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| Altri autori (Persone)  | ChadwickJohn C   |
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| Nota di contenuto       | Homogeneous Catalysts: Activity - Stability - Deactivation; Contents; Preface; 1 Elementary Steps; 1.1 Introduction; 1.2 Metal Deposition; 1.2.1 Ligand Loss; 1.2.2 Loss of H+, Reductive Elimination of HX; 1.2.3 Reductive Elimination of C-, N-, O-Donor Fragments; 1.2.4 Metallic Nanoparticles; 1.3 Ligand Decomposition by Oxidation; 1.3.1 General; 1.3.2 Oxidation; 1.3.2.1 Catalysis Using O <sub>2</sub> ; 1.3.2.2 Catalysis Using Hydroperoxides; 1.4 Phosphines; 1.4.1 Introduction; 1.4.2 Oxidation of Phosphines; 1.4.3 Oxidative Addition of a P-C Bond to a Low-Valent Metal<br>1.4.4 Nucleophilic Attack at Phosphorus<br>1.4.5 Aryl Exchange Via Phosponium Intermediates; 1.4.6 Aryl Exchange Via Metallophosphoranes; 1.5 Phosphites; 1.6 Imines and Pyridines; 1.7 Carbenes; 1.7.1 Introduction to NHCs as Ligands; 1.7.2 Reductive Elimination of NHCs; 1.7.3 Carbene Decomposition in Metathesis Catalysts; 1.8 Reactions of Metal-Carbon and Metal-Hydride Bonds; 1.8.1 Reactions with Protic Reagents; 1.8.2 Reactions of Zirconium and |

Titanium Alkyl Catalysts; 1.9 Reactions Blocking the Active Sites; 1.9.1 Polar Impurities; 1.9.2 Dimer Formation; 1.9.3 Ligand Metallation; References

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Sommario/riassunto

This first book to illuminate this important aspect of chemical synthesis improves the lifetime of catalysts, thus reducing material and saving energy, costs and waste. The international panel of expert authors describes the studies that have been conducted concerning the way homogeneous catalysts decompose, and the differences between homogeneous and heterogeneous catalysts. The result is a ready reference for organic, catalytic, polymer and complex chemists, as well as those working in industry and with/on organometallics

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