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Enhanced thermoelectric properties of $BaZn_2Sb_2$ via synergistic optimization strategy of co-doped Na and Sr

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Supplementary Information:

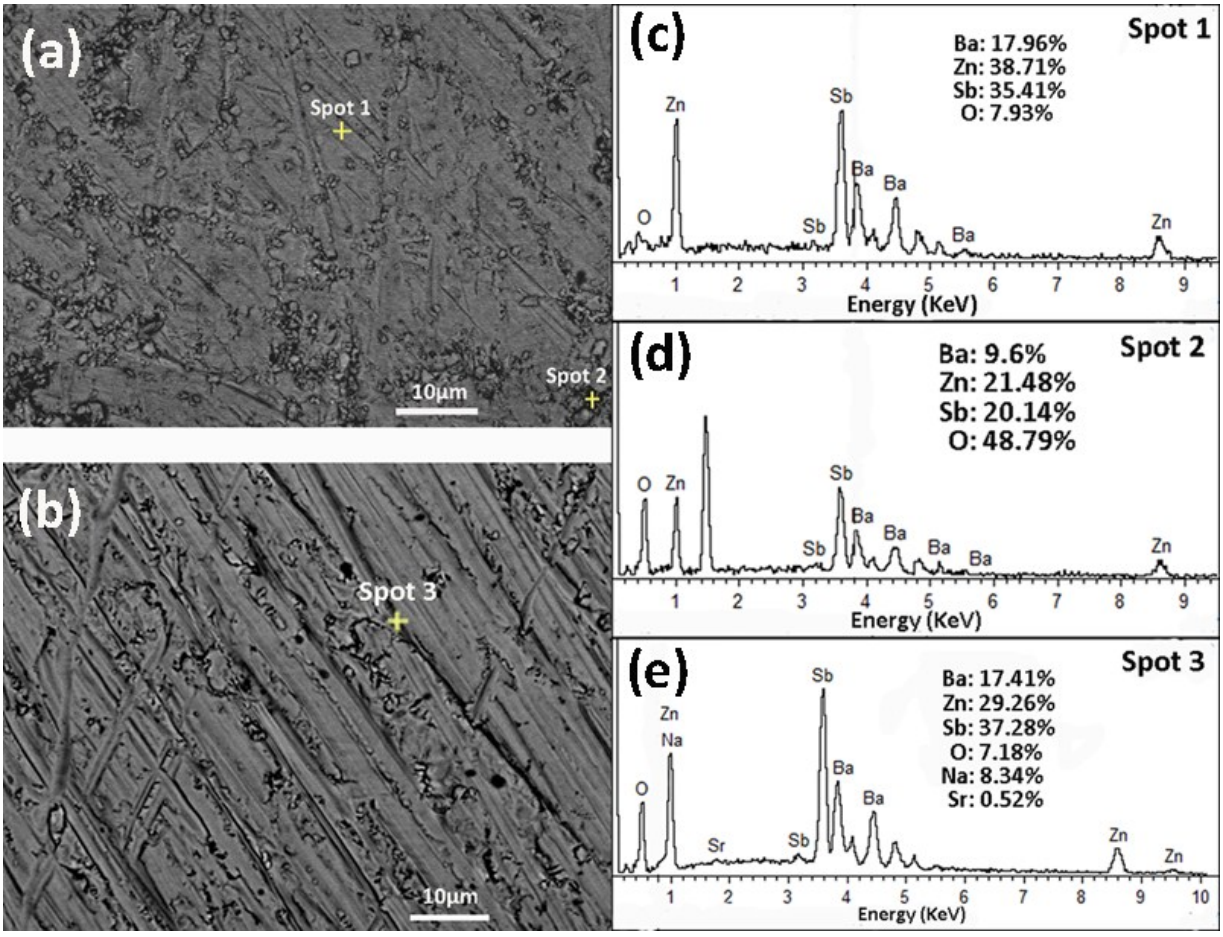

Fig. S1 The BSEM of (a) $BaZn_2Sb_2$ sample, (b) $Ba_{0.92}Na_{0.06}Sr_{0.02}Zn_2Sb_2$ sample and (c) (d) (e) EDS analysis results.

