dutta and Akhila K. Sahoo*



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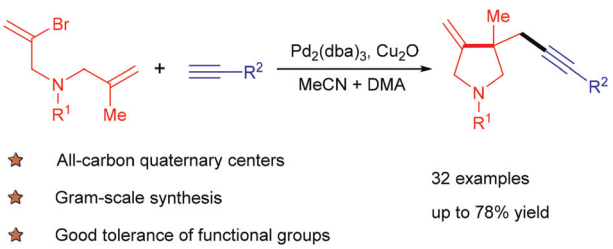
Pd/Cu-catalyzed cascade Heck-type reactions of alkenyl halides with terminal alkynes toward substituted pyrrolidine analogues

Shiji Xu, Qiang Wang, Jing Sun, Ying Han, Weiming Hu,* Lei Wang* and Chao-Guo Yan*



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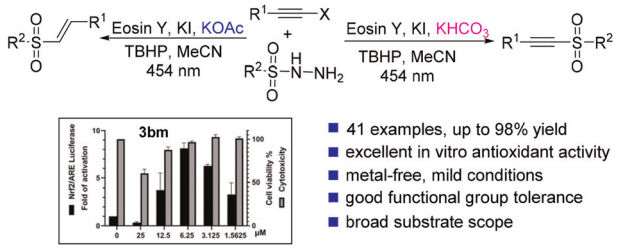

Photocatalytic synthesis of alkynylsulfones and alkenylsulfones using sulfonylhydrazides and alkynes

Xiaoju Yang, Jumei Yi, Xinhan Li, Yihang Wu, Jun Dong, Zhenxiu He, Guangzhi Zeng,* Jianbin Xu* and Baomin Fan*

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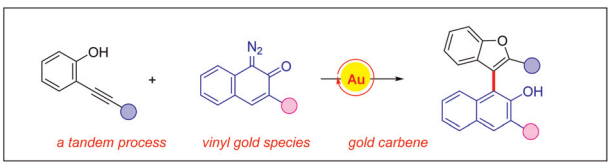

Gold-catalyzed tandem reaction of *o*-alkynylphenols with diazo compounds: access to 2,3-disubstituted benzofurans

Tingzhong Huang, Ying Shao, Shengbiao Tang and Jiangtao Sun*

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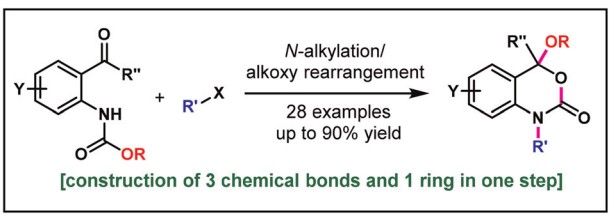

Convenient synthesis of *N*-alkyl-3,1-benzoxazin-2-ones from carbamate protected anthranil aldehydes and ketones *via* one-step alkylation/alkoxy rearrangement

Guang Tian, Wei-Li Jin, Chuanguang Qin* and Jie Wang*

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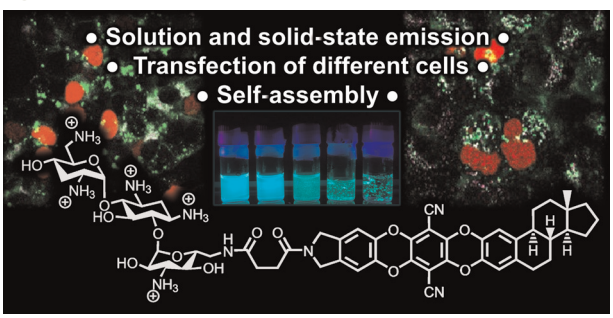

Deoxyestrone-based lipofection agents with solution- and solid-state emission properties

Alexander Huber, Johannes Koch, Kevin Rudolph, Alexander Höing, Fabio Rizzo, Shirley K. Knauer and Jens Voskuhl*

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PAPERS

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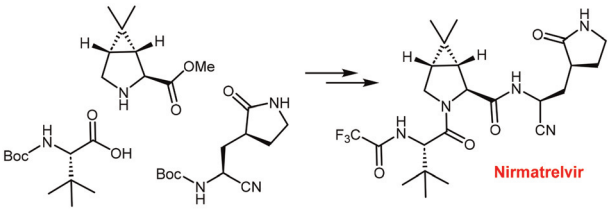
Synthesis of optically active SARS-CoV-2 Mpro inhibitor drug nirmatrelvir (Paxlovid): an approved treatment of COVID-19

