

Významné Publikace (Important Publications)

1. VOSTRÝ, P., SMOLA, B., STULÍKOVÁ, I., VON BUCH, F., MORDIKE, B. L.: Microstructure evolution in isochronally heat treated Mg-Gd alloys. *phys.stat.sol. (a)* 175 (1999) s. 491-500
2. VOSTRÝ, P., STULÍKOVÁ, I., SMOLA, B., VON BUCH, F.: Electrical Resistivity Changes due to Solution Treatment of Magnesium-Rare Earth Binary Alloys. *Z. Metallkd.* 90 (1999) p. 888-891
3. MÁLEK, P., JANEČEK, M., SMOLA, B., BARTUŠKA, P., PLEŠTIL, J.: Structure and Properties of Rapidly Solidified Al-Zr-Ti Alloys. *J. Mater. Sci.* 35 (2000), p. 2625-2633
4. STULÍKOVÁ, I., SMOLA, B., PELCOVÁ, J., von BUCH, F., MORDIKE, B.L.: Ageing Characteristics of Sc Rich Complex Magnesium Alloys. in: *MAGNESIUM 2000* (eds.: Aghion, E., Eliezer, D.), Magnesium Research Institute, Beer-Sheva 2000, p. 218-225
5. SMOLA, B., STULÍKOVÁ, I.: Structure and Identification of Some Metastable Phases in Mg-Rare Earth Alloys. in : *Proc. of 12th European Congress on Electron Microscopy, Volume II Physical Sciences* (eds.: Gemperlová, J., Vávra I.), Czechoslovak Society for Electron Microscopy, Brno 2000, p. P597-P598
6. STULÍKOVÁ, I., SMOLA, B., von BUCH, F., MORDIKE, B.L.: Development of Creep Resistant Mg-Gd-Sc Alloys with Low Sc Content. *Mat.-wiss. u. Werkstofftech.* 32 (2001) 20-24
7. SMOLA, B., STULÍKOVÁ, I., PELCOVÁ, J., von BUCH, F., MORDIKE, B.L.: Aging Response of Mg - Rare Earth Alloys with Low Scandium Content. in: *Magnesium Alloys and their Applications* (ed.: Kainer, K.U.), WILEY-VCH Verlag, Weinheim, 2000, p. 92-97
8. SMOLA, B., STULÍKOVÁ, I., von BUCH, F., MORDIKE, B.L.: Structural Aspects of High Performance Mg Alloys Design. *Mat. Sci. Eng. A* 324 (2002), 113-117
9. STULÍKOVÁ, I., SMOLA, B., MORDIKE, B. L.: New High Temperature Creep Resistant Mg-Y-Nd-Sc-Mn Alloy. *phys. stat. sol (a)* 190 (2002) R5-R7
10. SMOLA, B., STULÍKOVÁ, I., PELCOVÁ, J., von BUCH, F., MORDIKE, B.L.: Microstructure and Phase Changes due to Heat Treatment of Squeeze Cast Mg-Sc-(Ce)-Mn Alloys. *phys. stat. sol (a)* 191 (2002) 305-316
11. STULÍKOVÁ, I., SMOLA, B., CIESLAR, M., HÁJEK, M., PELCOVÁ, J., MELIKHOVA, O., FALTUS, J.: The Influence of Tin on Precipitation Processes and Mechanical Properties of a Machinable Lead-free Al-Cu Alloy. *Kovové Materiály* 40 (2002) 321-329
12. STULÍKOVÁ, I., SMOLA, B., von BUCH, F., MORDIKE, B.L.: Mechanical Properties and Creep of Mg – Rare Earth – Sc – Mn Squeeze Cast Alloys. *Mat.-wiss. u. Werkstofftech.* 34 (2003) 102-108

