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Titolo	Towards Integrating Control and Information Theories : From Information-Theoretic Measures to Control Performance Limitations // by Song Fang, Jie Chen, Hideaki Ishii
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Information Measures and Spectral Analysis -- System Performance Measures -- Channel Blurredness -- Bode-Type Integrals -- MIMO Systems -- Bounds on Power Gain -- State Estimation Systems -- Preliminary Results on Continuous-Time Systems -- Conclusion.
Sommario/riassunto	This book investigates the performance limitation issues in networked feedback systems. The fact that networked feedback systems consist of control and communication devices and systems calls for the integration of control theory and information theory. The primary contributions of this book lie in two aspects: the newly-proposed information-theoretic measures and the newly-discovered control performance limitations. We first propose a number of information notions to facilitate the analysis. Using those notions, classes of performance limitations of networked feedback systems, as well as state estimation systems, are then investigated. In general, the book presents a unique, cohesive treatment of performance limitation issues

of networked feedback systems via an information-theoretic approach. This book is believed to be the first to treat the aforementioned subjects systematically and in a unified manner, offering a unique perspective differing from existing books.
