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IN THIS ISSUE

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Cover

See Jakub Copko and Tomáš Slanina, pp. 3774–3777. Image reproduced by permission of Tomáš Slanina from *Chem. Commun.*, 2024, 60, 3774.



Inside cover

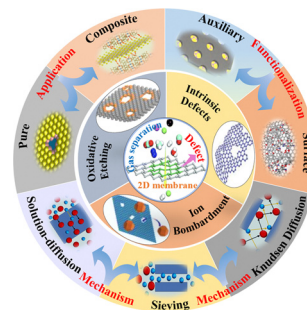
See Baoxian Ye, Jianxun Zhang et al., pp. 3778–3781. Image reproduced by permission of Zhang Jianxun from *Chem. Commun.*, 2024, 60, 3778.

HIGHLIGHT

3745

Advancements in defect engineering of two-dimensional nanomaterial-based membranes for enhanced gas separation

Wenjia Luo,* Changzheng Wang, Xueguo Li, Jian Liu, Duo Hou, Xi Zhang, Guoxian Huang, Xingwu Lu, Yanlong Li and Tao Zhou

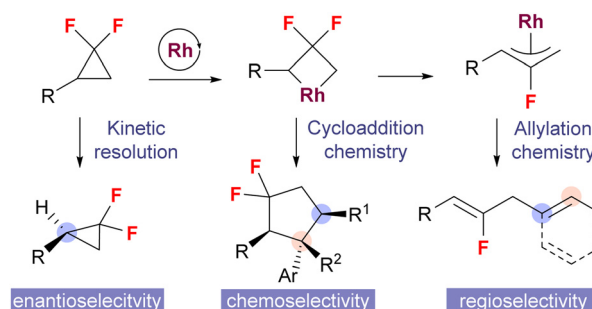


FEATURE ARTICLE

3764

Selectivity in Rh-catalysis with *gem*-difluorinated cyclopropanes

Yaxin Zeng, Zhong-Tao Jiang and Ying Xia*



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Elemental answers

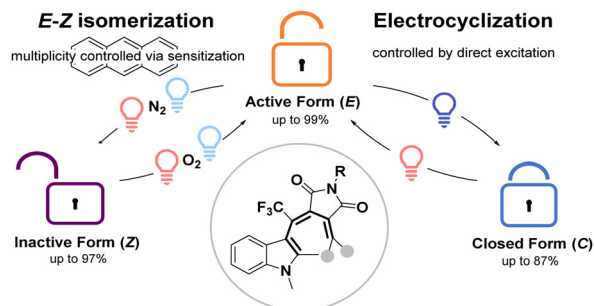


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3774

Multiplicity-driven photochromism controls three-state fulgimide photoswitches

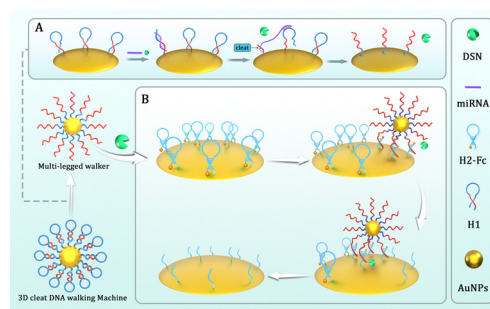
Jakub Copko and Tomáš Slanina*



3778

Twice-walk strategy based on three-dimensional DNA walking machine driven by duplex-specific nuclease

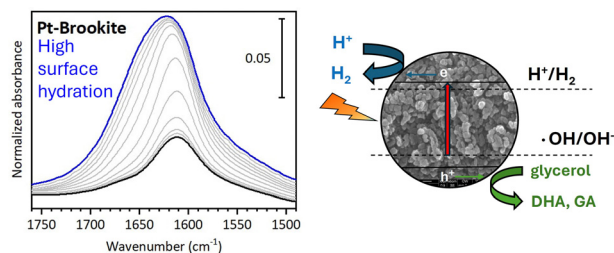
Sheng Lei, Zi Liu, Qidong Zhang, Zezhi Li, Gaiping Li, Lina Zou, Guobi Chai, Jian Mao, Baoxian Ye* and Jianxun Zhang*



3782

Pt–TiO₂ catalysts for glycerol photoreforming: comparison of anatase, brookite and rutile polymorphs

