



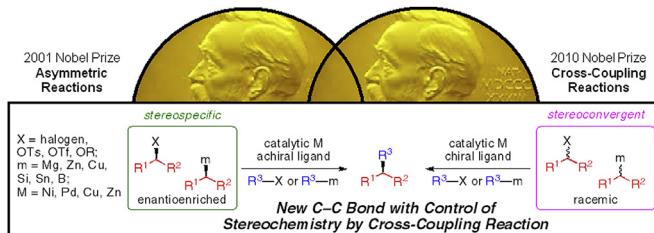
## Tetrahedron Vol. 69, Issue 29, 2013

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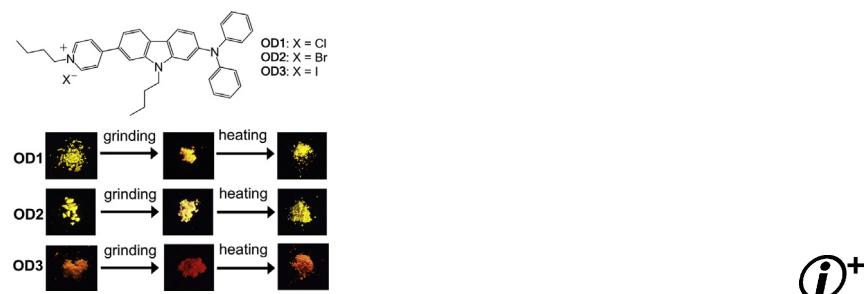


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Yousuke Ooyama\*, Yuichiro Oda, Yuta Hagiwara, Hiroshi Fukuoka, Eigo Miyazaki, Tomonobu Mizumo, Joji Ohshita

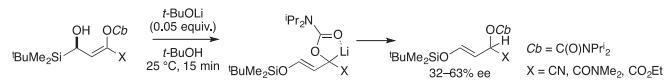
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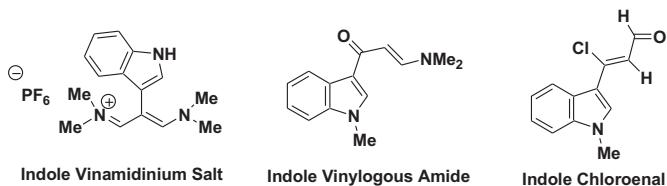
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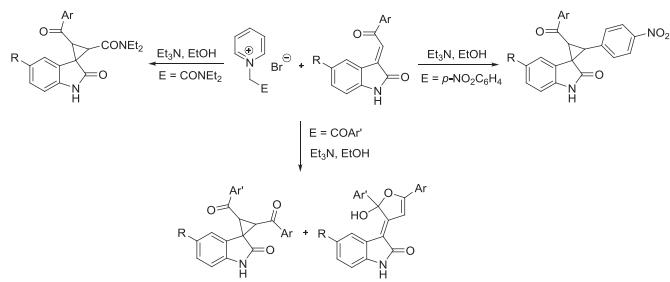
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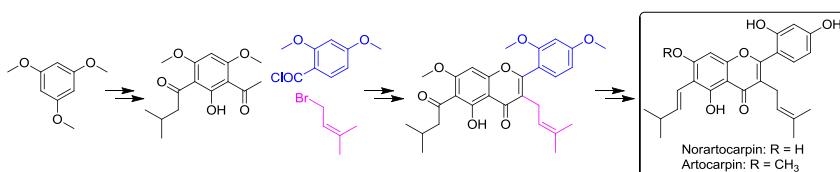
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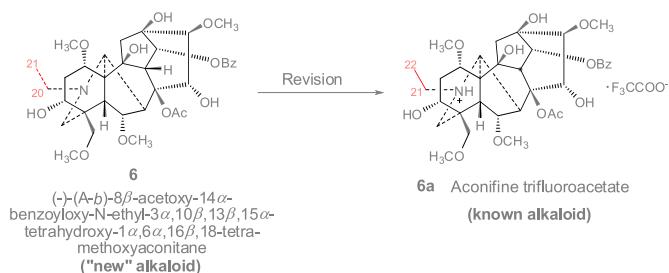
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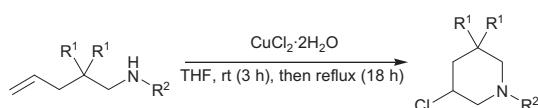
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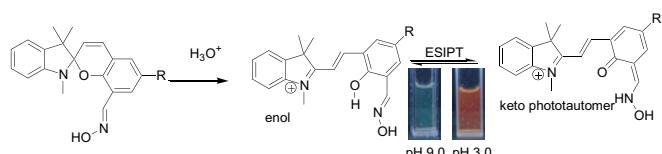
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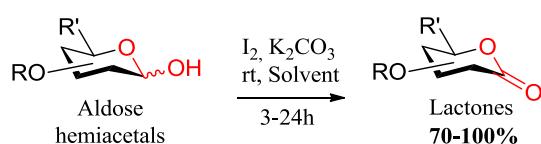
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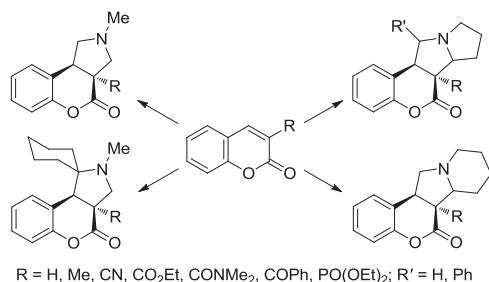
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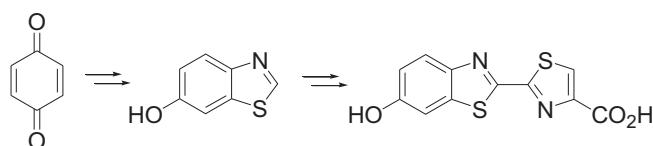
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Pierangela Ciuffreda, Silvana Casati, Giuseppe Meroni, Enzo Santaniello\*

