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Cover
See Po-Shen Pan *et al.*, pp. 1639–1645.

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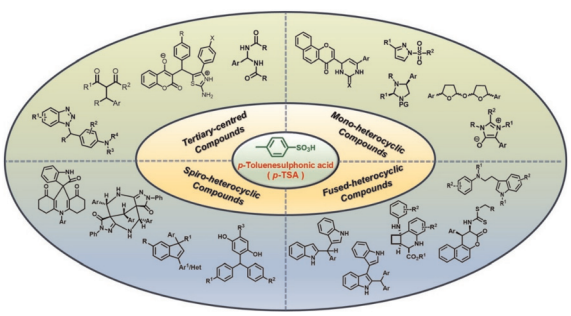
REVIEWS

1527

p-Toluenesulfonic acid-promoted organic transformations for the generation of molecular complexity

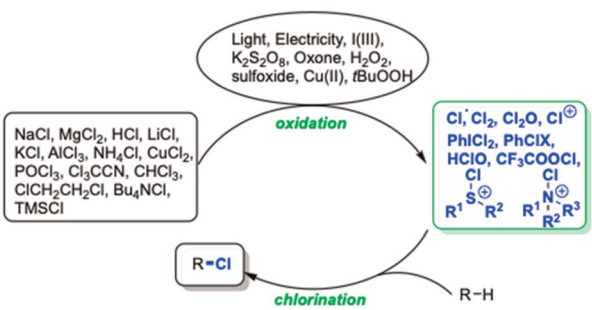
Sanchari Pal, Debjit Das* and Sabyasachi Bhunia*



1580

Recent advances in oxidative chlorination

Hai-Lei Cui



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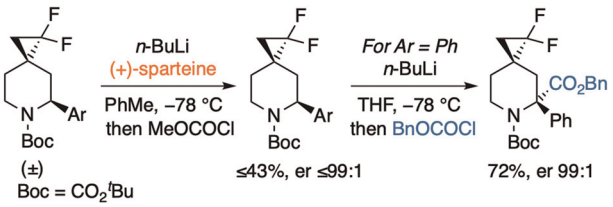
COMMUNICATIONS

1602

Synthesis of enantioenriched spirocyclic 2-arylpiperidines *via* kinetic resolution

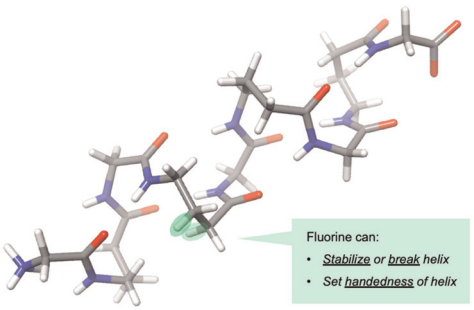
Anthony Choi, Anjan Das, Anthony J. H. M. Meijer, Ilaria Proietti Silvestri and Iain Coldham*



1608

The influence of backbone fluorination on the helicity of α/γ-hybrid peptides

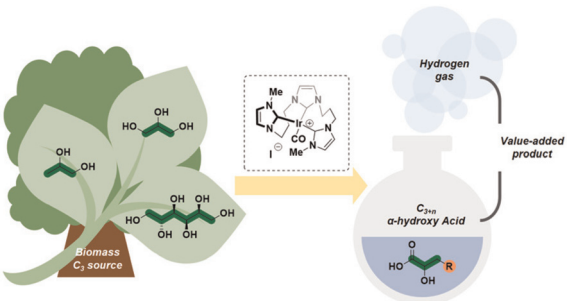
Alpesh Ramanlal Patel, Aggie Lawer, Mohan Bhadbhade and Luke Hunter*



1613

Ir(tri-N-heterocyclic carbene)-catalyzed upgrading of glycerol: C–C bond formation for the synthesis of α-hydroxy acids

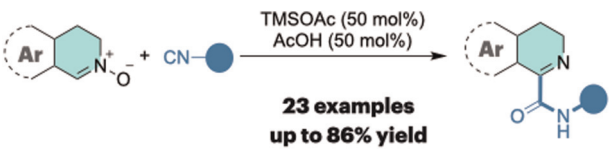
Heemin Byeon, Jaeho Kim, Mi-hyun Lee and Hye-Young Jang*



