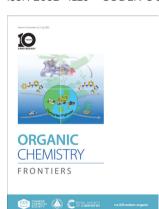
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ISSN 2052-4129 CODEN OCFRA8 10(13) 3171-3448 (2023)



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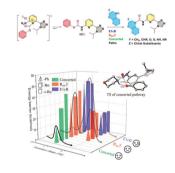
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The metal- and column-free synthesis of pyridin-2-yl ureas carrying cyclic secondary amine substituents and establishing the mechanism of the reactions through a computational study

Kai Liu, Yayu Xie, Yuan Qin, Virinder S. Parmar, Yonghong Liu* and Pei Cao*



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Takuya Kanetomo,* Sayaka Ono, Yusuke Fukushima, Yuta Takenouchi and Masaya Enomoto*

Dinitronyl nitroxide

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Aza-Wolff rearrangement of *N*-fluoroalkyl triazoles to ketenimines

Anna Kubíčková, Athanasios Markos, Svatava Voltrová, Anežka Marková, Josef Filgas, Blanka Klepetářová, Petr Slavíček and Petr Beier*

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An alternative metal-free amination approach to 3-trifluoromethyl aniline derivatives: the major products under Kröhnke pyridine synthesis conditions

Zheng Fang, Biqiong Hong, Wei Wu* and Zhiqiang Weng*

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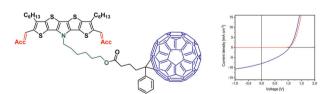
lodine(III)-mediated dehydroaromatization of cyclohexanones with primary amines and CD₃SSO₃Na to access *ortho*-SCD₃ anilines

Hui Wu, Youqing He, Kai Sun, Yaling Xu, Wenting Wang and Ge Wu*

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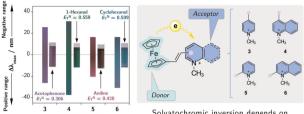
S,N-Heteropentacene-based molecular donor-acceptor dyads: structure-property relationships and application in single-material organic solar cells

Teresa Kraus, Anna Aubele and Peter Bäuerle*



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Organometallic inverted solvatochromic dyes

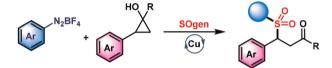


Solvatochromic inversion depends on annulation and donor/acceptor orientation

Ferrocene analogs of Brooker's merocyanine: a new library of organometallic inverted solvatochromic dyes

Ignacio Aburto, Fabián Martínez-Gómez. Carolina Aliaga and Moisés Domínguez*

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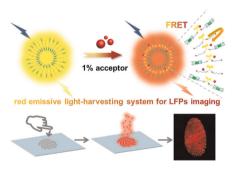


- ♦ Multi-component reaction
- ♦ Mild conditions and broad scope
- ♦ Gram-scale and late-stage modification of drugs
- ♦ First protocol to access γ -Keto Arylsulfones via SO₂ Insertion
- ♦ SOgen as a uniquely effective SO₂ surrogate
- ♦ Radical intermediates different from previous work

Copper-catalyzed ring-opening sulfonylation of cyclopropanols via the insertion of sulfur dioxide toward the synthesis of γ -keto aryl sulfones

Lin Shen, Xuemei Zhang and Zhong Lian*

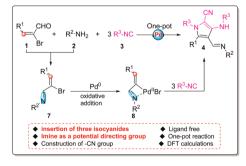
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A pillar[5] arene-based artificial light-harvesting system with red emission for high-resolution imaging of latent fingerprints

Tangxin Xiao,* Liangliang Zhang, Dengli Chen, Qiaona Zhang, Qi Wang, Zheng-Yi Li and Xiao-Qiang Sun

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Pd-catalyzed imine-directed one-pot access to polysubstituted pyrroles via tandem triple isocyanide insertion/aza-Nazarov cyclization reactions

Jun Li, Zhi-Wen Zhao, Shuang Zheng, Ping He,* Ji-Ying Qiu, Quan-Quan Zhou* and Zhi-Lin Ren*

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4CzIPN-catalyzed radical-initiated cascade cyclization for the photosynthesis of polysubstituted quinolin-3-amines

Shiqiang Mu, Yu Guo, Xiujuan Huang, Ying Luo, Menghan Chen, Jian Xu* and Qiuling Song*

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Base-promoted transition metal-free phosphorylation/acylation of 2-vinyl pyridines with Ph₂PCl and carboxylic acids

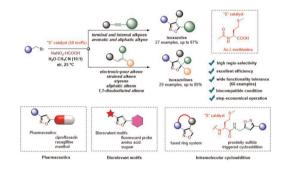
Zhichao Li, Lianze Zong, Xixi Hu, Xinjin Li, Feng-Gang Sun, Yunhui Dong, Zhengbao Xu, Hui Liu* and Lizhi Zhang*

