

1. Record Nr.	UNINA9910350308603321
Autore	Zhang Bao-Lin
Titolo	Active Control of Offshore Steel Jacket Platforms [[electronic resource] /] / by Bao-Lin Zhang, Qing-Long Han, Xian-Ming Zhang, Gong-You Tang
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-13-2986-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (196 pages)
Disciplina	627.98
Soggetti	Ocean engineering Control engineering Vibration Dynamical systems Dynamics Offshore Engineering Control and Systems Theory Vibration, Dynamical Systems, Control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Dynamic models of offshore platforms -- Optimal tracking control with feedforward compensation -- Integral sliding mode H control -- Delayed integral sliding mode control -- Delayed robust non-fragile H control -- Delayed dynamic output feedback control -- Network-based modeling and active control -- Event-triggered H reliable control in network environments.-References -- Index.
Sommario/riassunto	Offshore platforms are widely used to explore, drill, produce, store and transport ocean resources, and are usually subjected to environmental loading, which can lead to deck facility failure and platform fatigue failure, inefficient operation and even crew discomfort. In order to ensure the reliability and safety of offshore platforms, it is important to explore effective ways of suppressing the vibration of offshore platforms. This book provides a brief overview of passive, semi-active and active control schemes to deal with vibration of offshore platforms.

It then comprehensively and systematically discusses the recent advances in active systems with optimal, sliding model, delayed feedback and network-based control. Intended for readers interested in vibration control and ocean engineering, it is particularly useful for researchers, engineers, and graduate students in the fields of system and control community, vibration control, ocean engineering, as well as electrical and electronic engineering.
