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Titolo	The General Kelvin-Helmholtz Stability Model : With Applications to Sand Wave and Water Wave Generation / / by Hermann Moshagen
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Sommario/riassunto	This book presents a generalized version of the classical Kelvin-Helmholtz instability, a useful tool which allows for new approaches when studying stability problems in fluid mechanics, as well as its important applications. It begins by providing an introduction to hydrodynamic stability and the Kelvin-Helmholtz (KH) instability. The author then develops the general KH stability model for a multi-layer flow system, which includes the conventional KH instability as a special case. This book also includes the detailed discussion of two important

applications of this model: the generation of sand waves in alluvial channels and the generation of wind waves on water. Additionally, the effects of nonlinearities and the use of computational methods to study KH instability are included. This book serves as a concise and modern treatment of the KH stability model with specific attention paid to hydrodynamic stability analysis. It is ideal for graduate students interested in fluid dynamics as well as scientists and engineers in the fields of oceanography, geophysics, offshore engineering, and more.