1619

Silylacetate-promoted addition reaction of isocyanides to nitrones: effective synthesis of C(1)-carboxamide derivatives

Takahiro Soeta,* Siming Yao, Hirokazu Sugiyama and Yutaka Ukaji*



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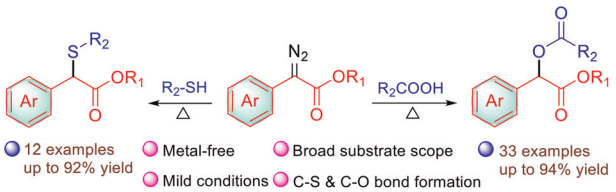
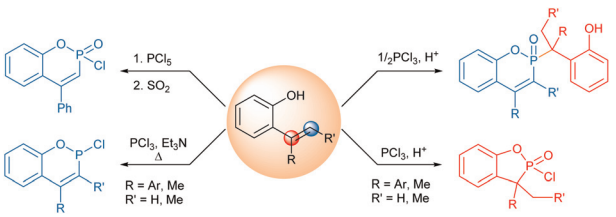
1624



Straightforward access to α-carbonyloxy esters and β-keto thioethers from aryldiazoacetates

Naveen Kumar, Ajay Kant Gola and Satyendra Kumar Pandey*

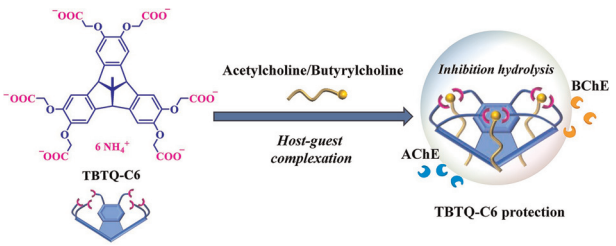
1629



Divergent synthesis of benzoxaphospholenes and phosphacoumarins *via* the reaction of 2-alkenylphenols with phosphorus(III/V) chlorides

Dmitry A. Tatarinov,* Elina A. Mikulenkova, Igor A. Litvinov, Khasan R. Khayarov and Vladimir F. Mironov

1634



A molecular container providing supramolecular protection against acetylcholine hydrolysis

Yi-Long Lu, Jing Su, Jian-Wei Li* and Wen-Rong Xu*

PAPERS

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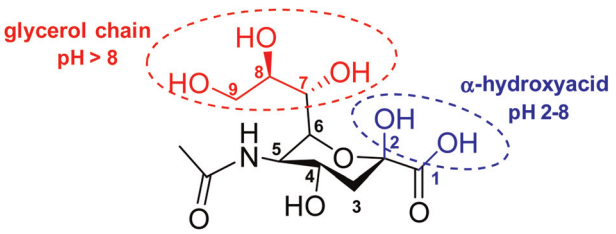

The use of multicomponent reactions in the development of bis-boronic acids for the detection of β-sialic acid

Tzu-Ching Chou, Ying-Li Hu, Guan-Cheng Xie, Jyh-Chiang Jiang, Liang-Ying Peng, Hsiao-Chun Tsai, Chiao-Tien Yao, Yi-Jie Tsai, Ting-Yu Huang, Jing-Wen Hu, Yi-Ching Chen, Min-Yeh Tsai, Yi-Wei Chen and Po-Shen Pan*

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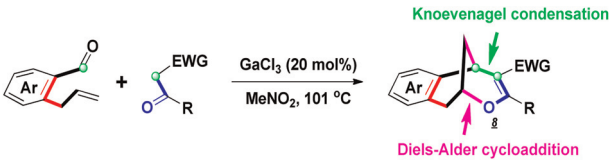
1646

One-pot synthesis of benzofused 8-oxabicyclo [3.3.1]nonanes *via* $GaCl_3$-mediated cyclo-condensation of *o*-allylbenzaldehydes and 1,3-dicarbonyl synthons