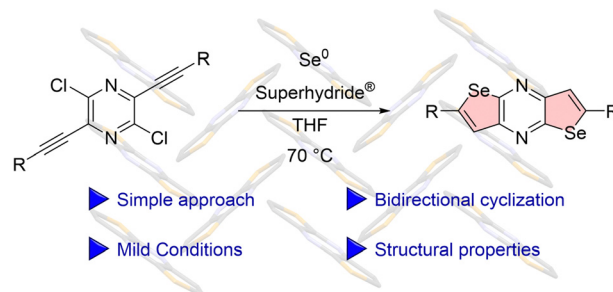
Claudio Maria Pecoraro, Lorenzo Mino,* Elizaveta Kozyr, Leonardo Palmisano, Francesco di Franco, Vittorio Loddo, Monica Santamaria and Marianna Bellardita*



3786

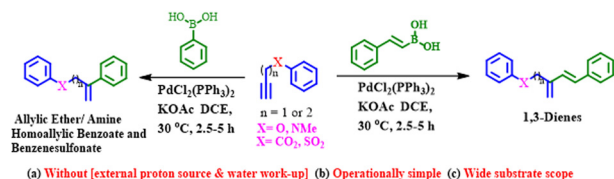
Synthesis and structural properties of *para*-diselenopyrazines

Christopher Hüßler, Martin C. Dietl, Justin Kahle, Eric F. Lopes, Miku Kawamura, Petra Krämer, Frank Rominger, Matthias Rudolph, Iwao Hachiya and A. Stephen K. Hashmi*



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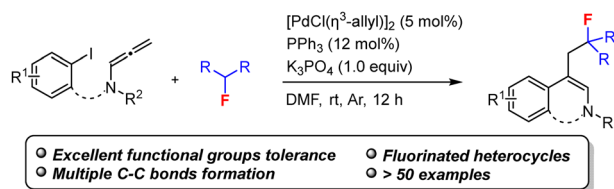
3790



Pd(II)-catalyzed hydroarylations/hydroalkenylations of terminal alkynes: regioselective synthesis of allylic, homoallylic, and 1,3-diene systems

Jivan Shinde, Sundaram Suresh, Veerababurao Kavala and Ching-Fa Yao*

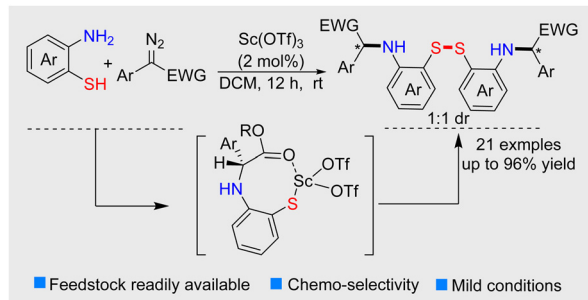
3794



Palladium-catalysed aryl/monofluoroalkylation of allenamides: access to fluoroalkyl indoles and isoquinolones

Qiaoli Xue, Yue Pu, Haixia Zhao, Xiaotian Xie, Heng Zhang, Jian Wang,* Liqin Yan* and Yongjia Shang*

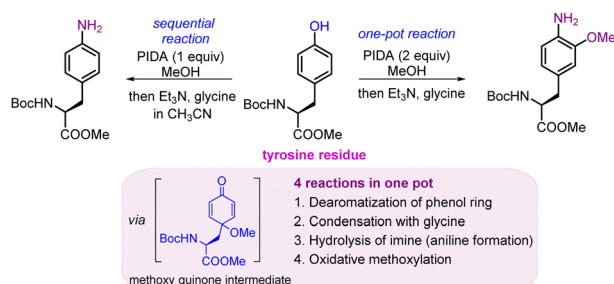
3798



Scandium-catalyzed chemoselective carbene insertion into N-H over S-H: access to o-alkylamine-diaryl disulfides

Haoyang Sun, Junhong Pan, Wenying Zhao, Tong Zhou, Xizhong Song,* Jun Lin and Yi Jin*

3802



Metal-free functionalization of tyrosine residues in short peptides and study of the morphological alterations

Santanu Karmakar, Genji Sukumar, Seelam Prasanthkumar, Babli K. Jha, Prathama S. Mainkar, Kiranmai Nayani* and Srivari Chandrasekhar*

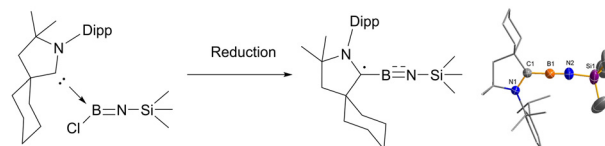


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3806

Synthesis, structure and reactivity of iminoborane radicals

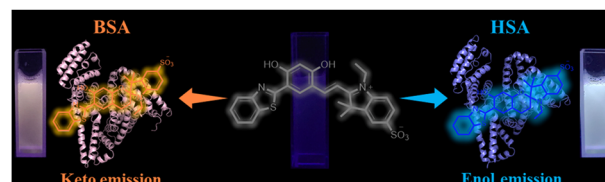
Hanqiang Wang



3810

A novel FA1-targeting fluorescent probe for specific discrimination and identification of human serum albumin from bovine serum albumin