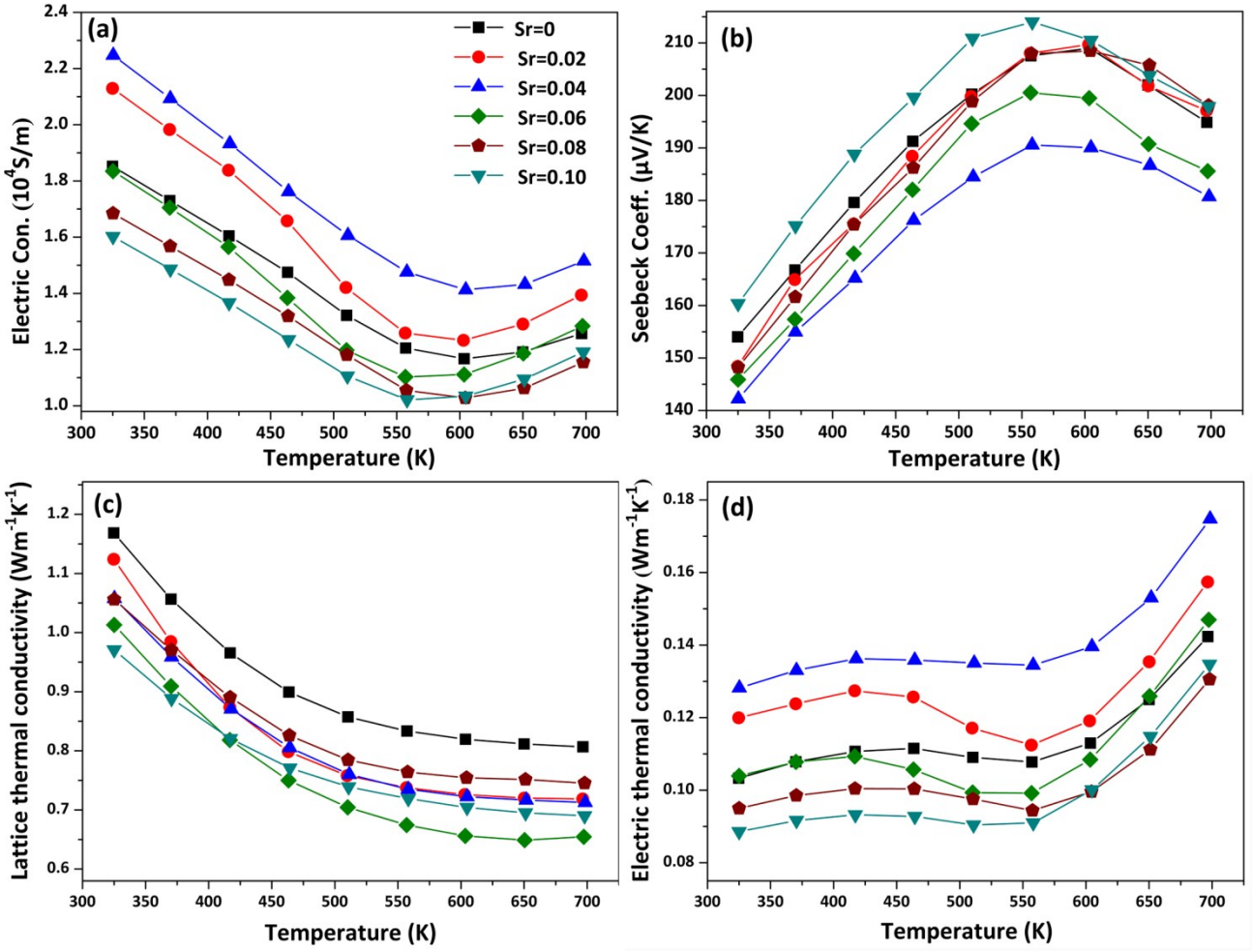

Fig. S2 (a) The electric conductivity (b) the Seebeck coefficient (c) the lattice thermal conductivity and (d) the electric thermal conductivity of Sr doped $BaZn_2Sb_2$ samples.

