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Altri autori (Persone)	TanabeTeruo YoshidaHideo ImaiYoji TakedaMahoto HanawaKenzo
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Nota di contenuto	Basis for Construction of New Reaction Kinetics -- What is Reaction Kinetics as a Scientific -- Critique to "Theory of Rate Processes" -- Formulation of New Reaction Kinetics -- Physical Formulation of New Theory -- Mathematical Formulation of New Kinetics -- Application of New Reaction Kinetics to Simple Systems -- Characteristics of New Reaction Kinetics. .
Sommario/riassunto	This book proposes a completely unique reaction kinetics theory based

on the uncertainty principle of quantum mechanics; the physical viewpoint and mathematical details for the theory construction are explained, and abundant applications of the theory mainly in materials science are described. The theory argues that physical systems on reaction are in a quantum-mechanically uncertain state, and that such systems will transition to new states after a finite duration time. Based on this theory, if the magnitude of the energy uncertainty, i.e., energy fluctuation of the system on reaction can be determined, we can calculate the reaction rates not only for the thermal activation processes but also for the non-thermal activation process such as mechanical, optical, electromagnetic, or other actions. Therefore, researchers or engineers who are involved in fields such as the discovery of new chemical substances, development of materials, innovation of manufacturing processes, and also everyone purely interested in kinetic methodology find this book very stimulating and motivating. .