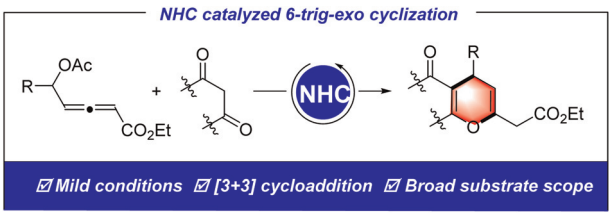
Arun K. Ghosh* and Monika Yadav



5775

NHC-catalyzed formal [3 + 3] annulations of δ-acetoxy allenoates for the synthesis of 4*H*-pyran derivatives

Bai Shi, Fangyi Jin, Qi Lv, Xinrong Zhou, Zhixiao Liao, Chenxia Yu, Kai Zhang* and Changsheng Yao*



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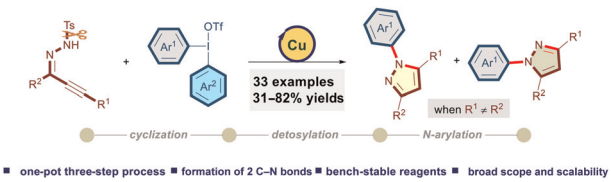
Copper-catalyzed tandem cyclization/arylation of α,β-alkynic hydrazones with diaryliodonium salts: synthesis of *N*-arylpyrazoles

Sushanta Kumar Parida, Saurav Joshi and Sandip Murarka*



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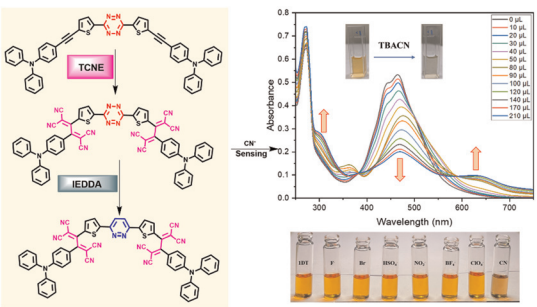
Synthesis of tetrazine-tetracyanobutadienes and their transformation into pyridazines *via* inverse-electron demand Diels–Alder cycloaddition (IEDDA)

Abhijeet V. Kamble, Aswani Raj K and Rajeswara Rao Malakalapalli*



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PAPERS

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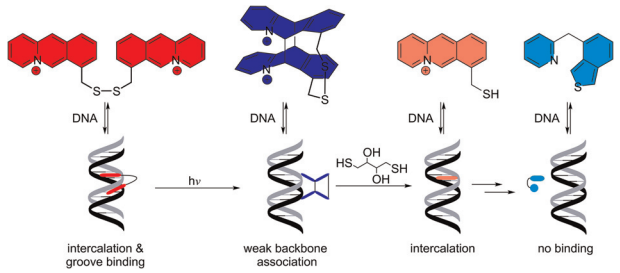
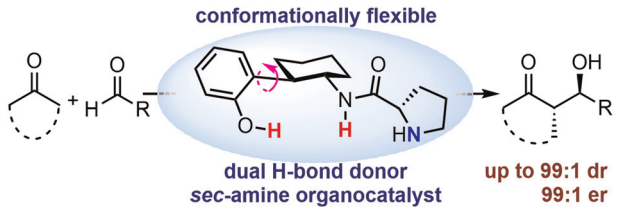


Switching between DNA binding modes with a photo- and redox-active DNA-targeting ligand, part II: the influence of the substitution pattern

Christoph Dohmen and Heiko Ihmels*

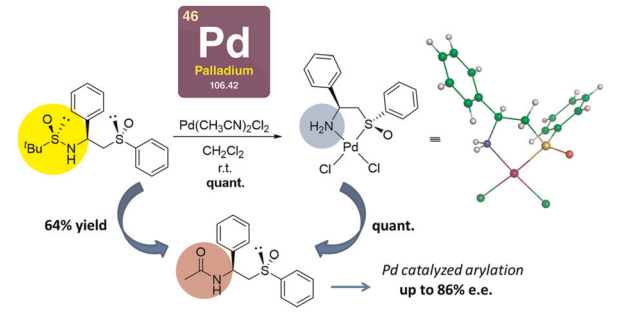
5809



Prolinamides containing 2-(2-aminocyclohexyl) phenols as highly enantioselective organocatalysts for aldol reactions

Tolga A. Yeşil, Taner Atalar, Mustafa Yavuz and Erkan Ertürk*

5827



Synthesis and characterization of enantiopure chiral NH_2/SO palladium complexes

Nazaret Moreno-Rodriguez, L. Gabriel Borrego, Rocío Recio,* Victoria Valdivia, M. Carmen Nicasio, Eleuterio Álvarez, Noureddine Khiar and Inmaculada Fernández*

