



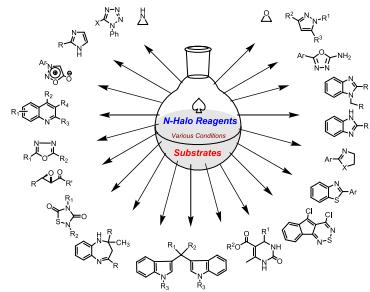
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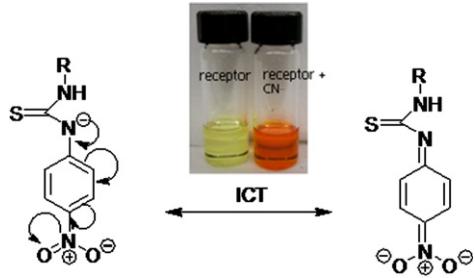
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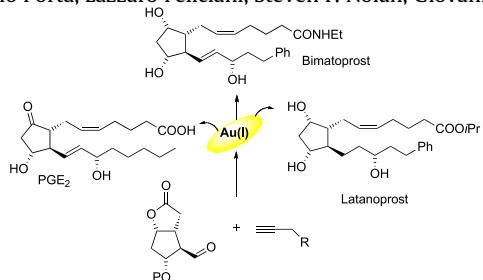
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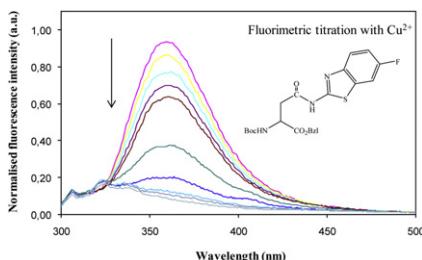
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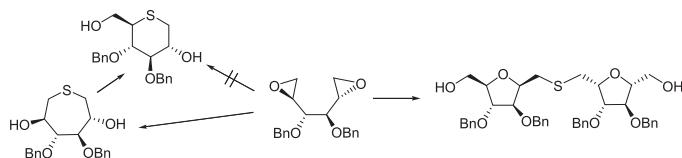
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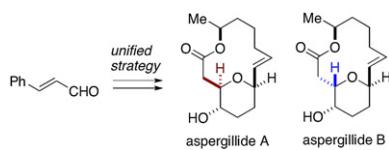
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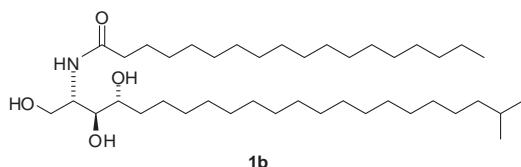
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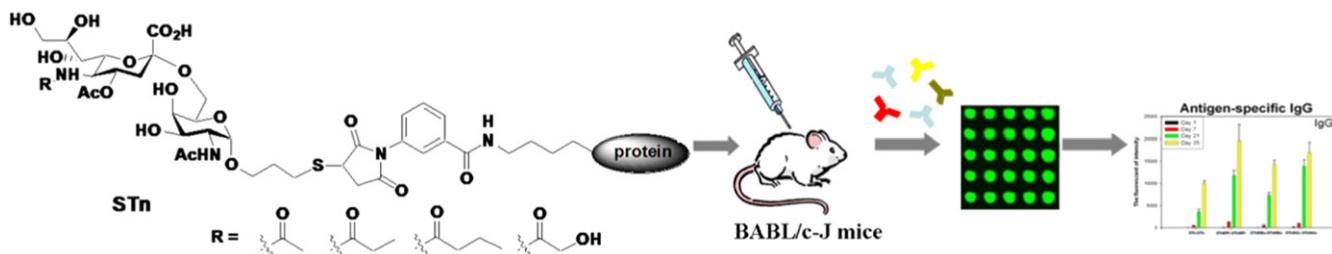
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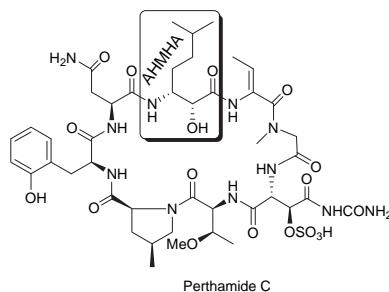
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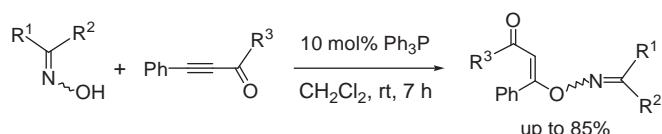
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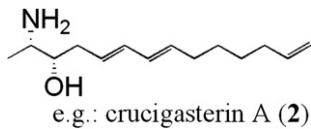


