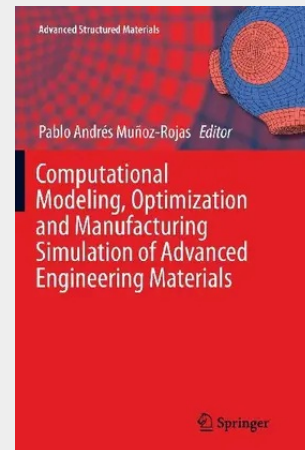


Computational Modeling, Optimization and Manufacturing Simulation of Advanced Engineering Materials

This volume presents recent research work focused in the development of adequate theoretical and numerical formulations to describe the behavior of advanced engineering materials. Particular emphasis is devoted to applications in the fields of biological tissues, phase changing and porous materials, polymers and to micro/nano scale modeling. Sensitivity analysis, gradient and non-gradient based optimization procedures are involved in many of the chapters, aiming at the solution of constitutive inverse problems and parameter identification. All these relevant topics are exposed by experienced international and inter institutional research teams resulting in a high level compilation. The book is a valuable research reference for scientists, senior undergraduate and graduate students, as well as for engineers acting in the area of computational material modeling.

This volume presents recent research work focused in the development of adequate theoretical and numerical formulations to describe the behavior of advanced engineering materials. Particular emphasis is devoted to applications in the fields of biological tissues, phase changing and porous materials, polymers and to micro/nano scale modeling. Sensitivity analysis, gradient and non-gradient based optimization procedures are involved in many of the chapters, aiming at the solution of constitutive inverse problems and parameter identification. All these relevant topics are exposed by experienced international and inter institutional research teams resulting in a high level compilation. The book is a valuable research reference for scientists, senior undergraduate and graduate students, as well as for engineers acting in the area of computational material modeling.



160,49 €

149,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783319791432

Medium: Buch

ISBN: 978-3-319-79143-2

Verlag: Birkhäuser

Erscheinungstermin: 30.05.2018

Sprache(n): Englisch

Auflage: Softcover Nachdruck of the original 1. Auflage 2016

Serie: Advanced Structured Materials

Produktform: Kartoniert

Gewicht: 610 g

Seiten: 393

Format (B x H): 155 x 235 mm

