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Nota di contenuto	Background and Preliminaries -- Mathematical Models of Flying Vehicles -- Attitude Synchronization -- Attitude Synchronization with Communication Delays -- Global Trajectory Tracking of VTOL UAVs -- Formation Control of VTOL UAVs -- Formation Control with Communication Delays.
Sommario/riassunto	Motion Coordination for VTOL Unmanned Aerial Vehicles develops new control design techniques for the distributed coordination of a team of autonomous unmanned aerial vehicles. In particular, it provides new control design approaches for the attitude synchronization of a formation of rigid body systems. In addition, by integrating new control design techniques with some concepts from nonlinear control theory and multi-agent systems, it presents a new theoretical framework for the formation control of a class of under-actuated aerial vehicles capable of vertical take-off and landing. Several practical problems related to the systems' inputs, states measurements, and restrictions on the interconnection topology between the aerial vehicles in the team are addressed. Worked examples with sufficient details and simulation results are provided to illustrate the applicability and effectiveness of the theoretical results discussed in the book. The

material presented is primarily intended for researchers and industrial engineers from robotics, control engineering and aerospace communities. It also serves as a complementary reading for graduate students involved in research related to flying robotics, aerospace, control of under-actuated systems, and nonlinear control theory.