

LIST OF PUBLICATIONS

BOOKS EDITED

1. S. Dattagupta, A. El-Azab, S.B. Krupanidhi, S. Noronha, S. A. Shivashankar and M. Zaiser (Eds.) *Proceedings of the International conference on Statistical Mechanics of Plasticity and Related Instabilities*, Proceedings of Science 2006 (Online publication, total 287 pages).
2. M. Aindow, M. Asta, M.V. Glazov, D.L. Medlin, A.D. Rollett and M. Zaiser (Eds.) *Influences of Interface and Dislocation Behavior on Microstructure Evolution*, MRS Symposium Proceedings Vol. 652, MRS, Warrendale (PA) 2001 (348 pages).

BOOK CHAPTERS

3. S. Zapperi, M.-C. Miguel, P. Moretti and M. Zaiser, *Jamming and yielding of dislocations: From crystal plasticity to superconducting vortex flow*. In: *Jamming, Yielding and Irreversible Deformation in Condensed Matter*, Eds. M.-C. Miguel and J.M. Rubí, Springer, Lecture Notes in Physics 688, Heidelberg 2006, p. 189-205.
4. V. Koutsos, R. J. Cole, M. Zaiser, J. R. Blackford, F. Madani Grasset, C. Kratiras, D. S. Roseburgh, and L. Cuthbertson, *Investigation of Materials and their Surfaces Using Reflection Anisotropy Spectroscopy*. In: *Focus on Surface Science Research*, Ed. C. P. Norris, Nova Science Publishers, Hauppauge 2006, pp. 99-123.
5. M. Zaiser, *Dislocation Patterns in Crystalline Solids – Phenomenology and Modelling*. In: *Crystal Growth - From Fundamentals to Technology*, Eds. G. Müller, J.-J. Metois and P. Rudolph, Elsevier, Amsterdam 2004, p. 215-238.
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9. O. Kapetanou, D. Weygand, M. Zaiser, *Stress and strain fluctuations in plastic deformation of crystals with disordered microstructure*, *J. Stat. Mech. Theory Exp.* 2015, P08009 (2015).
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11. S. Sandfeld and M. Zaiser, *Pattern formation in a minimal model of continuum dislocation plasticity*, Modelling and Simulation in Materials Science and Engineering 23, 065005 (2015).
12. S. Liebenstein, S. Sandfeld and M. Zaiser, *Higher Order Continuum Modelling for Predicting the Mechanical Behaviour of Solid Foams*, Proceedings in Applied Mathematics and Mechanics 14, 315 – 316 (2014)
13. S. Lennartz, I.G. Main, M. Zaiser and C.C. Graham, *Acceleration and localisation of sub-critical crack growth in a natural composite material*, Physical Review E 90, 052401 (2014).
14. X. Zhang, K.E. Aifantis, D. Weygand, J. Senger and M. Zaiser, *Internal length scale and grain boundary yield strength in gradient models of polycrystal plasticity: How do they relate to the dislocation microstructure?* Journal of Materials Research 29, 2116-2128 (2014).
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