

1. Record Nr.	UNINA9910739461203321
Titolo	NUMISHEET 2022 : Proceedings of the 12th International Conference and Workshop on Numerical Simulation of 3D Sheet Metal Forming Processes // edited by Kaan Inal, Julie Levesque, Michael Worswick, Cliff Butcher
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-06212-4
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (941 pages)
Collana	The Minerals, Metals & Materials Series, , 2367-1696
Disciplina	003.3 671.823
Soggetti	Metals Mathematical models Materials - Analysis Mathematical physics Computer simulation Numerical analysis Metals and Alloys Mathematical Modeling and Industrial Mathematics Characterization and Analytical Technique Computational Physics and Simulations Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	A New Trial Stress for Newton's Iteration Based on Plastic Strain Rate Potential -- Anisotropic Time-dependent Continuum Damage-coupled Plasticity Model for Predicting Ductile Fracture of 6xxx Series Aluminum Alloys -- Characterization of Impurities in Nanomaterials -- Constructing Exact Solutions to Modelling Problems -- Crystal Plasticity Modelling of Localization in Precipitation Hardened AA6060 -- Deformation and Fracture in Micro-stamping Process -- Die Design for Flashless Forging of a Polymer Insulator Fitting -- DP1180 Material

Calibration between Sheet Metal Simulation and Prototype -- Evolution of the R-value and Its Determination Based on Reverse Fitting for Sheet Metal -- Modelling Transient Mechanical Behavior of Aluminum Alloy during Electric-assisted Forming.

Sommario/riassunto

The NUMISHEET conference series is the most significant international conference on the area of the numerical simulation of sheet metal forming processes. It gathers the most prominent experts in numerical methods in sheet forming processes and is an outstanding forum for the exchange of ideas and for the discussion of technologies related to sheet metal forming processes. Topics covered in this volume include but are not limited to the following: Materials Modeling and Experimental Testing Methods Friction and Contact Formability, Necking, and Fracture Instabilities and Surface Defects Fracture and Damage Numerical Methods Springback Incremental Sheet Forming Roll Forming Innovative Forming Methods Product and Process Design and Optimization.
