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Note generali	"Doctoral thesis accepted by Tsinghua University, Beijing, Chin."--Title page.
Nota di contenuto	System overview -- Fabrication of superhydrophobic surfaces -- Condensed droplet behaviors -- Simulation on multi-droplet coalescence induced droplet jumping -- Ice droplet melting behaviors -- Meltwater evolution behaviors -- Relationship between droplet behavior and surface wettability -- Concluding remarks.
Sommario/riassunto	This book introduces the fabrication of superhydrophobic surfaces and some unique droplet behaviors during condensation and melting phase change on superhydrophobic surfaces, and discusses the relationship between droplet behavior and surface wettability. The contents in this book, which are all research hotspots currently, shall not only bring new insights into the physics of condensation and icing/frosting phenomena, but also provide theoretical support to solve the heat transfer deterioration, the ice/frost accretion and other related engineering problems. This book is for the majority of graduate students and researchers in related scientific areas.