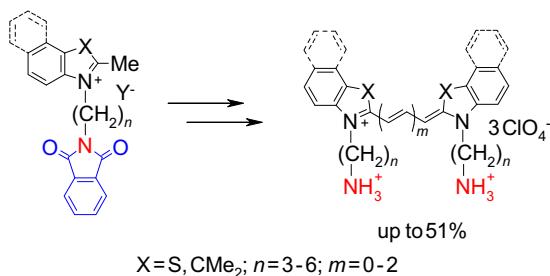


A new synthesis of dehydroluciferin, the oxidative product of luciferin, has been realized starting from 1,4-benzoquinone. Reaction with cysteine ethyl ester, oxidation–cyclization, hydrolysis, and decarboxylation gave 6-hydroxybenzothiazole. The *tert*-butyl(dimethyl)silyl ether of this key intermediate was subjected to  $\alpha$ -lithiation followed by formylation, condensation with cysteine ethyl ester, dehydrogenation, and deprotection to afford dehydroluciferin (35% overall yield from 1,4-benzoquinone).

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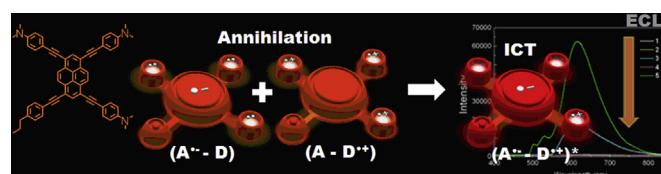
Sergey P. Gromov\*, Marina V. Fomina, Alexander S. Nikiforov, Artem I. Vedernikov, Lyudmila G. Kuz'mina, Judith A.K. Howard



