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Record Nr.	UNINA9910830352403321
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Titolo	Functionalised N-heterocyclic carbene complexes [[electronic resource] /] / Olaf Kuhl
Pubbl/distr/stampa	Chichester, West Sussex, : Wiley, 2010
ISBN	1-282-48220-3 9786612482205 0-470-68583-2 0-470-68584-0
Descrizione fisica	1 online resource (365 p.)
Classificazione	CHE 330f CHE 612f CHE 670f
Disciplina	541.2242 547.05
Soggetti	Ligands Heterocyclic compounds Transition metal complexes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Contents; Abbreviations; Introduction; Chapter 1 The Nature of N-Heterocyclic Carbenes; 1.1 Synthesis; 1.1.1 Synthesis of the Imidazolium Salts; 1.1.2 Closing the Ring; 1.1.3 Synthesis of the Free Carbenes; 1.1.4 Synthesis of Transition Metal Complexes of NHC; 1.2 Properties of NHC; 1.2.1 The Internal Electronic Structure; 1.2.2 Basicity of NHC; 1.2.3 Steric Properties; 1.2.4 The Carbene-Metal Bond; 1.2.5 Decomposition Pathways; References; Chapter 2 Why Functionalisation?; 2.1 Phosphane Mimic; 2.2 Hemilability; 2.3 Chirality; 2.3.1 Planar Chirality; 2.3.2 Axial Chirality 2.4 Ligand Geometry2.5 Catalysis; 2.5.1 Allylic Alkylation; 2.5.2 Coupling Reactions; 2.5.3 Olefin Metathesis; 2.5.4 Polymerisations; 2.5.5 Organocatalysis; References; Chapter 3 N-Heterocyclic Carbenes with Neutral Tethers; 3.1 Amine Functionalities; 3.1.1 Heteroaromatic Functional Groups; 3.1.2 Oxazolines; 3.1.3 Imino Functional Groups; 3.1.4 Amino Functionalised NHC; 3.2 Oxygen-Containing Groups; 3.3

Phosphane Functionalities; 3.4 Bis-Carbene Ligands; 3.5 Tris-N-Heterocyclic Carbene Ligands; 3.6 Pincer Carbenes; References; Chapter 4 N-Heterocyclic Carbenes with Anionic Functional Groups
4.1 Oxygen-Containing Groups4.2 Nitrogen-Containing Groups; 4.3 NHC Ligands Incorporating Cp Moieties; 4.4 Transition Metal NHC Complexes Involved in the Activation of C-H Bonds; 4.5 Immobilisation of the Catalyst; 4.6 Sulfur-Containing Functional Groups; References; Chapter 5 Chiral N-Heterocyclic Carbenes; References; Chapter 6 Natural Products; 6.1 Thiazole; 6.1.1 Isolation and Stability of Thiazolylidene; 6.1.2 Benzothiazoles; 6.1.3 Metal Complexes; 6.2 Amino Acids; 6.3 Purines and Xanthines; 6.4 Carbohydrates; 6.5 Miscellaneous; References; Index; A; B; C; D; E; F; G; H; I; J; K; L; M; N OP; Q; R; S; T; U; V; W; X; Z

Sommario/riassunto

N-heterocyclic carbenes (NHCs) have found increasing use as reagents for a range of organic transformations and in asymmetric organocatalysis. The performance of these molecules can be improved and tuned by functionalisation. Functionalised carbenes can anchor free carbenes to the metal site, introduce hemilability, provide a means to immobilise transition metal carbene catalysts, introduce chirality, provide a chelate ligand or bridge two metal centres. NHC can be attached to carbohydrates and campher, derived from amino acids and purines, they can be used as organocatalysts mimicking vitamin