a. Highlights in 2007

1) Establishing design concept for high performance thermoelectric intermetallic semiconductors based on alloy substitution and dopings based on half-Heusler TiNiSn.

2) Enhancement on high temperature creep properties of 9 Cr steels by optimizing morphology of fine carbo-nitride precipitates.

3) TEM analysis on the microstructure evolution during recrystallization of cold worked steels.

b. Articles (original article, comment/book)

1) Sung-Wng Kim, Yoshisato Kimura and Yoshinao Mishima; High temperature thermoelectric properties of TiNiSn-based half-Heusler compounds; Intermetallics, 15 (2007) 349-356


3) Andrey Belyakov, Kaneaki Tsuzaki, Yuuji Kimura, Yoshisato Kimura, Yoshinao Mishima: Comparative study on microstructure evolution upon unidirectional and multidirectional cold working in an Fe-15%Cr ferritic alloy; Materials Science and Engineering A, 456(2007) 323-331

4) A. Belyakov, F. G. Wei, K. Tsuzaki, Y. Kimura, Y. Mishima: Incomplete recrystallization in cold worked steel containing TiC; Materials Science and Engineering A, 471(2007) 50-56