

Organic & Biomolecular Chemistry

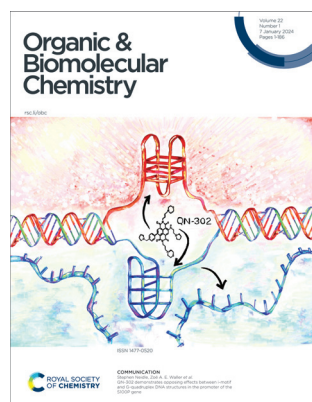
An international journal of synthetic, physical and biomolecular organic chemistry

rsc.li/obc

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 22(1) 1–186 (2024)



Cover

See Stephen Neidle,
Zoë A. E. Waller *et al.*,
pp. 55–58.

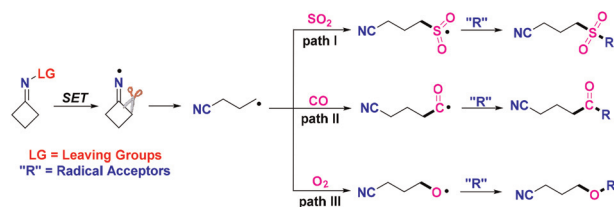
Cover image created by
Effrosyni Alexandrou and
reproduced by permission of
Zoë A. E. Waller and
Effrosyni Alexandrou from
Org. Biomol. Chem., 2024,
22, 55.

REVIEWS

10

Recent advances in ring-opening of cyclobutanone oximes for capturing SO₂, CO or O₂ via a radical process

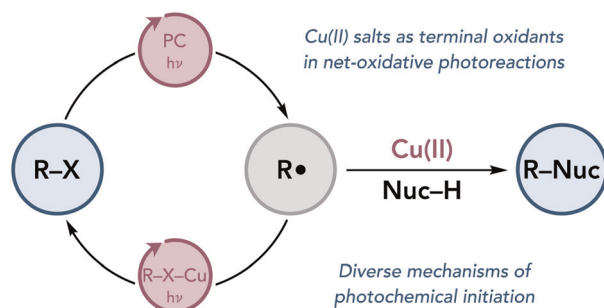
Long-Jin Zhong, Jian-Hong Fan, Pu Chen,
Peng-Fei Huang,* Bi-Quan Xiong, Ke-Wen Tang and
Yu Liu*



25

Cu(II) salts as terminal oxidants in visible-light photochemical oxidation reactions

Grace A. Lutovsky and Tehshik P. Yoon*



Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning
that suits you.

**Courses in the classroom,
the lab, or online**

Find something for every
stage of your professional
development. Search our
database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit rsc.li/cpd-training

**SAVE
10%**

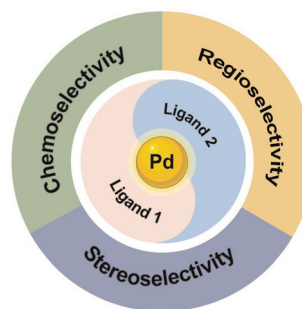


REVIEWS

37

Recent advances in ligand-enabled palladium-catalyzed divergent synthesis

Yue Wang, Jinzan Feng, Er-Qing Li,* Zhenhua Jia* and Teck-Peng Loh*

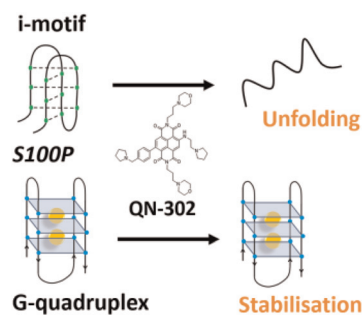


COMMUNICATIONS

55

QN-302 demonstrates opposing effects between i-motif and G-quadruplex DNA structures in the promoter of the S100P gene

