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	Descrizione fisica	1 online resource (262 p.)
	Altri autori (Persone)	LiuMeng-Kun
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	Soggetti	Cutting - Vibration
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	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Cutting Dynamics and Machining Instability -- Basic Physical Principles -- Adaptive Filters and Filtered-x LMS Algorithm -- Time-Frequency Analysis -- Wavelet Filter Banks -- Temporal and Spectral Characteristics of Dynamic Instability -- Simultanous Time-Frequency Control of Dynamic Instability -- Time-Frequency Control of Milling Instability and Chatter at High Speed -- Multi-Dimensional Time-Frequency Control of Micro-Milling Instability -- Time-Frequency Friction Induced Instability -- Synchronization of Chaos in Simultaneous Time-Frequency Domain -- Appendix.
	Sommario/riassunto	Presents new developments on machine tool vibration control based on

discontinuous dynamical systems Machining instability is a topical area, and there are a wide range of publications that cover the topic. However, many of these previous studies have started by assuming that the behavior of the system can be linearised. Meanwhile, there are many recent advances in the fields of signal processing, nonlinear dynamics, and nonlinear control, all of which are relevant to the machining stability problem. This book establishes the fundamentals of cutting mechanics and machine tool