



Tetrahedron Vol. 67, Issue 34, 2011

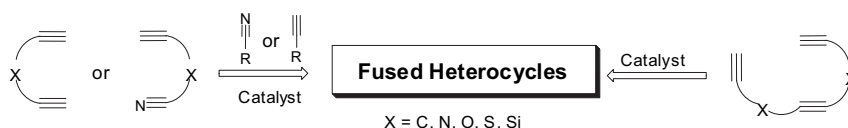
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REPORT

Construction of fused heterocycles by metal-mediated [2+2+2] cyclotrimerization of alkynes and/or nitriles

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Mohamed R. Shaaban, Refat El-Sayed, Ahmed H. M. Elwahy*



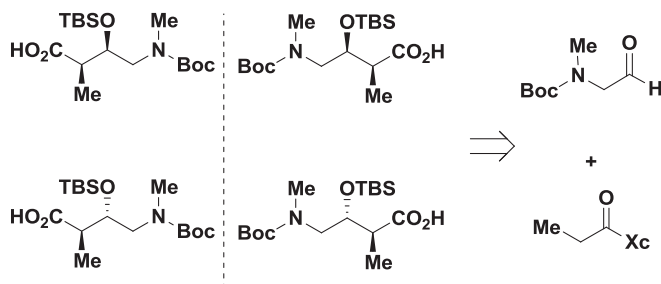
The main strategies for the synthesis of fused heterocycles by metal-mediated [2+2+2] cyclotrimerization of alkynes and/or nitriles as well as their specific syntheses are reviewed.

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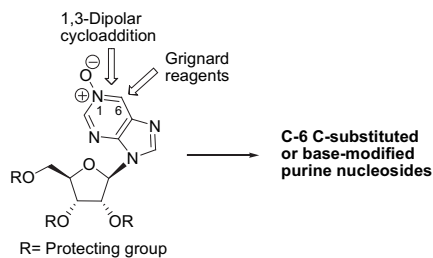
Bhaumik A. Pandya, Sivaraman Dandapani, Jeremy R. Duvall, Ann Rowley, Carol A. Mulrooney, Troy Ryba, Michael Dombrowski, Marie Harton, Damian W. Young, Lisa A. Marcaurelle*



Probing the reactivity of nebularine N1-oxide. A novel approach to C-6 C-substituted purine nucleosides

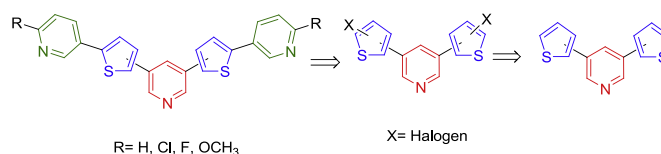
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Stefano D'Errico, Vincenzo Piccialli, Giorgia Oliviero*, Nicola Borbone, Jussara Amato, Valentina D'Atri, Gennaro Piccialli

**Design and synthesis of thienylpyridyl garlands as non-peptidic alpha helix mimetics and potential protein–protein interactions disruptors**

