

2011 Journal Papers

1. Matthew Peloso, Lew Jen Sern, Thorsten Trupke, Marius Peters, Roland Utama and Armin Aberle, (2011). "Evaluating the electrical properties of silicon wafer solar cells using hyperspectral imaging of luminescence," *Applied Physics Letters*, **99**, Art. No. 221915.
2. Gao, R.P., Tay, Z.Y., Wang, C.M. and Koh, C.G. (2011). "Hydroelastic response of very large floating structure with a flexible line connection," *Ocean Engineering*, **38**(17-18), 1957-1966.
3. Chen, S.J., Collins, F.G., Macleod, A.J.N., Pan, Z., Duan, W.H. and Wang, C.M. (2011). "Carbon nanotube-cement composites: a retrospect," *IES Journal Part A: Civil and Structural Engineering*, **4**(4), 254-265.
4. Wang, C.Y. and Wang, C.M. (2011). "Exact solutions for vibrating rectangular membranes placed in a vertical plane," *International Journal of Applied Mechanics*, **3**(3), 625-631.
5. Wang, C.M., Tay, Z.Y., Chowdhury, A.N.R., Duan, W.H., Zhang, Y.Y. and Silvestre, N. (2011). "Examination of cylindrical shell theories for buckling of carbon nanotubes," *International Journal of Structural Stability and Dynamics*, **11**(6), 1035-1058.
6. Agarwala, S., Lim, Z.H., E. Nicholson, Ho, G.W. (2011). "Controlled synthesis of iron oxide with 3D nanostructures promising photovoltaic and room temperature gas sensing applications." *Nanoscale* (accepted).
7. Ong, W.L., Zhang, C. and Ho, G.W. (2011). "Ammonia Plasma Modification Towards A Rapid and Low Temperature Approach for Tuning Electrical Conductivity of ZnO Nanowires on Flexible Substrate," *Nanoscale*, **3**, 4206.
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10. Chua, K.J. (2011). "Computer simulations on multiprobe freezing of irregularly shaped tumors," *Computers in Biology and Medicine*, **41**(7), 493-505.
11. Yang, W.M. Chou, S.K., Chua, K.J., Li, J., Zhao, X. (2011) "Research on modular micro combustor-radiator with and without porous media," *Chemical Engineering Journal*, **168**(2), 799-802.
12. Chua, K.J. and Ho, C.A. (2011). "Integrating renewable energy technologies to support building trigeneration - a multi-criteria analysis," *Renewable Energy*, (accepted).
13. Mirkhani, H. and Joshi, S.P. (2011). "Crystal plasticity of nano-twinned microstructures: a discrete twin approach for copper," *Acta Materialia*, **59**(14), 5603-5617.
14. Aghababaei, R and Joshi, SP (2011) Grain size-inclusion size interaction in metal matrix composites using mechanism-based gradient crystal plasticity," *International Journal of Solids and Structures*, **48**(18), 2585-2594.
15. Aghababaei, R., Joshi, S.P. and Reddy, J.N. (2011). "Nonlocal continuum crystal plasticity with internal residual stresses," *Journal of the Mechanics and Physics of Solids*, **59**, 713-731.
16. Abhilash, A.S., Joshi, S.P., Mukherjee, A. and Mishnaevsky, L.Jr. (2011), "Micromechanics of diffusion induced damage evolution in reinforced polymers," *Composites Science and Technology*, **71**, 333-342.

17. Zhang, Y.Y., Wang, C.M., Cheng, Y. and Xiang, Y. (2011). "Mechanical properties of bilayer graphene sheets coupled by sp^3 bonding," *Carbon*, **49**, 4511-4517.
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19. Kevin, M., Ong, W.L., Lee, G.H. and Ho, G.W. (2011). "Formation of hybrid structures: copper oxide nanocrystals templated on ultralong copper nanowires for open network sensing at room temperature," *Nanotechnology*, **22**, 235701.
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22. Aghababaei, R., Joshi, S.P. and Reddy, J.N. (2011). "Nonlocal continuum crystal plasticity with internal residual stresses," *Journal of the Mechanics and Physics of Solids*, **59**, 713-731.
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26. Chou, S.K., Yang, W.M., Chua, K.J. Li, J., Li Z.W., and Zhang, K.L. (2011). "Development of micro power generators - A review," *Applied Energy*, **88**(1), 1-16.
27. Agarwala, S., Thummalakunta, L.N.S.A., Cook, C.A., Peh, C.K.N., Wong, A.S.W., Ke, L. and Ho, G.W. (2011). "Co-existence of LiI and KI in a filler free Quasi solid state electrolyte for efficient and stable dye sensitized solar cell," *J. Power Sources*, **196**, 1651.
28. Silvestre, N., Wang, C.M., Xiang, Y. and Zhang Y.Y. (2011). "Sanders shell model for buckling of single-walled carbon nanotubes with small aspect ratio," *Composite Structures*, **93**(7), 1683-1691.
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