

## **2007 — YASUDA Hideyuki**

### **Scientific Papers/Commentary Articles**

1. H.Yasuda, I.Ohnaka, B.K.Dhinda, T.Nagira, K.Umetani, K.Uesugi, A.Tsuchiyama, T.Nakano, Control of Monotectic Solidification by a High Static Magnetic Field, *Trans. Ind. Inst. Metals*, 60, 75-78, 2007
2. H. Yasuda, T. Yoshimoto, T. Mizuguchi, Y. Tamura, T. Nagira, M. Yoshiya, Effect of the melt flow on the solidified structure of middle carbon steel by means of the levitation method using alternating and static magnetic fields, *ISIJ International*, 47, 612-618, 2007
3. H.Yasuda, T.Toh, K.Iwai, K.Morita, Recent progress of EPM in steelmaking, casting, and solidification processing, *ISIJ International*, 47, 619-626, 2007
4. Y.Yokoyama, H.Fredriksson, H.Yasuda, M.Nishijima, A.Inoue, Glassy Solidification Criterion of Zr50Cu40Al10 Alloy, *Materials Transaction*, 48, 1363-1372, 2007
5. T.Nagira, H.Yasuda, T.Sakimura, A.Kawaguchi, Effects of shaping conditions on the microstructure and the mechanical property of the Al<sub>2</sub>O<sub>3</sub>-YAG eutectic composite produced by melting the Al<sub>2</sub>O<sub>3</sub>-YAP eutectic structure, *Materials Transactions*, 48, 2312-2315, 2007
6. R.Ishii, H. Yasuda, T.Miyoshi, H.Kanekiyo, S.Hirosawa, Effects of magnetic field annealing on magnetic properties and microstructure of Nd-Fe-B-Ti-C based nanocomposite permanent magnet, *Physica status solidi (a)*, 204, 4145-4148, 2007
7. I.Ohnaka, A.Sugiyama, T.Ikeda, H.Yasuda, Mold Filling and prevention of gas entrapment in high-pressure die-casting, *J. Mater. Sci. Technol.*, 24, 139-140, 2008

### **International Conference Proceedings**

1. T.Ohmi, M.Sakurai, H.Yasuda, K.Matsuura, M.Iguchi, 3D OBSERVATION OF METALLIC MICROCHANNEL DEVICES BY MICRO-X-RAY COMPUTER TOMOGRAPHY, *Proceedings of the 6th Pacific Symposium on Flow Visualization and Image Processing (PSFVIP-6)*, 416-419, 2007
2. T. Nagira, H. Yasuda, M. Yoshiya, K. Uesugi, Al<sub>2</sub>O<sub>3</sub>-YAG equilibrium eutectic growth from the undercooled melt produced by melting Al<sub>2</sub>O<sub>3</sub>-YAP metastable eutectic, *Proc. 5th decennial international conference on Solidification Processing*, 211-214, 2007
3. H. Yasuda, T. Nagira, M. Yoshiya, A. Sugiyama, I. Ohnaka, M. Yoshiya, K.Kawasaki, K. Umetani, K. Uesugi, Time-resolved X-ray imaging of the dendritic and the monotectic solidification of Sn, Al and Cu-based alloy, *Proc. 5th decennial international conference on Solidification Processing*, 211-214, 2007

4. D.NAGAMATSU, H.YASUDA, Y. TAMURA, T.YOSHIMOTO, T.NAGIRA, Y.YOKOYAMA, A.INOUE, Measurement of the Crystal Growth Velocity in the Bulk-Metallic-Glass Zr-based Alloys by Using the AC + DC Levitation Method, Proc. 2nd International Symposium on Advanced Fluid/Solid Science and Technology in Experimental Mechanics, C1-2-1, 2007
5. T.Fukuda, T.Mizuguchi, T.Yoshimoto, D.Nagamatsu,T.Nagira, H.Yasuda, Morphological transition in the highly undercooled Fe-C alloy melt by the AC + DC levitation technique, Proc. 2nd International Symposium on Advanced Fluid/Solid Science and Technology in Experimental Mechanics, C7-1-4, 2007
6. H.Yasuda, Y.Yamamoto, T.Nagira, M.Yoshiya, A.Sugiyama, I.Ohnaka, K.Kawasaki, K.metani, K. Uesugi, Application of time-resolved X-ray imaging to the solidification behaviour, Proc. 2nd International Symposium on Advanced Fluid/Solid Science and Technology in Experimental Mechanics, C3-3-3, 2007
7. H.Yasuda, T.Nagira, H.Harada, T.Sawai, H.Sindoh, K.Nishimura, SOLIDIFICATION STRUCTURE FORMATION OF Zn-Al ALLOY IN HOT DIP GALVANIZED PROCESS, Proceedings of 7th International Conference on Zinc and Zinc alloy Coated Steel Sheet, 545-549, 2007

### **Publications**

1. H.Yasuda, Applications of High Magnetic Fields in Materials Processing, Magnetohydrodynamics, Historical Evolution and Trends, Series Fluid Mechanics and Its Applications (Ed. by H.K.Moffatt), Vol.80, Springer, 2007, (329-344)