

SERIES EDITOR: G.M.L. GLADWELL

SOLID MECHANICS AND ITS APPLICATIONS

Mechatronics

Dynamics of Electromechanical and Piezoelectric Systems

A. Preumont

This volume treats Lagrange equations for electromechanical systems, including piezoelectric transducers and selected applications.

It is essentially an extension to piezoelectric systems of the work by Crandall et al.: "Dynamics of Mechanical and Electromechanical Systems", McGraw-Hill, published in 1968. The first three chapters contain classical material based on this and other well-known standard texts in the field, such as Methods of Analytical Dynamics by L. Meirovitch, McGraw-Hill, 1970. Some applications are new (e.g. geophone). Chapters 4 to 6 consist of new material which has not been published in a monograph before. They deal with piezoelectric systems in a unified way, starting from a Lagrangian approach.

This book will appeal to the research community and graduate students at the MSc and PhD level.

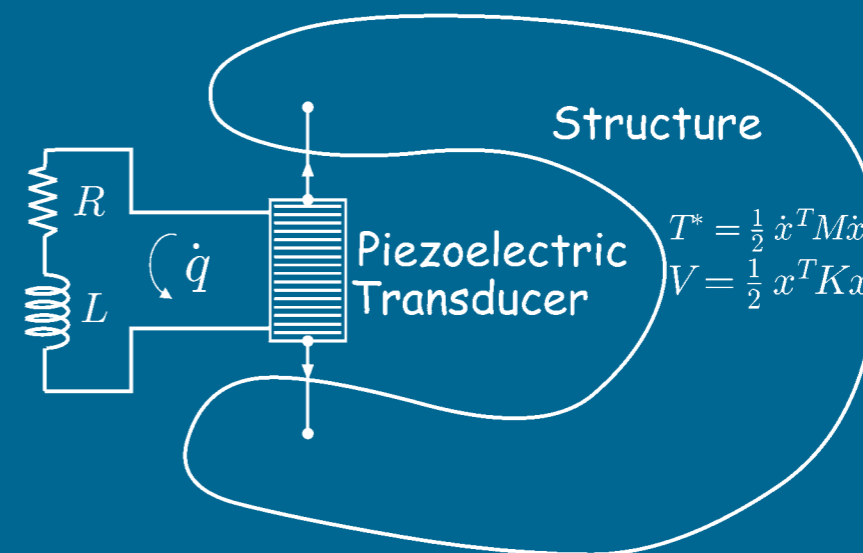
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