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Inside cover
See Yosuke Tani *et al.*, pp. 5302–5308. Image reproduced by permission of Mao Komura from *Chem. Sci.*, 2023, **14**, 5302.

COMMENTARY

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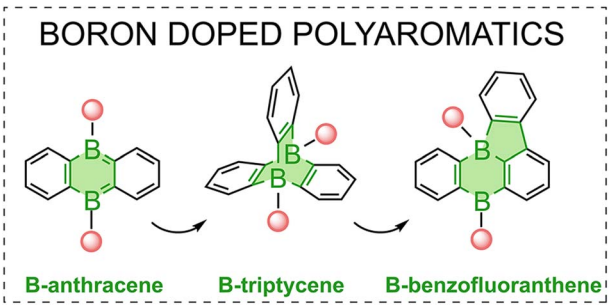
A focus on anionic boron anthracenes and triptycenes as entry point toward B-doped polyaromatic materials and Lewis acids

Guillaume Berionni*



REVIEWS

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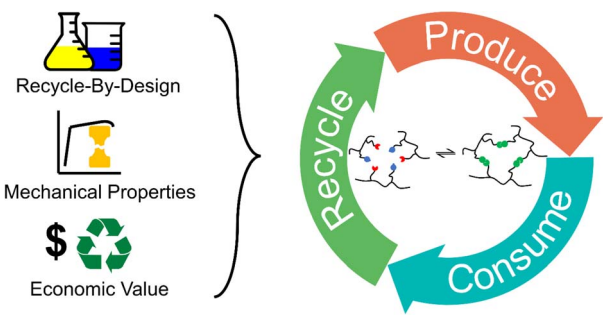
Circularity in polymers: addressing performance and sustainability challenges using dynamic covalent chemistries

Tianwei Yan, Alex H. Balzer, Katie M. Herbert,* Thomas H. Epps, III* and LaShanda T. J. Korley*



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REVIEWS

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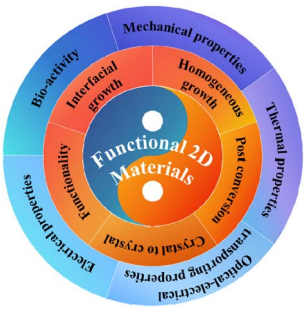
Design, synthesis, and application of some two-dimensional materials

Luwei Zhang, Ning Wang* and Yuliang Li*



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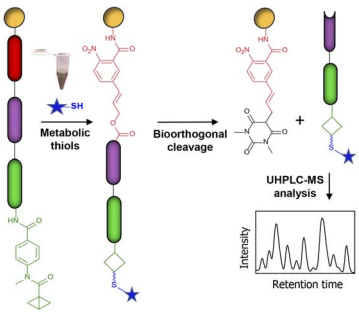
Chemoselective bicyclobutane-based mass spectrometric detection of biological thiols uncovers human and bacterial metabolites

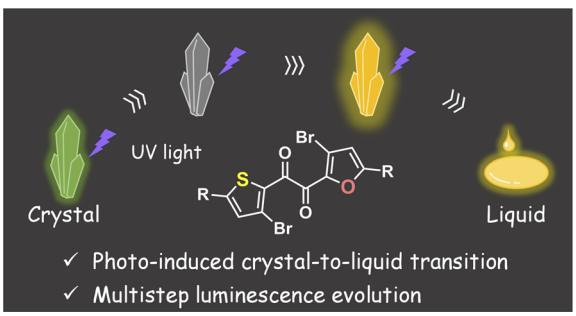
Amanpreet Kaur, Weifeng Lin, Vladyslav Dovhalyuk, Léna Driutti, Maria Letizia Di Martino, Miroslav Vujasinovic, J.-Matthias Löhr, Mikael E. Sellin and Daniel Globisch*



5302

Photoinduced crystal melting with luminescence evolution based on conformational isomerisation

