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Descrizione fisica	1 online resource (313 p.)
Collana	Catalysis by metal complexes ; ; v. 23
Disciplina	547.1395
Soggetti	Phase-transfer catalysis Organometallic compounds
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Ligands used for aqueous organometallic catalysis -- Hydrogenation -- Hydroformylation -- Carbonylation -- Carbon-carbon bond formation -- Dimerization, oligomerization and polymerization of alkenes and alkynes -- Catalytic oxidations in aqueous media-recent developments -- Miscellaneous catalytic reactions in aqueous media -- Host-guest chemistry in aqueous organometallic catalysis.
Sommario/riassunto	Over the past 20 years aqueous organometallic catalysis has found applications in small- scale organic synthesis in the laboratory, as well as in the industrial production of chemicals with a combined output close to one million tons per year. Aqueous/organic two-phase reactions allow easy product-catalyst separation and full catalyst recovery which mean clear benefits not only in economic but also in environmental and green chemistry contexts. Instead of putting together a series of expert reviews of specialized fields, this book attempts to give a comprehensive yet comprehensible description of the various catalytic transformations in aqueous systems as seen by an author who has been working on aqueous organometallic catalysis since its origin. Emphasis is put on the discussion of differences between related non-aqueous and aqueous processes due to the presence of water. The book will be of interest to experts and students working in catalysis, inorganic chemistry or organic synthesis, and may

serve as a basis for advanced courses.

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