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Titolo	Control Strategies for Non-minimum Phase Systems // by Manish Yadav, Ashutosh K. Giri, Stepan Ozana
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Descrizione fisica	1 online resource (XII, 180 p. 120 illus., 84 illus. in color.)
Collana	Studies in Infrastructure and Control, , 2730-6461
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Soggetti	Automatic control Mathematical optimization Algorithms Control and Systems Theory Optimization
Lingua di pubblicazione	Inglese
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Nota di contenuto	Outline of non-minimum phase systems -- Improved series cascade control schemes for non-minimum phase zeros and dead-Time systems -- An enhancement in series cascade control scheme -- Improved parallel cascade control for non minimum phase system -- Modified tuning approaches for non-minimum phase systems -- Tuning of fractional order filter with non-minimum phase zeros -- A combined approach for tuning optimal fractional IMC-based series cascade control -- Conclusion and Future scope.
Sommario/riassunto	This book provides overview of numerous control schemes for non-minimum phase and dead-time systems. The inverse response arises from the conflict of two first-order systems with opposite effects. This feature of the system is known as non-minim phase (NMP) process. The opposite response initiates from odd multiplicity of NMP open-loop zeros. As a result, the controller shows a limited gain margin and bandwidth, implying a robustness restriction. If the user tries to increase the gain, system sometimes gets unstable. Thus, the fundamental notion of providing a suitable balance control theory can potentially improve the performance of those processes. This book is

useful to researchers working in the field of control system. The book provides comprehensive philosophy of different control schemes used for the non-minimum phase zeros and dead-time systems. The researcher working on non-minimum phase zeros can find innovative algorithms and novel schemes. Further, they can design innovative control schemes by referring to the content of chapters and specifically tuning after encountering NMP zeros and delay terms.
