1.

Record Nr.	UNICAMPANIAVAN00060410
Autore	Lloyd, Geoffrey E. R.
Titolo	Scienza, folclore, ideologia : le scienze della vita nella Grecia antica / Geoffrey E. R. Lloyd
Pubbl/distr/stampa	225 p. ; 24 cm
Titolo uniforme	Science, folklore and ideology
ISBN	88-339-5403-X
Edizione	[Torino : Boringhieri]
Descrizione fisica	Trad. di Alessandra Fiore, Barbara Fiore, con la collaborazione di Regina Chiecchio.
Disciplina	574.0938
Soggetti	Scienze biologiche - Grecia antica
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910484888603321

Autore	Mimani Akhilesh
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Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-10-4828-2
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (161 pages)
Disciplina	629.23
Soggetti	Automotive engineering Acoustical engineering Acoustics Engineering mathematics Engineering - Data processing Mathematical physics Automotive Engineering Engineering Acoustics Mathematical and Computational Engineering Applications Theoretical, Mathematical and Computational Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Solution of the Helmholtz equation in the Elliptical Cylindrical Co-ordinates -- Characterization of an Elliptical/Circular Cylindrical Chamber Muffler -- Analysis and Design of Long Chamber Mufflers -- Double-Tuning the Short Chamber Mufflers: Design for Broadband Attenuation -- Summary of Contribution and Directions for Future Work.
Sommario/riassunto	This book presents a three-dimensional analysis of acoustic wave propagation in an elliptical waveguide, and applies the equations and concepts to design axially short elliptical end-chamber muffler configurations which are an important component of a complex multi-pass muffler used in a modern-day automotive exhaust system. A general solution of the Helmholtz equation in elliptical cylindrical co-ordinates is presented in terms of the Mathieu and modified Mathieu

modal functions. This is followed by the tabulation and analysis, for the first time, of the non-dimensional resonance frequencies of the transverse modes of a rigid-wall elliptical waveguide for a complete range of aspect ratio. The modal shape patterns of the first few circumferential, radial and cross-modes are examined with particular attention to the pressure nodal ellipses and hyperbolae. An analytical formulation is then outlined for characterizing a single-inlet and single-outlet elliptical muffler with the inlet located on the end face and the outlet located either on the end face or side-surface. The ensuing chapter is devoted toward analyzing the Transmission Loss (TL) performance of different short end-chamber mufflers, namely (a) the straight-flow configuration having ports located on the opposite face, (b) the flow-reversal configuration with ports located on the same end face and (c) configuration with inlet port on the end face and outlet on the side surface. Design guidelines are formulated in terms of the optimal location of inlet and outlet ports which suppresses the deteriorating influence of certain higher-order modes, thereby delivering a broadband TL performance. Directions for future work are discussed toward the end. In summary, this book is a one-stop solution for a practicing automotive engineer designing mufflers, for an applied mathematician studying wave propagation in elliptical geometries, and also as a niche area within noise control engineering. .