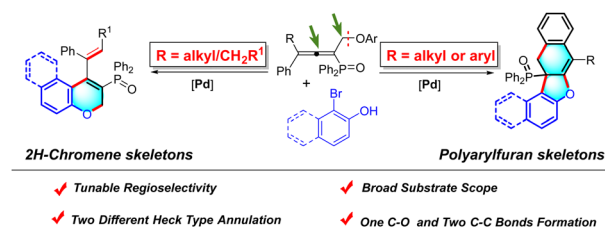
Yuchen Huan, Xiaojing Nan, Hongjuan Li, Shiguo Sun and Yongqian Xu*



3814

Pd-catalyzed divergent regioselective annulation of phosphinyl allenes accessing polyarylfurans and 2H-chromenes

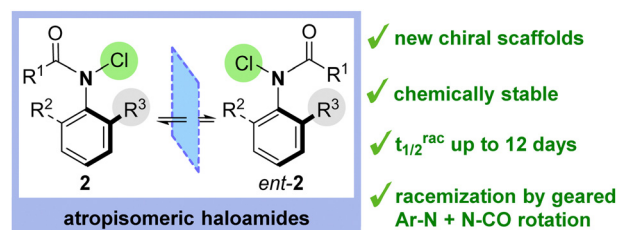
Yang Li, Xiao-Long Yan, Li-Yan Hu, Kai Luo, Jie Zhu* and Lei Wu*



3818

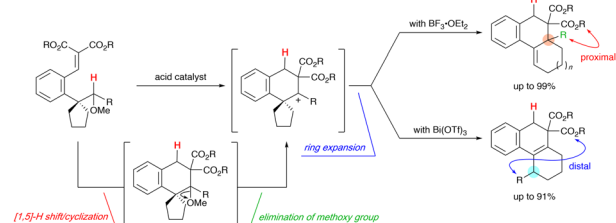
Synthesis, structure and stereodynamics of atropisomeric N-chloroamides

Aaron D. G. Campbell, Natalie J. Roper, Paul G. Waddell, Corinne Wills, Casey M. Dixon, Ross M. Denton, Kristaps Ermanis* and Roly J. Armstrong*



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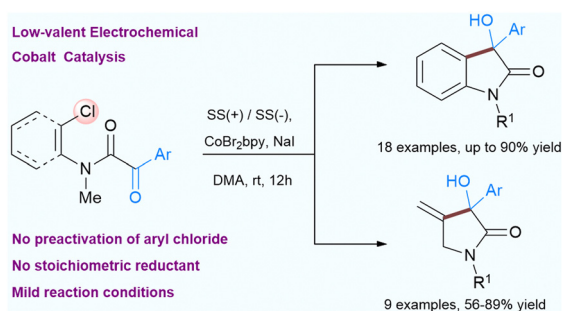
3822



Divergent synthesis of multi-substituted phenanthrenes via an internal redox reaction/ring expansion sequence

Ryosei Koyama, Masahiro Anada, Shunsuke Sueki, Koshi Makino, Tatsuhiro Kojima, Tomoko Kawasaki-Takasuka and Keiji Mori*

3826



Electrochemical low valent cobalt-catalyzed addition of aryl and vinyl chlorides to α -ketoamides via C–Cl bond activation

Prashant S. Shinde, Valmik S. Shinde* and Magnus Rueping*

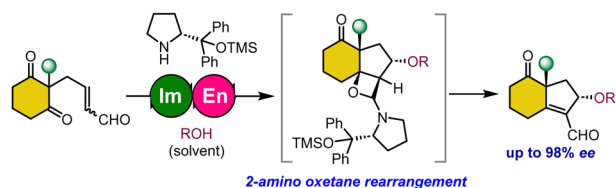
3830



Bromine atom introduction improves the F^- sensing ability of an indolo[3,2-*b*]carbazole-salicylaldehyde-based fluorescence turn-on sensor

Lihua Xu and Jiang Zhao*

3834



Organocatalytic enantioselective desymmetrization of enal-tethered cyclohexane-1,3-diones

Lakshmi Revati Magham, Abdus Samad, Satish B. Thopate, Jagadeesh Babu Nanubolu and Rambabu Chegondi*

