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Nota di contenuto	Introduction: Metal Organic Framework -- Fundamental behind MOF synthesis -- Chemistry and Synthesis of MOFs -- Design aspects of MOFs for catalytic degradation -- MOFs for pesticide degradation -- Metal-organic frameworks for plastic degradation -- MOFs for nitroaromatic compound degradation -- MOFs for PAHs degradation -- MOFs for emerging pollutants degradation -- Challenges and future prospective of MOFs for catalytic degradation of organic pollutants.
Sommario/riassunto	This book presents the fundamental chemistry, synthesis, and classification of Metal Organic Framework (MOFs) for/in catalysis applications. As an introduction, the role of theoretical catalytic degradation studies on MOFs is also covered. The book includes all types of pollutants, i.e., pesticides, plastics, Polycyclic Aromatic Hydrocarbon compounds (PAHs), nitroaromatic compounds, and emerging pollutants degradation studies using MOFs. Finally, the book

discusses the challenges and future prospective for catalytic degradation using MOFs. In the last decades, significant attention has been drawn on catalysis applications of Metal Organic Framework (MOFs). It is due to the structural characteristics, i.e., coordination vacancies available in the metal nodes, organocatalytic site of organic linkers, and ligand to metal charge transfer features, etc., of MOFs. Furthermore, some excellent features including presence of pendent groups, functionalization/bio conjugation possibility, optoelectronic properties as hosts, and additional catalytic sites possibility via post-synthetic modification of MOFs have made them potential materials for real-world application.