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# Tetrahedron Letters

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## Tetrahedron Letters

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Tetrahedron Letters Vol. 55, Issue 33, 2014

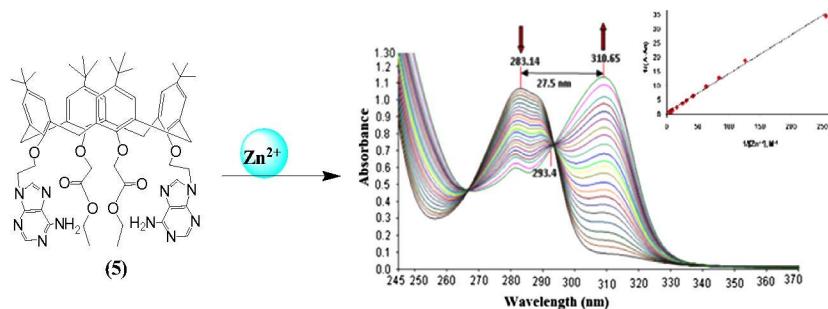
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One-pot, three component synthesis of novel 5*H*-[1,3,4]thiadiazolo[3,2-*a*]pyrimidine-6-carboxylate derivatives by microwave irradiation

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Bing Zhao, Yu Xu, Qi-Gang Deng\*, Zhuo Liu, Li-Yan Wang, Yan Gao\*

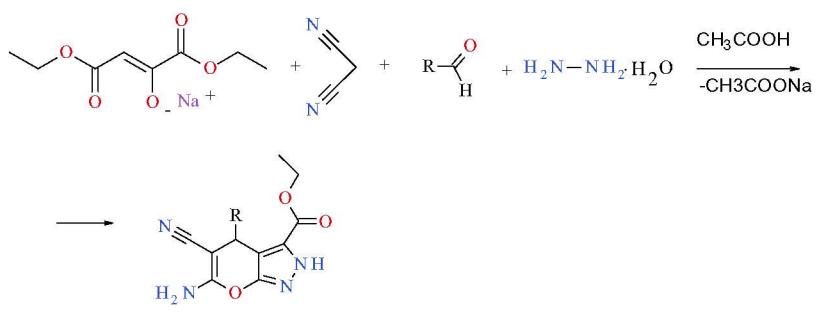


The synthesis of highly substituted 5*H*-[1,3,4]thiadiazolo[3,2-*a*]pyrimidine-6-carboxylate derivatives via a microwave assisted multicomponent reaction of 2-aminothiadiazole, substituted benzaldehydes, and ethyl acetoacetate has been accomplished without any catalyst in acetic acid. This approach provides a convenient one pot method for the synthesis of 5*H*-[1,3,4]thiadiazolo[3,2-*a*]pyrimidine-6-carboxylate derivatives.

