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1. Main Research Results

- 1) Precipitation behavior of intermetallic compounds in high Cr heat resistant steels
- 2) Establishment of design criteria of high performance thermo-electric materials based on Half-Heustler TiNiSn through ternary substitutions and quaternary additions

2. List of publication (original article, comment/book)

Original Paper

- 1) Yosuke Uotani, Yoshisato Kimura and Yoshinao Mishima: “Effects of Ru Additions on Phase Equilibria, Microstructures and Mechanical Properties of $E2_1 Co_3AlC_{1-x}$ Based Alloys”, Proc. of TMS 2008 Annual Meeting, (2008), pp. 399-405
- 2) Seiji Miura, Yuki Murasato, Yoshihito Sekito, Yukiyoishi Tsutsumi, Kenji Ohkubo, Yoshisato Kimura, Yoshinao Mishima, Tetsuo Mohri: “Effect of microstructure on the high-temperature deformation behavior of Nb-Si alloys”; Material Science and Engineering A, 510-511(2009) 317-321
- 3) Yoshihito Sekito, Seiji Miura, Kenji Ohkubo, Tetsuo Mohri, Norihito Sakaguchi, Seiichi Watanabe, Yoshisato Kimura, Yoshinao Mishima: “Effect of growth rate on microstructure and microstructure evolution of directionally solidified Nb-Si alloys”; Mater. Res. Soc. Symp. Proc. Vol. 1128(2009) 1128-U05-38

3. Award

- 1) Komou Industrial Achievement Award of Tanigawa Thermal technology Achievement Fund (2009)