Record Nr. UNINA9910678252603321 Autore Kryvokhatko Illia Titolo Aerodynamics of tandem wing aircraft: from dinosaurs to UAVs and supersonic planes / / Illia Kryvokhatko Pubbl/distr/stampa Cham, Switzerland: ,: Springer, , [2023] ©2023 **ISBN** 9783031237775 9783031237768 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (183 pages) Disciplina 629.1323 Aerodynamics Soggetti Airplanes - Wings Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Chapter 1. Historical Review -- Chapter 2. Determination of Tandem Wing Aircraft Aerodynamic Characteristics -- Chapter 3. Effect of Geometric Parameters on Aerodynamic Characteristics -- Chapter 4. Recommendations Regarding Aerodynamic Design of Tandem Wing Aircraft. This book contains extensive data about tandem wing aircraft. It Sommario/riassunto includes a review of modern flying vehicles with four fixed wings, a review of analytical, numerical and experimental methods; results of the studies about aerodynamics; dependencies between geometrical parameters and aerodynamic characteristics, practical recommendations in development and optimizing of tandem wing aircraft to provide high lift-to-drag ratio, stability, and controllability. This is an ideal book for graduate students, researchers, and engineers working in fields of aerodynamics and conceptual design of the aircraft especially UAVs, ground-effect vehicles, and convertiplanes. Reviews a wide range of aircraft with four wings, providing insights and best practices; Explains how to choose layout and geometrical parameters of tandem wing aircraft; Maximizes reader understanding of many

important facets of aerodynamics using relatively simple terms.