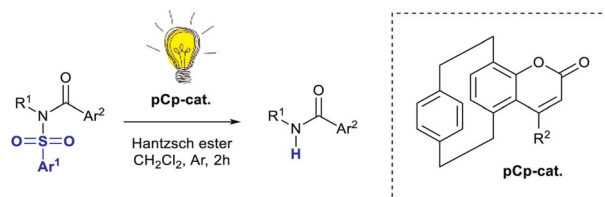
Effrosyni Alexandrou, Dilek Guneri, Stephen Neidle* and Zoë A. E. Waller*



59

[2.2]Paracyclophane-based coumarins: effective organo-photocatalysts for light-induced desulfonylation processes

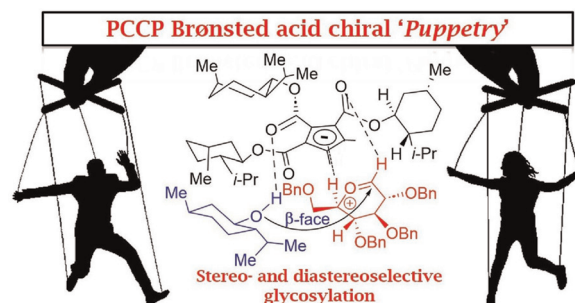
Jules Brom, Antoine Maruani, Serge Turcaud, Sonia Lajnef, Fabienne Peyrot, Laurent Micouin and Erica Benedetti*



65

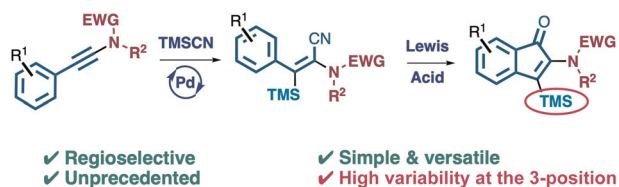
 α/β -Stereo- and diastereoselective glycosylation with *n*-pentenyl glycoside donors, promoted by *N*-iodosuccinimide and catalyzed by chiral Brønsted acid

Maniyamma Aswathy, Mohammed Sadik N. K., Purushothaman C. Hari Krishnan, Sasikumar Parameswaran, Kokkuvayil Vasu Radhakrishnan* and Ravi S. Lankalapalli*



COMMUNICATIONS

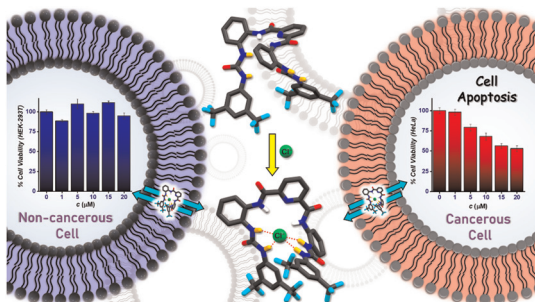
70



Synthesis of 2-amidoindenone derivatives through an ynamide carbosilylation/Houben–Hoesch cyclization 2-step sequence

Pierre Hansjacob, Céla Schwoerer, Frédéric R. Leroux and Morgan Donnard*

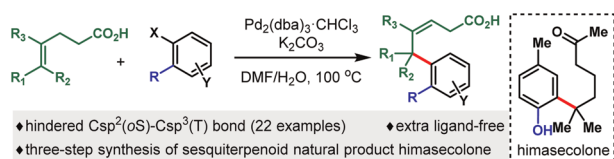
74



Molecular clips with spatially proximal urea residues for efficient transmembrane co-transport of H^+/Cl^- ions

Nyaya Prakash Pradhan, Kavthekar Rupesh Namdev and Aasheesh Srivastava*

80

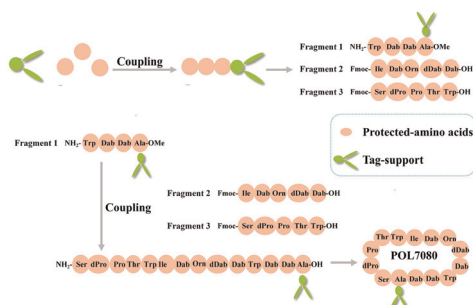


Sterically demanding $Csp^2(ortho\text{-substitution})-Csp^3(tertiary)$ bond formation via carboxylate-directed Mizoroki-Heck reaction under extra-ligand-free conditions