Mao Komura, Hikaru Sotome, Hiroshi Miyasaka, Takuji Ogawa and Yosuke Tani*



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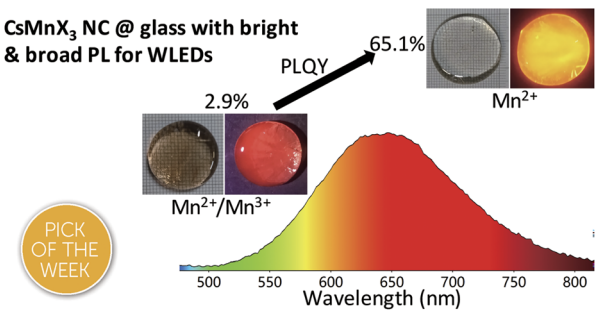
Solid-state synthesis of cesium manganese halide nanocrystals in glass with bright and broad red emission for white LEDs

Guangyong Xu, Chuying Wang, Yacong Li, Wen Meng, Guigen Luo, Min Peng, Bin Xu and Zhengtao Deng*



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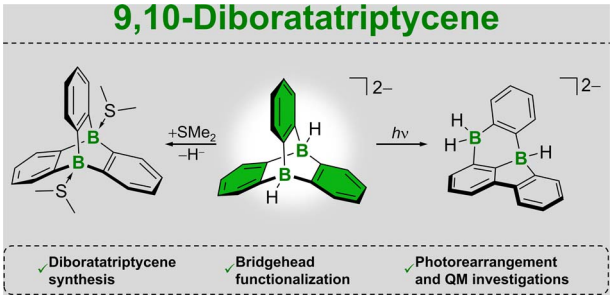

Synthesis, bridgehead functionalization, and photoisomerization of 9,10-diboratatriptycene dianions

Sven E. Prey, Jannik Gilmer, Samira V. Teichmann, Luis Čaić, Mischa Wenisch, Michael Bolte, Alexander Virovets, Hans-Wolfram Lerner, Felipe Fantuzzi and Matthias Wagner*

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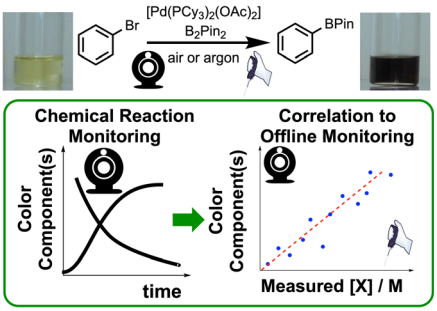

Computer vision for non-contact monitoring of catalyst degradation and product formation kinetics

Chunhui Yan, Megan Cowie, Calum Howcutt, Katherine M. P. Wheelhouse, Neil S. Hodnett, Martin Kollie, Martin Gildea, Martin H. Goodfellow and Marc Reid*

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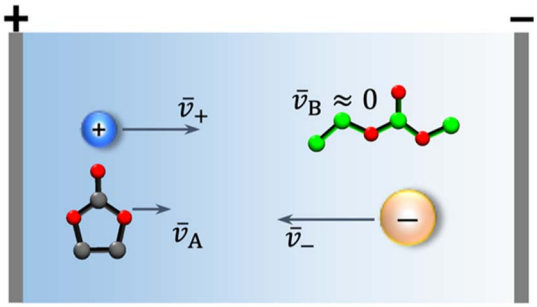

Quantifying selective solvent transport under an electric field in mixed-solvent electrolytes

Chao Fang, David M. Halat, Aashutosh Mistry, Jeffrey A. Reimer, Nitash P. Balsara and Rui Wang*

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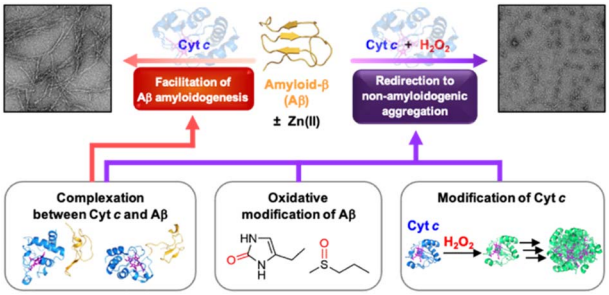

Unveiling the impact of oxidation-driven endogenous protein interactions on the dynamics of amyloid-β aggregation and toxicity

