

1. Record Nr.	UNINA9910438322303321
Autore	Flemming Robert J.
Titolo	Ice accretion and icing technology // Robert J. Flemming
Pubbl/distr/stampa	Warrendale, Pa. (400 Commonwealth Dr., Wallendale PA USA) : , : Society of Automotive Engineers, , 2015 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2015]
ISBN	0-7680-8713-9 0-7680-8189-0 1-5231-0224-1
Descrizione fisica	1 online resource (xii, 107 pages) : illustrations
Collana	Society of Automotive Engineers. Electronic publications
Disciplina	629.13432
Soggetti	Airplanes - Ice prevention Aeronautics - Safety meaures Airplanes - Climatic factors
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Minimal Level Cataloging Plus.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Effect of stagnation flow on an impacting water droplet on a superhydrophobic surface (2013-01-2174) -- Icing process of supercooled-water droplet moving on a surface by using luminescent temperature-imaging technique (2013-01-2210) -- Considerations on the use of hydrophobic, superhydrophobic or icephobic coatings as a part of the aircraft ice protection system (2013-01-2108) -- Evaluation of icing scaling on swept NACA 0012 airfoil models (2011-38-0081) -- New SLD icing capabilities at DGA aero-engine testing (2011-38-0086) -- S-76D tail rotor ice impact test (2011-38-0101) -- Numerical correlation between meteorological parameters and aerodynamic performance degradation of iced airfoils (2013-01-2137) -- Calculation of ice shapes on oscillating airfoils (2011-38-0015) -- Oscillating airfoil icing tests in the NASA Glenn Research Center Icing Research Tunnel (2011-38-0016) -- In-flight icing of UAVs - The influence of Reynolds Number on the ice accretion process (2011-01-2572) -- About the editor.
Sommario/riassunto	This title addresses, among other topics, the measurement techniques and the drop physics that apply to icing, certification for flight through

ice crystal clouds and in supercooled large drops, improvements in predictive techniques, scaling methods, test facilities and techniques, and rotorcraft icing. The effects of inflight atmospheric icing can be devastating to aircraft. Universities and industry have been hard at work to respond to the challenge of maintaining flight safety in all weather conditions. ...Proposed changes in the regulations for operation in icing conditions are sure to keep this type of research and development at its highest level. This is especially true for the effects of ice crystals in the atmosphere, and for the threat associated with supercooled large drop (SLD) icing.
