

Global nonlinear dynamics for engineering design and system safety

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920521588&lokasi=lokal>

Abstrak

This is the first book which exploits concepts and tools of global nonlinear dynamics for bridging the gap between theoretical and practical stability of systems/structures, and for possibly enhancing the engineering design in macro-, micro- and nano-mechanics. Addressed topics include complementing theoretical and practical stability to achieve load carrying capacity; dynamical integrity for analyzing global dynamics, for interpreting/predicting experimental behavior, for getting hints towards engineering design; techniques for control of chaos; response of uncontrolled and controlled system/models in applied mechanics and structural dynamics by also considering the effect of system imperfections; from relatively simple systems to multidimensional models representative of real world applications; potential and expected impact of global dynamics for engineering design.