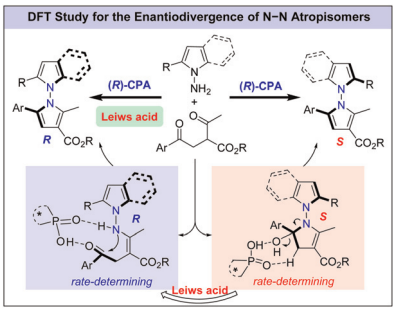
Meng-Yang Chang* and Yan-Ling Lee



1654

Theoretical insights into the enantiodivergence induced by chiral phosphoric acid catalysis with a Lewis acid for the synthesis of N–N axially chiral atropisomers

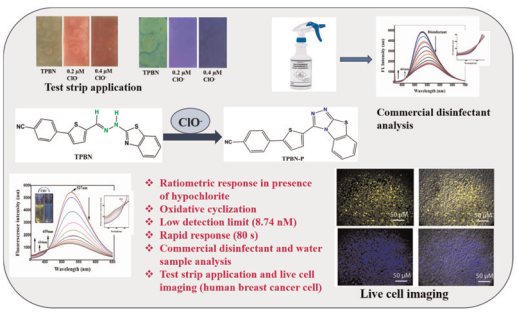
Yanze Li and Xinyao Li*



1662

A ratiometric small-molecule fluorescent probe for the selective detection of hypochlorite by an oxidative cyclization reaction: application to commercial disinfectants and live cells

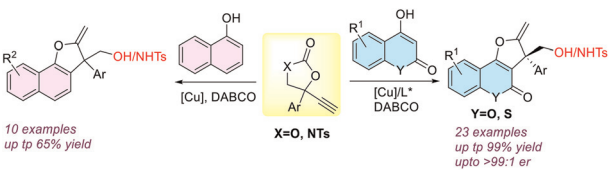
Shilpita Banerjee, Dipanjan Banik, Satyajit Halder, Anirban Karak, Pintu Ghosh, Kuladip Jana and Ajit Kumar Mahapatra*



1671

Decarboxylative [3 + 2] cycloaddition of propargyl cyclic carbonates with *C*,*O*-bis(nucleophile)s to access dihydrofuro[3,2-*c*]coumarins and dihydronaphtho[1,2-*b*]furans with quaternary center

Shravani Battula, Pranay Kothuri, Haripriya Bhumannagari and Kiranmai Nayani*



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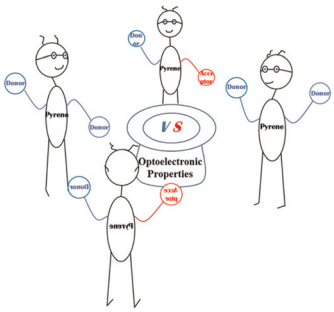
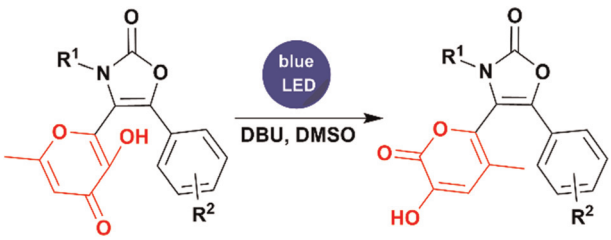


4,9- and 4,10-Substituted pyrenes: synthesis, successful isolation, and optoelectronic properties

Leibo Tan, Xiuli Zheng, Junqing Shi,* Tianshi Qin* and Lei Ji*

1686



Anionic photochemical rearrangement of 3-hydroxypyran-4-ones bearing oxazol-2-one fragment

Andrey N. Komogortsev,* Valeriya G. Melekhina and Boris V. Lichitskii

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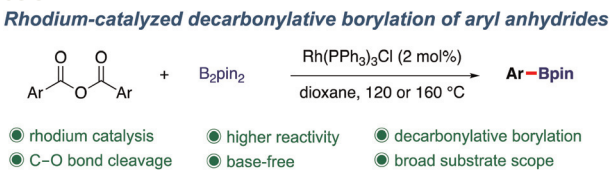
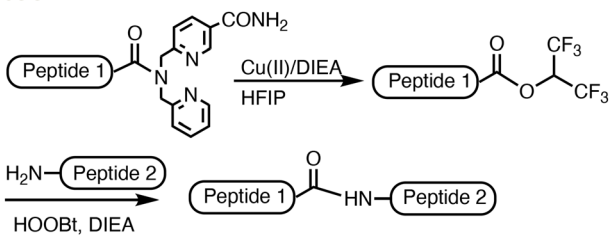


