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See Philipp Klahn et al., pp. 4744-4749.

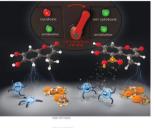


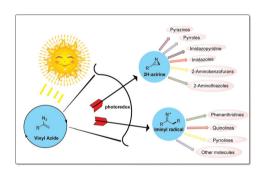
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REVIEW

4723

Visible light-assisted chemistry of vinyl azides and its applications in organic synthesis

Barakha Saxena, Roshan I. Patel, Jaya Tripathi and Anuj Sharma*



COMMUNICATIONS

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Design of non-cytotoxic 6,7-dihydroxycoumarin-5-carboxylates with antibiofilm activity against Staphylococcus aureus and Candida albicans

Robert Zscherp, Aishi Chakrabarti, Anna P. Lehmann, Hedda Schrey, Hoaxuan Zeng, Wera Collisi and Philipp Klahn*

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COMMUNICATIONS

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Distal p-benzylic deuteration via N-heterocyclic carbene catalyzed ring opening of p-cyclopropylbenzaldehydes

Ye Qiu, Lei Dai, Zhong-Hua Gao and Song Ye*

Distal p-benzylic deuteration Mild conditions under NHC catalysis

4755

An epoxide-opening cyclization/double Smiles rearrangement cascade approach to N-aryl-1,4benzoxazines and N-arylindolines

Jonali Das, Abhijit Gogoi, Biraj Jyoti Borah and Sajal Kumar Das*

$$R^{-1}$$

$$R^{2}$$

$$X = 0 \text{ and } CH_{2}; n = 1 \text{ and } 0$$

$$R^{2}$$

$$X = 0 \text{ and } CH_{2}; n = 1 \text{ and } 0$$

$$R^{2}$$

$$X = 0 \text{ and } CH_{2}; n = 1 \text{ and } 0$$

epoxide-opening cyclization/desulfonylative Smiles/classical Smiles cascade

- favorable entropy factor transition-metal-free conditions
- broad substrate scope, regio- and diastereoselective
- a new entry to the synthesis N-aryl aza-heterocycles

4760

Amidic resonance not a barrier for transamidation of N-pivaloyl activated amides: catalyst, base and additive free conditions

Ida Angel Priya Samuel Rajan and Saravanakumar Rajendran*

One-pot transamidation

$$t = 4.54^{\circ}, \chi_{N} = 6.39^{\circ}$$
 $RT, 30 \text{ min - 2 h}$

Oshort rxn. time
Ono additive
Ono catalyst
Ono base

 $t = 4.54^{\circ}, \chi_{N} = 6.39^{\circ}$
 $t = 4.54^{\circ}, \chi_{N} = 6.39^{\circ}$

4766

Annulation of α -bromocinnamaldehydes to access 3-formyl-imidazo[$1,2-\alpha$] pyridines and pyrimidines under transition metal-free conditions

Fanglian Zhang, Jiameng Liu, Wenjun Luo, Yuping Zhu, Yi Xiao, Shuxian Ma, Feixian Luo* and Zhengwang Chen*

4770

Metal-free C-H insertion ÇO₂R CO₂R 6b. 7b. 8b 3, R = Me 6a. 7a. 8a 4, R = Bn 5, R = iPr

Up to 21%

Up to 20%

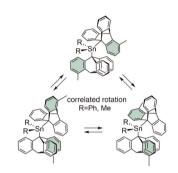
Photolysis without photosensitiser: Up to 26%

Photolysis with photosensitiser: Up to 50%

Flow photolysis of aryldiazoacetates leading to dihydrobenzofurans via intramolecular C-H insertion

Katie S. O'Callaghan, Denis Lynch, Marcus Baumann, Stuart G. Collins* and Anita R. Maguire*

4781



Synthesis and structure of stannane-based molecular bevel gears having substituents on a tin linker

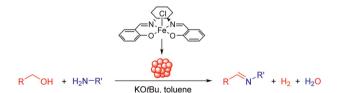
Satoshi Hosono, Yusuke Inagaki and Wataru Setaka*

4788

Synthesis of 2-trifluoromethyl benzimidazoles, benzoxazoles, and benzothiazoles via condensation of diamines or amino(thio)phenols with CF₃CN

Bo Lin, Yunfei Yao, Minze Wu, Lu Qin, Shouxiong Chen, Yi You* and Zhiqiang Weng*

4794



Development and mechanistic investigation of the dehydrogenation of alcohols with an iron(III) salen catalyst

Nicolai S. B. Hansen, Fabrizio Monda, Frederik Simonsen Bro, Xiyue Liu, Mårten S. G. Ahlquist and Robert Madsen*

4801

Synthesis of fused tetramate-oxazolidine and -imidazolidine derivatives and their antibacterial activity

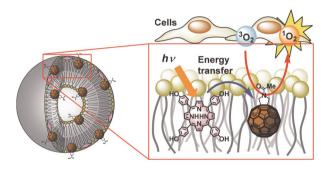
Liban Saney, Tharindi Panduwawala, Xiang Li, Kirsten E. Christensen, Miroslav Genov, Alexander Pretsch, Dagmar Pretsch and Mark G. Moloney*

$$\mathsf{EtO_2C} \underbrace{\mathsf{CO_2Et}}_{\mathsf{NH_2},\mathsf{HCl}} \underbrace{\mathsf{CO_2Et}}_{\mathsf{NH_2},\mathsf{HCl}} \underbrace{\mathsf{EtO_2C}}_{\mathsf{CO_2},\mathsf{N}} \underbrace{\mathsf{NBn}}_{\mathsf{Ar}} \underbrace{\mathsf{EtO_2C}}_{\mathsf{CO_2},\mathsf{N}} \underbrace{\mathsf{CO_2Et}}_{\mathsf{Ar}} \underbrace{\mathsf{NBn}}_{\mathsf{NBn}}$$

