Supporting Information

Enhanced thermoelectric power factor of Re-substituted higher manganese silicides with small islands of MnSi secondary phase

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Figure S1. (a) Backscattered electron image of the polished surface of the QH sample. (b-d) Highresolution backscattered electron images of the areas marked by the red squares in (a) showing that the MnSi layers are broken into platelets.



Figure S2. (a, b) Backscattered electron images of the polished surface of the SSR sample. No significant amount of MnSi layers is observed.



Figure S3. The Lorenz number (*L*) of the four samples calculated based on the single parabolic band model. The obtained *L* values are lower than the Sommerfeld value of 2.45×10^{-8} V² K⁻² for the metallic limit.