Zhi Du, Eunju Nam, Yuxi Lin, Mannkyu Hong, Tamás Molnár, Ikufumi Kondo, Koichiro Ishimori, Mu-Hyun Baik, Young-Ho Lee* and Mi Hee Lim*

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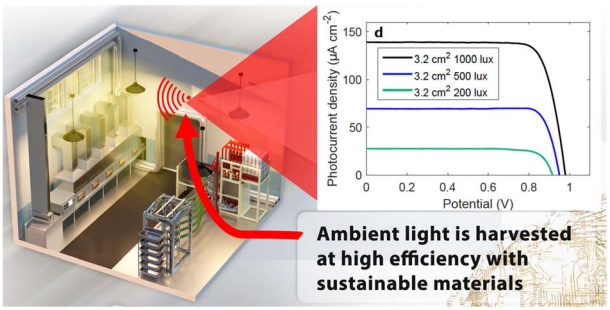
Emerging indoor photovoltaics for self-powered and self-aware IoT towards sustainable energy management

Hannes Michaels, Michael Rinderle, Iacopo Benesperi, Richard Freitag, Alessio Gagliardi and Marina Freitag*



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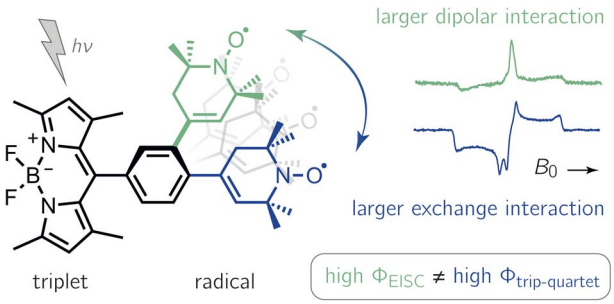
Distance dependence of enhanced intersystem crossing in BODIPY–nitroxide dyads

Maximilian Mayländer, Theresia Quintes, Michael Franz, Xavier Allonas, Andreas Vargas Jentzsch* and Sabine Richert*



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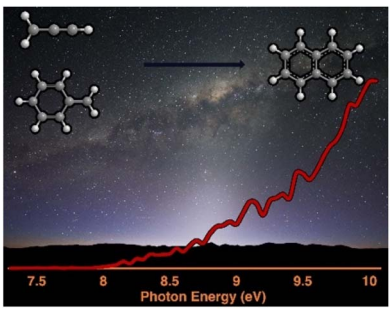
Unconventional gas-phase preparation of the prototype polycyclic aromatic hydrocarbon naphthalene ($C_{10}H_8$) *via* the reaction of benzyl (C_7H_7) and propargyl (C_3H_3) radicals coupled with hydrogen-atom assisted isomerization

Chao He, Ralf I. Kaiser,* Wenchao Lu, Musahid Ahmed,* Vladislav S. Krasnoukhov, Pavel S. Pivovarov, Marsel V. Zagidullin, Valeriy N. Azyazov, Alexander N. Morozov and Alexander M. Mebel*



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The promotional role of Mn in CO_2 hydrogenation over Rh-based catalysts from a surface organometallic chemistry approach

Wei Zhou, Scott R. Docherty, Christian Ehinger, Xiaoyu Zhou and Christophe Copéret*

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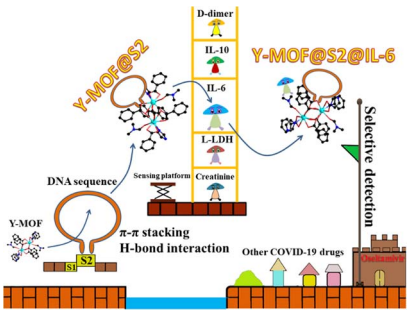

A MOF/DNA luminescent sensing platform for detection of potential COVID-19 biomarkers and drugs

Xinrui Wang, Gilles Clavier, Yan Zhang, Kamal Batra, Nanan Xiao, Guillaume Maurin, Bin Ding,* Antoine Tissot* and Christian Serre*