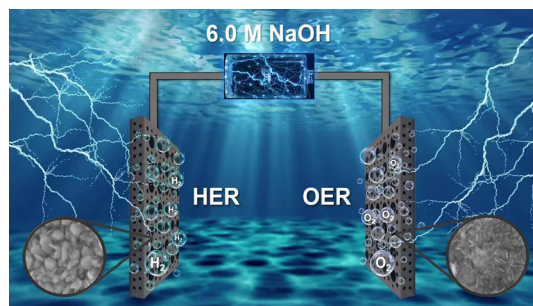


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3838

***In situ* reconstruction of self-supported NiFeP electrodes for overall water splitting at large current density**

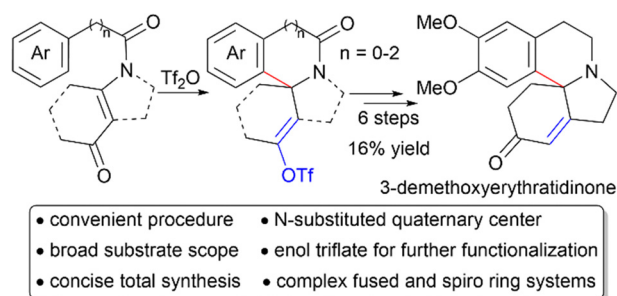
Ang Li, Dongcai Song, Runjie Cao, Fangzheng Wang, Hua Yan and Hongmei Chen*



3842

Total synthesis of (±)-3-demethoxyerythratinone via Tr_2O -promoted cascade reaction of enaminone

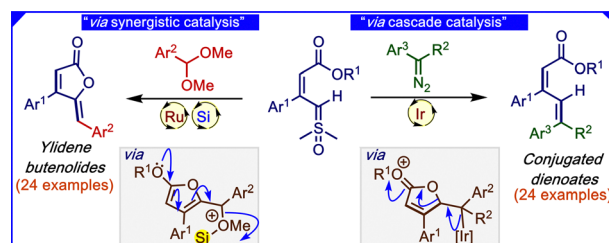
Mingliang Lou, Xiaolei Liu, Shoule Han, Songlin Bai and Xiangbing Qi*



3846

Carbene-mediated stereoselective olefination of vinyl sulfoxonium ylides with diazo compounds and acetals

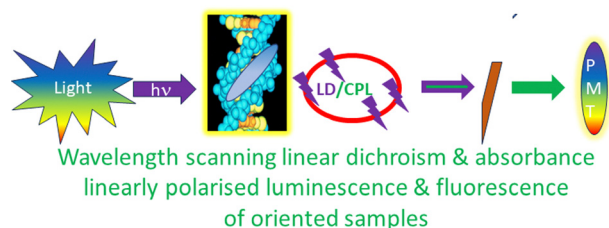
Dinesh Kumar Gopalakrishnan, Srashti Bhardwaj, Sandeep Kumar, Tarak Karmakar* and Janakiram Vaitla*



3850

Linear dichroism and linearly polarised luminescence spectra of oriented samples collected on a new integrated instrument

Alison Rodger

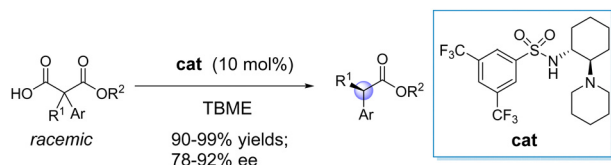


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3854

Organocatalytic enantioselective decarboxylative protonation of α -alkyl- α -aryl malonate monoesters

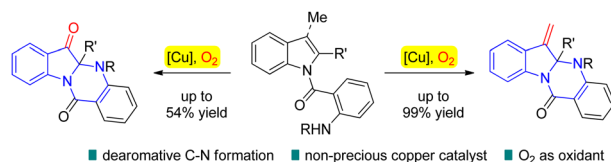
Cong-Ying Guo, Jia-Zheng Chen, Wen-Ting Liu, Hao Mei, Jie Meng and Jian-Ping Chen*



3858

Copper-catalyzed intramolecular dearomative aza-Wacker reaction of indole

Bi Wang, Ren-Xiao Liang, Zhen-Lu Shen* and Yi-Xia Jia*



CORRECTION

3862

Correction: Water-dispersible donor–acceptor–donor π -conjugated bolaamphiphiles enabling a humidity-responsive luminescence color change

Tomoya Enjou, Shimpei Goto, Qiming Liu, Fumitaka Ishiwari, Akinori Saeki, Taro Uematsu, Yuka Ikemoto, Sora Watanabe, Go Matsuba, Kouichiro Ishibashi, Go Watanabe, Satoshi Minakata, Yoshimitsu Sagara and Youhei Takeda*