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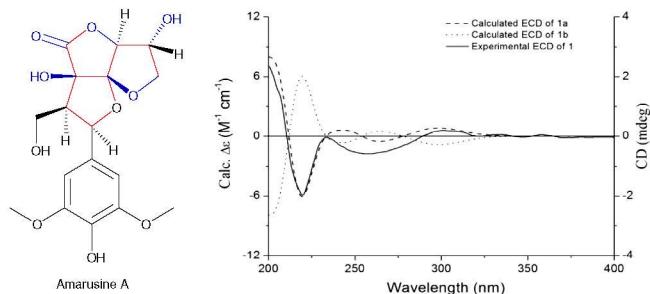
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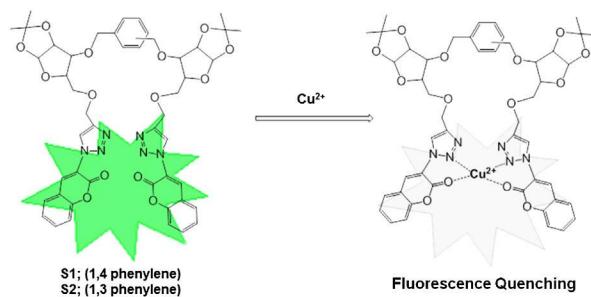
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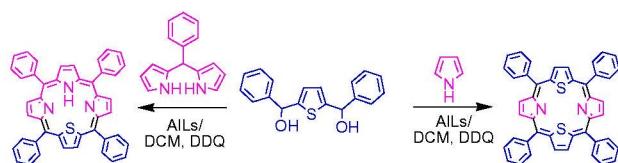
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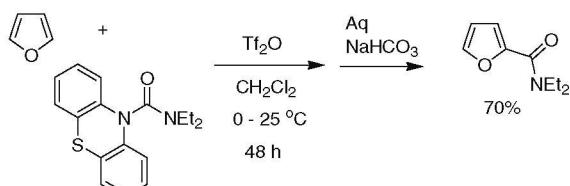
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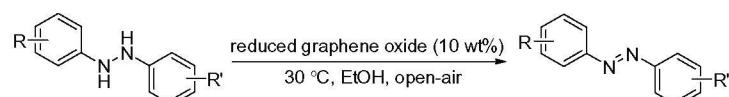
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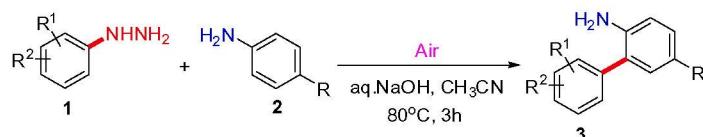
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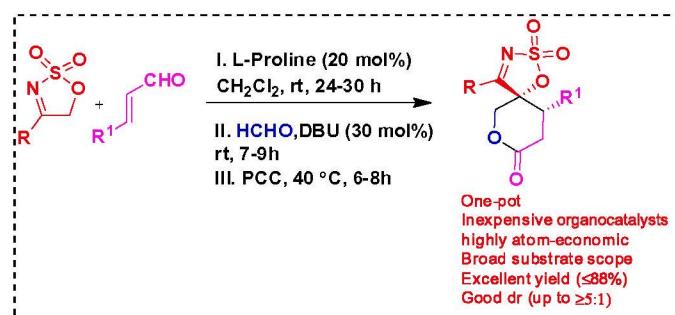
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**An expedient one-pot sequential three-component reaction for the stereoselective synthesis of functionalized spiro-sulfamidate imine fused δ-lactone scaffold**

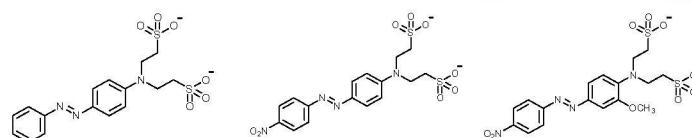
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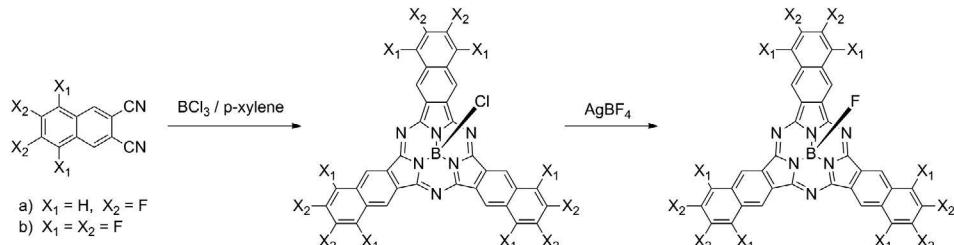
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**Synthesis and properties of novel fluorinated subnaphthalocyanines for organic photovoltaic cells**

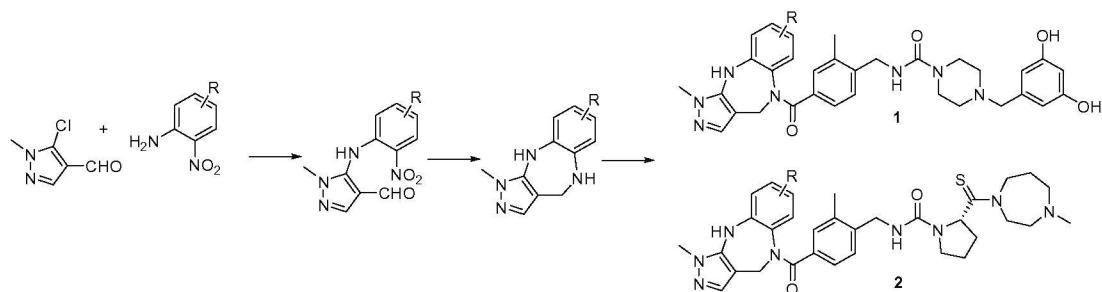
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Yuko Takao\*, Tomoaki Masuoka, Koji Yamamoto, Tadashi Mizutani, Fukashi Matsumoto, Kazuyuki Moriwaki, Koichi Hida, Toshiyuki Iwai, Takatoshi Ito, Takumi Mizuno, Toshinobu Ohno\*

