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### **Research interest**

Computational solid and structural mechanics, Wrinkled membranes, Tensegrity, Non-smooth problems

- **Education**

Ph.D., Department of Engineering Mechanics, Dalian University of Technology, June, 2014

M.S., Department of Engineering Mechanics, Dalian University of Technology, June, 2011

B.S., Department of Engineering Mechanics, Chongqing University, June, 2008

- **Experience**

Lecturer, Department of Engineering Mechanics, Chongqing University, July, 2014 - present

- **Projects and funding**

“Study on stabilized algorithm for wrinkling analysis of membranes with thermo-mechanical coupling effects”, supported by NSFC, 2016-2018.

- **Publications**

- [1] Lu MK, Zhang HW, Zheng YG\*, **Zhang L**, A multiscale finite element method with embedded strong discontinuity model for the simulation of cohesive cracks in solids, Computer Methods in Applied Mechanics and Engineering, 2016, Accepted.
- [2] Wu J\*, **Zhang L**, Wan L, A mode-III crack under surface adhesion studied by non-uniform linear spring models, Acta Mechanica, 2016, Accepted.
- [3] **Zhang L\***, Zhang HT, Wu J, Yan B, Lu MK, Parametric variational principle for bi-modulus materials and its application to nacreous bio-composites, International Journal of Applied Mechanics, 2016, Accepted.
- [4] Wu J\*, Ru C, **Zhang L**, Wan L, On geometrical shape of in-plane inclusion characterized by polynomial internal stress field under uniform eigenstrains, Applied Mathematics and Mechanics, 2016, 37(9): 1113-1130.
- [5] Wu C, Yan B\*, **Zhang L**, Zhang B, Li Q, A method to calculate jump height of iced transmission lines after ice-shedding, Cold Regions Science and Technology, 2016, 125: 40-47.
- [6] Li H, Zhang HW, Zheng YG\*, **Zhang L**, A peridynamic model for the nonlinear static analysis of truss and tensegrity structures, Computational Mechanics, 2016, 57(5): 843-858.
- [7] **Zhang L\***, Dong KJ, Zhang HT, Yan B, A 3D PVP co-rotational formulation for large-displacement and small-strain analysis of bi-modulus materials, Finite Elements in Analysis and Design, 2016, 110: 20-31.

- [8] Zhou LS, Yan B\*, **Zhang L**, Zhou S, Study on galloping behavior of iced eight bundle conductor transmission lines, *Journal of Sound and Vibration*, 2016, 362: 85-110.
- [9] **Zhang L**, Gao Q, Liu Y, Zhang HW\*, An efficient finite element formulation for nonlinear analysis of clustered tensegrity, *Engineering Computations*, 2016, 33(1): 252-273.
- [10] **Zhang L\***, Zhang HW, Wu J, Yan B, A stabilized complementarity formulation for nonlinear analysis of 3D bimodular materials, *Acta Mechanica Sinica*, 2016, 32(3): 481-490.
- [11] **Zhang L\***, Lu MK, Zhang HW, Yan B, Geometrically nonlinear elasto-plastic analysis of clustered tensegrity based on the co-rotational approach, *International Journal of Mechanical Sciences*, 2015, 93: 154-165.
- [12] **Zhang L**, Gao Q, Zhang HW\*, Analysis of 2-D bimodular materials and wrinkled membranes based on the parametric variational principle and co-rotational approach, *International Journal for Numerical Methods in Engineering*, 2014, 98(10): 721-746.
- [13] Liu H, **Zhang L**, Yang DS, Zhang HW\*, An efficient multiscale method for 2D large displacement-small strain analysis of heterogeneous materials, *Computational Materials Science*, 2014, 83: 443-456.
- [14] **Zhang L**, Gao Q, Zhang HW\*, An efficient algorithm for mechanical analysis of bimodular truss and tensegrity structures, *International Journal of Mechanical Sciences*, 2013, 70: 57-68.
- [15] Zhang HW\*, **Zhang L**, Gao Q, Numerical method for dynamic analysis of two-dimensional bimodular structures, *AIAA Journal*, 2012, 50: 1933-1942.
- [16] Zhang HW\*, **Zhang L**, Gao Q, An efficient computational method for mechanical analysis of bimodular structures based on parametric variational principle, *Computers & Structures*, 2011, 89: 2352-2360.

- **Conference presentation**

- [1] **Zhang L**, Zhang HW, Gao Q, Numerical investigation of tensegrity structures using co-rotational approach and parametric variational principle, *The Fifth Asia Pacific Congress on Computational Mechanics and the Fourth International Symposium on Computational Mechanics*, Singapore, 11-14th December, 2013.
- [2] **Zhang L**, Zhang HW, Yan B, A Stabilized Algorithm for Nonlinear Analysis of Bi-modulus Composites and Wrinkled Membranes, *WCCM & APCOM*, Seoul, 24-29 July, 2016.