

1. Record Nr.	UNINA9910484932803321
Autore	Ingenito Antonella
Titolo	Subsonic combustion ramjet design / / Antonella Ingenito
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] Â©2021
ISBN	3-030-66881-9
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (X, 115 p. 84 illus., 36 illus. in color.)
Collana	SpringerBriefs in Applied Sciences and Technology, , 2191-530X
Disciplina	629.134353
Soggetti	Airplanes - Ramjet engines - Design and construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Fundamental Definitions of Ramjet Engines -- Ramjet Engines Performance -- Ramjets Fuels -- Flameholders Design Guidelines -- Injectors Design Guidelines -- Combustor Design Guidelines -- Igniter Design Guidelines -- Material Selection for Ramjet Engines.
Sommario/riassunto	This book presents a step-by-step methodology for the design of ramjet engines. It explores ramjet combustion, provides guidelines on how to size the engines, and discusses performance analysis. The book begins with an introduction to ramjet design, including fundamental definitions in the field. It then discusses ramjet engine performance, and fuels which can be used. Several types of ramjet engines are then explored, and guidelines for their design are presented, including flame holders, injectors, and combustors. Finally, the book concludes with a discussion of the types of materials which should be used for ramjet engines. This book is of interest to engine designers and engineers, researchers, and graduate students, as it collates research in a succinct, clear guide to the issue of designing ramjet engines. .