

## List of publications

### A. Books and chapters in monographs

1. Magnesium Alloys - Design, Processing and Properties, Ed.: F. Czerwinski, INTECH Open Access Pub., Vienna, 2011, ISBN 978-953-307-520-4

Název kapitoly:

M. Janeček, F. Chmelík: Mechanisms of Plastic Deformation in AZ31 Magnesium Alloy Investigated by Acoustic Emission and Electron Microscopy, pp. 43-68

2. Modern Electron Microscopy in Life Sciences, Eds.: M. Janeček, R. Král, INTECH 2016

Název kapitoly:

J. Stráská, J. Stráský, P. Minárik, M. Janeček, R. Král: Microstructure evolution in ultrafine-grained magnesium alloy AZ31 processed by severe plastic deformation. Pp. 81-106, DOI: 10.5772/60494

### B. Scientific papers (WoS)

*Impact factors are in bold*

1. F. Vávra; Z. Ševčík; M. Janeček.  
Temperature-dependence of development of slip bands and of strain hardening in AgCl crystals. Czechoslovak Journal of Physics, 37(7) (1987) 886-895 **0.42**
2. J. Balík, M. Janeček, J. Mencl.  
Dynamic strain aging in CuNiSn alloys. Czechoslovak Journal of Physics, 38(5) (1988) 485-487 **0.42**
3. M. Janeček; K. Tangri.  
Substructure evolution and flow behavior of AISI 316L stainless-steel polycrystals at room-temperature. Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing, 138(2) (1991) 237-245 **2.35**
4. J. Balík; M. Janeček; P. Lukáč.  
Dislocation glide and multiple slip. Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing, 159(2) (1992) 143-149 **2.35**
5. P. Málek; M. Janeček; B. Smola; P. Bartuška.  
High-temperature stability of an Al-Zr-Ti alloy. Key Engineering Materials, 97-98 (1994) 65-72 **0.50**
6. J. Balík; M. Janeček; P. Lukáč.  
Dynamic recovery in CU-9NI alloy at low-temperatures. Key Engineering Materials, 97-98 (1994) 353-358 **0.50**
7. M. Janeček; K. Tangri.  
The influence of temperature and grain-size on substructure evolution in stainless-steel 316L. Journal of Materials Science, 30(15) (1995) 3820-3826 **2.10**
8. M. Verdier; JA. Saeter; M. Janeček; et al.  
Kinetics and microstructural aspects of recovery in Al, Al-Mg and Al-Mn alloys. Aluminium Alloys: Their Physical and Mechanical Properties, Materials Science Forum 1-3, 217(1-3) (1996) 435-440 **0.61**
9. R. Král; P. Lukáč; M. Janeček.

- Critical conditions for Portevin Le Chatelier instabilities in Al-4.8%Mg and Al-2.57%Mg alloys. Aluminium Alloys: Their Physical and Mechanical Properties, Materials Science Forum 1-3, 217(1-3) (1996) 1025-1030 **0.61**
10. VY Gertsman; M. Janeček; K. Tangri,  
Grain boundary ensembles in polycrystals. Acta Materialia, 44(7) (1996) 2869-2882 **4.39**
  11. VY Gertsman; M. Janeček; K. Tangri.  
Grain boundary networks in AISI 316L stainless steel. Physica Status Solidi A-Applied Research, 157(2) (1996) 241-247 **1.33**
  12. M. Verdier; F. Bley; M. Janeček; et al.  
Characterization of dislocation structures and internal stresses in Al-Mg alloys during recovery by synchrotron radiation. Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing, 234 (1997) 258-262 **2.35**
  13. M. Janeček; P. Málek; B. Smola.  
Structure development in high temperature Al-Zr-Ti alloys. Advanced Light Alloys and Composites, 59 (1998) 385-390
  14. M. Verdier; M. Janeček; Y. Brechet; et al.  
Microstructural evolution during recovery in Al-2.5%Mg alloys. Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing, 248(1-2) (1998) 187-197 **2.35**
  15. M. Janeček; Z. Trojanová; K. Mathis; et al.  
Microstructure and mechanical properties of AZ91 polycrystals. Advances in Mechanical Behaviour, Plasticity and Damage, Vols 1 and 2, Proceedings, (2000) 383-388
  16. Z. Trojanová; Z. Drozd; M. Janeček; et al.  
Deformation behaviour of AZ91/Al<sub>2</sub>O<sub>3</sub> MMC at elevated temperatures. Advances in Mechanical Behaviour, Plasticity and Damage, Vols 1 and 2, Proceedings, (2000) 1279-1284
  17. P. Málek; M. Janeček; B. Smola; et al.  
Structure and properties of melt-spun Al-Zr-Ti alloys - II. The solidification microstructure and microhardness. Kovové Materiály-Metallic Materials, 38(1) (2000) 9-20 **0.69**
  18. P. Málek; M. Janeček; B. Smola  
Structure and properties of melt-spun Al-Zr-Ti alloys IV. Microstructure and microhardness stability at elevated temperatures. Kovové Materiály-Metallic Materials, 38(3) (2000) 160-177 **0.69**
  19. P. Málek; M. Janeček; B. Smola; et al.  
Structure and properties of rapidly solidified Al-Zr-Ti alloys. Journal of Materials Science, 35(10) (2000) 2625-2633 **2.10**
  20. M. Janeček; F. Louchet; B. Doisneau-Cottignies; et al.  
Specific dislocation multiplication mechanisms and mechanical properties in nanoscaled multilayers: the example of pearlite. Philosophical Magazine A-Physics of Condensed Matter Structure Defects and Mechanical Properties, 80(7) (2000) 1605-1619 **1.45**
  21. M. Karlík; P. Kratochvíl; M. Janeček; et al.  
Tensile deformation and fracture micromorphology of an Fe-28Al-4Cr-0.1Ce alloy. Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing, 289(1-2) (2000) 182-188 **2.35**
  22. F. Louchet; B. Doisneau-Cottignies; O. Calonne; M. Janeček; et al.  
Is plastic flow always controlled by dislocation mobility? An answer from in situ transmission electron microscopy straining tests. Journal of Microscopy-Oxford; 203 (2001) 84-89 **2.15**

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26. M. Janeček; F. Louchet; O. Calonne; et al.  
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27. P. Málek; M. Janeček; P. Bartuška.  
Structure and properties of a powder metallurgy Al-Zr-Ti alloy. Kovove Materialy-Metallic Materials, 40(6) (2002) 371-388 **0.69**
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The influence of microstructure on the corrosion properties of Cu polycrystals prepared by ECAP. Kovové Materialy-Metallic Materials, 43(4) (2005) 258-271 **0.69**

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44. Z. Valiev, Y. Ruslan; Y. Estrin; G. Raab.; M. Janeček; et al.  
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A qualitatively new approach to acoustic emission measurements and its application to pure aluminium and Mg-Al alloys. *Kovové Materialy-Metallic Materials*, 45(3) (2007) 159-163 **0.69**
47. Z. Zuberová; Y. Estrin; T.T. Lamark; et al.  
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A portrait of copper processed by equal channel angular pressing. *Materials Transactions*, 49(1) (2008) 31-37 **1.89**
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Microstructure evolution of CuZr polycrystals processed by high-pressure torsion. *Journal of Materials Science*, 45(17) (2010) 4631-4644 **2.10**
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The effect of chemical composition and microstructure on elastic modulus and hardness of biomedical Titanium alloys based on Ti-Nb-Zr-Ta composition with small Fe and Si additions. *METAL 2013: 22ND International Conference on Metallurgy and Materials*, (2013) 1307-1312
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