1. Record Nr. UNISALENTO991002219699707536

Autore	Beckerath, Jürgen : von
Titolo	Handbuch der Ägyptischen Konigsnamen / Jürgen von Beckerath
Pubbl/distr/stampa	Mainz am Rhein : von Zabern, 1999
Edizione	[2. verbesserte und erweiterte Aufl.]
Descrizione fisica	XX, 314 p. : ill. ; 30 cm
Collana	Münchner Agyptologische Studien ; 49
Disciplina	932.0099
Soggetti	Egitto antico Sovrani Titoli
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910483928303321

Titolo	Acting Principles of Nano-Scaled Matrix Additives for Composite Structures / / edited by Michael Sinapius, Gerhard Ziegmann
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-68523-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (479 pages)
Collana	Research Topics in Aerospace, , 2194-8259
Disciplina	620.118
Soggetti	Building materials Nanotechnology Mechanics, Applied Solids Structural Materials Solid Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	State of the Art and Theses -- Modeling and Simulation of Composite -- Characterization of Polymer Composites -- Liquid Composite Molding Processes -- Mechanical Properties of Boehmite -- Particle Surface Modification -- Short- and Long-Range Particle-Matrix Interphases -- Elastic properties of Nanocomposites -- Multiscale Modeling and Simulation of Polymer Nanocomposites -- Dispersion Technology and its Simulation -- Cure Kinetics and Rheology -- Thermal Properties of Boehmite-epoxy Nanocomposites -- Molecular Modeling of Epoxy Resin Crosslinking -- Impregnation Characterization and Strategies -- Nanoscaled Boehmites‘ Modes of Action -- Viscoelastic Damage Behavior of Fiber Reinforced Nanocomposites -- Effect of Particle-Surface-Modification on the Failure Behavior -- Surface quality of carbon fibre reinforced nanocomposites -- Upscaling Effects of Carbon Fiber Reinforced Nanocomposites withRespect to Matrix-Induced Distortions and Mechanical Properties.
Sommario/riassunto	The book explores the effect of nanoscale matrix additives along the four levels of material formation, particle-resin interaction, the influence of nanoparticles on the processability of the polymer, the influence of nanoparticles on polymer curing and the influence of nanoparticles on the fiber plastic composite. Fiber-reinforced plastics have a significantly higher lightweight construction potential in components with a primary single- or biaxial stress state compared to isotropic metals. At the same time, their insensitivity to corrosion and their advantageous fatigue properties can help to reduce maintenance costs. Due to their outstanding specific mechanical properties, they are among today's high-performance lightweight construction materials. These properties make them particularly attractive in the field of mobility. However, as soon as the matrix properties dominate the mechanical properties, e.g. in the case of fibre-parallel compressive strength, significant weaknesses become apparent in the mechanical properties. Here, one approach is to significantly increase the matrix properties through nanoscale ceramic additives and at the same time to guarantee the processability of the resin.