



Professor Li-Qun Chen

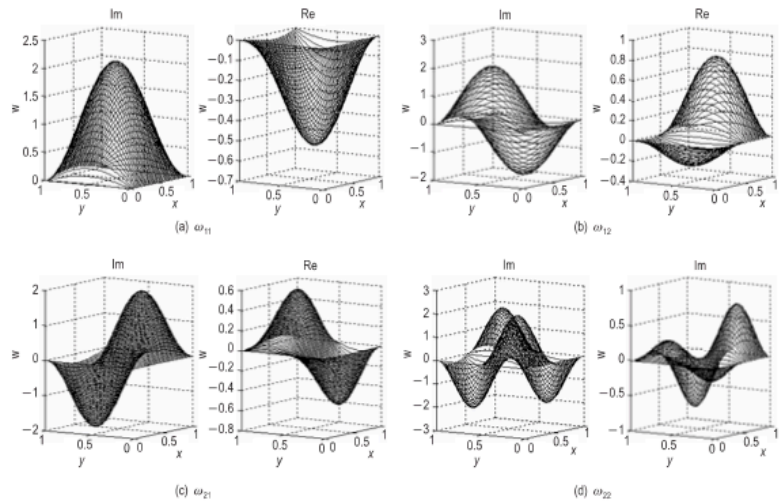


Fig. 4 The modal functions diagrams

From: You-Qi Tang and Li-Qun Chen, “Natural frequencies, modes and critical speeds of in-plane moving plates”, *Advances in Vibration Engineering*, July 2012

See:

<http://www.dvc.shu.edu.cn/Default.aspx?tabid=15116>

<https://scholar.google.com/citations?user=DPsJrA8AAAAJ&hl=zh-CN>

https://www.researchgate.net/profile/Li-Qun_Chen

School of Science, Harbin Institute of Technology, Shenzhen, China

Also:

Institute of Applied Mathematics and Mechanics, Shanghai University, China

Selected Publications:

J.T. Liu, X.D. Yang and L.Q. Chen, “Bifurcations and chaos of an axially moving plate under external and parametric excitations”, *International Journal of Structural Stability and Dynamics*, Vol. 12, No. 4, 1250023, 2012

You-Qi Tang and Li-Qun Chen, “Natural frequencies, modes and critical speeds of in-plane moving plates”, *Advances in Vibration Engineering*, July 2012

You-Qi Tang and Li-Qun Chen, “Primary resonance in forced vibrations of in-plane translating viscoelastic plates with 3:1 internal resonance”, *Nonlinear Dynamics*, Vol. 69, pp 159-172, 2012

Liu-Yang Xiong, Guo-Ce Zhang, Hu Ding and Li-Qun Chen, “Nonlinear forced vibration of a viscoelastic buckled beam with 2:1 internal resonance”, *Mathematical Problems in Engineering*, Vol. 2014, Article ID 906324

Wen-An Jiang and Li-Qun Chen, “Snap-through piezoelectric energy harvesting”, *Journal of Sound and Vibration*, Vol. 333, No. 18, pp 4314-4325, September 2014

Li-Qun Chen and Ke Li, “Equilibriums and their stabilities of the snap-through mechanism”, *Archive of Applied Mechanics*, Vol. 86, No. 3, pp 403-410, March 2016

Yan-Lei Zhang, Hui-Rong Feng and Li-Qun Chen, “Supercritical nonlinear vibration of a fluid-conveying pipe subjected to a strong external excitation”, *Shock and Vibration*, Article ID 3907498, Vol. 2016

Xiao-Ye Mao, Hu Ding and Li-Qun Chen, “Steady-state response of a fluid-conveying pipe with 3:1 internal resonance in supercritical regime”, *Nonlinear Dynamics*, Vol. 86, No. 2, pp 795-809, October 2016

Li-qun Chen and Tianchen Yuan, "Harmonic balance in the dynamic analysis of circular composite plate harvester", *Procedia IUTAM*, Vol. 22, pp 200-207, 2017

Hu Ding, Minghui Zhu, Zhen Zhang, Ye-Wei Zhang and Li-Qun Chen, "Free vibration of a rotating ring on an elastic foundation", *International Journal of Applied Mechanics*, Vol. 9, No. 4, 1750051, June 2017

Xiao-Ye Mao, Hu Ding and Li-Qun Chen, "Vibration of flexible structures under nonlinear boundary conditions", *Journal of Applied Mechanics*, Vol. 84, No. 11, November 2017

Tianchen Yuan, Jian Yang and Li-Qun Chen, "Nonlinear characteristic of a circular composite plate energy harvester: experiments and simulations", *Nonlinear Dynamics*, Vol. 90, No. 4, pp 2495-2506, December 2017

Hu Ding, Min-Hui Zhu and Li-Qun Chen, "Nonlinear vibration isolation of a viscoelastic beam", *Nonlinear Dynamics*, Vol. 92, No. 2, pp 325-349, April 2018

Xiao-Ying Xhao, Ye-Wei Zhang, Hu Ding and Li-Qun Chen, "Vibration suppression of a nonlinear fluid-conveying pipe under harmonic foundation displacement excitation via nonlinear energy sink", *International Journal of Applied Mechanics*, Vol. 10, No. 9, 1850096, September 2018

Tian-Chen Yuan, Jian Yang and Li-Qun Chen, "Nonlinear dynamics of a circular piezoelectric plate for vibratory energy harvesting", *Commun Nonlinear Sci Numer Simulat*, Vol. 59, pp 651-656, 2018

Deng-Bo Zhang, You-Qi Tang and Li-Qun Chen, "Internal resonance in parametric vibrations of axially accelerating viscoelastic plates", *European Journal of Mechanics - A/Solids*, Vol. 75, pp 142-155, May-June 2019

Yuanbin Wang, Hu Ding and Li-Qun Chen, "Vibration of axially moving hyperelastic beam with finite deformation", *Applied Mathematical Modelling*, Vol. 71, pp 269-285, July 2019

Ye-Wei Zhang, Chang Su, Zhi-Yu Ni, Jian Zang and Li-Qun Chen, "A multifunctional lattice sandwich structure with energy harvesting and nonlinear vibration control", *Composite Structures*, Vol. 221, 110875, 1 August 2019

Yuanbin Wang, Hu Ding and Li-Qun Chen, "Kinematic aspects in modeling large-amplitude vibration of axially moving beams", *International Journal of Applied Mechanics*, Vol. 11, No. 2, 1950021, 2019