Wei Zeng, Ai-Wen Chen, Ming-Jie Yan and Jie Wang*

PAPERS

85



A novel synthetic method for backbone-cyclized polypeptide POL7080 with the help of hydrophobic-support materials

Xiaotong Gu, Weijin Chen, Ting Guo, Xiaohong Chang, Shenyang Zhang, Bingfang Bai and Shutao Ma*

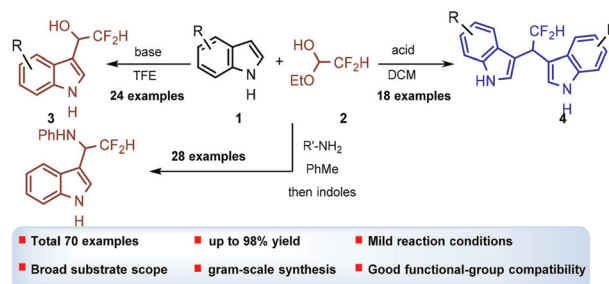


PAPERS

90

Divergent synthesis of difluoromethylated indole-3-carbinols, bisindolylmethanes and indole-3-methanamines

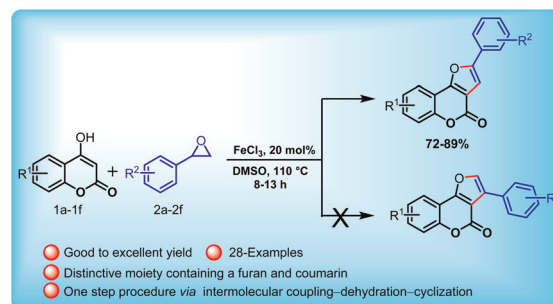
Yifei Qu, Xiaojia Cai, Yuzhuang Guan, Jiamin Tan, Zhangping Cai, Minyun Liu, Yasi Huang, Jinhui Hu,* Wen-Hua Chen* and Jia-Qiang Wu*



95

FeCl₃-catalyzed regioselective ring-opening of aryl oxirane with 4-hydroxycoumarin for the synthesis of furo[3,2-c]coumarins

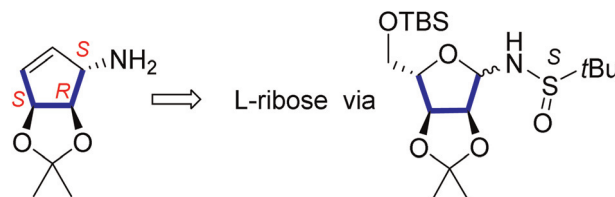
Simra Faraz, Ahmad Ali and Abu Taleb Khan*



106

Synthesis of the aminocyclopentenediol fragment of queuosine by way of the stereoselective addition of an organometallic reagent to a *N*-*t*-butanesulfinyl glycosylamine

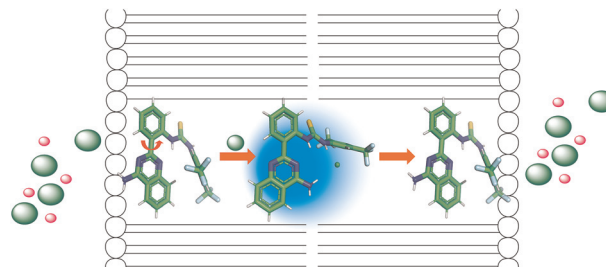
Floriane Heis, Estelle Gallienne and Olivier R. Martin*



114

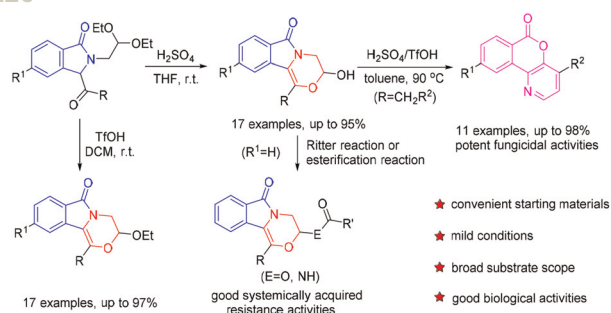
A chloride-responsive molecular switch: driving ion transport and empowering antibacterial properties