Decarbonylative borylation of aryl anhydrides *via* rhodium catalysis

Kexin Li, Ruxing Li, Yongmei Cui* and Chengwei Liu*

1699



The dipicolylamino group as an efficient leaving group for amide bond formation *via* hexafluoroisopropyl ester

Yasuhito Akai, Yuya Asahina* and Hironobu Hojo*

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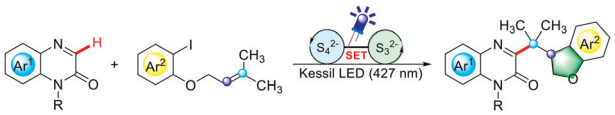
Radical relay cyclization/C–C bond formation of allyloxy-tethered aryl iodides with quinoxalin-2 (1*H*)-ones *via* polysulfide anion photocatalysis

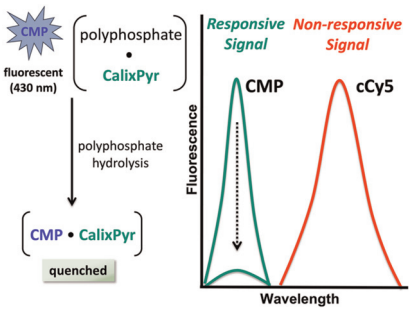
Zhongyi Zhang, Yaqin Zhou, Jiehui Wang, Yicheng Zhang, Lei Wang,* Jie Liu, Chao Zhou,* Min Wang and Pinhua Li*



1714

Fluorescent ratiometric supramolecular tandem assays for phosphatase and phytase enzymes

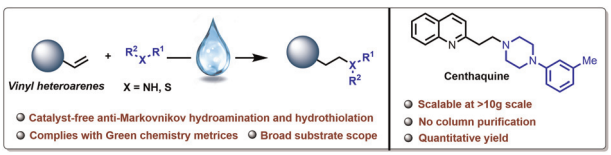
Kirk M. Atkinson and Bradley D. Smith*



1721

Catalyst-free anti-Markovnikov hydroamination and hydrothiolation of vinyl heteroarenes in aqueous medium: an improved process towards centhaquine

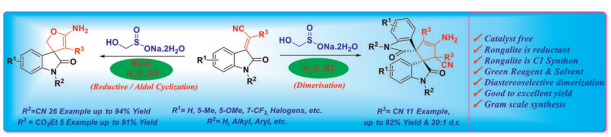
Anamika Yadav, Mayur D. Ambule and Ajay Kumar Srivastava*



1727

Base controlled rongalite-mediated reductive aldol/cyclization and dimerization of isatylidene malononitriles/cyanoacetates

Suryakant S. Chaudhari, Chandrakant B. Nichinde, Baliram R. Patil, Amardipsing S. Girase, Gamidi Rama Krishna and Anil K. Kinage*



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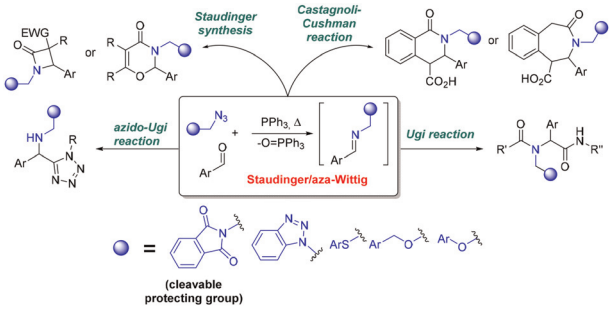

Imines with rare α-heteroatom substituted amine components generated *in situ via* the Staudinger/aza-Wittig tandem reaction and their application in multicomponent reactions

Polina Paramonova, Ilia Eliseev, Dmitry Dar'in and Olga Bakulina*

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