1. Record Nr. UNINA9910349447203321

Autore	Jabran Khawar
Titolo	Role of Mulching in Pest Management and Agricultural Sustainability / / by Khawar Jabran
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-22301-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (69 pages)
Collana	SpringerBriefs in Plant Science, , 2192-1229
Disciplina	635.04
Soggetti	Plant ecology Systems biology Agriculture Plant anatomy Plants - Development Botanical chemistry Plant physiology Plant Ecology Systems Biology Plant Anatomy/Development Plant Biochemistry Plant Physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Use of Mulches in Agriculture: Introduction and Concepts -- Mulches for Weed Control -- Mulches for Pest and Disease Managment -- Mulches for Soil and Water Conservation -- Mulches for Enhancing Biological Activities in Soil -- Mulches for regulation of Soil Temperature -- Mulches for Nutrient Addition to Soil -- Index.
Sommario/riassunto	This book provides the concepts, techniques, and recent developments with regard to use of mulches in agriculture, utility of mulches for non-chemical pest control, and sustainability of crop production systems. Non-conventional means of improving the sustainability of crop production and pest control are required in the wake of environmental

	concerns over the use of conventional pesticides as well as the intensive use of land resources. Mulches have been used in agriculture for various purposes; however, there has been an increase in their use more recently, and scientists around the world have conducted more research to explore the benefits of mulching in various agricultural systems. Mulches have been found advantageous in non-chemical pest control, soil and water conservation, improving fertility, and improving microbial activities in the soil. While this is a topic of current importance, the information use of mulches in agricultural fields is rarely compiled in one comprehensive location to provide a full account of various aspects of mulches and their utility. This book will be helpful for researchers, growers, and students.

2.

Record Nr.	UNINA9910484729603321
Autore	Roy Spandan
Titolo	Adaptive-Robust Control with Limited Knowledge on Systems Dynamics : An Artificial Input Delay Approach and Beyond / / by Spandan Roy, Indra Narayan Kar
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-0640-X
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XX, 144 pages 33 illustrations, 29 illustrations in color.)
Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 257
Disciplina	629.83
Soggetti	Control engineering Engineering design Acoustical engineering Fluid mechanics Control and Systems Theory Engineering Design Engineering Acoustics Engineering Fluid Dynamics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto	Introduction -- Time-Delayed Control of a Class of EL System: Design Issues and Solutions -- Adaptive Robust Time-Delayed Control for a Class of Uncertain EL Systems -- Time-Delayed Control of a Class of EL Systems with only Position Feedback -- Adaptive-Robust Control of a Class of EL Systems with Unknown System Dynamics -- Conclusion.
Sommario/riassunto	The book investigates the role of artificial input delay in approximating unknown system dynamics, referred to as time-delayed control (TDC), and provides novel solutions to current design issues in TDC. Its central focus is on designing adaptive-switching gain-based robust control (ARC) for a class of Euler–Lagrange (EL) systems with minimal or no knowledge of the system dynamics parameters. The newly proposed TDC-based ARC tackles the commonly observed over- and under-estimation issues in switching gain. The consideration of EL systems lends a practical perspective on the proposed methods, and each chapter is supplemented by relevant experimental data. The book offers a unique resource for researchers in the areas of ARC and TDC alike, and covers the state of the art, new algorithms, and future directions.