

Publications 2017

Demler, E.; Gerstein, G.; Dalinger, A.; Epishin, A.; Rodman, D.; Nürnberger, F.:
Influence of high-current-density impulses on the compression behavior: experiments with iron and a nickel-based alloy

Journal of Materials Engineering and performance, 26, 1, 2017, pp. 177-184

Liu, ZD; Schade, R.; Luthringer, B.; Hort, N.; Rothe, H.; Müller, S.; Liefeith, K.; Willumeit-Romer, R.; Feyerabend, F.:

Influence of the microstructure and silver content on degradation, cytocompatibility, and antibacterial properties of magnesium-silver alloys in vitro

Oxidative Medicine and Cellular Longevity, 2017,

<https://www.hindawi.com/journals/omcl/2017/8091265/>

Marquez, J.; Stange, H.; Hages, J.; Schäfer, N.; Levchenko, S.; Giraldo, S.; Saucedo, E.; Schwarzbürger, K.; Abou-Ras, D.; Redinger, A.; Klaus, M.; Genzel, C.; Unold, T.; Mainz, R.:

Chemistry and dynamics of Ge in kesterite: towards band gap graded absorbers

Chemistry of Materials, 29, 21, 2017, pp. 9399-9406

Midtlyng, J.; Epishin, A.; Petrushin, N.; Link, T.; Nolze, G.; Svetlov, I.; Reimers, W.:

Creep behavior of a γ' -strengthened Co-base alloy with zero

γ/γ' -lattice misfit at 800 °C, 196 MPa

Journal of Materials Research, 32, 24, 2017, pp. 4466-4474

Paulisch, M. C.; Treff, A.; Driehorst, I.; Reimers, W.:

The influence of natural aging and repeated solution annealing on microstructure and mechanical properties of hot extruded alloys Al 7020 and Al 7175

Materials Science & Engineering A, <https://doi.org/10.1016/j.msea.2017.10.048>

Risse, M.; Lentz, M.; Fahrenson, C.; Reimers, W.; Knezevic, M.; Beyerlein:

Elevated temperature effects on the plastic anisotropy of an extruded Mg-4 Wt Pct Li alloy: experiments and polycrystal modeling

Metallurgical and Materials Transactions A, 48 A, 1, 2017, pp. 446-458

Sanabria, V.; Mueller, S.:

Influence of temperature and sliding speed on the subsurface microstructure evolution of EN AW-6060 under sticking conditions

AIP Conference Proceedings 1896, 140012, 2017, Issue 1, pp. 1-6,

doi.org/10.1063/1.5008168

Tian, L.; Russell, A.; Riedemann, T.; Müller, S.; Anderson, J.:

A deformation-processed Al-matrix/Ca-nanofilamentary composite with low density, high strength, and high conductivity

Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing 690, 2017, pp. 348-354

Uhlmann, E.; Henze, S.; Brömmelhoff, K.; Reimers, W.:

Cutting simulation with consideration of the material hardening in the shear zone of AISI1045

Procedia CIRP 58, 2017, pp. 91-96