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**Metal-free regioselective hydrobromination of alkynes through C—H/C—Br activation**

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Xiuling Chen, Tieqiao Chen, Yuqiang Xiang, Yongbo Zhou\*, Daoqing Han, Li-Biao Han, Shuang-Feng Yin\*

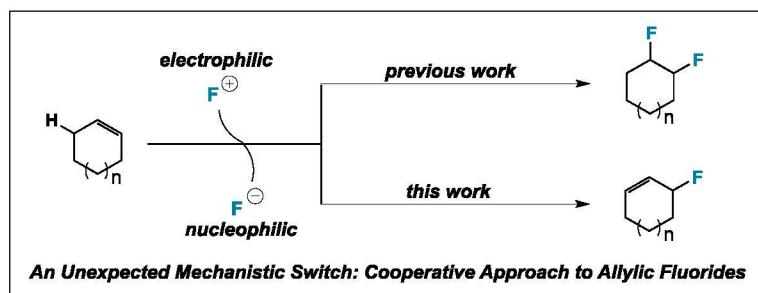


A metal-free regioselective hydrobromination of alkynes has been developed to provide the Markovnikov-type vinyl bromides in good yields using dibromomethane/*N,N*-dimethylaniline as in-situ 'HBr' source. This protocol also represents an elegant example of the activation of  $sp^2$  C—H and C—Br bonds in one pot, in which 'HBr' is generated and transferred under mild metal-free conditions. D-incorporated experiments were employed to investigate the reaction mechanism and a plausible reaction path was proposed.

**A cooperative allylic fluorination: combination of nucleophilic and electrophilic fluorine sources**

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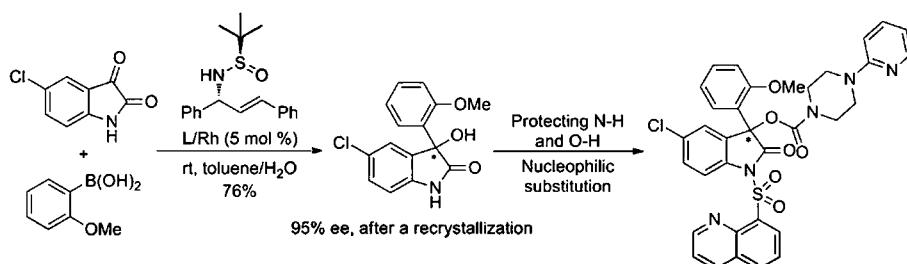
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**Rh(I)-catalyzed asymmetric 1,2-additions of arylboronic acids to isatins with chiral sulfur-alkene hybrid ligands**

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Xiangqing Feng, Yanzhao Nie, Lanqiong Zhang, Jing Yang\*, Haifeng Du\*

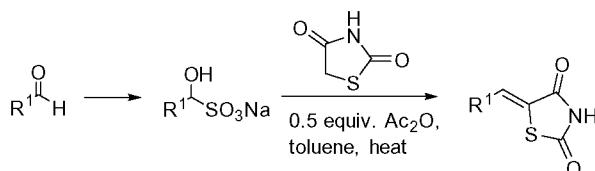


A rhodium-catalyzed asymmetric 1,2-additions of arylboronic acids to isatins with chiral sulfur-alkene hybrid ligands was achieved, and a variety of 3-aryl-3-hydroxy-2-oxindoles were obtained in moderate to good yields with up to 85% ee. And a biologically active compound was synthesized with this strategy.

