

1. Record Nr.	UNINA9910768164103321
Autore	Kalck Philippe
Titolo	Modes of Cooperative Effects in Dinuclear Complexes // edited by Philippe Kalck
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	9783031322501 9783031322495
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (241 pages)
Collana	Topics in Organometallic Chemistry, , 1616-8534 ; ; 70
Disciplina	541.2242
Soggetti	Organometallic chemistry Chemical structure Catalysts Organometallic Chemistry Structure And Bonding Catalyst Synthesis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Dinuclear Reactivity of One Metal Exalted by the Second One -- Chemical Transformations in Heterobimetallic Complexes Facilitated by the Second Coordination Sphere -- Role of a Redox-Active Ligand Close to a Dinuclear Activating Framework -- Bimetallic oxidative addition or reductive elimination on M-M' -- Magnetism in Binuclear Compounds: Theoretical Insights.
Sommario/riassunto	This book presents recent advances in dinuclear complexes in which the metal-metal cooperative effect operates for obtaining substrate activation and high performance catalysts. Catalysis continues to be a fast expanding area to design efficient tools in synthesis and in industrial chemistry. It allows performing syntheses with short reaction times, atom economy, reduced consumption of energy and loss of reagents, and low level of wastes. Dinuclear complexes are known to be more efficient than the mononuclear analogues for the reaction rates and the selectivities. This book analyses the latest research, focusing on the key concepts, in building and using these dinuclear complexes.

The book is aimed at researchers, graduate students and chemists at all levels in academia and industry.
