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		Computers
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		Computer input-output equipment
		Engineering mathematics
		Engineering - Data processing
		Mathematical physics
		Computer Modelling
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	Nota di bibliografia	Includes bibliographical references at the end of each chapters.
	Sommario/riassunto	The research and its outcomes presented in this collection focus on various aspects of high-performance computing (HPC) software and its development which is confronted with various challenges as today's supercomputer technology heads towards exascale computing. The individual chapters address one or more of the research directions (1) computational algorithms, (2) system software, (3) application software, (4) data management and exploration, (5) programming, and (6)

software tools. The collection therebyhighlights pioneering research findings as well as innovative concepts in exascale software development that have been conducted under the umbrella of the priority programme "Software for Exascale Computing" (SPPEXA) of the German Research Foundation (DFG) and that have been presented at the SPPEXA Symposium, Jan 25-27 2016, in Munich. The book has an interdisciplinary appeal: scholars from computational sub-fields in computer science, mathematics, physics, or engineering will find it of particular interest.