**Acetic anhydride-promoted one-pot condensation of 2,4-thiazolidinedione with bisulfite adducts of aldehydes**

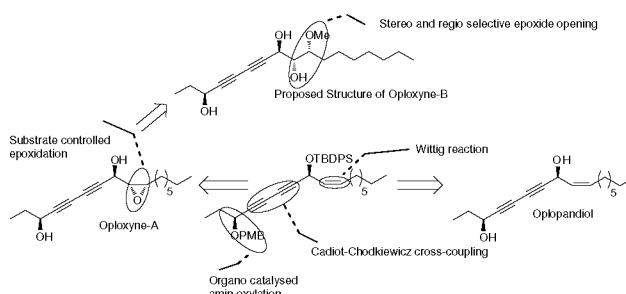
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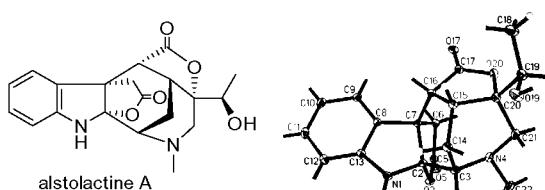
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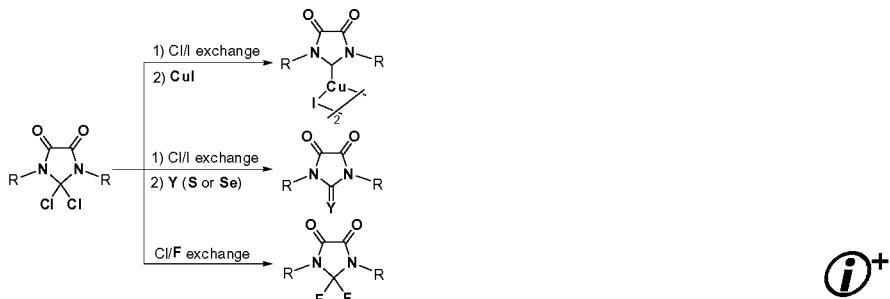
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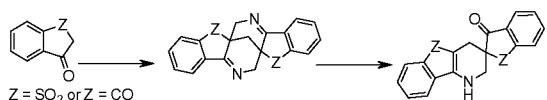
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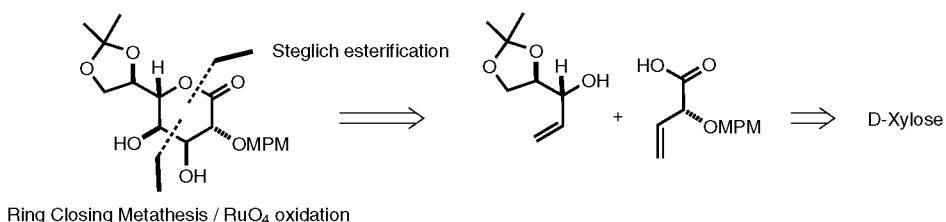
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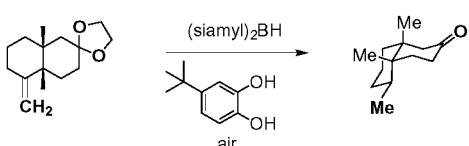


