Record Nr. UNINA9910886086603321 Autore Maiti Debabrata Titolo Functionalisation of Heterocycles through Transition Metal Catalyzed C-H Activation / / edited by Debabrata Maiti, Upendra Sharma Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa 3-031-70843-1 **ISBN** Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (415 pages) Collana Topics in Heterocyclic Chemistry, , 1861-9290 ; ; 60 Altri autori (Persone) SharmaUpendra Disciplina 541.395 Soggetti Catalysis Chemistry Organometallic chemistry Chemistry, Organic Chemical structure Chemical Synthesis Organometallic Chemistry **Organic Chemistry** Structure And Bonding Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Mn-Catalyzed functionalization of Heterocycles through C-H Activation Nota di contenuto -- Fe-Catalyzed functionalization of Heterocycles through C-H Activation -- Ru-Catalyzed functionalization of Heterocycles through C-H Activation -- Co-Catalyzed functionalization of Heterocycles through C-H Activation -- Rh-Catalyzed functionalization of N-Heterocycles through C-H Activation -- Ir-Catalyzed functionalization of Heterocycles through C-H Activation -- Pd-Catalyzed functionalization of Heterocycles through C-H Activation -- Cu-Catalyzed functionalization of Heterocycles through C-H Activation --Ag/Au-Catalyzed functionalization of Heterocycles through C-H Activation. Sommario/riassunto In this book, recent advancements in the heterocycles functionalization by using different transition metals have been described. Heterocycles

are the central point mainly in drug discovery and various other fields.

The ease with which one can functionalize these scaffolds mainly accounts for the whole process output. In the last three decades, C-H activation has emerged as the sustainable and economic way to functionalize the heterocycles. Numerous catalytic methods have been developed and are being developed by applying mainly transition metals. The books main emphasis has been given to mechanistic aspects and the application of developed methodologies for the functionalization of natural scaffolds. The book is useful for researchers who are working in the area of C-H activation/functionalization in academia and industry.