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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Historical background of atmospheric secondary aerosol research -- Fundamentals of multiphase chemical reactions -- Gas-phase reactions related to secondary organic aerosols -- Aqueous-phase reactions related to secondary organic aerosols -- Heterogeneous oxidation reactions at organic aerosol surfaces -- Reactions at the air-water and air-solid particle interface -- Atmospheric new particle formation and cloud condensation nuclei -- Field observation of secondary organic aerosols (SOA)
Sommario/riassunto	"This book aims to provide knowledge on multiphase chemical processes to graduate students and research scientists who wish to learn more about aerosol chemistry. It provides fundamentals on gas-liquid equilibrium, gas phase reactions, bulk aqueous phase reactions, gas-particle interface reactions related to formation of secondary aerosols. It also describes on new particle formation, and cloud condensation nuclei (CCN) activity. Field observations and modelling on secondary aerosols and PM2.5 are also described. Atmospheric aerosols (typified by PM2.5) play a critical role in air quality and climate change. There is growing evidence that the multiphase reactions involving heterogeneous reactions on the air-particle interface and the

reactions in the bulk liquid phase of cloud/fog or wet aerosol droplets are important processes forming secondary aerosols in addition to gas-phase oxidation reactions to form low-volatile compounds. This area is closely related to the evolving interest in the air-water interface characterization and aqueous interface organic reactions in the physical chemistry community. The field is also related to reactions in biological cells and organisms"--