1. Record Nr. UNINA9910416139603321

Titolo	Superalloys 2020 [[electronic resource]] : Proceedings of the 14th International Symposium on Superalloys / / edited by Sammy Tin, Mark Hardy, Justin Clews, Jonathan Cormier, Qiang Feng, John Marcin, Chris O'Brien, Akane Suzuki
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-51834-5
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (1,108 pages)
Collana	The Minerals, Metals & Materials Series, , 2367-1181
Disciplina	620.1617
Soggetti	Structural materials Tribology Corrosion and anti-corrosives Coatings Chemistry Inorganic chemistry Organic chemistry Materials science Force and energy Structural Materials Tribology, Corrosion and Coatings Chemistry/Food Science, general Inorganic Chemistry Organic Chemistry Energy Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Advanced Modeling Tools for Processing and Lifing of Aeroengine Components -- Developing Alloy Compositions for Future High Temperature Disk Rotors -- Development of AGAT, a 3rd Generation Nickel Based Superalloy for Single Crystal Turbine Blade Applications -- Segregation of solutes at dislocations: A new alloy design parameter for

advanced superalloys -- Ni-Co-based Wrought Superalloys Containing High W – Microstructure Design for a Balance of Properties -- On the influence of alloy composition on creep behavior of single crystal (SX) Ni-based superalloys -- Platinum containing new generation nickel-based superalloy for single crystalline applications -- Development and Application of New Cast & Wrought Ni-base Superalloy M647 for Turbine Disk -- Alloy Design and Microstructural Evolution during Heat Treatment of Newly Developed Cast & Wrought Ni-base Superalloy M647 for Turbine Disk Application -- Thermodynamic Simulation and Experimental Validation of Phase Stability in Ni-based Superalloys.

Sommario/riassunto

The 14th International Symposium on Superalloys (Superalloys 2020) highlights technologies for lifecycle improvement of superalloys. In addition to the traditional focus areas of alloy development, processing, mechanical behavior, coatings, and environmental effects, this volume includes contributions from academia, supply chain, and product-user members of the superalloy community that highlight technologies that contribute to improving manufacturability, affordability, life prediction, and performance of superalloys.