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Autore	Li Qinchuan
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Nota di contenuto	Introduction -- Fundamentals of group theory -- Rotation and displacements of rigid body -- Lie group based method for type synthesis of parallel mechanisms -- Type Synthesis of 5-DOF 3R2T Parallel Mechanisms -- Type Synthesis of 4-DOF 2R2T Parallel Mechanisms -- Type Synthesis of 4-DOF Parallel Mechanisms with Bifurcation of Schoenflies Motion -- Type Synthesis of 3-DOF RPR-equivalent Parallel Mechanisms -- Type Synthesis of 3-DOF PU-equivalent Parallel Mechanisms -- Type Synthesis of a Special Family of Remote Center-of-Motion Parallel Manipulators with Fixed Linear Actuators for Minimally Invasive Surgery -- Type synthesis of Non-overconstrainted 3-DOF Translational parallel mechanisms with Less Structural Shakiness -- Type synthesis of Pan-Tilt Wrists with Uncoupled Actuation.
Sommario/riassunto	This book focuses on the synthesis of lower-mobility parallel manipulators, presenting a group-theory-based method that has the advantage of being geometrically intrinsic. Rotations and translations of a rigid body as well as a combination of the two can be expressed and handled elegantly using the group algebraic structure of the set of rigid-body displacements. The book gathers the authors’ research results, which were previously scattered in various journals and conference proceedings, presenting them in a unified form. Using the presented method, it reveals numerous novel architectures of lower-mobility parallel manipulators, which are of interest to those in the robotics community. More importantly, readers can use the method and

tool to develop new types of lower-mobility parallel manipulators independently.