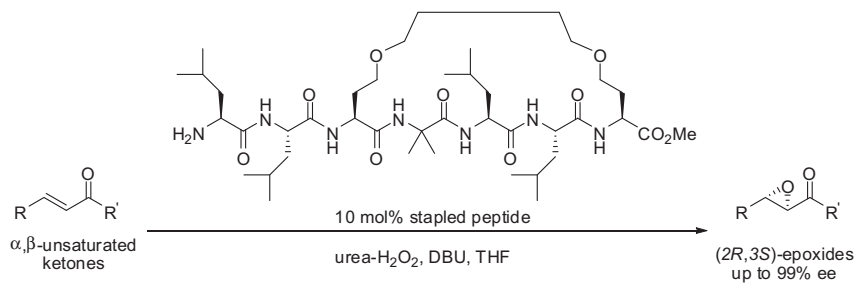
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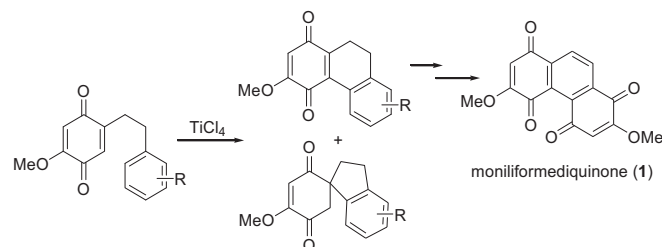
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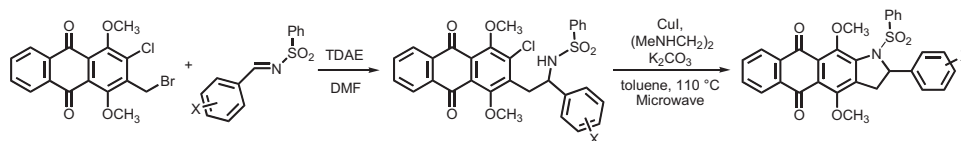
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Original synthesis of 2-substituted-4,11-dimethoxy-1-(phenylsulfonyl)-2,3-dihydro-1H-naphtho[2,3-f]indole-5,10-diones using TDAE and Cu-catalyzed reaction strategy

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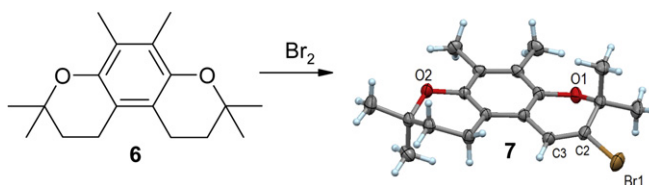
Omar Koumeri, Gamal Giuglio-Tonolo, Maxime D. Crozet, Thierry Terme, Patrice Vanelle*



Novel tocopherol derivatives. Part 32: On the bromination of pyrano[3,2-f]chromenes related to γ -tocopherol

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Stefan Böhmendorfer, Elisabeth Kloser, Anjan Patel, Lars Gille, Kurt Mereiter, Thomas Rosenau*

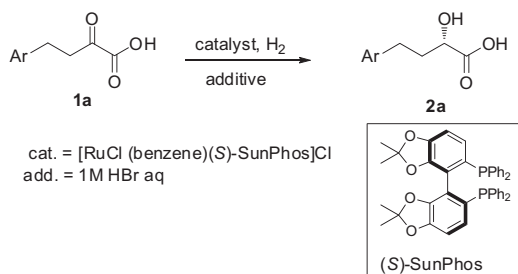


Bromination of pyrano[3,2-f]chromene (**6**), a byproduct in the synthesis of γ -tocopherol model compounds, affords bromochromene **7** as the major product according to an oxidation–addition mechanism. Comprehensive analytical data of product and intermediates are reported

Highly enantioselective hydrogenation of 2-oxo-4-arylbutanoic acids to 2-hydroxy-4-arylbutanoic acids

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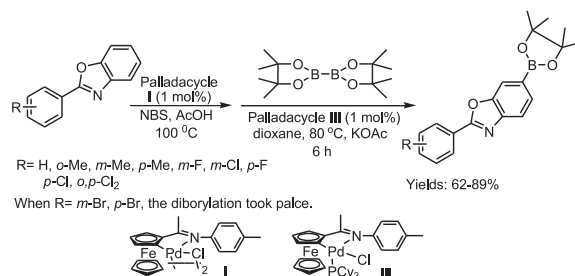
Lufeng Zhu, Houhe Chen*, Qinghua Meng, Weizheng Fan, Xiaomin Xie, Zhaoguo Zhang*



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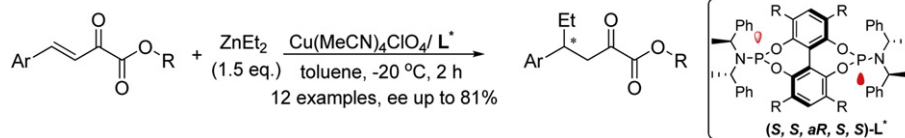
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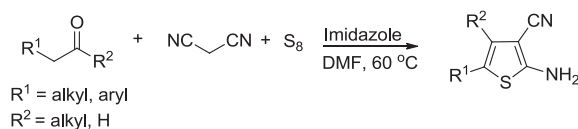
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Bo Yang, Fang Xie, Han Yu, Kaiji Shen, Zhenni Ma, Wanbin Zhang*


