1. Record Nr. UNINA9910299839703321

Autore	Mohs William F
Titolo	Heat and Mass Transfer in the Melting of Frost / / by William F. Mohs, Francis A. Kulacki
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-20508-0
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (104 p.)
Collana	SpringerBriefs in Thermal Engineering and Applied Science, , 2193-2530
Disciplina	621.4022
Soggetti	Thermodynamics Heat engineering Heat - Transmission Mass transfer Low temperatures Energy consumption Engineering Thermodynamics, Heat and Mass Transfer Low Temperature Physics Energy Efficiency
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1. Introduction -- 2. State-of-the-Art -- 3. Multi-Stage Defrost Model -- 4. Experimental Method -- 5. Measurement of the Defrost Process -- 6. Solution of the Defrost Model.
Sommario/riassunto	This Brief is aimed at engineers and researchers involved in the refrigeration industry: specifically, those interested in energy utilization and system efficiency. The book presents what the authors believe is the first comprehensive frost melting study involving all aspects of heat and mass transfer. The volume’s description of in-plane and normal digital images of frost growth and melting is also unique in the field, and the digital analysis technique offers an advantage over invasive measurement methods. The scope of book’s coverage includes modeling and experimentation for the frost formation and melting

processes. The key sub-specialties to which the book are aimed include refrigeration system analysis and design, coupled heat and mass transfer, and phase-change processes.