Sribash Das, Rama Karn, Mohit Kumar, Soumya Srimayee and Debasis Manna*



PAPERS

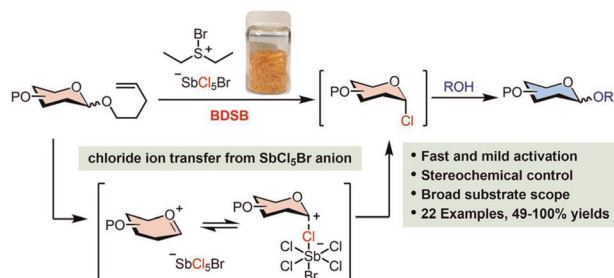
120



Synthesis of fungicidal morpholines and isochromenopyridinones via acid-catalyzed intramolecular reactions of isoindolinones

Xiaoyu Liu, Yaru Sun, Shuang Hong, Xia Ji, Wei Gao, Haolin Yuan, Yue Zhang, Bin Lei, Liangfu Tang* and Zhijin Fan*

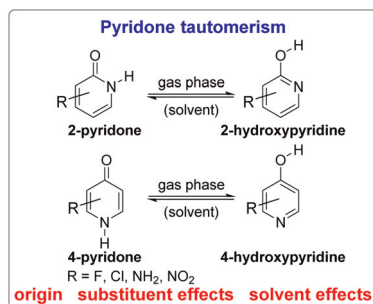
126



Glycosylation of *n*-pentenyl glycosides using bromodiethylsulfonium salt as an activator: interception of the glycosyl intermediate by chloride ion transfer

Supanat Buntasana and Panuwat Padungros*

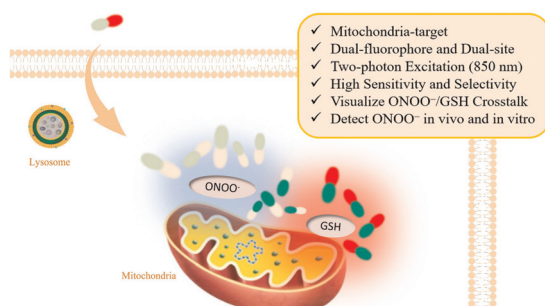
144



Theoretical investigation of tautomerism of 2- and 4-pyridones: origin, substituent and solvent effects

Marija Baranac-Stojanović,* Jovana Aleksić and Milovan Stojanović

159



Visualization of peroxynitrite/GSH cross-talk in the oxidant-antioxidant balance by a dual-fluorophore and dual-site based mito-specific fluorescent probe

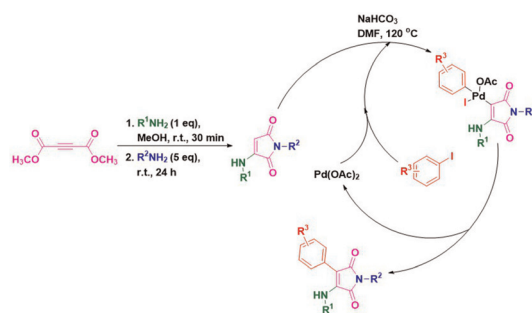
Yu Liu, Jinjin Zhao and Yingzhe Wang*



169

Developing a straightforward route toward the synthesis of arylaminomaleimides by palladium-catalyzed arylation of one-pot synthesized aminomaleimides

Elmira Taheri and Farnaz Jafarpour*



175

Bioinspired synthesis and biological evaluation of *ent*-protulactones A and B

Changxu Liang, Chao Hu, Pengpeng Nie, Yuanfang Liu, Jun Liu* and Yuguo Du

