

Submitted papers and papers in manuscript

A. Jedenmalm, H. Olivecrona, L. Olivecrona, M. E. Noz and A. Stark, "A new approach for assessment of acetabular cup wear with computed tomography: a phantom study", accepted for publication in *Acta Orthopaedica*

G. Engberg and L. Lissel, "A physically based microstructure model for predicting the microstructural evolution of a C-Mn steel during and after hot deformation", submitted to *Steel Res. Int.*

L. Lissel, "Modelling the microstructural evolution of a Nb microalloyed steel during and after hot deformation", in manuscript

S. Riljak, "A Finite Element Code for Simplified Simulations of Shape Rolling", in manuscript

K. Nordén, and S. Jonsson, "Experimental and numerical study of inner deformation during shape rolling of an M2 high speed steel"

M. Filipović and S. Jonsson, "Experimental and Numerical study of the Evolution of Artificial Inner Defects in Stainless Steel rolled in a Wire Rod Block"

P. W. Olupot, S. Jonsson, and J. K. Byaruhanga "Effects of Mixing Proportions and Firing Temperature on Properties of Electric Porcelain from Ugandan Minerals", Accepted for publication in *Industrial Ceramics*

Publications in scientific journals

2008

M. Hoseini, A. Jedenmalm and A. Boldizar, "Tribological investigation of coatings for artificial joints", *Wear* 264 (2008) 958.

2007

M. Dalborg, K. Jacobson and S. Jonsson, "Methods for determining the spatial distribution of oxidation in ultra-high molecular-weight polyethylene prostheses" *Polymer Degradation and Stability*, 92, (2007) 437-447.

K. Nordén and S. Jonsson, "A study of Surface Deformation during Wire-Rod Rolling of High Speed Steels using Experimental and Computational Techniques", *Steel Res. Int.* 78 (2007) 876-883

2006

A. Jedenmalm, W. Leardini, M. Zavalloni, A. Toni, S. Affatato, Effect of Head Surface Roughness and Sterilization Method on Wear of UHMWPE Acetabular Cups: Preliminary Hip Joint Simulator Results, Accepted to ESDA in Torino, Italy, 4th to 7th July 2006.

Peter W. Olupot, Stefan Jonsson, Joseph K. Byaruhanga, "Characterization of Feldspar and Quartz Raw Materials in Uganda for Manufacture of Electrical Porcelains", *J. Australasian Cer. Soc.* 42 (2006) 29-35.

J. B. Kirabira, G. Wijk, S. Jonsson, J. K. Byaruhanga, "Fireclay Refractories from Ugandan Kaolinitic Minerals", *Steel Res. Int.* 77 (2006), no.8, 531-536.

M. Filipović, C. Eriksson and H. Överstam, "Behaviour of Surface Defects in Wire Rod Rolling", *Steel Res. Int.* 77 (2006) 439-444.

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M. Hoseini, A. Jedenmalm, and A. Boldizar, Tribological Investigation of Coatings for Artificial Joints, submitted to *Wear* in May 2005

L. Olivecrona, A. Jedenmalm, P. Aspelin, L. Weidenhielm, M.E. Noz, G.Q. Maguire JR, M.P. Zeleznik and H. Olivecrona, Assessing Wear of the Acetabular Cup Using Computed Tomography: an ex vivo Study, *Acta Radiologica*, 8 (2005), pp.852-857.

J. B. Kirabira, S. Jonsson and J. K. Byaruhanga, Powder Characterization of High Temperature Ceramic raw materials in the Lake Victoria Region, *Sil. Ind.* 70 (2005), pp. 127-134.

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J.B. Kirabira, S. Jonsson, J.K. Byaruhanga, Production of firebrick refractories from kaolinitic clays of the Lake Victoria Region, *J. Aust. Ceram. Soc.*, 40 (2), pp. 12-19.

Dilip Chandrasekaran, Mikael Nygård, 2004, Comparison of surface displacement measurements in a ferritic steel using AFM and non-local plasticity, *Materials Science & Engineering A*, Vol 365/1-2 pp. 191-195.

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Dilip Chandrasekaran and Mikael Nygård, 2003, A Study of the Surface Deformation Behaviour at Grain Boundaries in an Ultra Low-Carbon Steel, *Acta Materialia*, vol. 51, pp. 5375-5384.

Conferences

2007

M. Tehler and S. Jonsson, "A Material Model for Simulating Volume Changes during Phase Transformations", COMSOL conference, Grenoble, France 23-24 Oct. 2007.

2006

A. Jedenmalm, W. Leardini, M. Zavalloni and S. Affatato, "Effect of head surface roughness and sterilization method on wear of uhmwpe acetabular cups: Preliminary hip joint simulator results", Proc. 8th Biennial ASME Conf. on Eng. Syst. Design and Analysis, ESDA2006, Torino, Italy, July 4-7, 2006.

2005

S. Riljak, "Prediction of Roll Force and Roll Torque in Shape Rolling", Proc. 8:th int. conf. on Techn. of Plast. (ICTP), Verona, Italy, Oct. 9-13, 2005.

L. Lissel and G. Engberg, "Prediction of microstructural behavior during hot rolling", Proc. 8:th int. conf. on Techn. of Plast. (ICTP), Verona, Italy, Oct. 9-13, 2005.

A Jedenmalm, L Olivecrona, H Olivecrona, S Jonsson, A Stark, L Weidenhielm, Verifiering av nötningsmätningar med 3D-CT i acetabularkomponenten i en höftledsprotos, Medicinteknikdagarna 2005, September 27-28, 2005, Södertälje, Sweden

L. Olivecrona, A. Jedenmalm, H. Olivecrona, L. Weidenhielm, S. Jonsson, M. E. Noz, G. Q. Maguire, M. P. Zeleznik, CAN WEAR OF THE ACETABULAR CUP BE ASSESSED WITH CT? Orthopaedic Research Society Annual Meeting Transactions, Vol.30, February 20-23, 2005, Washington D.C., USA.

J. B. Kirabira, J.K. Byaruhanga, S. Jonsson, G.Wijk, "Investigation of Ugandan kaolinitic minerals for manufacture of fireclay refractories", 48:th Int. Colloquium on Refractories, Aachen, Germany, 28-29 Sept. 2005, stahl und eisen, special (2005) 99-106.

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