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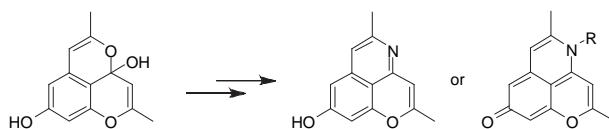
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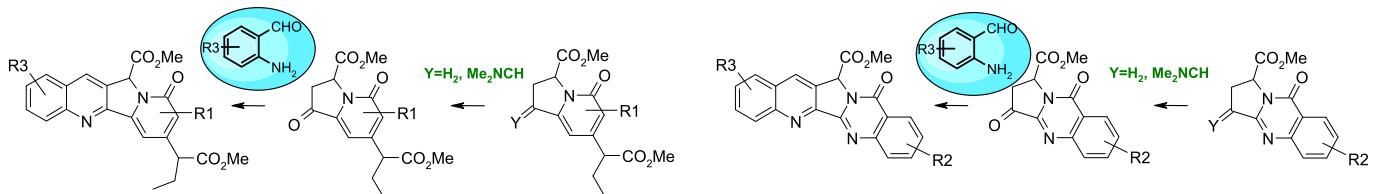
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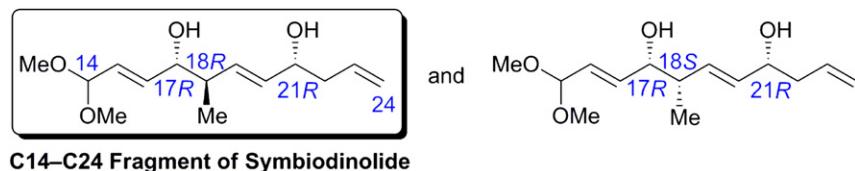
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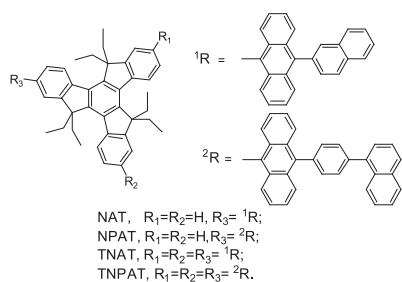
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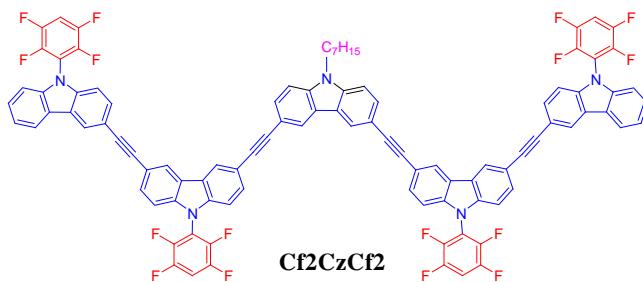
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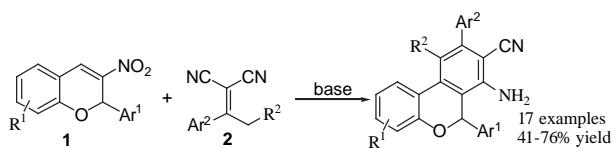
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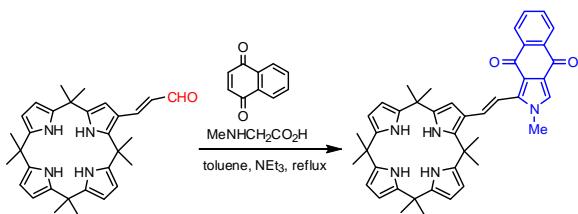
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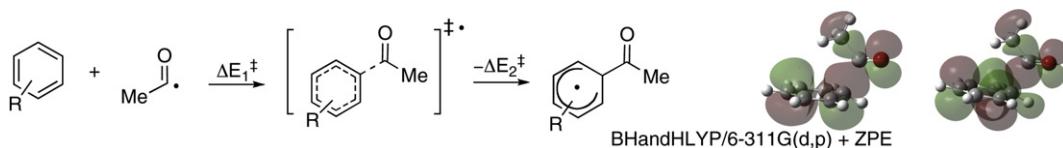
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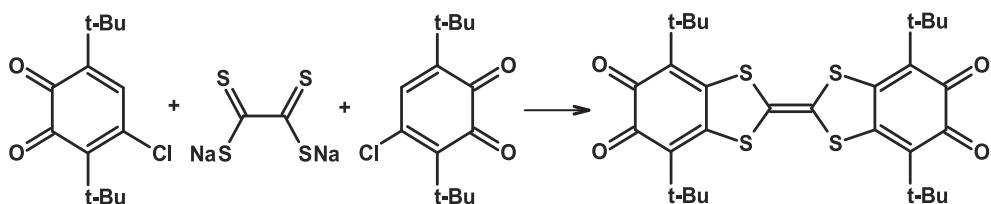
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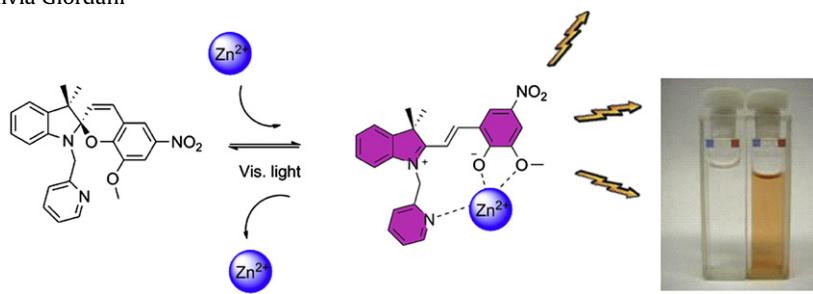
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**A photoswitchable Zn (II) selective spiropyran-based sensor**

