

1. Record Nr.	UNINA9910383843103321
Titolo	Droplet Interactions and Spray Processes // edited by Grazia Lamanna, Simona Tonini, Gianpietro Elvio Cossali, Bernhard Weigand
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-33338-8
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIII, 311 p. 152 illus., 107 illus. in color.)
Collana	Fluid Mechanics and Its Applications, , 2215-0056 ; ; 121
Disciplina	530.427
Soggetti	Engineering design Energy policy Energy and state Electric power production Mathematical physics Engineering Design Energy Policy, Economics and Management Electrical Power Engineering Mechanical Power Engineering Mathematical Methods in Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Droplet-Gas Interactions -- Droplet-Liquid Interactions -- Spray Processes.
Sommario/riassunto	This book provides a selection of contributions to the DIPSI workshop 2019 (Droplet Impact Phenomena & Spray Investigations) as well as recent progress of the Int. Research Training Group "DROPIT". The DIPSI workshop, which is now at its thirteenth edition, represents an important opportunity to share recent knowledge on droplets and sprays in a variety of research fields and industrial applications. The research training group "DROPIT" is focused on droplet interaction technologies where microscopic effects influence strongly macroscopic behavior. This requires the inclusion of interface kinetics and/or a detailed analysis of surface microstructures. Normally, complicated technical processes cover the underlying basic mechanisms, and

therefore, progress in the overall process modelling can hardly be gained. Therefore, DROPIT focuses on the underlying basic processes. This is done by investigating different spatial and/or temporal scales of the problems and by linking them through a multi-scale approach. In addition, multi-physics are required to understand e.g. problems for droplet-wall interactions, where porous structures are involved.
