1. Record Nr. UNINA9910768457403321

Autore	Wu Xiao-Feng
Titolo	C-C Cross Couplings with 3d Base Metal Catalysts / / edited by Xiao-Feng Wu
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-32867-1
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (401 pages)
Collana	Topics in Organometallic Chemistry, , 1616-8534 ; ; 71
Disciplina	547.2
Soggetti	Chemistry, Organic Organometallic chemistry Chemistry Catalysis Organic Chemistry Organometallic Chemistry Chemical Synthesis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cr-catalyzed C-C coupling reactions -- Mn-catalyzed C-C coupling reactions -- Fe-catalyzed C-C coupling reactions -- Co-catalyzed C-C coupling reactions with Csp3 electrophiles -- Co-catalyzed C-C coupling reactions with Csp2 electrophiles -- Ni-catalyzed C-C coupling reactions -- Cu-catalyzed C-C bond formation with CO2 -- Cu-catalyzed C-C bond formation with CO -- Cu-catalyzed C-C coupling reactions (no CO or CO2 gas involved) -- Zn-catalyzed C-C coupling reactions. .
Sommario/riassunto	This volume presents recent progress on 3d base metal catalyzed C-C cross coupling reactions. The contributions provide detailed discussions on the use of cheap metal catalysts such as Cr, Mn, Fe, Co, Ni, Cu, and Zn to construct Csp2-Csp2, Csp2-Csp3 and Csp3-Csp3 bonds with a variety of substrates. These non-noble metal catalyst have many advantages such as being inexpensive, having low toxicity and are environmentally benign. Therefore the use of cheap metal catalysts in organic synthesis has gained much attention in efforts to

develop more sustainable synthetic green chemistry. Each chapter is written by international experts in the field and is a great resource for students, researchers and chemists working in industry to gain an overview on the latest developments.