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Nota di contenuto	1. ADAMANT: Hardware-Accelerated Query Processing Made Easy -- 2. Query Processing on Heterogeneous Hardware -- 3. Efficient Event Processing on Modern Hardware -- 4. Hybrid Transactional/Analytical Graph Processing in Modern Memory Hierarchies -- 5. MxKernel: A Bare-Metal Runtime System for Database Operations on Heterogeneous Many-Core Hardware -- 6. Scaling beyond DRAM without Compromising Performance -- 7. ReProVide: Query Optimisation and Near-Data Processing on Reconfigurable SoCs for Big Data Analysis -- 8. Scalable Data Management on Next-Generation Data Center Networks -- 9. Managing Very Large Data Sets on Directly-Attached NVMe Arrays.
Sommario/riassunto	This open access book presents the results of the DFG priority program on Scalable Data Management for Future Hardware. It details requirements and solutions of how modern and future hardware architectures can be leveraged to address the challenges in modern data management. The nine chapters of the book present a wide range

of data management architectures in conjunction with current hardware developments, often related to applications in data analytics or machine learning. They cover topics such as hardware-accelerated query or event processing on FPGA, GPU, and multicore CPUs, scalable data management in data center networks or on modern memory and storage technologies, and operating system support. This book provides researchers in academia and industry with a comprehensive combination of data management, operating systems, distributed systems and computer architecture issues necessary to address the requirements from practice as well as to propel innovative ideas and challenging research questions.