A facile and practical one-pot synthesis of multisubstituted 2-aminothiophenes via imidazole-catalyzed Gewald reaction

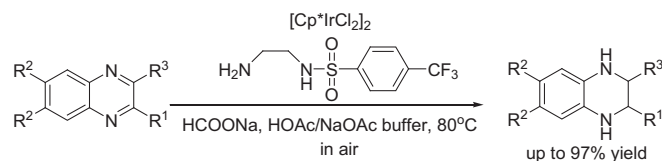
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pH-Regulated transfer hydrogenation of quinoxalines with a Cp*Ir–diamine catalyst in aqueous media

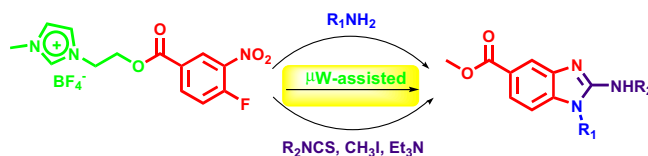
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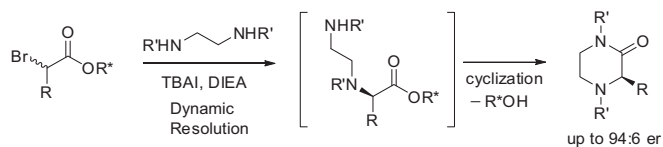
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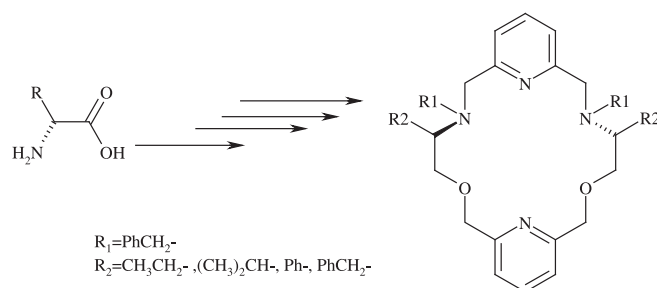
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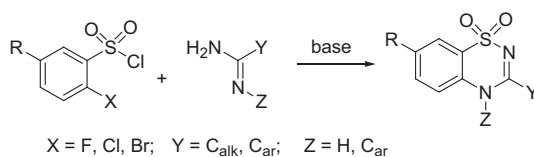
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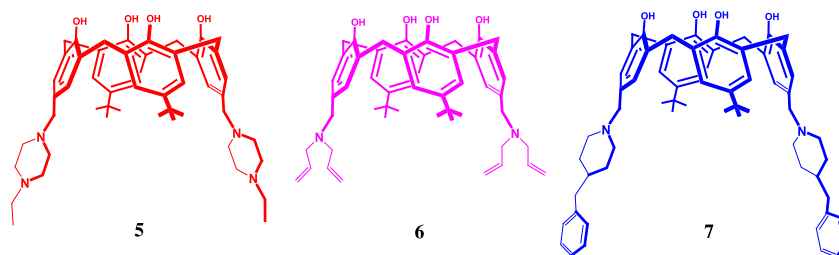
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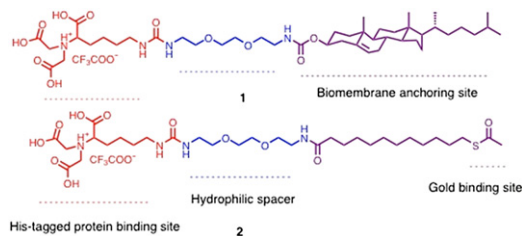
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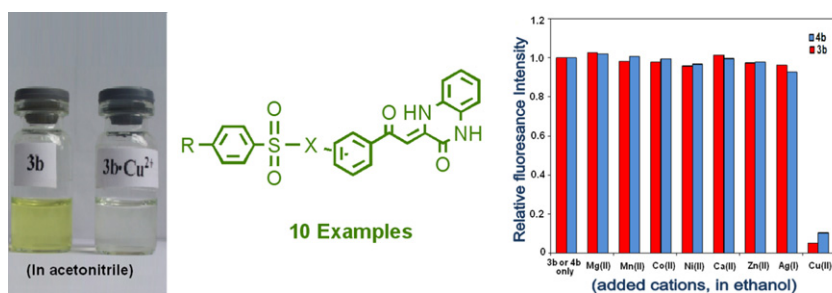
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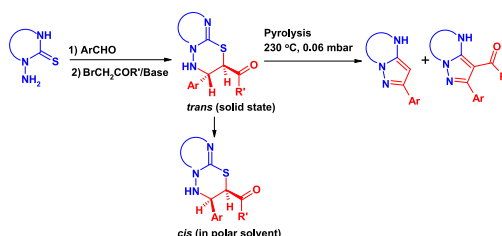
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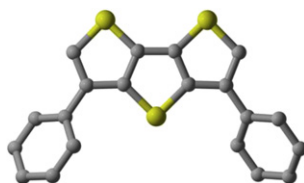
Alya Al-Etaibi, Elizabeth John, Maher R. Ibrahim, Nouria A. Al-Awadi, Yehia A. Ibrahim*



