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Altri autori (Persone)	FosterIan
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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Title Page; Preface; Contents; State-of-the-Art and Future Scenarios; The History of the Grid; Shaping the Petaflop-Era in Europe - Supercomputing Made in Julich; Exascale Computing and the Role of Co-Design; Fast Heterogeneous Computing: Principles and CUDA Programming; Grids and Clouds; Integrating Service and Desktop Grids at Middleware and Application Level; Crosscloud Computing; High Performance Computing as a Service; A Prototype Implementation of Desktop Clouds; Technologies and Systems; Component-Oriented Approaches for Software Development in the Extreme-Scale Computing Era An Operating System Strategy for General-Purpose Parallel Computing on Many-Core ArchitecturesHigh Performance Composition Operators in Component Models; High-Performance Computing on Heterogeneous Systems: Database Queries on CPU and GPU; Applications; Service-Oriented Data Analysis in Distributed Computing Systems; System Level Acceleration with Blue Gene/L: Grand Challenge Problems in Physiological Multi-Scale Modelling; Towards the Scalability of Real-Time Online Interactive Applications on Multiple Servers and Clouds

	Distributed Storage and Parallel Processing in Large-Scale Wireless Sensor NetworksSubject Index; Author Index
Sommario/riassunto	In the last decade, parallel computing technologies have transformed high-performance computing. Two trends have emerged: massively parallel computing leading to exascale on the one hand and moderately parallel applications, which have opened up high-performance computing for the masses, on the other. The availability of commodity hardware components, a wide spectrum of parallel applications in research and industry and user-friendly management and development tools have enabled access to parallel and high-performance computing for a wide spectrum of end users from research and academia to mid