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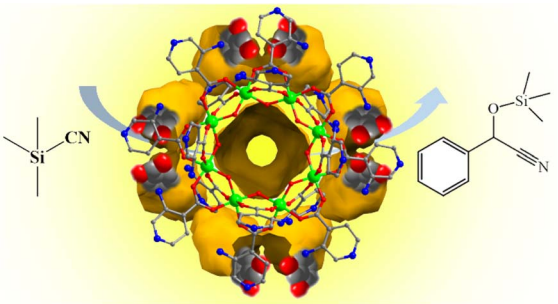

Accurate binding of porous aluminum molecular ring catalysts with the substrate

Dan Luo, Han Xiao, Min-Yi Zhang, Shang-Da Li, Liang He, Hong Lv, Chun-Sen Li, Qi-Pu Lin, Wei-Hui Fang* and Jian Zhang

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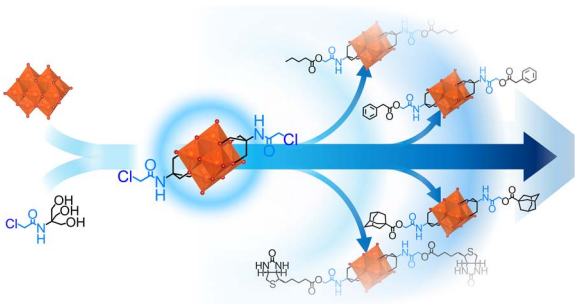

Rational synthesis of elusive organic–inorganic hybrid metal-oxo clusters: formation and post-functionalization of hexavanadates

David E. Salazar Marcano, Givi Kalandia, Mhamad Aly Moussawi, Kristof Van Hecke and Tatjana N. Parac-Vogt*

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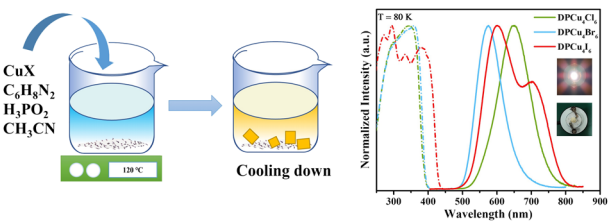

Photophysical studies for Cu(I)-based halides: broad excitation bands and highly efficient single-component warm white-light-emitting diodes

Shuigen Zhou, Yihao Chen, Kailei Li, Xiaowei Liu, Ting Zhang, Wei Shen, Ming Li, Lei Zhou* and Rongxing He*

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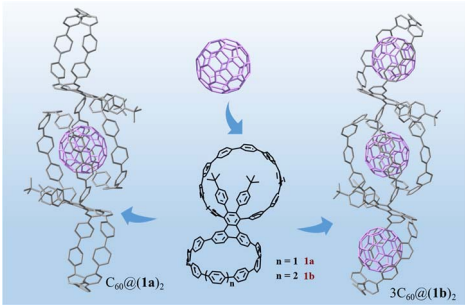
Regulating supramolecular interactions in dimeric macrocycles

Pengwei Fang, Muqing Chen,* Nan Yin, Guilin Zhuang,* Tianyun Chen, Xinyu Zhang and Pingwu Du*



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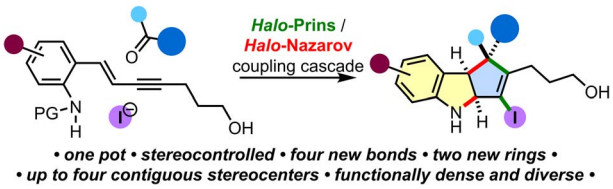
Nitrogen-interrupted *halo*-Prins/*halo*-Nazarov fragment coupling cascade for the synthesis of indolines

Aleksa Milosavljevic, Connor Holt and Alison J. Frontier*



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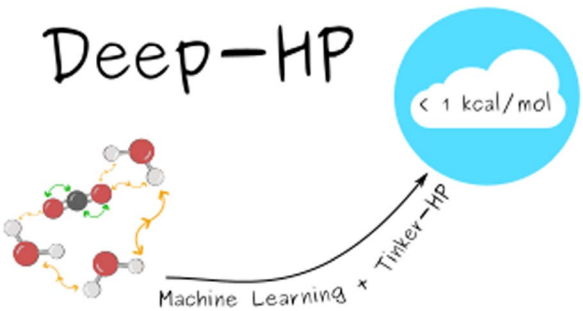
Scalable hybrid deep neural networks/polarizable potentials biomolecular simulations including long-range effects

