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Titolo	Advanced structural wind engineering / / Y. Tamura, A. Kareem, editors
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Descrizione fisica	1 online resource (x, 410 pages) : illustrations (some color)
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Altri autori (Persone)	TamuraY (Yasuo) Abdul KareemA
Disciplina	624.175
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Strong winds and their characteristics -- Estimation of design wind speeds -- Bluff body aerodynamics -- Bluff body aerodynamics application -- Wind-induced vibration of structures -- The gust factor approach to along-wind excitation -- Wind loads on components and cladding -- Debris flight and impact criteria -- Understanding of wind codes and standards -- Computational tools for wind engineering -- CFD applications in wind engineering -- Human perception and tolerance of wind-induced building motions -- Damping in buildings -- Suppression of wind-induced responses of buildings and structures.
Sommario/riassunto	This book serves as a textbook for advanced courses as it introduces state-of-the-art information and the latest research results on diverse problems in the structural wind engineering field. The topics include wind climates, design wind speed estimation, bluff body aerodynamics and applications, wind-induced building responses, wind, gust factor approach, wind loads on components and cladding, debris impacts, wind loading codes and standards, computational tools and computational fluid dynamics techniques, habitability to building vibrations, damping in buildings, and suppression of wind-induced vibrations. Graduate students and expert engineers will find the book especially interesting and relevant to their research and work.