

1. Record Nr.	UNISA996465673903316
Titolo	Computational Science -- ICCS 2005 [[electronic resource]] : 5th International Conference, Atlanta, GA, USA, May 22-25, 2005, Proceedings, Part I // edited by V.S. Sunderam, G. Dick van Albada, Peter M.A. Sloot, J. J. Dongarra
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (LXIII, 1089 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 3514
Disciplina	004.0151
Soggetti	Computer science Software engineering Numerical analysis Computer networks Image processing—Digital techniques Computer vision Computer simulation Theory of Computation Software Engineering Numerical Analysis Computer Communication Networks Computer Imaging, Vision, Pattern Recognition and Graphics Computer Modelling
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Numerical Methods -- Algorithms and Computational Kernels -- Nonnumerical Algorithms -- Parallel Algorithms -- Environments and Libraries -- Performance and Scalability -- Programming Techniques -- Networks and Distributed Algorithms -- Parallel and Distributed Computing -- Grid Computing -- Failure Handling -- Optimization -- Modeling and Simulation -- Image Analysis and Processing -- Graphics and Visualization -- Computation as a Scientific Paradigm -- Hybrid

Sommario/riassunto

The Fifth International Conference on Computational Science (ICCS 2005) held in Atlanta, Georgia, USA, May 22–25, 2005, continued in the tradition of previous conferences in the series: ICCS 2004 in Krakow, Poland; ICCS 2003 held simultaneously at two locations, in Melbourne, Australia and St. Petersburg, Russia; ICCS 2002 in Amsterdam, The Netherlands; and ICCS 2001 in San Francisco, California, USA. Computational science is rapidly maturing as a mainstream discipline. It is central to an ever-expanding variety of fields in which computational methods and tools enable new discoveries with greater accuracy and speed. ICCS 2005 was organized as a forum for scientists from the core disciplines of computational science and numerous application areas to discuss and exchange ideas, results, and future directions. ICCS participants included researchers from many application domains, including those interested in advanced computational methods for physics, chemistry, life sciences, engineering, economics and finance, arts and humanities, as well as computer system vendors and software developers. The primary objectives of this conference were to discuss problems and solutions in all areas, to identify new issues, to shape future directions of research, and to help users apply various advanced computational techniques. The event highlighted recent developments in algorithms, computational kernels, next generation computing systems, tools, advanced numerical methods, data-driven systems, and emerging application fields, such as complex systems, finance, bioinformatics, computational aspects of wireless and mobile networks, graphics, and hybrid computation.
