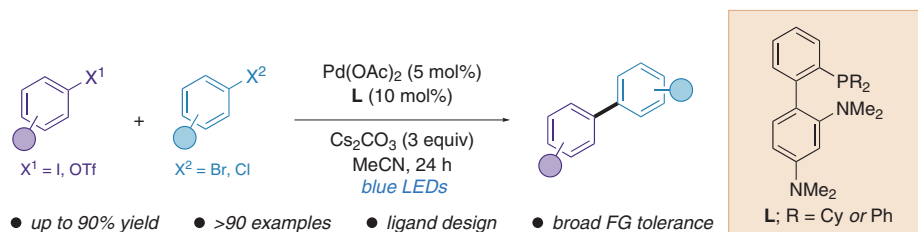
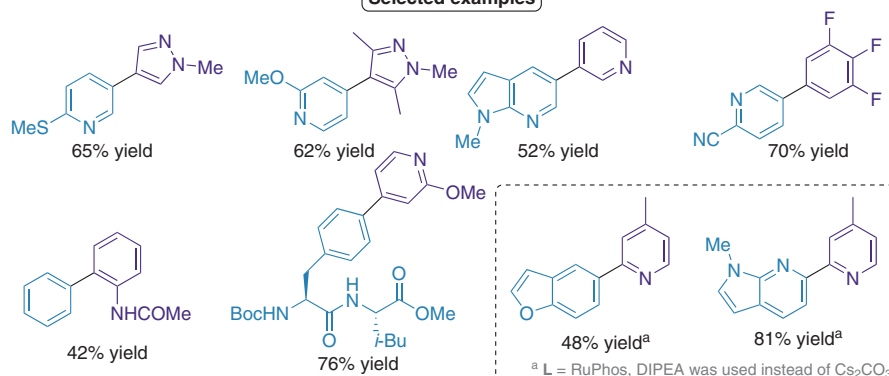


S. MAITI, P. GHOSH, D. RAJA, S. GHOSH, S. CHATTERJEE, V. SANKAR, S. ROY, G. K. LAHIRI, D. MAITI\* (INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, MUMBAI, INDIA)  
 Light-Induced Pd Catalyst Enables C(sp<sup>2</sup>)-C(sp<sup>2</sup>) Cross-Electrophile Coupling Bypassing the Demand for Transmetalation  
*Nat. Catal.* **2024**, *7*, 285–294, DOI: 10.1038/s41929-024-01109-4.

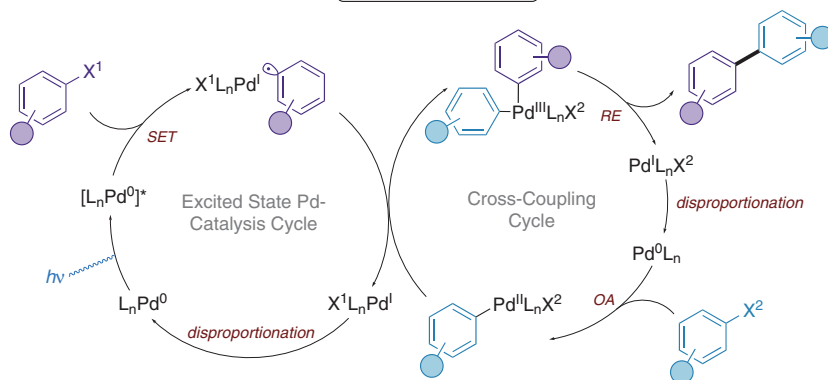
# Cross-Electrophile Coupling Enabled by Visible-Light Palladium Catalysis



## Selected examples



## Proposed mechanism



**Significance:** Maiti and co-workers report a highly chemoselective cross-coupling of (hetero)aryl halides under palladium visible-light catalysis. Key to success was ligand design enabling differing modes of oxidative addition between the (pseudo)halides.

**Comment:** Support for the proposed hybrid aryl Pd(I)-radical species was achieved by trapping the corresponding species with *N*-methyl pyrrole and DMPO. The corresponding DMPO adduct was subsequently characterized by EPR.

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 Synfacts 2024, 20(05), 0483 Published online: 15.04.2024  
 DOI: 10.1055/s-0043-1763921; Reg-No.: L06224SF

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Category

Metals in Synthesis

Key words

palladium catalysis

photocatalysis

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