1. Record Nr. UNINA9910300105503321

Titolo	High Performance Computing in Science and Engineering ' 17 : Transactions of the High Performance Computing Center, Stuttgart (HLRS) 2017 / / edited by Wolfgang E. Nagel, Dietmar H. Kröner, Michael M. Resch
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-68394-2
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (522 pages) : illustrations
Disciplina	004.3
Soggetti	Mathematics - Data processing Mathematical physics Engineering mathematics Engineering - Data processing Chemistry, Physical and theoretical Computer simulation Computer science - Mathematics Computational Science and Engineering Theoretical, Mathematical and Computational Physics Mathematical and Computational Engineering Applications Theoretical Chemistry Computer Modelling Mathematical Applications in Computer Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Sommario/riassunto	This book presents the state-of-the-art in supercomputer simulation. It includes the latest findings from leading researchers using systems from the High Performance Computing Center Stuttgart (HLRS) in 2017. The reports cover all fields of computational science and engineering ranging from CFD to computational physics and from chemistry to computer science with a special emphasis on industrially relevant

applications. Presenting findings of one of Europe’s leading systems, this volume covers a wide variety of applications that deliver a high level of sustained performance.The book covers the main methods in high-performance computing. Its outstanding results in achieving the best performance for production codes are of particular interest for both scientists and engineers. The book comes with a wealth of color illustrations and tables of results.