

2007 年度業績 — 安田 秀幸

学術論文・解説記事

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 Al₂O₃-YAG eutectic composite produced by melting the Al₂O₃-YAP eutectic structure, *Materials Transactions*, 48, 2312-2315, 2007
6. 安田秀幸, 材料プロセスにおける強磁場利用 物質の磁場に対する応答を利用した高次組織・構造制御, *化学と工業*, 60, 712-715, 2007
7. 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
8. 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
9. 柳楽知也、安田秀幸、吉矢真人、吉田健太郎、上杉健太郎、和久芳春, X線マイクロCTを利用した Al₂O₃-GAP 共晶組織の 3D 構造観察, *まてりあ*, 46, 819, 2007
10. 安田秀幸、山本洋介、柳楽知也、吉矢真人、杉山明、大中逸雄、上杉健太郎、梅谷啓二, 時間分解 X線イメージングによる結晶成長過程の観察, *まてりあ*, 46, 820, 2007

国際会議プロシーディングス

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, Al₂O₃-YAG equilibrium eutectic growth from the

- undercooled melt produced by melting Al₂O₃-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

著書

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, 16 ページ (329-344)