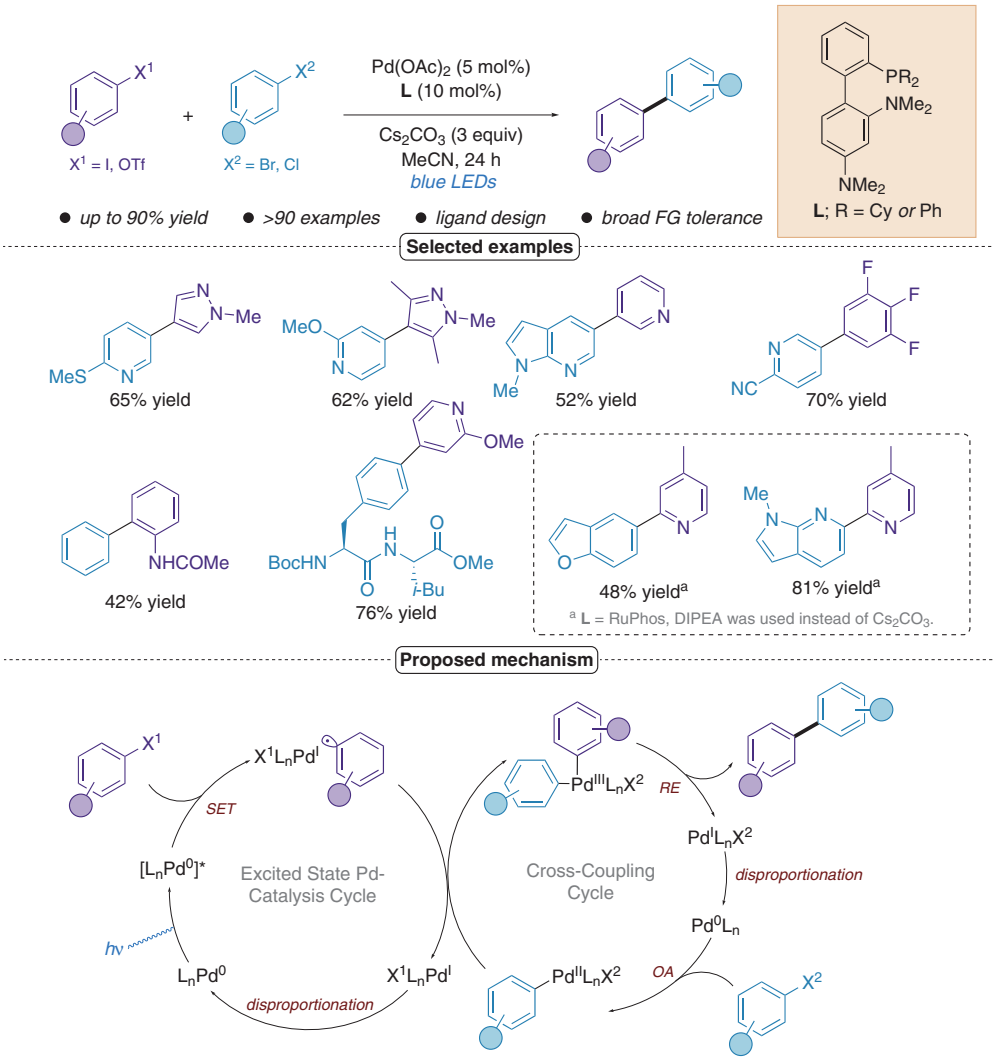
S. MAITI, P. GHOSH, D. RAJA, S. GHOSH, S. CHATTERJEE, V. SANKAR, S. ROY, G. K. LAHIRI, D. MAITI* (INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, MUMBAI, INDIA)

Light-Induced Pd Catalyst Enables C(sp^2)–C(sp^2) 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



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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Synfact of the Month