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Autore	Wu Zhizheng
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Altri autori (Persone)	IqbalAzhar Ben AmaraFoued
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Adaptive Optics Systems -- Magnetic Fluid Deformable Mirrors -- Analytical Model of a Magnetic Fluid Deformable Mirror -- Design of a Magnetic Fluid Deformable Mirror and Experimental Model Validation -- Control System Design -- Decentralized PID Controller Design -- Centralized Optimal Controller Design.
Sommario/riassunto	Modeling and Control of Magnetic Fluid Deformable Mirrors for Adaptive Optics Systems presents a novel design of wavefront correctors based on magnetic fluid deformable mirrors (MFDM) as well as corresponding control algorithms. The presented wavefront correctors are characterized by their linear, dynamic response. Various mirror surface shape control algorithms are presented along with experimental evaluations of the performance of the resulting adaptive optics systems. Adaptive optics (AO) systems are used in various fields of application to enhance the performance of optical systems, such as imaging, laser, free space optical communication systems, etc. This book is intended for undergraduate and graduate students, professors, engineers, scientists and researchers working on the design of adaptive optics systems and their various emerging fields of application. Zhizheng Wu is an associate professor at Shanghai University, China. Azhar Iqbal is a research associate at the University of Toronto,

Canada. Foued Ben Amara is an assistant professor at the University of
Toronto, Canada.