4810

Improvement in photodynamic activity by a porphyrin-fullerene composite system in lipid membranes

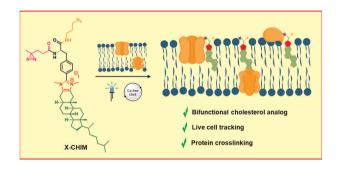
Kotaro Nishimura, Keita Yamana, Riku Kawasaki and Atsushi Ikeda*



4817

A bifunctional imidazolium-based cholesterol analog for the tracking of cellular cholesterol distributions and cholesterol-protein interactions

Tristan Wegner, Anna L. L. Matos, Karine Porte, Kira Mehring, Marco Pierau, Hendrik Horstmeier, Volker Gerke* and Frank Glorius*



4823

Visible-light promoted cascade cyanoalkylsulfonylation/ipso-cyclization of N-arylpropiolamides toward sulfonated spiro[4,5] trienones via SO₂ insertion

Xiwen Shan, Yu Gao, Yaru Lu, Rong Huang, Tengteng Sun, Kui Lu and Xia Zhao*

4833

Development of an α' -hydroxy enone for the aminocatalytic asymmetric formal conjugate addition of aldehydes to acrylates, vinyl ketones and acrolein

José M. Odriozola, Jesús Razkin, Beñat Lorea, Antonia Mielgo, Jesús M. García,* Mikel Oiarbide* and Claudio Palomo*

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Biocatalytic synthesis of oxadiazole thioethers and evaluation of their antitumor activity

Negin Neissari, Mansour Shahedi, Zohreh Habibi,* Maryam Yousefi, Arash Minai-Tehrani, Fatemeh Yazdi Samadi, Jesper Brask, Hossein Bavandi and Mehdi Mohammadi*

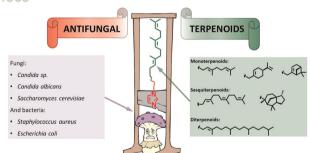
4854



A green synthesis of pyrimido[4,5-b]quinolines and pyrido[2,3-d]pyrimidines via a mechanochemical approach

Himanshu Kumar Singh, Arsala Kamal, Suresh Kumar Maury, Ambuj Kumar Kushwaha, Vandana Srivastava and Sundaram Singh*

4863



Towards potential antifungal agents: synthesis, supramolecular self-assembly and *in vitro* activity of azole mono-, sesqui- and diterpenoids

Alan Akhmedov, Rustem Gamirov, Yulia Panina, Evgenia Sokolova, Yulia Leonteva, Evgeniya Tarasova, Ramziya Potekhina, Igor Fitsev, Dmitriy Shurpik and Ivan Stoikov*

4874

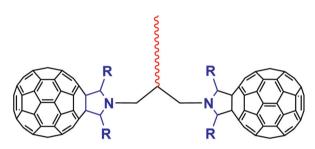
New P,N_{sp3} ligands for palladium-catalyzed asymmetric allylic substitutions

Qin Su, Chuan-Jin Hou,* De-Quan Wei, Hao Qin, Ding-Hua Liang and Xiang-Ping Hu*

4881

Synthesis of pendant fullerene dimers by an aminomethylation reaction of fulleropyrrolidines bearing ketone moieties

Qian-Na Peng, Hui-Juan Wang, Xing-Yu Wang, Fa-Bao Li,* Li Liu, Xiaoli Wang, Ping Wu* and Chao-Yang Liu*

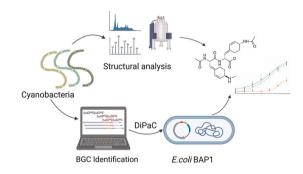


pendant fullerene dimers

4893

Direct pathway cloning and expression of the radiosumin biosynthetic gene cluster

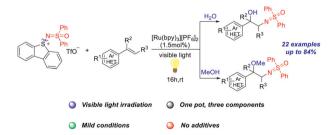
Xiaodan Ouyang, Paul M. D'Agostino, Matti Wahlsten, Endrews Delbaje, Jouni Jokela, Perttu Permi, Greta Gaiani, Antti Poso, Piia Bartos, Tobias A. M. Gulder, Hannu Koistinen and David P. Fewer*



4909

Visible light-mediated three-component functionalization of olefins with sulfoxyimidoylsulfonium salt for the synthesis of β-amino alcohols and amino ethers

Wei Xie, Liang Zhao, Xinmei Fu, Rong Zhang, Xinyu Hao, Chunying Duan and Yaming Li*



RETRACTION

4913

Retraction: Direct Sb–S cross-coupling of halostibines with thiols and disulfides at room temperature Wei Li, Shan Li, Zixiu Wang, Chenfu Liu, Yifei Ye, Yujing Chen, Yuyan Xiong and Jian Lei