- base-promoted metal-free conditions
- phosphorylation/acylation of alkenes
- no excess oxidant and by-product
- facile and mild reaction conditions

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Ac-L-methionine-catalyzed, nitrite-triggered cycloaddition reactions between bromides and alkynes/alkenes: step-economical reactions for modular synthesis

Shuangrong Liu, Zhimin Ying, Qi Zhu, Xiuwen Zhong, Jie Cen, You Wu, Yongping Yu, Jiaan Shao* and Wenteng Chen*



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Formal allylic $C(sp^3)-H$ alkylation of α -alkylstyrenes by rearrangement of intermediate alkenyl sulfonium salts

Zeyu Shao, Junqi Zhou, Ziyu Wang, Biao Liu, Liang-Hua Zou,* Cheng Wang and Jian Wen*

3280 ^tBuXPhosAu(MeCN)SbF₆ (5 mol %) DCE, 4 Å MS, 80 °C, 6-24 h 8-11 37 examples up to 99% yield ■ Biaryl-bridged 8-11 membered N-heterocycles ■ Broad substrates scope ■ Flexible position of nitrogen atom ■ High efficiency & readily scalable

Direct construction of biaryl-bridged 8-11 membered N-heterocycles via gold(ı)catalyzed intramolecular [4 + 2] benzannulation of N-tethered divnyl benzaldehydes

Qing Bao, Jichao Chen, Zhen Liu and Weidong Rao*

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☐ Metal free

□ Broad substrate scope

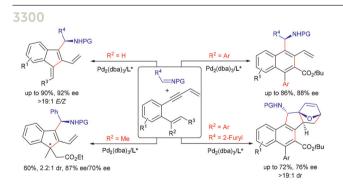
Direct access to β-arylketoesters by NHC/ photoredox catalyzed alkoxycarbonylationcarbonylation of styrenes

Yaomei Liu, Zuming Wu, Wenjing Li, Mengjiao Zhang, Youhui Zhang, Shuqin Deng, Shilu Fan,* Yanwu Zhu* and Yi-Si Feng*

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Qi Qu, Meigui Fu, Caixia Lin, Yanhou Geng,* Yuanming Li* and Yaofeng Yuan*



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Bo Zhu, Teng Sun, Zhi-Chao Chen,* Lu Gao, Wei Du and Ying-Chun Chen*

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Jiaying He, Wenhao Mao, Jie Lin, Yongzhen Wu, Lingxin Chen, Pengtao Yang, Dingguo Song, Peixi Zhu, Weihui Zhong and Fei Ling*

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Seydou Kassamba, Mathias Reboli, Alejandro Perez-Luna, Franck Ferreira and Muriel Durandetti*

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Polychlorination of (Poly)Azines CH₂CN, 60 ~ 80°C • Readily available chlorination reagents Catalyst-free conditions Broad heteroarene scope • Excellent functional group tolerance

Direct benzylic polychlorination of (poly)azines with N-chlorosuccinimide

Xueting Liu, Yaoqiang Wang, Shengda Chen, Qingqing Jia, Guoqiang Wang* and Shuhua Li*

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Visible-light-mediated C-F bond cleavage for the synthesis of polyfluorinated compounds

Bin Wang, Cui-Tian Wang, Xue-Song Li, Wen-Hui Sun, Xue-Yuan Liu* and Yong-Min Liang*

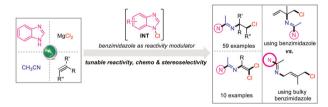
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Asymmetric synthesis of spirofuro[2,3-b]azepine-5,3'-indoline derivatives via cycloisomerization/ [4 + 3] annulation process under Au/N-heterocyclic carbene relay catalysis

Mengwei You, Yan Li, Xin Lv,* Guodong Shen, Xiao Xiao and Liejin Zhou*

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Electrochemical four-component aminochlorination tuned by benzimidazoles

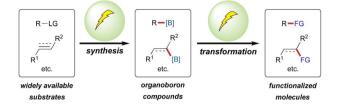
Xuan Zhan, Guiqi Gao, Yating Liang, Fengyi Li, Ke Liu, Weigang Fan, Sheng Zhang* and Man-Bo Li*

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Electrochemical synthesis and transformation of organoboron compounds

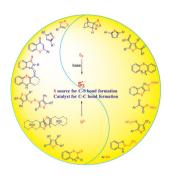
Chunyu Yin, Shuai Tang, Jiatong Mei, Xiaoyu Hu* and Hua Zhang*



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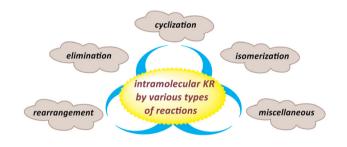
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Tianyu Peng, Shixin Li, Dongxu Yang* and Linging Wang*



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Recent progress on the chemical synthesis of bacterial non-2-ulosonic acids

Xing Guo, Pengfei Li, Han Liu* and Xuechen Li*