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Supporting Information

A Highly Efficient Nano-Sized Cu₂O/SiO₂ Egg-Shell Catalyst for C-C

Coupling Reactions

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Entry	Solvent (2 ml)	Conv. (%)	Select. (%)
1	Toluene	84	99
2	THF	3	100
3	DMF	19	0
4	neat	100	99

Reaction conditions: phenylacetylene (0.50 mmol), benzoyl chloride (0.75 mmol), base Et_3N (4.0 eqiv.), cat. 1 mol% $SiO_2@Cu_2O/mSiO_2$, 12h, 80 °C, Ar atmosphere. Determined by using gas chromatography-mass spectrometery (GC-MS).

Table S1 The synthesis of ynones from acyl chlorides and terminal alkynes catalyed by $SiO_2@Cu_2O/mSiO_2$ under the various solvent system.