

Russia-Japan Workshop on Advanced Materials MRC International Symposium, MRC2016

The 65th Meeting of Kyushu Magnesium Network

The 2nd International Workshop on Green Materials

Dec. 8, 2016, Mielparque KYOTO, Kyoto, Japan

Program

9:00-9:10 Opening remarks (Prof. Y. Kawamura)

Session 1 / Chair person: Prof. E. Abe

9:10-9:35 Lecture 1: A. Vinogradov

9:35-10:00 Lecture 2: K. Hagihara

10:00-10:25 Lecture 3: E. Vasilev

10:25-10:45 Coffee Break

Session 2 / Chair person: Prof. A. Vinogradov

10:45-11:10 Lecture 4: E. Abe

11:10-11:35 Lecture 5: S. Dobatkin

11:35-12:00 Lecture 6: D. Okumura

12:00-13:30 Lunch

Session 3 / Chair person: Prof. M. Enoki

13:30-13:55 Lecture 7: A. Romanov

13:55-14:20 Lecture 8: R. Matsumoto

14:20-14:45 Lecture 9: A. Kolesnikova

14:45-15:05 Coffee Break

Session 4 / Chair person: Prof. A. Romanov

15:05-15:30 Lecture 10: M. Enoki

15:30-15:55 Lecture 11: M. Markushev

15:55-16:20 Lecture 12: K. Inoue

16:20-16:30 Closing remarks (Prof. A. Vinogradov)

Contents

A phenomenological approach to modelling of twinning kinetics and work hardening in Mg alloys

A. Vinogradov, E. Agletdinov, E. Vasilev, Y. Estrin 1

Experimental and computational approaches for the understanding of the nature of deformation band formed in materials with hexagonal crystal structures including the LPSO phase

K. Hagihara, T. Mayama, M. Yamasaki, T. Ohashi, Y. Kawamura, T. Nakano 2

Microstructure and mechanical properties of Mg-Zn-Ca alloys for biomedical application

E. Vasilev, M. Linderov, A. Vinogradov 3

Fascinating LPSO-structured Mg alloys

E. Abe 4

Structure, mechanical properties, and biocompatibility of ultrafine-grained magnesium alloy WE43 with different severe plastic deformation histories

S.V. Dobatkin, E.A. Lukyanova, N.S. Martynenko, Y. Estrin..... 5

Swelling-induced pattern transformation in porous gel films

D. Okumura, A. Kasugai 6

Processing and Internal Structure of Disclinated Microcrystals A.A. Vikarchuk, M.N. Dorogov, A.N. Priezzheva, I.S. Yasnikov, L.M. Dorogin, A.L. Kolesnikova, E.C. Aifantis, A.E. Romanov	7
Atomistic Study of Hydrogen Effects on Various Lattice Defects in Alpha Iron R. Matsumoto, S. Taketomi	8
Defects in 3D and 2D Crystals: Classification, Elastic Fields and Energies A.L. Kolesnikova, A.E. Romanov	9
Comparison of AE behaviors due to deformation and fracture in commercial Mg alloys and LPSO-Mg alloys Manabu Enoki1	10
Structure, Texture and Tensile Strength of Severely Deformed Magnesium Alloy M. Markushev, D. Nugmanov, O. Sitdikov	11
Structure of Grain Boundaries in Ceramic Materials from Mathematical Perspective K. Inoue, B. Feng, N. Shibata, M. Kotani, Y. Ikuhara	12