

DMSM Proposal References List

1. Dean, J., C.S. Dunleavy, P.M. Brown, and T.W. Clyne, Energy Absorption during Projectile Perforation of Thin Steel Plates and the Kinetic Energy of Ejected Fragments. *Int. J. Impact Engineering*, 2009. **36**(10-11): p. 1250-1258.
2. Dean, J., A. S-Fallah, P.M. Brown, L.A. Louca, and T.W. Clyne, Energy absorption during projectile perforation of lightweight sandwich panels with metallic fibre cores. *Composite Structures*, 2011. **93**(3): p. 1089-1095.
3. Oberg, E.K., J. Dean, and T.W. Clyne, Effect of inter-layer toughness in ballistic protection systems on absorption of projectile energy. *International Journal of Impact Engineering*, 2015. **76**: p. 75-82.
4. Brown, P.M., J. Dean, and T.W. Clyne, Stainless Steel Sandwich Panels for Lightweight Crash-resistant Applications. *Materials World*, 2007. **15**: p. 26-28.
5. Dean, J., C. Taltavull, and T.W. Clyne, Influence of the Composition and Viscosity of Volcanic Ashes on their Adhesion within Gas Turbine Aeroengines. *Acta Materialia*, 2016. **109**: p. 8-16.
6. Taltavull, C., J. Dean, and P.T.W. Clyne, Adhesion of Volcanic Ash Particles under Controlled Conditions and Implications for their Deposition in Gas Turbines. *Adv. Eng. Materials*, 2015. DOI: [10.1002/adem.201500371](https://doi.org/10.1002/adem.201500371).
7. Li, X.D. and B. Bhushan, A review of nanoindentation continuous stiffness measurement technique and its applications. *Materials Characterization*, 2002. **48**(1): p. 11-36.
8. Tabor, D., *The hardness of metals*. 1951, Oxford: Oxford University press. 175.
9. Pelletier, H., Predictive Model to Estimate the Stress-Strain Curves of Bulk Metals using Nanoindentation. *Tribology International*, 2006. **39**: p. 593-606.
10. Heinrich, C., A.M. Waas, and A.S. Wineman, Determination of material properties using nanoindentation and multiple indenter tips. *Int. J. Solids and Structures*, 2009. **46**: p. 364-376.
11. Dean, J., J.M. Wheeler, and T.W. Clyne, Use of Quasi-Static Nanoindentation Data to Obtain Stress-Strain Characteristics for Metallic Materials. *Acta Materialia*, 2010. **58**: p. 3613-3623.
12. Dean, J., J. Campbell, G. Aldrich-Smith, and T.W. Clyne, A Critical Assessment of the "Stable Indenter Velocity" Method for Obtaining the Creep Stress Exponent from Indentation Data. *Acta Materialia*, 2014. **80**: p. 56-66.
13. Dean, J., A. Bradbury, G. Aldrich-Smith, and T.W. Clyne, A procedure for extracting primary and secondary creep parameters from nanoindentation data. *Mechanics of Materials*, 2013. **65**: p. 124-134.
14. Muir Wood, A.J. and T.W. Clyne, Measurement and Modelling of the Nanoindentation Response of Shape Memory Alloys. *Acta Materialia*, 2006. **54**(20): p. 5607-5615.
15. Zhang, Y., Y. Cheng, and D. Grummon, Finite element modeling of indentation-induced superelastic effect using a three-dimensional constitutive model for shape memory materials with plasticity *J. Appl. Phys.*, 2007. **101**: p. Art. 053507.
16. Reed, J.L., J. Dean, G. Aldrich-Smith, and T.W. Clyne, A Methodology for Obtaining Plasticity Characteristics of Metallic Coatings via Instrumented Indentation. *Int. J. Solids and Structures*, 2015. **80**: p. 128-136.
17. Muir Wood, A.J., S. Sanjabi, Y.Q. Fu, Z.H. Barber, and T.W. Clyne, Nanoindentation of Binary and Ternary Ni-Ti-based Shape Memory Alloy Thin Film. *Surface & Coatings Technology*, 2008. **202**: p. 3115-3120.
18. Cao, X., X. Cao, and Q. Zhang, Nanoscale Indentation Behaviour of Pseudo-elastic Ti-Ni Thin Films. *Journal of Alloys and Compounds*, 2008. **465**: p. 491-496.
19. Fu, Y., W. Huang, H. Du, X. Huang, J. Tan, et al., Characterization of TiNi Shape Memory Alloy Thin Films for MEMS Applications. *Surf. & Coat. Techn.*, 2001. **145**: p. 107-112.

20. Zhang, Y., Y.T. Cheng, and D.S. Grummon, *Novel Tribological Systems using Shape Memory Alloys and Thin Films*. *Surface & Coatings Technology*, 2007. **202**: p. 998-1002.
21. den Toonder, J., J. Malzbender, G. de With, and R. Balkenende, *Fracture toughness and adhesion energy of sol-gel coatings on glass*. *J. Mater. Res.*, 2002. **17**(1): p. 224-233.
22. Quinn, G.D. and R.C. Bradt, *On the Vickers indentation fracture toughness test*. *J. Amer. Ceram. Soc.*, 2007. **90**(3): p. 673-680.
23. Chen, J., *On the determination of coating toughness during nanoindentation*. *Surface & Coatings Technology*, 2012. **206**(13): p. 3064-3068.
24. Wasmer, K., C. Pouvreau, J.M. Breguet, J. Michler, D. Schulz, et al., *Nanoindentation cracking in gallium arsenide: Part I. In situ SEM nanoindentation*. *J. Mater. Res.*, 2013. **28**(20): p. 2785-2798.