Publication List, Niclas Strömberg

Citations, Scopus: 404 (2012-03-15)

H-factor, Scopus: 9 (2012-03-15)

Master of Science Thesis


Licentiate Thesis


Doctoral Dissertation


Refereed Journal Articles

Publications during my Ph.D.-period, 1993-1997 (5 papers)


Publications after my Ph.D.-period, 2000 until present (16 papers)


**Refereed Articles in Conference Proceedings**

*Publications during my Ph.D.-period, 1993-1997 (3 papers)*


C3 N. Strömberg, Finite element treatment of thermoeelastic wear problems, in the proceedings of the IUTAM-Symposium on Unilateral Multibody Dynamics, Munich, Germany, August 3-7, 1998.

Publications after my Ph.D.-period, 2000 until present (30 papers)


C5 N. Strömberg, TriLab - a tool for simulating tribological systems, in the proceedings of PTG03, ASME/AGMA, September 2-6, Chicago, USA, 2003.

C6 N. Strömberg, TriLab - a toolbox for tribological systems, in the proceedings of the Nordic MATLAB conference, October 21-22, Copenhagen, Denmark, 2003.


C8 E. Gustafsson & N. Strömberg, Structural optimization of castings by using ABAQUS and Matlab in the proceedings of the Seminar on Competent Design by Castings (GJUTDESIGN -2005), June 13-14, Espoo, FINLAND, 2005

C9 N. Strömberg, Contact, impact and rolling of a nonlinear elastic body on rigid foundations, in the proceedings of Multibody Dynamics, International Conference on Advances in Computational Multibody Dynamics, June 21-24, Madrid, Spain, 2005.

C10 N. Strömberg & J.F. Massana, A soft contact formulation for modelling thin coatings, in the proceedings of Contact/Surface, the Seventh International Conference on Computer Methods and Experimental Measurements for Surface Effects and Contact Mechanics, September 5-7, Bologna, Italy, 2005.


C12 N. Strömberg, Frictional Contact/Impact between a Hyperelastic Body and Moving Rigid Obstacles, in the proceedings of the 3rd European Conference on Computational Mechanics, June 5-9, Lisbon, Portugal, 2006.

C13 E. Gustafsson & N. Strömberg, Successive Response Surface Methodology by using Neural Networks, in the proceedings of the 7th World Congress on Structural and Multidisciplinary Optimization, May 21-25, Seoul, Korea, 2007.


C15 E. Gustafsson, M. Hofwing & N. Strömberg, Simulation and Measurement of Residual Stresses in a Stress Lattice, in the proceedings of the 2nd International Conference of Simulation and Modelling of Metallurgical Processes
in Steelmaking, September 12-14, Austria, 2007.


C19 N. Strömberg & A. Klarbring, Topology Optimization of Structures with Contact Constraints by using a Smooth Formulation and a Nested Approach, in the proceedings of the 8th World Congress on Structural and Multidisciplinary Optimization, June 1-5, Lisbon, Portugal, 2009.

C20 M. Hofwing & N. Strömberg, D-optimality of Non-Regular Design Spaces by using a Genetic Algorithm, in the proceedings of 8th World Congress on Structural and Multidisciplinary Optimization, June 1-5, Lisbon, Portugal, 2009.

C21 N. Strömberg, Topology Optimization of Non-linear Elastic Structures by using SLP, the proceedings of the 35th Design Automation Conference, ASME, August 30-September 2, San Diego, USA, 2009.

C22 M. Hofwing & N. Strömberg, Robustness of Residual Stresses in Castings and an Improved Process Window, the proceedings of the 35th Design Automation Conference, ASME, August 30-September 2, San Diego, USA, 2009.


C28 N. Strömberg, RBDO with Non-Gaussian Variables by using a LHS- and SORM-based SLP approach and Optimal Regression Models, in the proceedings

Abstracts in Conferences

Publications during my Ph.D.-period, 1993-1997 (5 abstracts)

A4 N. Strömberg, A Newton algorithm for fretting problems, Euromech Colloquium 351, Systems with Coulomb friction, Vadstena, Sweden, August 5-7, 1996.

Publications after my Ph.D.-period, 2000 until present (12 abstracts)

Teaching materials


Books

N. Strömberg, Nonlinear Finite Element Analysis and Design Optimization
for Mechanical Engineers, 329 pages manuscript to a book in English, 2012. This manuscript is used in the following two graduate courses: Non-linear FEA (TOFD28) and Design Optimization (TODD28) on the master programme in Product Development at JTH. The book is free and can be downloaded from http://www.fema.se.

Computer Programs

Topo4abq – a Matlab toolbox for topology optimization problems, http://www.fema.se, N. Strömberg, 2012. This toolbox is used in the graduate course Design Optimization (TODD28) on the master programme in Product Development at JTH.
Meta4abq – a Matlab toolbox for surrogate based design optimization, http://www.fema.se, N. Strömberg, 2012. This toolbox is used in the graduate course Design Optimization (TODD28) on the master programme in Product Development at JTH.

Movies

http://www.youtube.com/watch?v=7Qi3GoCeLb4 – a Youtube movie demonstrating the magnitudes of residual stresses that might be developed during solidification of castings.