

1. Record Nr.	UNINA9910437869703321
Titolo	High Performance Computing in Science and Engineering '13 : Transactions of the High Performance Computing Center, Stuttgart (HLRS) 2013 // edited by Wolfgang E. Nagel, Dietmar H. Kröner, Michael M. Resch
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2013
ISBN	9783319021652 3319021656
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (xiii, 697 pages) : illustrations (some color)
Collana	Gale eBooks
Disciplina	004 502.85435 510 519
Soggetti	Mathematics - Data processing Mathematical physics Engineering mathematics Engineering - Data processing Chemistry, Physical and theoretical Computational Science and Engineering Theoretical, Mathematical and Computational Physics Mathematical and Computational Engineering Applications Theoretical Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Physics -- Solid State Physics -- Chemistry -- Reacting Flows -- Computational Fluid Dynamics -- Transport and Climate -- Miscellaneous Topics.
Sommario/riassunto	This book presents the state-of-the-art in simulation on supercomputers. Leading researchers present results achieved on systems of the High Performance Computing Center Stuttgart (HLRS) for the year 2013. The reports cover all fields of computational science and

engineering ranging from CFD via computational physics and chemistry to computer science with a special emphasis on industrially relevant applications. Presenting results 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 highest performance for production codes are of particular interest for both the scientist and the engineer. The book comes with a wealth of coloured illustrations and tables of results.