Manuel Natali, Laura Soldi, Silvia Giordani\*

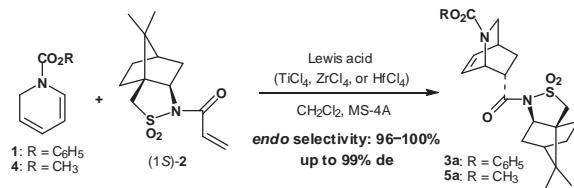
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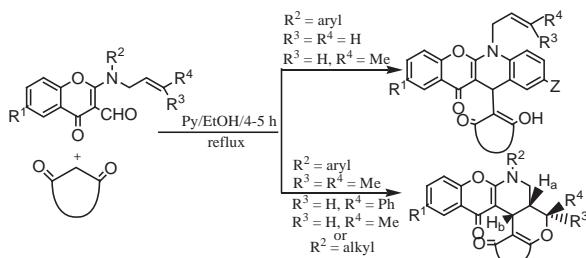
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Masafumi Hirama, Yuji Kato, Chigusa Seki, Hiroto Nakano, Mitsuhiro Takeshita, Noriko Oshikiri, Masahiko Iyoda, Haruo Matsuyama\*

**Substituent-controlled domino-Knoevenagel-hetero Diels–Alder reaction—a one-pot synthesis of polycyclic heterocycles**

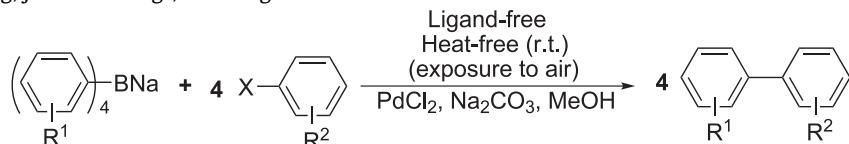
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Sourav Maiti, Suman Kalyan Panja, Chandrakanta Bandyopadhyay\*

**Ligand-free, atom-efficient Suzuki–Miyaura type cross-coupling reactions at room temperature**

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Wen-Jun Zhou, Ke-Hu Wang, Jin-Xian Wang\*, Zhi-Rong Gao



X = Br, I;

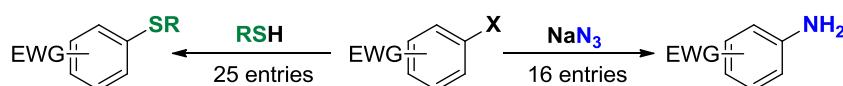
R<sup>1</sup> = 4-CH<sub>3</sub>, 4-OCH<sub>3</sub>, 4-Cl, 4-F;R<sup>2</sup> = 3-CH<sub>3</sub>, 4-CH<sub>3</sub>, 4-OCH<sub>3</sub>, 4-NO<sub>2</sub>, 3-NO<sub>2</sub>, 3-Cl, 4-CN, 4-CHO, 4-COCH<sub>3</sub>, 4-COOCH<sub>3</sub>, 4-NH<sub>2</sub>, 4-NHCOCH<sub>3</sub>, 4-OC<sub>2</sub>H<sub>5</sub> etc.

The atom-efficient Suzuki–Miyaura cross-coupling reaction of sodium tetraaryllborates with aryl iodides and bromides was reported under ligand-free conditions at room temperature.

**The [Cu]-catalyzed S<sub>N</sub>Ar reactions: direct amination of electron deficient aryl halides with sodium azide and the synthesis of arylthioethers under Cu(II)–ascorbate redox system**

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Yogesh Goriya, C.V. Ramana\*



CuSO<sub>4</sub>·5H<sub>2</sub>O (10–20 mol%), Na-ascorbate (10–20 mol%), L-proline (10–20 mol%)  
Na<sub>2</sub>CO<sub>3</sub> (0.2–5 eq.), DMSO:H<sub>2</sub>O (9:1), 70–80 °C, 10–24 h



\*Corresponding author

† Supplementary data available via ScienceDirect

**COVER**

A catalytic asymmetric synthesis of the key intermediate for otteliones has been achieved using the oxidative desymmetrization. This oxidative desymmetrization was efficiently promoted by an iridium diamine complex to give the desired hydroxy ketone in >90% ee. Details can be found in *Tetrahedron*, **2010**, 66, 7562–7568.

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