A theoretical approach to the formation mechanism of diphenyldithieno[3,2-b:2',3'-d]thiophene from 1,8-diketone, 4,5-bis(benzoylmethylthio)thiophene: a DFT study

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Cihan Ozen, Mine Yurtsever*, Turan Ozturk



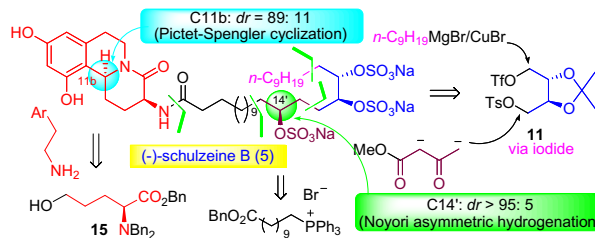
The possible reaction mechanisms of 1,8-diketone, 4,5-bis(benzoylmethylthio)thiophene with P₄S₁₀ yielding organic semiconducting materials, dithieno[3,2-*b*:2',3'-*d*]thiophene (DTT) and its derivatives, have been investigated through DFT method at B3LYP/6-311+G(d,p) level in accordance with experimental findings. Calculations showed that the mechanism, which involves direct cyclization of ketone reactant in the presence of P₂S₅ is the most favorable mechanism and it proceeds in a stepwise manner.



A new approach to the C₂₈ fatty acid chain of the marine natural products schulzeines B and C: a concise diastereoselective total synthesis of (–)-schulzeine B

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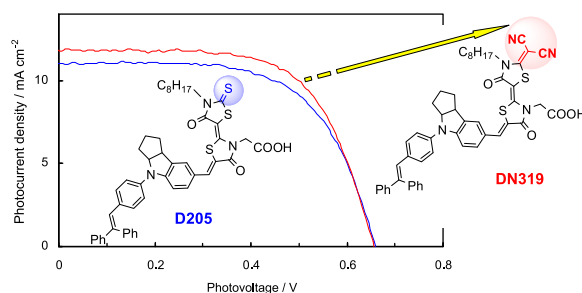
Chao Yang, Yu-Hui Bao, Pan Liang, Jian-Liang Ye, Ai-E Wang, Pei-Qiang Huang*



Highly efficient new indoline dye having strong electron-withdrawing group for zinc oxide dye-sensitized solar cell

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Shinji Higashijima*, Hidetoshi Miura, Tomoki Fujita, Yasuhiro Kubota, Kazumasa Funabiki, Tsukasa Yoshida, Masaki Matsui

