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Titolo	Pipe inspection robots for structural health and condition monitoring / / Harutoshi Ogai, Bishakh Bhattacharya
Pubbl/distr/stampa	New Delhi : , : Springer, , [2018] ©2018
ISBN	81-322-3751-X 9788132237518
Descrizione fisica	1 online resource (xvi, 201 pages) : illustrations
Collana	Intelligent systems, control and automation: science and engineering, , 2213-8994 ; ; 89
Disciplina	388.55
Soggetti	Pipelines - Maintenance and repair Robots, Industrial Robotics Automation Vibration Dynamics Artificial intelligence Robotics and Automation Vibration, Dynamical Systems, Control Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction to Pipe Inspection Robots -- Pipe Inspection robot with Single Axis Movement -- PIR with Multi-axes Movement -- Wireless Transfer Technology for Communication -- Video based Sensing and Image Processing -- Vibration based Sensing Method -- Smart Sensors for SHM -- Future Directions in Pipe Inspection Robot.
Sommario/riassunto	This book highlights the state-of-the-art with regard to inline pipe investigation and structural health monitoring of pipes. The book begins with applications of pipe inspection robots, and goes on to discuss. robots that are developed for a mobile platform, various sensors employed to sense defects, and different data

storage/communication systems employed for damage prognosis. The book also introduces smart materials and smart sensors for use in pipe inspection robots. The contents of this book will be useful to researchers and professionals alike. The structure of the book enables its use as a text in professional training and development coursework.

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