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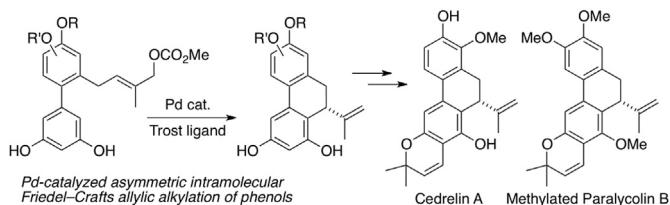
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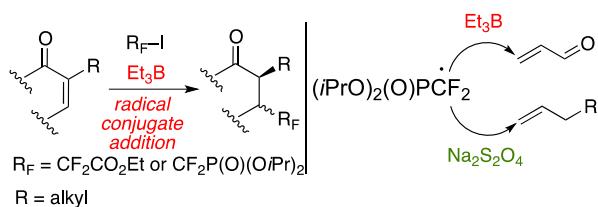
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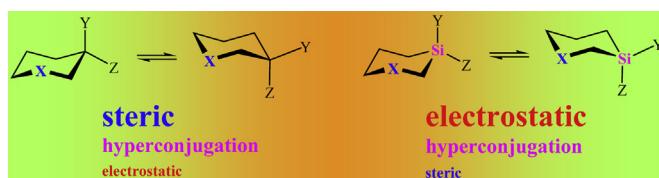
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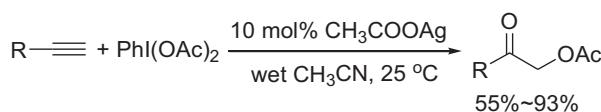
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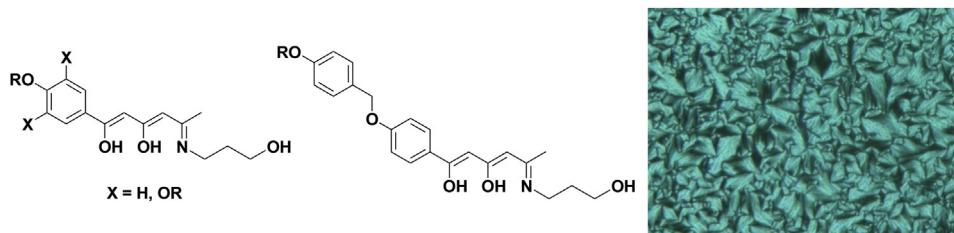
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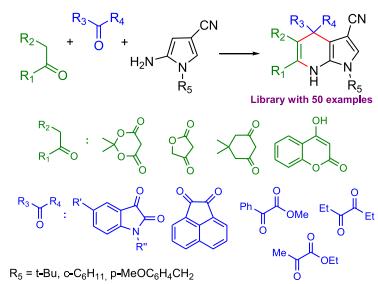
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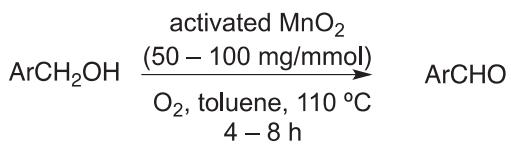
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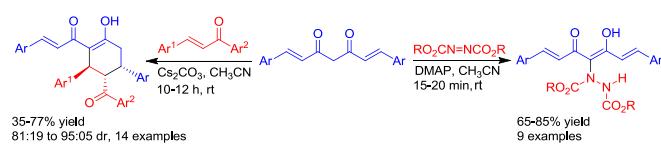
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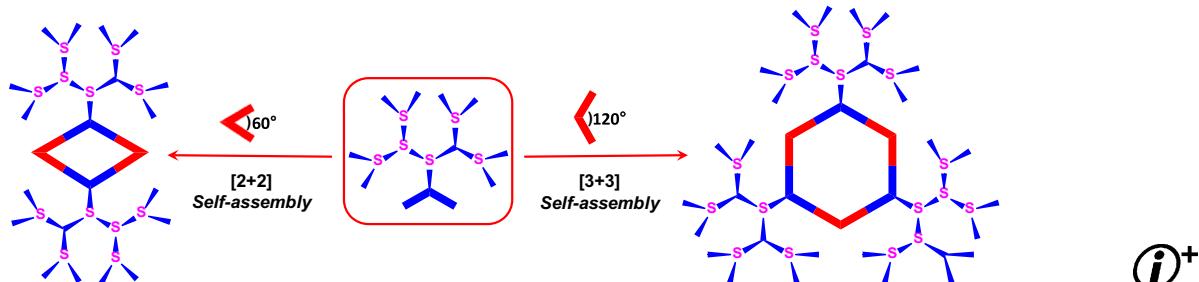
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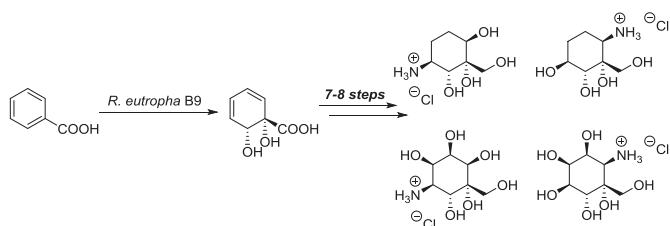
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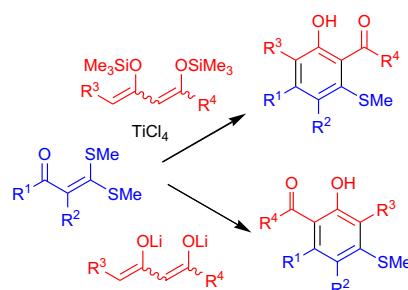
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\*Corresponding author

† Supplementary data available via SciVerse ScienceDirect

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