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Nota di contenuto	1. Introductory Chapter: Autonomous Mobile Mapping Robots - Current State and Future Real-World Challenges -- By Janusz Bedkowski -- 2. Unconventional Trajectories for Mobile 3D Scanning and Mapping -- By Fabian Arzberger, Jasper Zevering, Anton Bredenbeck, Dorit Borrmann and Andreas Nuchter -- 3. Autonomous Mobile Mapping Robots: Key Software Components -- By Janusz Bedkowski and Jacek Szklarski -- 4. Coverage Technology of Autonomous Mobile Mapping Robots -- By SeungHwan Lee -- 5. Multi-Robot Mapping Based on 3D Maps Integration -- By Michal Drwiega and Elzbieta Roszkowska -- 6. Scalable Algorithms for Simultaneous Mapping and Localization of Mobile Robot Swarms -- By Anton Filatov and Kirill Krinkin -- 7. Aerial 3D Mapping with Continuous Time ICP for Urban Search and Rescue -- By Helge Andreas Lauterbach and Andreas Nuchter -- 8. Practical Insights on Automotive SLAM in Urban Environments -- By Piotr Skrzypczynski.
Sommario/riassunto	This book presents recent research advances in autonomous mobile mapping robots, covering a range of topics. These include unconventional trajectories for mobile 3D scanning, key software components such as lidar odometry, look closure, pose graph SLAM, map refinement, path planning, and coverage algorithms. The book also explores multi-robot mapping and scalable algorithms for simultaneous localization and mapping. Finally, it delves into real-world applications like aerial 3D mapping and automotive SLAM in urban environments.