Record Nr. UNINA9910627262003321 Integration of unmanned aerial vehicles in wireless communication and **Titolo** networks: UAVs and 5G // Dushantha Nalin K Jayakody [and three others], editors Cham, Switzerland: ,: Springer, , [2023] Pubbl/distr/stampa ©2023 **ISBN** 3-031-03880-0 Descrizione fisica 1 online resource (167 pages): illustrations (chiefly color) Unmanned system technologies Collana 629.13339 Disciplina Soggetti Drone aircraft - Automatic control Wireless communication systems 5G mobile communication systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction Positioning of UAVs Coagulation Attacks on UAVs Self-Energized UAV assisted Co-operative Relay Low Latency Enabled UAVs Full Duplex UAV Assisted Wireless Networks Cellular Integration of UAVs Trajectory Optimization of UAVs UAV Assisted Wireless Power Sensor Network UAV Assisted NOMA for 5G Conclusion Sommario/riassunto This book presents a comprehensive overview of Unmanned Arial Vehicles (UAV) and their integration of wireless communications and networks, including inherent challenges and open access concerns. The authors present the latest technologies associated with UAV-assisted wireless communications and networks by linking their association with 5G Wireless Networks. The authors include positioning of UAV, coagulation attack of UAV, and the green prospective of UAV communication systems. The book explains how the UAV can be integrated with 5G wireless schemes such as ultra-reliable, low density communications, full duplex, and non-orthogonal multiple access (NOMA) for 5G. This book targets graduate students, researchers, and industry personnel. Present the technologies associated with Unmanned Aerial Vehicles (UAV) assisted wireless communications and

networks Discusses UAV and the integration to 5G and beyond

technologies Contains solved examples and step-by-step instructions of the derivations and highlights future direction and open challenges.