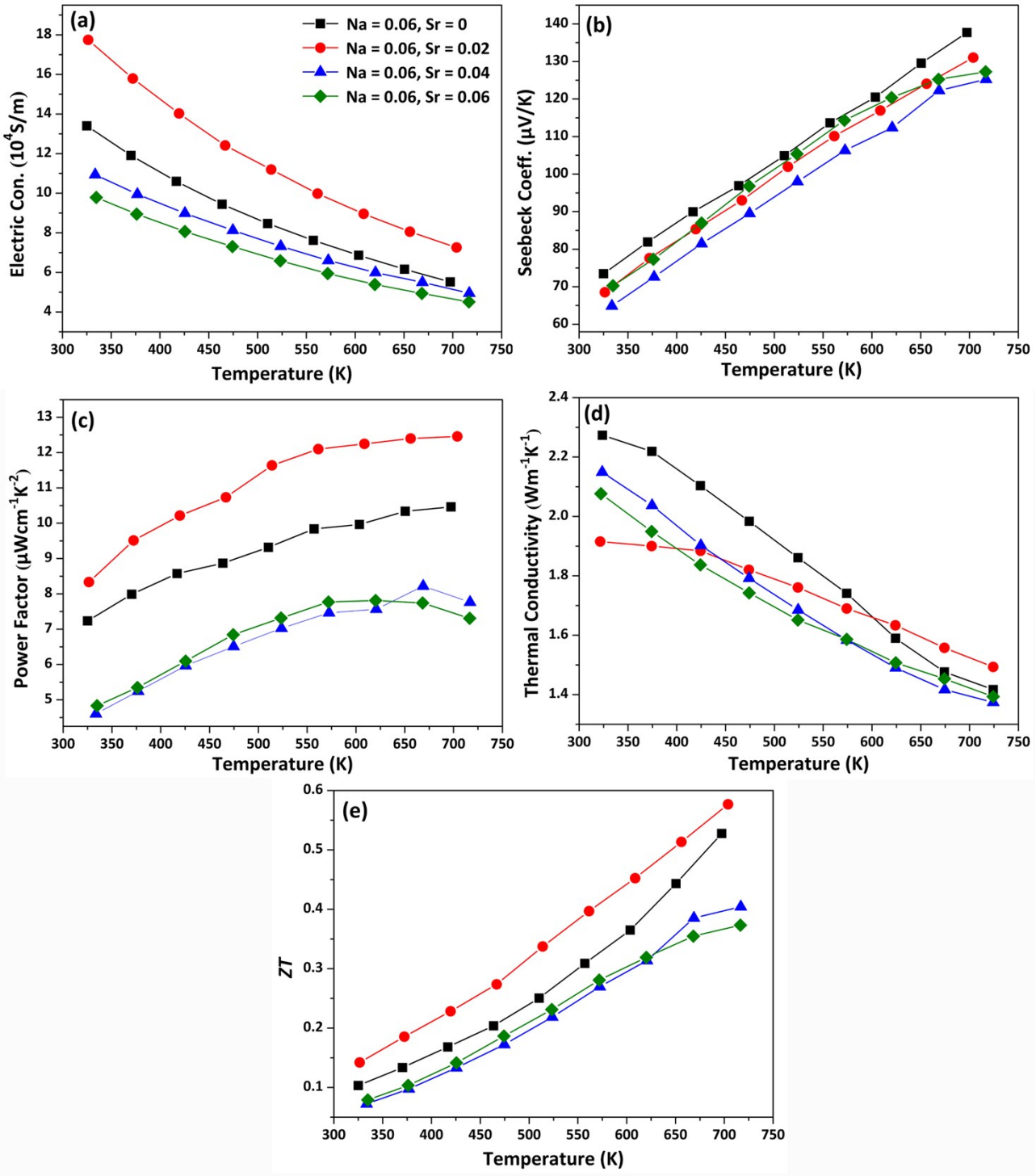

Fig. S3 Temperature dependence of (a) the electrical conductivity, (b) the Seebeck coefficient, (c) the power factor, (d) the thermal conductivity and (e) the electrical thermal conductivity for $BaNa_{0.06}Sr_yZn_2Sb_2$ samples.