Théo Jaffrelot Inizan, Thomas Plé, Olivier Adjoua, Pengyu Ren, Hatice Gökcan, Olexandr Isayev, Louis Lagardère and Jean-Philip Piquemal*



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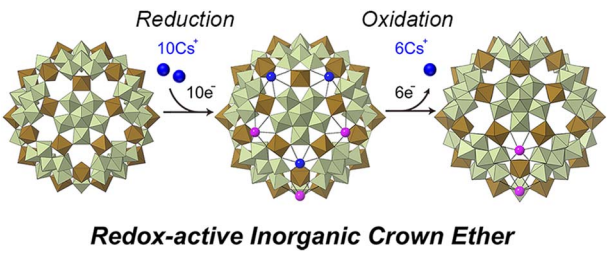
A redox-active inorganic crown ether based on a polyoxometalate capsule

Nanako Tamai, Naoki Ogiwara, Eri Hayashi, Keigo Kamata, Toshiyuki Misawa, Takeru Ito, Tatsuhiro Kojima, Mireia Segado, Enric Petrus, Carles Bo and Sayaka Uchida*



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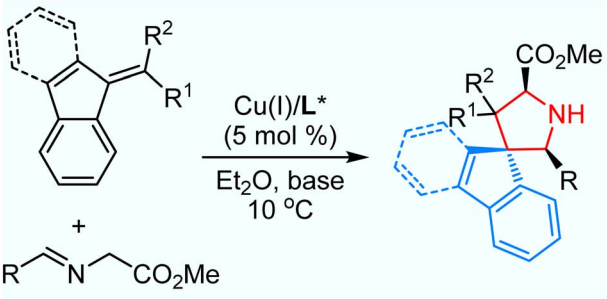

Electron-rich benzofulvenes as effective dipolarophiles in copper(I)-catalyzed asymmetric 1,3-dipolar cycloaddition of azomethine ylides

Xin Chang, Xue-Tao Liu, Fangfang Li, Yuhong Yang, Lung Wa Chung* and Chun-Jiang Wang*

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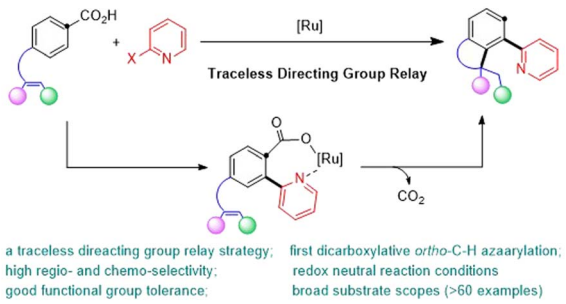

Ruthenium-catalysed decarboxylative unsymmetric dual *ortho*-/*meta*-C–H bond functionalization of arenecarboxylic acids

Xiankai Li, Xiaofei Wang and Jing Zhang*

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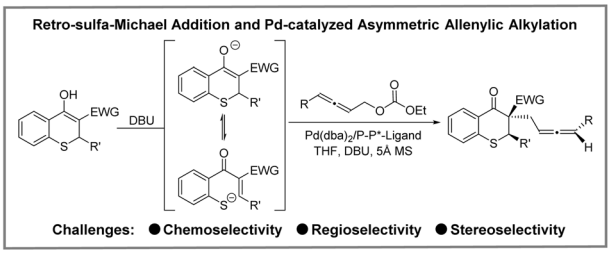
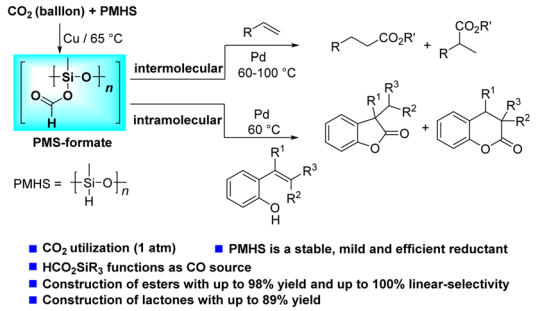


