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Sommario/riassunto	<p>Long description: With the advantages of high strength, lightweight, no corrosion and excellent fatigue resistance, Carbon Fibre Reinforced Polymer (CFRP) cables have the potential to replace steel cables in a broad range of applications. The ideal structures for such cables are highly pre-tensioned cable systems that are loaded orthogonally to their cable axes. This type of structures with CFRP cables, such as cable net facades, spoked wheel cable roofs and stressed-ribbon bridges, can be built economically with large or small spans. This book is the first in the world to demonstrate the advantages of using CFRP cables in orthogonally loaded cable structures, including detailed analyses of mechanical properties and economic efficiencies. Furthermore, in order to solve the anchorage problem which hinders the application of CFRP cables, two new CFRP cable anchorages, especially suitable for orthogonally loaded cable structures, are proposed in this book. In addition, a prototype of CFRP spoked wheel cable roof built by the author is presented to show the feasibility of CFRP orthogonally loaded cable structures based on the present technology; a novel design, i.e. the CFRP Continuous Band Winding System, is also conceptually introduced, so as to show a feasible form of CFRP orthogonally loaded cable structures in the future. This book is written to encourage the use of CFRP cables and show that CFRP cable structures are feasible and have advantages over steel cable structures. It will be read by researchers of structural engineering and by consulting engineers.</p>

