

1. Record Nr.	UNINA9911061832103321
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Titolo	High Performance Computing in Science and Engineering '23 : Transactions of the High Performance Computing Center, Stuttgart (HLRS) 2023 // edited by Thomas Ludwig, Peter Bastian, Michael M. Resch
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2026
ISBN	3-031-91312-4
Edizione	[1st ed. 2026.]
Descrizione fisica	1 online resource (722 pages)
Collana	Mathematics and Statistics Series
Altri autori (Persone)	LudwigKarel
Disciplina	518
Soggetti	Mathematics - Data processing Computer science Mathematical physics Computer simulation Chemistry - Data processing Engineering mathematics Engineering - Data processing Computational Mathematics and Numerical Analysis Computer Science Computational Physics and Simulations Computational Chemistry Mathematical and Computational Engineering Applications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part 1 Physics -- Part 2 Molecules, Interfaces, and Solids -- Part 3 Materials Science -- Part 4 Computational Fluid Dynamics -- Part 5 Reactive Flows -- Part 6 Transport and Climate -- Part 7 Particle-based Simulations.
Sommario/riassunto	This book presents the state-of-the-art in supercomputer simulation. It includes the latest findings from leading researchers using one of Europe's top systems at the High Performance Computing Center Stuttgart (HLRS) in 2023. A wide variety of topics are discussed from 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 that deliver a high level of sustained performance. Covering the main methods in high-performance computing, and featuring a wealth of color illustrations and tables of results, the book will be of particular interest to scientists and engineers who seek to achieve the best performance for production codes.

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