Palladium-catalyzed asymmetric allenylic alkylation: construction of multiple chiral thiochromanone derivatives

Li-Xia Liu, Yu-Qing Bai, Xiang Li, Chang-Bin Yu* and Yong-Gui Zhou*

5483



Regioselective hydroesterification of alkenes and alkenylphenols utilizing CO_2 and hydrosilane

Meng-Meng Wang, Sheng-Mei Lu and Can Li*

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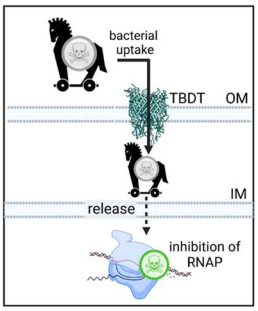
EDGE ARTICLES

5490

Siderophore conjugation with cleavable linkers boosts the potency of RNA polymerase inhibitors against multidrug-resistant *E. coli*

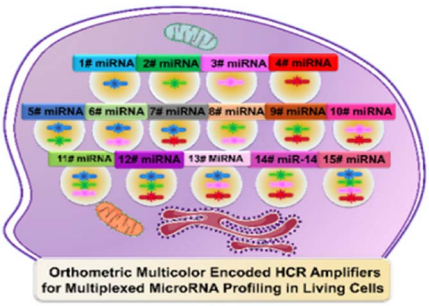
Carsten Peukert, Anna C. Vetter, Hazel L. S. Fuchs, Kirsten Harmrolfs, Bianka Karge, Marc Stadler and Mark Brönstrup*



5503

Orthometric multicolor encoded hybridization chain reaction amplifiers for multiplexed microRNA profiling in living cells

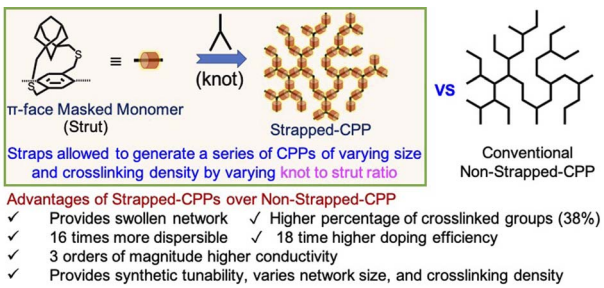
Wei Wei, Yiyi Zhang, Fan Yang, Liping Zhou, Yufan Zhang, Yeyu Wang, Shuangshuang Yang, Jinze Li and Haifeng Dong*



5510

Using molecular straps to engineer conjugated porous polymer growth, chemical doping, and conductivity

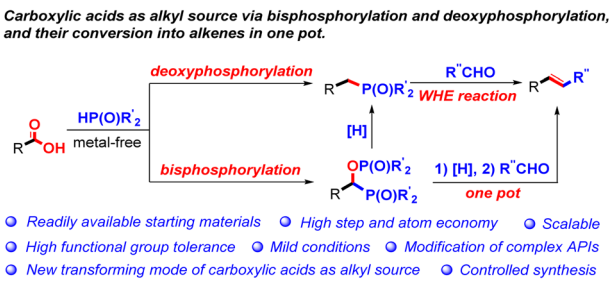
Manikandan Mohanan, Humayun Ahmad, Pooja Ajayan, Prashant K. Pandey, Benjamin M. Calvert, Xinran Zhang, Fu Chen, Sung J. Kim, Santanu Kundu and Nagarjuna Gavvalapalli*



5519

Metal-free highly chemo-selective bisphosphorylation and deoxyphosphorylation of carboxylic acids

Liguang Gan, Tianhao Xu, Qihang Tan, Mengjie Cen, Lingling Wang, Jingwei Zhao, Kuang Liu, Long Liu, Wen-Hao Chen, Li-Biao Han,* Jacek E. Nycz* and Tieqiao Chen*



CORRECTION

5527

Correction: Novel synthetic route for (parent) phosphetanes, phospholanes, phosphinanes and phosphepanes

Stephan Reichl, Gábor Balázs and Manfred Scheer*

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