1. Record Nr. UNINA9910688467903321

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| Titolo | Development and application of nonlinear dissipative device in structural vibration control / / edited by Zheng Lu, [and three others] |
| Pubbl/distr/stampa | Basel, Switzerland : , : MDPI, , [2018]<br>©2018 |
| ISBN | 3-03897-038-7 |
| Descrizione fisica | 1 online resource (240 pages) : illustrations |
| Disciplina | 531 |
| Soggetti | Nonlinear mechanics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |
| Sommario/riassunto | This book entitled Development and Application of Nonlinear Dissipative Device in Structural Vibration Control contains contributions that focus on the development and application of innovative nonlinear dissipative systems that mitigate the potentially catastrophic effects of extreme loading by incorporating new materials or effective mechanical control technologies. Moreover, new nonlinear analytical methods for distinctive vibrating structures under different excitations are also highlighted in this book. It is notable that nonlinear dampers prove superior in energy dissipation compared to linear dampers, such as the wide frequency band of vibration attenuation and high robustness. In light of this, nonlinear dampers have been utilized in many different cases. For example, pounding-tuned mass dampers are employed to alleviate the excessive vibration of power transmission towers, and self-powered magnetorheological dampers are used to suppress the undesirable vibration of long stay cables. The content of this book covers a wide variety of topics that can be mainly divided into three categories, namely, new nonlinear dissipative devices, new simulation tools for vibrating structures undergoing nonlinear stage, and new design/optimum methods for dissipative devices and isolation systems. The contributions presented in this book can provide valuable and constructive reference material for the further study of nonlinear |

dampers and structures.