13. SMOLA, B., STULÍKOVÁ, I., PELCOVÁ, J., von BUCH, F., MORDIKE, B.L.: The Phase Transformations due to Isochronal Annealing of Magnesium-Rare Earth-Scandium-Manganese Squeeze Cast Alloys, *Z. Metallkde.* 94 (2003) 553-558
14. SMOLA, B., STULÍKOVÁ, I., OČENÁŠEK, V., PELCOVÁ, J.: Effect of Sc and Zr Addition on Microstructure and Age Hardening of AlMg₃MnCr Alloy. *Mater. Charact.* 51 (2003) pp. 11-20
15. SMOLA, B., STULÍKOVÁ, I., PELCOVÁ, J., MORDIKE, B.L.: Structure and Morphology of Effective Obstacles in High Performance Mg-Rare Earth base Alloys. in: *Magnesium, Proc. of 6th Int. Conf. Magnesium Alloys and their Applications.* (ed.: Kainer, K.U.), WILEY-VCH Verlag, Weinheim, (2004) 43-48
16. STULÍKOVÁ, I., SMOLA, B., PELCOVÁ, J., MORDIKE, B.L.: Ageing Characteristics and Creep resistance of Mg-Y-Nd-Sc-Mn Alloy. in: *Magnesium, Proc. of 6th Int. Conf. Magnesium Alloys and their Applications.* (ed.: Kainer, K.U.), WILEY-VCH Verlag, Weinheim, (2004) 116-121
17. ČÍŽEK, J., PROCHÁZKA, I., STULÍKOVÁ, I., SMOLA, B., KUŽEL, R., ISLAMGALIEV, R.K., KULJASOVA, O.: Microstructure of Ultra Fine Grained Mg and Mg-10 wt.% Gd Prepared by High-Pressure Torsion. in: *Magnesium, Proc. of 6th Int. Conf. Magnesium Alloys and their Applications.* (ed.: Kainer, K.U.), WILEY-VCH Verlag, Weinheim, (2004) 202-207
18. NEUBERT, V., STULÍKOVÁ, I., SMOLA, B., BAKKAR, A., MORDIKE, B.L.: Corrosion Behaviour of Highly Creep Resistant Magnesium – Rare Earth Based Alloys. *Kovove Mater.* 42 (2004) pp. 31-41.
19. SMOLA, B., STULÍKOVÁ, I., PELCOVÁ, J., MORDIKE, B.L.: Significance of Stable and Metastable Phases in High Temperature Creep Resistant Magnesium – Rare Earth Base Alloys. *J. Alloys and Comp.*, 378 (2004) pp. 196-201
20. SMOLA, B., STULÍKOVÁ, I.: Equilibrium and Transient Phases in Mg-Y-Nd alloy. *J. Alloys and Comp.*, 381 (2004) pp. L1-L2
21. SMOLA, B., STULÍKOVÁ, I.: Structure and Identification of Transient and Equilibrium Phases in Mg Alloys Containing Rare Earth Elements. *Kovove Mater.*, 42/5 (2004) pp. 301-315
22. GALUN, R., MAIWALD, T., MORDIKE, B.L., SMOLA, B., MERGEN, R., MANNER, M., UITZ, W: Microstructure and age hardening effects of aluminium alloys with additions of scandium and zirconium. *Z. Metallkde.* 95 (2004) pp.1142-1146
23. MORDIKE, B.L., STULÍKOVÁ, I., SMOLA, B.: Mechanisms of creep deformation in Mg-Sc based alloys. *Proc. of Symp. On Phase Transformations and Deformation of Mg Alloys*, TMS Annual Meeting 2004, *Metall. Mater. Trans. A* 36A (2005) pp. 1729-1736
24. ČÍŽEK, J., PROCHÁZKA, I., SMOLA, B., STULÍKOVÁ, I., KUŽEL, R., MATĚJ, Z., CHERKASKA, V., ISLAMGALIEV, R.K., KULYASOVA, O.: Microstructure and thermal stability of ultra grained Mg and Mg-Gd alloys prepared by high-pressure torsion. *Proc. of MSMF 4, Mater. Sci. Forum* 482 (2005) pp. 183-186

25. ČÍŽEK, J., PROCHÁZKA, I., SMOLA, B., STULÍKOVÁ, I., KUŽEL, R., CIESLAR, M., MATĚJ, Z., CHERKASKA, V., BRAUER, G., ANWAND, W., ISLAMGALIEV, R.K., KULYASOVA, O.: Positron annihilation studies of microstructure of ultra fine grained metals prepared by severe plastic deformation. Proc. of MSMF 4, Mater. Sci. Forum 482 (2005) pp. 207-210
26. HNILICA, F., OČENÁŠEK, V., STULÍKOVÁ, I., SMOLA, B.: The effect of structure defects on the fatigue behaviour of AZ91 magnesium alloy prepared by the sand casting and squeeze casting processes. Kovove Mater. 43 (2005) pp. 300-316
27. STULÍKOVÁ, I., SMOLA, B., ŽALUDOVÁ, N., VLACH, M., PELCOVÁ, J.: Development of Electrical Resistivity Due To Solution Treatment of Squeeze Cast Magnesium-Rare Earth Alloys, Kovove Mater. 43 (2005) pp. 272-279
28. STULIKOVÁ, I., SMOLA, B., PELCOVÁ, J., VLACH, M., MORDIKE, B.L.: Phase transformations in creep resistant MgYNdScMn alloy. Z. Metalkde. 96 (2005) pp. 821-825