

## 2016 Journal Papers

1. Challamel N., Wang C.M. and Elishakoff I. (2016). "Nonlocal or gradient elasticity macroscopic models: a question of concentrated or distributed microstructure", *Mechanics Research Communications*, **71**, 25-31.
2. Eugenio, R., Zhang, H. and Wang, C.M. (2016). "Hencky bar-chain model for buckling analysis of non-uniform columns," *Structures* **6**, 73-84.
3. Yuanjun Yan, Daryl Boey, Li Theng Ng, Jan Gruber, Andrew Bettiol, Nitish Thakor, Chia-Hung Chen. (2016). "Continuous-flow *C. elegans* fluorescence expression analysis with real-time image processing through microfluidics," *Biosensors and Bioelectronics* Volume **77**, 428-434.
4. Long Qi, Ying Wang, Lei Shen\* and Yihong Wu\*. (2016). "Chemisorption-induced n-doping of MoS<sub>2</sub> by oxygen," *Applied Physics Letters*, **108**, 063103
5. Vellayappan Dheivanayagam S/O Ganesan, Jiajun Linghu, Yuan Ping Feng, Chun Zhang and Lei Shen\*. (2016). "Heterostructures of phosphorene and transition metal dichalcogenides for excitonic solar cells: A first-principles study," *Applied Physics Letters*, **108**
6. Burhan, M., K.C. Ng and K.J.E. Chua\*. (2016). "Simulation and Development of a Multi-leg Homogenizer Concentrating Assembly for Concentrated Photovoltaic (CPV) System with Electrical Rating Analysis," *Energy Conversion and Management*, **116**, 58-71.
7. Lin, J., T. Kyaw, D.T. Bui, K.C. Ng and K.J.E. Chua\*. (2016). "Study on dew point evaporative cooling with counter-flow configuration via an experimentally-validated model," *Energy Conversion and Management*, **109**, 153-165.
8. Cui, X., K.J.E. Chua\*, R. I. Md and M. Balaji. (2016). "Theoretical analysis of a liquid desiccant based indirect evaporative cooling system," *Energy*, **95**, 303-312.
9. Aqdas, N, D.T. Bui and K.J.E. Chua\*. (2016). "Water vapor permeation and dehumidification performance of poly (vinyl alcohol)/lithium chloride composite membranes," *Journal of Membrane Science*, **498**, 254-262.
10. Challamel, N., Hache, F., Elishakoff, I. and Wang, C.M. (2016). "Buckling and vibrations of microstructured rectangular plates considering phenomenological and lattice-based nonlocal continuum models," *Composite Structures*, **149**, 145-156.
11. Jia Hao Soh, Mengxue Wu, Guoqiang Gu, Lianwei Chen, and Minghui Hong. (2016). "Temperature-controlled photonic nanojet via VO<sub>2</sub> coating," *Appl. Opt.* **55**, 3751-3756.
12. Y.J. Jin, L.W. Chen, M.X. Wu, X.Z. Lu, B. Zhou and M.H. Hong (2016). "Enhanced saturable absorption of the graphene oxide film via photonic nanojets," *Optical Materials Express*, **6**(4), 1114-1121.
13. Challamel, N., Kocsis, A., Wang, C.M. and Lerbet, J. (2016). "From Ziegler to Beck's column: a nonlocal approach," *Archive of Applied Mechanics*, **86**(6), 1095-1118.
14. Ying Wang, Long Qi, Lei Shen, and Yihong Wu. (2016). "Surface defect passivation of MoS<sub>2</sub> by sulfur, selenium, and tellurium" *Journal of Applied Physics*, **119**, 154301.
15. Jun Zhou, Ming Yang, Lei Shen, Qing Yun Wu, Lei Xu, Yuan Ping Feng, and Andriwo Rusydi. (2016). "Tuning polarization states and interface properties of BaTiO<sub>3</sub>/SrTiO<sub>3</sub> heterostructure by metal capping layers" *Physical Review B*, **93**, 155167.
16. Challamel, N., Wang, C.M. and Elishakoff, I. (2016). "Nonlocal or gradient elasticity macroscopic models: a question of concentrated or distributed microstructure?" *Mechanics Research Communications*, **71**, 25-31.
17. Zhang, H., Wang, C.M., Ruocco, E. and Challamel, N. (2016). "Hencky bar-chain model for buckling and vibration analyses of non-uniform beams on variable elastic foundation," *Engineering Structures*, **126**, 252-263.
18. Challamel, N, Reddy, J.N. and Wang, C.M. (2016). "Eringen's stress gradient model for bending of nonlocal beams," *Journal of Engineering Mechanics, ASCE*, **142**(12) 04016095.

19. Wang, C.M., Zhang, H. Challamel, N. and Duan, W.H. (2017). "On boundary conditions for buckling and vibration of nonlocal beams," *European Journal of Mechanics - A/Solids*, **61**, 73-81.
20. Wang, C.M., Ke, L.L., Roy Chowdhury, A.N., Yang, J., Kitipornchai, S. and Fernando, D. (2017). "Critical examination of midplane and neutral plane formulations for vibration analysis of FGM beams," *Engineering Structures*, **130**, 275-281.
21. Zhang, H., Wang, C.M. and Challamel, N. (2016). "Buckling and vibration of Hencky bar-chain with internal elastic springs," *International Journal of Mechanical Sciences*, **119**, 383-395.
22. Wang, C.M. (2016). "VLFS technology for land creation on the sea," *Mechanics of Structures and Materials: Advancements and Challenges*, Edited by Hong Hao and Chunwei Zhang, **Vol. 1**, pp. 53-62, Taylor and Francis Group, London.