1.	Record Nr.	UNICAMPANIASUN0019137
	Autore	Cervetto, Luigi
	Titolo	Le basi fisiologiche della percezione / di Luigi Cervetto, Carlo Alberto Marzi e Giancarlo Tassinari
	Pubbl/distr/stampa	Bologna : Il mulino, [1987]
	ISBN	88-15-01529-9
	Descrizione fisica	312 p. : ill. ; 22 cm.
	Altri autori (Persone)	Marzi, Carlo Alberto Tassinari, Giancarlo
	Disciplina	152.1
	Soggetti	Percezione
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

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Autore	Öchsner Andreas
Titolo	A Numerical Approach to the Classical Laminate Theory of Composite Materials : The Composite Laminate Analysis Tool—CLAT v2.0 / / by Andreas Öchsner, Resam Makvandi
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031329753 3031329759
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (181 pages)
Collana	Advanced Structured Materials, , 1869-8441 ; ; 189
Altri autori (Persone)	MakvandiResam
Disciplina	620.100285
Soggetti	Materials science—Data processing Continuum mechanics Composite materials Computational Materials Science Continuum Mechanics Composites
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	 Introduction 2. Classical Laminate Theory 3. Composite Laminate Analysis Tool - CLAT 4. Application Examples 5. Source Codes.
Sommario/riassunto	This book first provides a systematic and thorough introduction to the classical laminate theory for composite materials based on the theory for plane elasticity elements and classical (shear-rigid) plate elements. The focus is on unidirectional lamina which can be described based on orthotropic constitutive equations and their composition to layered laminates. In addition to the elastic behavior, failure is investigated based on the maximum stress, maximum strain, Tsai-Hill, and the Tsai-Wu criteria. The solution of the fundamental equations of the classical laminate theory is connected with extensive matrix operations, and many problems require in addition iteration loops. Thus, a classical hand calculation of related problems is extremely time consuming. In order to facilitate the application of the classical laminate theory, we decided to provide a Python-based computational tool, the so-called

2.

Composite Laminate Analysis Tool (CLAT) to easily solve some standard questions from the context of fiber-reinforced composites. The tool runs in any standard web browser and offers a user-friendly interface with many post-processing options. The functionality comprises stress and strain analysis of lamina and laminates, derivation of off-axis elastic properties of lamina, and the failure analysis based on different criteria.