Stochastic Resonance: From Suprathreshold Stochastic Resonance to Stochastic Signal Quantization

著者:McDonnell, Mark D./ Stocks, Nigel G./ Pearce, Charles E. M./ Abbott, Derek

出版者:

出版时间:2008-10

装帧:

isbn:9780521882620

Stochastic resonance has been observed in many forms of systems, and has been hotly debated by scientists for over 30 years. Applications incorporating aspects of stochastic resonance may yet prove revolutionary in fields such as distributed sensor networks, nano-electronics, and biomedical prosthetics. Ideal for researchers in fields ranging from computational neuroscience through to electronic engineering, this 2008 book addresses in detail various theoretical aspects of stochastic quantization, in the context of the suprathreshold stochastic resonance effect. Initial chapters review stochastic resonance and outline some of the controversies and debates that have surrounded it. The book then discusses suprathreshold stochastic resonance, and its extension to more general models of stochastic signal quantization. Finally, it considers various constraints and tradeoffs in the performance of stochastic quantizers, before culminating with a chapter in the application of suprathreshold stochastic resonance to the design of cochlear implants.

作者介绍:

目录:

Stochastic Resonance: From Suprathreshold Stochastic Resonance to Stochastic Signal Quantization_下载链接1_

标签

神经科学

数学

Stochastic

Resonance

Quantization

评论

Stochastic Resonance: From Suprathreshold Stochastic Resonance to Stochastic Signal Quantization_下载链接1_

书评

Stochastic Resonance: From Suprathreshold Stochastic Resonance to Stochastic Signal Quantization_下载链接1_