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SYNFACTS Highlights in Chemical Synthesis

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Metals in Synthesis

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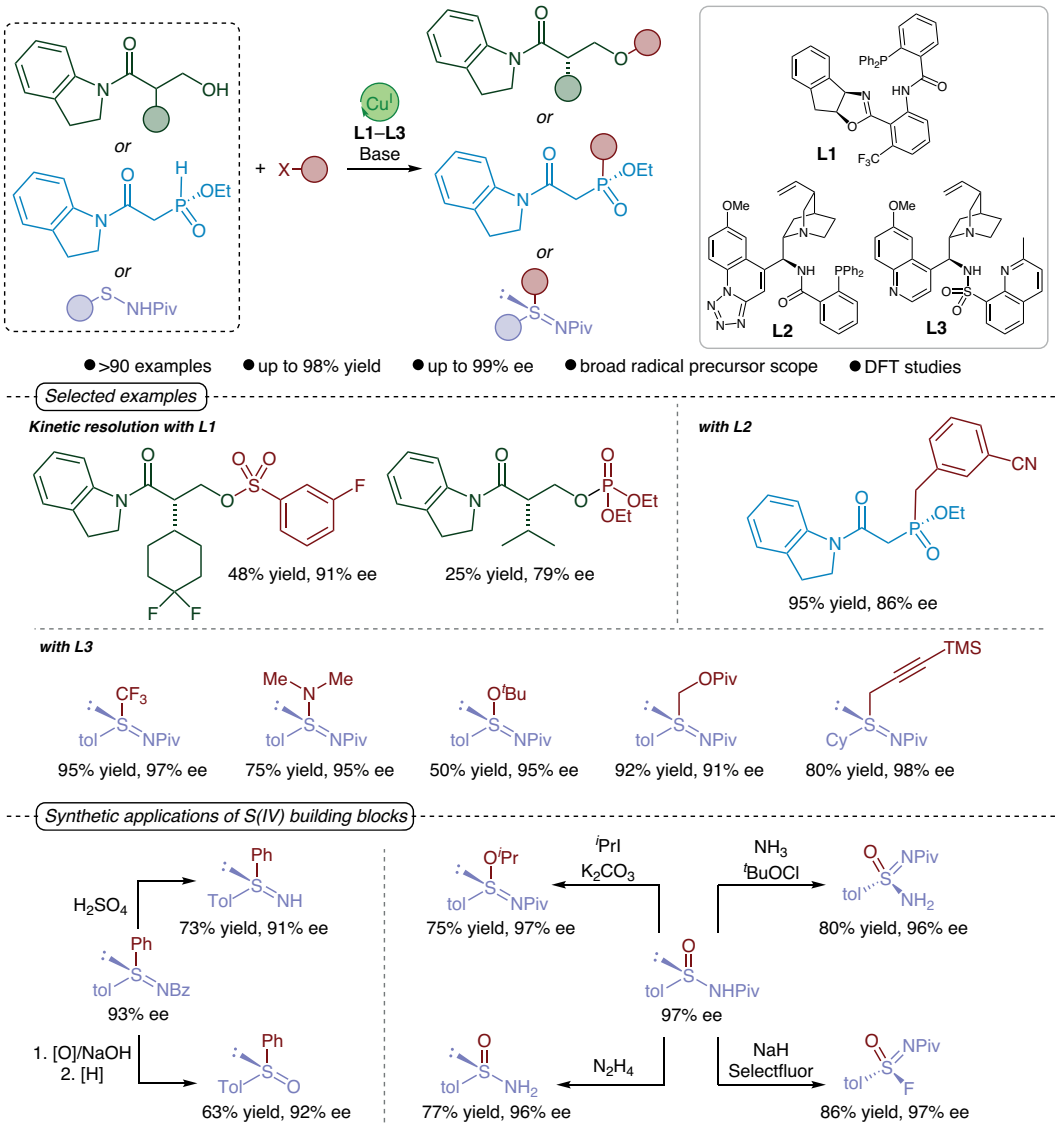
Copper-Catalysed Asymmetric Cross-Coupling Reactions Tolerant of Highly Reactive Radicals
Nat. Chem. **2026**, *18*, 142–151, DOI: 10.1038/s41557-025-01970-1

Unified Asymmetric Copper Radical Cross-Coupling towards C-, P(V)- and S(IV)-Stereocenters



Significance: Hong and co-workers report a unifying radical cross coupling strategy to generate chiral C-, P-, or S-stereocenters. Highly reactive N-/O-centered radicals efficiently undergo coupling without side reactions. The authors applied this strategy towards accessing a wide range of chiral S(IV) and S(VI) compounds.

Comment: Highly reactive N-/O-centered radicals efficiently undergo coupling. For example, *tert*-butoxy radical coupling outcompetes β-scission (6×10^4 s^{-1} in MeCN at 295 K).

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