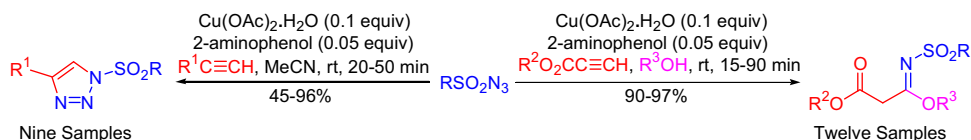


New indoline dye (DN319) having dicyanovinylidene moiety and octyl group in the terminal rhodanine ring gave higher efficiency than D205.

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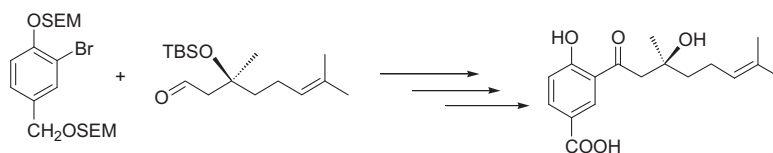
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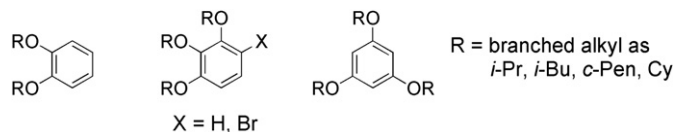
Jyotsna N. Chakor*, Lucio Merlini, Sabrina Dallavalle



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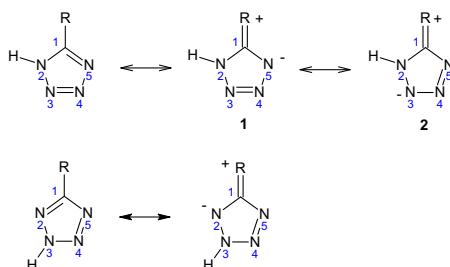
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Michel Stephan*, Borut Zupančič, Barbara Mohar*

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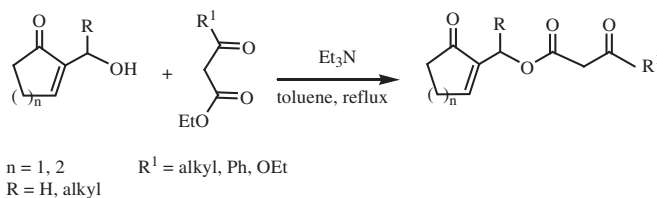
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W.P. Oziminski*, T.M. Krygowski

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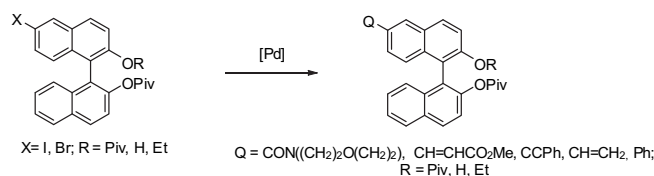
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Olfa Mhasni, Farhat Rezgui*

