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Autore	Awrejcewicz J (Jan)
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Nota di contenuto	Nano-Structural Members in Various Fields, Literature Review -- Size-Dependent Theories of Beams, Plates and Shells -- Lyapunov Exponents and Methods of Their Analysis -- Reliability of Chaotic Vibrations of Euler-Bernoulli Beams with Clearance -- Analysis of Simple Nonlinear Dynamical Systems -- Mathematical Models of Micro- and Nano-Cylindrical Panels in Temperature Field -- Mathematical Models of Functionally Graded Beams in Temperature Field -- Thermoelastic Vibrations of Timoshenko Microbeams (Modified Couple Stress Theory) -- Vibrations of Size-Dependent Beams Under Topologic Optimization and Temperature Field.
Sommario/riassunto	This book is devoted to researchers and teachers, as well as graduate students, undergraduates and bachelors in engineering mechanics, nano-mechanics, nanomaterials, nanostructures and applied mathematics. It presents a collection of the latest developments in the field of nonlinear (chaotic) dynamics of mass distributed-parameter nanomechanical structures, providing a rigorous and comprehensive study of modeling nonlinear phenomena. It is written in a unique pedagogical style particularly suitable for independent study and self-education. In addition, the book achieves a good balance between Western and Eastern extensive studies of the mathematical problems of

