Associate Professor

LI Shuting

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Background

2011-present	Associate Professor, Dept. of Mechanical, Electrical and Electronic Engineering, Interdisciplinary Faculty of Science and Engineering, Shimane University
1998-2011	Nabtesco Corporation
1998	PhD degree, Mechanical Design Engineering, Yamaguchi University
1989	MS degree, Mechanical Design Engineering, Northwestern Polytechnical University, China
1986	BS degree, Aircraft Manufacturing Engineering, Northwestern Polytechnical University, China

Research Interests

1. Machine design and machine elements
2. Strength & vibration analyses of various kinds of gears and geared mechanical systems
3. Strain wave gearing, cycloidal gear reducers and other gear devices used as joints of industry robots
4. Strength & vibration analyses of power transmissions used in helicopters, aircrafts, aerospace and wind turbines
5. The finite element methods used in engineering design
6. Processing and strength evaluation of metal materials and heat treatment technology

Key papers

1. Shuting Li, “A mathematical model and numeric method for contact analysis of rolling bearings”, Mechanism and Machine Theory, Elsevier Press, Vol. 119, 2018, pp.61-73.
2. Shuting Li, “Diaphragm stress analysis and fatigue strength evaluation of the flex-spline, a very thin-walled spur gear used in the strain wave gearing”, Mechanism and Machine Theory, Elsevier Press, Volume 104, October 2016, pp.1-16.
3. Shuting Li, “Finite element analyses for contact strength and bending strength of a pair of spur gear with machining errors, assembly errors and tooth modifications”, Mechanism and Machine Theory, Elsevier Press, Vol.42, Issue 1, 2007, pp.88-114.
4. Shuting Li, “Gear contact model and loaded tooth contact analysis of a three-dimensional, thin-rimmed gear”, Trans. ASME, Journal of Mechanical Design, Vol.124, Issue 3, 2002, pp.511-517.