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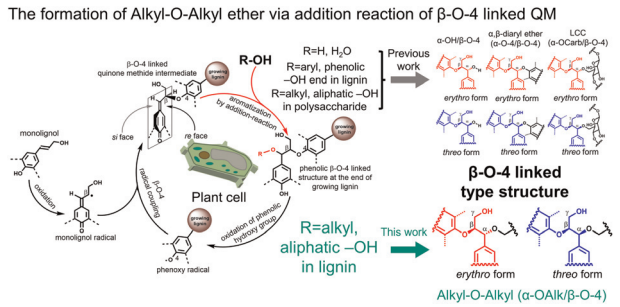

Formation of lignin alkyl-O-alkyl ether structures *via* 1,6-addition of aliphatic alcohols to β-O-4-aryl ether quinone methides

Xuhai Zhu, Dazhi Zhang, Rui Lu and Fang Lu*

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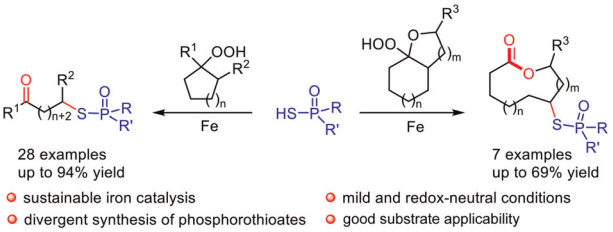
Iron-catalyzed alkoxyl radical-mediated C–C bond cleavage/phosphorothiolation: a new approach to functionalized *S*-alkyl phosphorothioates

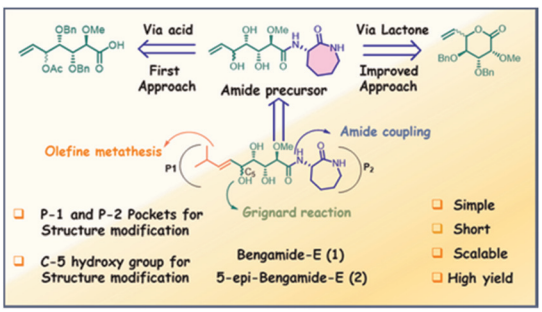
Ming Bai, Shuai Liu, Hong Xin, Xu Yang, Xin-Hua Duan and Li-Na Guo*



5861

A simple and efficient pathway for the total synthesis of marine natural products: bengamide E and 5-*epi*-bengamide E

Akanksha Gupta, Praveen Ambati and Ramu Sridhar Perali*



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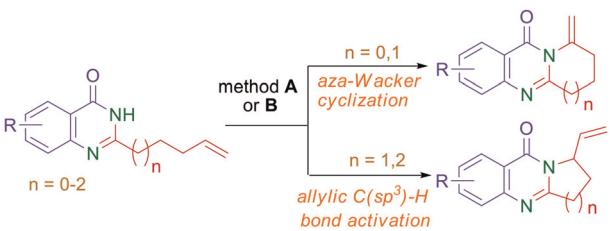
Pd-catalyzed oxidative amination of 2-alkenylquinazolin-4(3*H*)-ones: synthesis of methylene and vinyl derivatives of pyrrolo(pyrido)[2,1-*b*]quinazolinones

Alla I. Vaskevych,* Nataliia O. Savinchuk, Ruslan I. Vaskevych, Svitlana V. Shishkina and Mykhailo V. Vovk

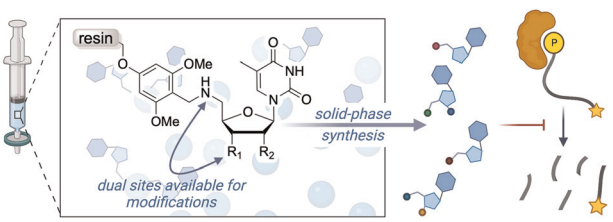


method **A:** $Pd(OAc)_2$,(10 mol %), PPh_3, (21 mol %), Cs_2CO_3 (2 eq), BQ, (2 eq), dioxane, 16 h, 110 °C; method **B:** $Pd(PPh_3)_2Cl_2$,(10 mol %), t-BuONa (2 eq), BQ (3 eq), toluene, 24-48 h, 110 °C

5873

Deploying solid-phase synthesis to access thymine-containing nucleoside analogs that inhibit DNA repair nuclease SNM1A

Christine A. Arbour, Ellen M. Fay, Joanna F. McGouran and Barbara Imperiali*



EXPRESSION OF CONCERN

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Expression of concern: Total synthesis of tubulysin U and N^{14}-desacetoxytubulysin H

Bohua Long, Cheng Tao, Yinghong Li, Xiaobin Zeng,* Meiqun Cao* and Zhengzhi Wu*

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