

Lars Pilgaard Mikkelsen

List of publications

Journal papers with peer review

- Løvdal, A, Laursen, L.L., Andersen, T.L., Madsen B. and Mikkelsen, L.P. Influence of temperature on mechanical properties of jute/biopolymer composites". *J Appl Polym Sci*, DOI: 10.1002/app.38387, 2012.
- Oddershede, J., Camin, B., Schmidt, S., Mikkelsen, L.P., Sørensen, H.O., Lienert, U., Poulsen, H.F. and Reimers, W., Measuring the stress field around an evolving crack in tensile deformed Mg AZ31 using three-dimensional X-ray diffraction', *Acta Materialia*, **60**, 3570-3580, 2012.
- Mikkelsen, L.P. and Goutianos, S., Suppression of plastic deformation at blunted crack-tips due to strain gradient effects, *Int. J. Solids and Structures*, **46**, 4430-4436, 2009.
- Fredriksson, P., Gudmundson, P., and Mikkelsen, L.P. Finite element implementation and numerical issues of strain gradient plasticity with application to metal matrix composites. *Int. J. Solids and Structures*, **46**, 3977-3987, 2009.
- Kristensen, R.F., Nielsen, K.L. and Mikkelsen, L.P., Numerical studies of shear damped composite beams using a constrained damping layer, *Composite Structures* **83**, 304-311, 2008.
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- Mikkelsen, L.P., Necking in rectangular tensile bars approximated by a 2-D gradient dependent plasticity model. *Eur. J. Mech. A/Solids* **18**, 805-818, 1999.
- Mikkelsen, L.P. and Tvergaard, V., A nonlocal two-dimensional analysis of instabilities in tubes under internal pressure. *J. Mech. Phys. Solids* **47**, 953-969, 1999.
- Mikkelsen, L.P., A numerical axisymmetric collapse analysis of viscoplastic cylindrical shells under axial compression. *Int. J. Solids and Structures* **36**, 643-668, 1999.
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- Mikkelsen, L.P., Post-necking behaviour modelled by a gradient dependent plasticity theory. *Int. J. Solids and Structures* **34**, 4531-4546, 1997.
- Mikkelsen, L.P., Elastic-viscoplastic buckling of circular cylindrical shells under axial compression. *Eur. J. Mech. A/Solids* **14**, 901-920, 1995.
- Mikkelsen, L.P., On the analysis of viscoplastic buckling. *Int. J. Solids and Structures* **30**, 1461-1472, 1993.

Other papers

- Mikkelsen, L.P. and Raghavalu Thirumalai, D.P. The Influence of Steel Fiber Plasticity on Kink-Band Formation, Proceedings of XXIII International Congress on Theoretical and Applied Mechanics. 2012.
- Mikkelsen, L.P., Beck, J.I., Jespersen, F.N. Compression strength of continuous steel fiber reinforced polymers, ICCM18, Korea, 2011.
- Mikkelsen, L.P., Skorini, R.I, Andersen, T. Biomechanical study of a drop foot brace, 2011 Simulia Customer Conference, Simulia, Barcelona, Spain, 2011.
- Markussen, C.M., Bottoli, F., Pignatti, L., Madsen, B., Mikkelsen, L.P., Brøndsted, P. and Andersen, T.L. 2011, Applying the MECO principle to assess the environmental impact of conventional and bio-based composite materials in a case study of a small-scale wind turbine blade, Risoe International Symposium on Materials Science. Proceedings, vol 32, pp. 365-375.
- Mikkelsen, L.P., N. Lynnerup, Professor Plum - in the Library - with a Wrench : The Forensic Study of Skull Fracture with Realistic Simulation, Insights, Sep/Oct, page 25, Simulia, 2010.
- Mikkelsen, L.P., K.D. Sørensen and H.M. Jensen, A smeared-out material model predicting compressive failure of composites, NAFEMS NORDIC Seminar: Simulating Composite Materials and Structures, 4 pages, Esbjerg, 2010.

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- Megniss, M.; Brøndsted, P.; Mikkelsen, L.P., Damage evolution in laminated composite materials. In: *Materialeopførsel og skadesanalyse. Dansk Metallurgisk Selskabs vintermøde, Kolding (DK)*, 7-9 Jan 2004. (eds. Somers, M.A.J.), DMS, Lyngby, 33-42, 2004.
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- Mikkelsen, L.P., Non-linear finite element modelling, Risø-R-1625, Risø, Roskilde, Denmark, 12p, 2007.
- Sørensen, B.F. and Mikkelsen, L.P., Design med kompositter – beregningsmetoder (in Danish), Risø-R-1530, Risø, Roskilde, Denmark, 91p, 2006.

- Mikkelsen, L.P., *Viscoplastic analysis of stability and collapse for cylindrical shells (in Danish)*. DCAMM-report s 70 (Ph.D. thesis), Technical University of Denmark, Lyngby, Denmark, 1995.
- Mikkelsen, L.P., *Viscoplastic buckling of columns, plates and shells* (in Danish). Dept. of Solid Mechanics (Master thesis), Technical University of Denmark, Lyngby, Denmark, 1992.

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- Sørensen, B.F., Mikkelsen, L.P., Lilholt, H., Goutianos, S. and Abdul-Mahdi, F.S. Interface Design of Polymer Matrix Composites – Mechanics, Chemistry, Modelling and Manufacturing. Proceedings of the 28th Risø International Symposium on Materials Science. Risø National Laboratory, Roskilde, Denmark, ISBN 978-87-550-3626-0, 303 p, 2007.
- Lilholt, H.; Madsen, B.; Andersen, T.L., Mikkelsen, L.P., Thygesen, A., *Polymer Composite Materials for Wind Power Turbines*. Proceedings. 27. Risø international symposium on Materials Science, Risø (DK), 4-7 Sep 2006. (Risø National Laboratory, Roskilde, 2006) 375 p., 2006
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