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PAPER

Oleg V. Larionov *et al.*

Insights into the mechanistic and synthetic aspects of the Mo/P-catalyzed oxidation of N-heterocycles

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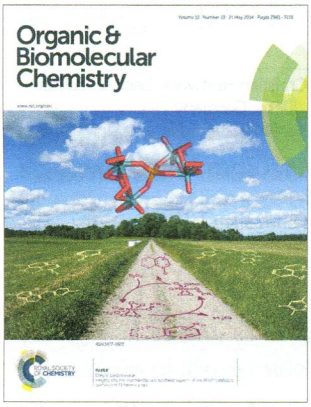

Cover
See Oleg V. Larionov *et al.*, pp. 3026–3036.

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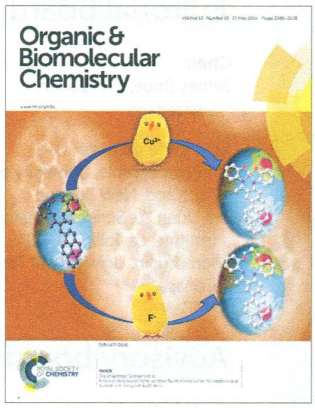

Inside cover
See Shyamaprosad Goswami *et al.*, pp. 3037–3044.

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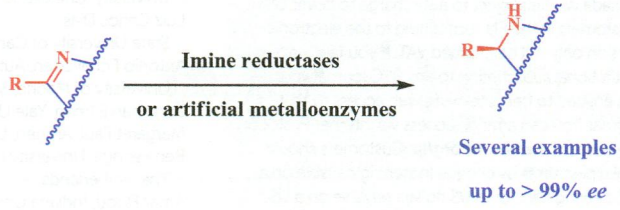
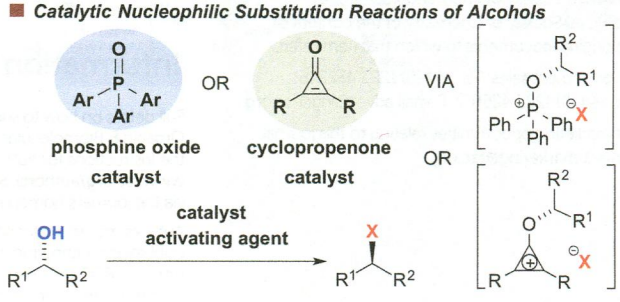
REVIEWS



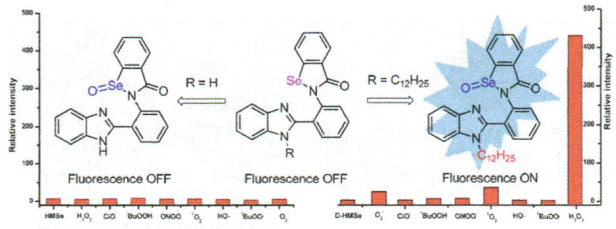


3004

A selenium-contained aggregation-induced "turn-on" fluorescent probe for hydrogen peroxide

Ye-Xin Liao, Kun Li,* Ming-Yu Wu, Tong Wu and Xiao-Qi Yu*

A novel selenium-contained aggregation-induced "turn-on" fluorescent probe was presented, which could selectively respond to hydrogen peroxide over other ROS in aqueous solution.

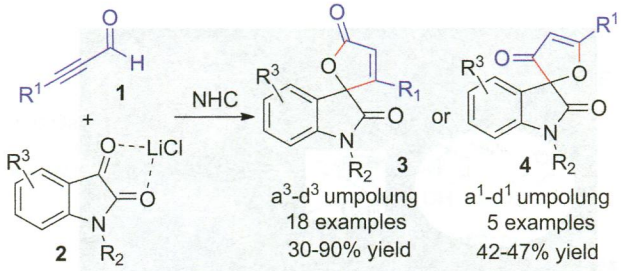


3009

Cooperative *N*-heterocyclic carbene (NHC)–Lewis acid-mediated regioselective umpolung formal [3 + 2] annulations of alkynyl aldehydes with isatins

Yu Zhang, Yingyan Lu, Weifang Tang, Tao Lu* and Ding Du*

A novel synthesis of spirooxindoles has been developed by cooperative NHC–Lewis acid-mediated formal [3 + 2] annulations of alkynyl aldehydes with isatins.

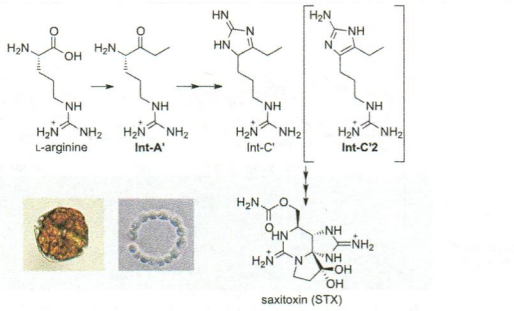


3016

Synthesis and identification of proposed biosynthetic intermediates of saxitoxin in the cyanobacterium *Anabaena circinalis* (TA04) and the dinoflagellate *Alexandrium tamarense* (Axat-2)

Shigeki Tsuchiya, Yuko Cho, Keiichi Konoki, Kazuo Nagasawa, Yasukatsu Oshima and Mari Yotsu-Yamashita*

We synthesized the genetically predicted biosynthetic intermediates of saxitoxin (STX) (**1**), **2**, **6** and **7**, and identified **2** and **6** in microorganisms.

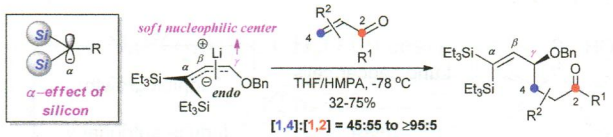


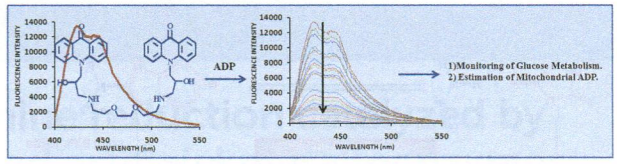
3021

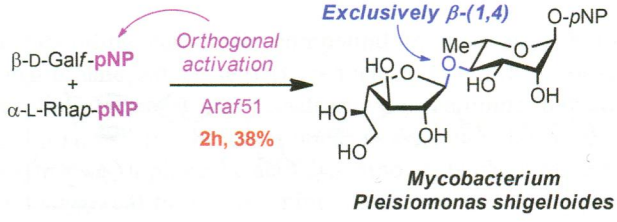
Regioselective 1,4- over 1,2-addition of 3,3-bis(silyl) allyloxy lithium to enals, enones and enoates. The remarkable α-effect of silicon

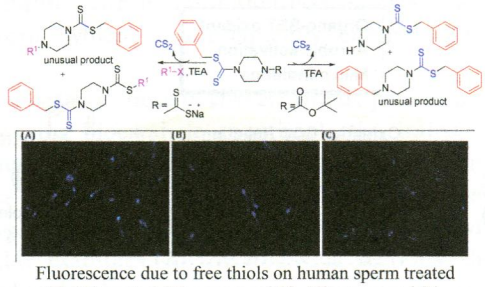
Xincui Ye, Xianwei Sun, Zhenggang Huang, Na Yang, Zhishan Su, Changwei Hu and Zhenlei Song*

The remarkable α-effect of silicon leads to a regioselective 1,4- over 1,2-addition of 3,3-bis(silyl) allyloxy lithium to α,β-unsaturated carbonyl compounds.









Fluorescence due to free thiols on human sperm treated with (A) control (B) compound **18** (C) compound **24**