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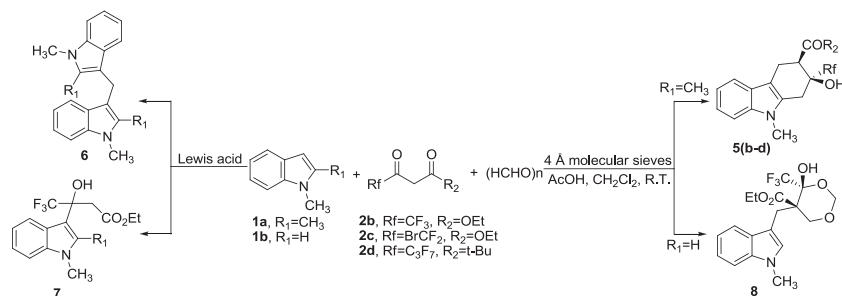
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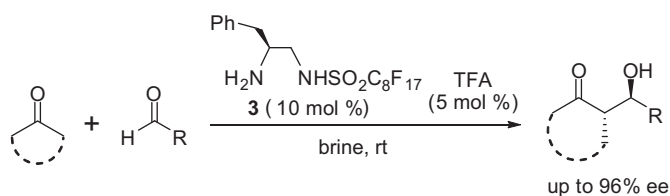
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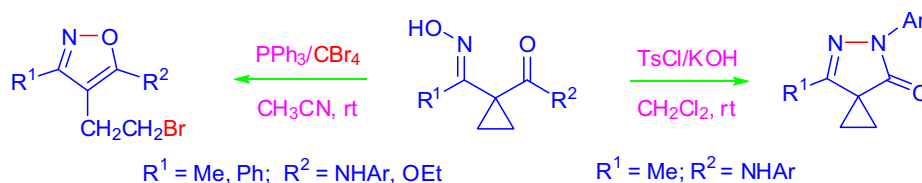
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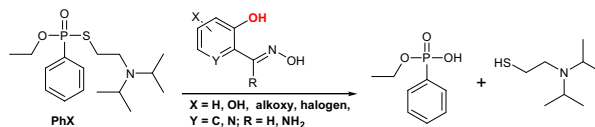
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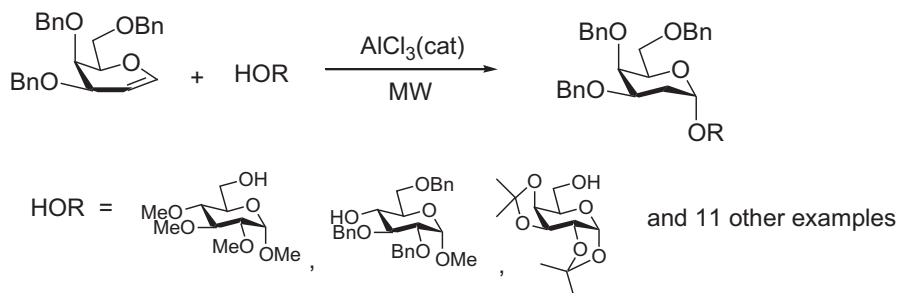
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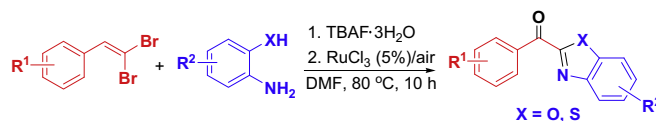
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Hui-Chang Lin*, Jia-Fu Pan, Yen-Bo Chen, Zi-Ping Lin, Chun-Hung Lin*

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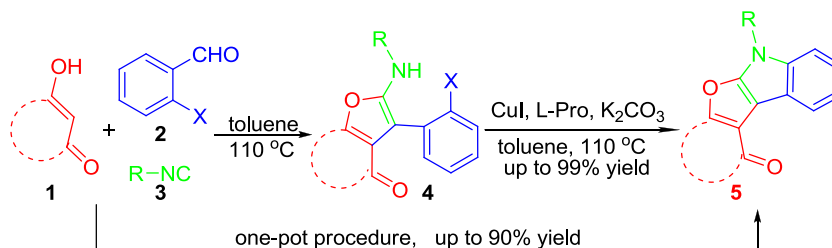
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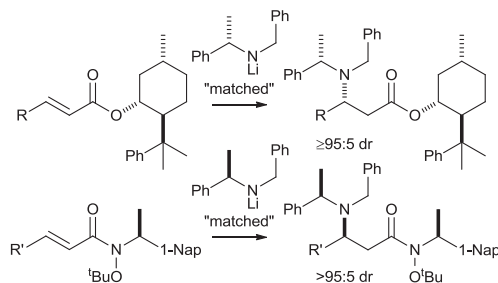
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Xu Zhu, Xiao-Ping Xu*, Chang Sun, Tao Chen, Zhi-Liang Shen, Shun-Jun Ji*


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Stephen G. Davies*, James A. Lee, Paul M. Roberts, James E. Thomson, Jingda Yin



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