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THERMOELECTRIC PROPERTIES OF Mn-Si CERAMICS. *Shunji Sakurai, Kenji Koga, Hiroki Kurisu, Setsuo Yamamoto and Mitsuru Matsuura (Faculty of Engineering, Yamaguchi University, Tokiwadai, Ube-city, Japan).*

Mn-Si ceramics were prepared by using the solid-state reaction and Spark Plasma Sintering (SPS). The effect of grain size on thermoelectric properties was investigated in details. Fineness of the materials improves thermoelectric properties such as seebeck coefficient and electrical conductivity. The maximum value of seebeck coefficient was 246.0_V/K at 750K. In addition the effect of dopant such as In, Sb, Pt, Cr and Fe on thermoelectric properties were investigated preliminary. The doping effect did not change seebeck coefficient much. But, for electrical conductivity, the dopant such as In, Sb, Cr and Fe seem to be effective to the improvement of thermoelectric properties.