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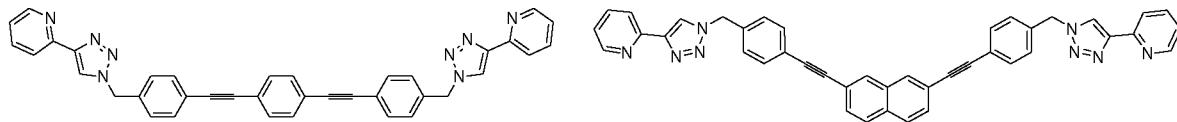
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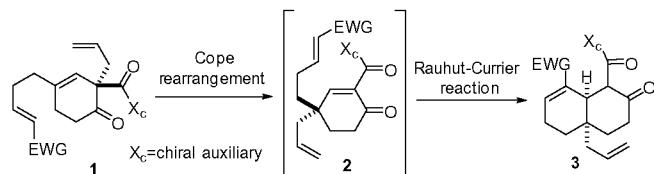
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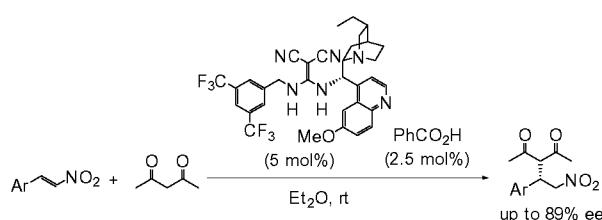
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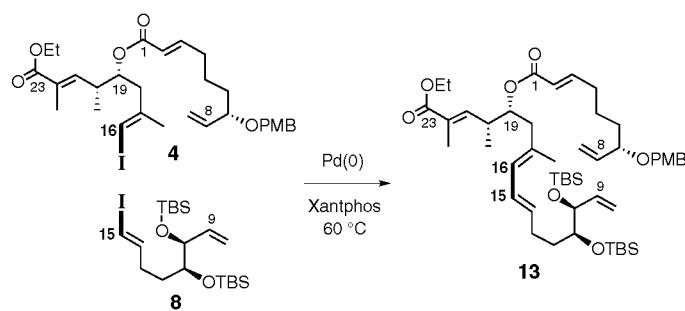
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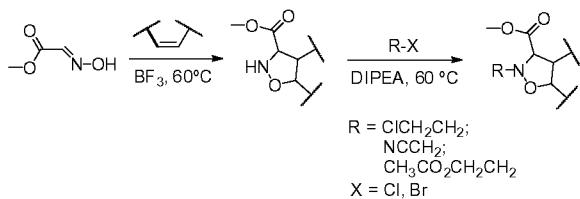
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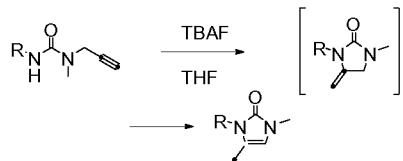
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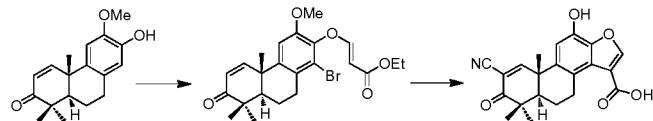
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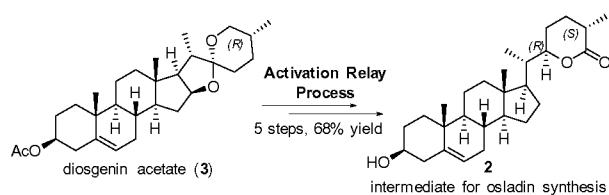
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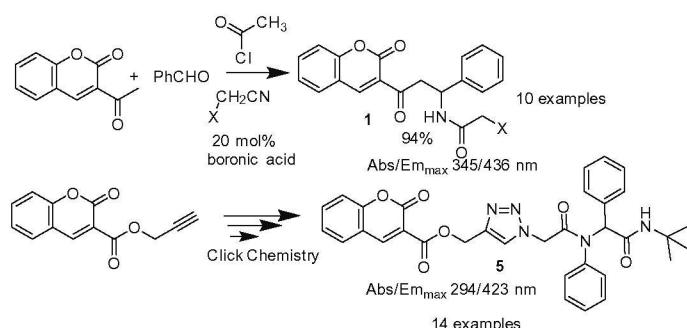
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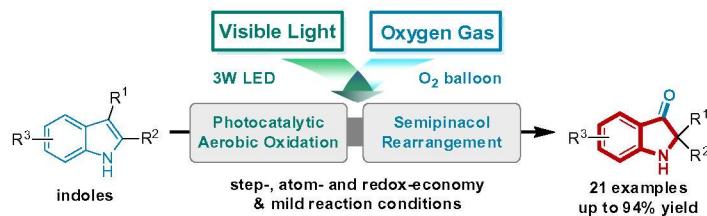
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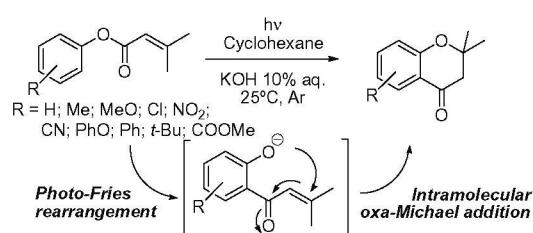
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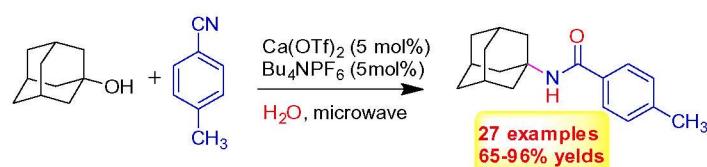
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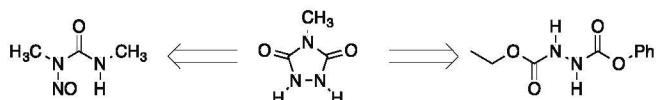
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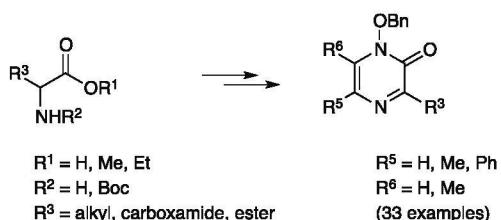
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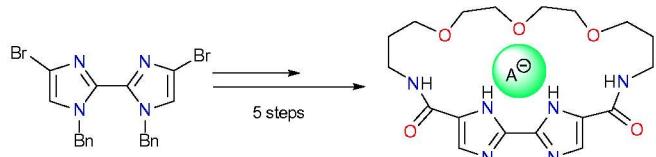
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Supplementary data available via ScienceDirect

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