

Supplementary Information (SI)

Ultrathin Few Layer Oxychalcogenide BiCuSeO Nanosheets

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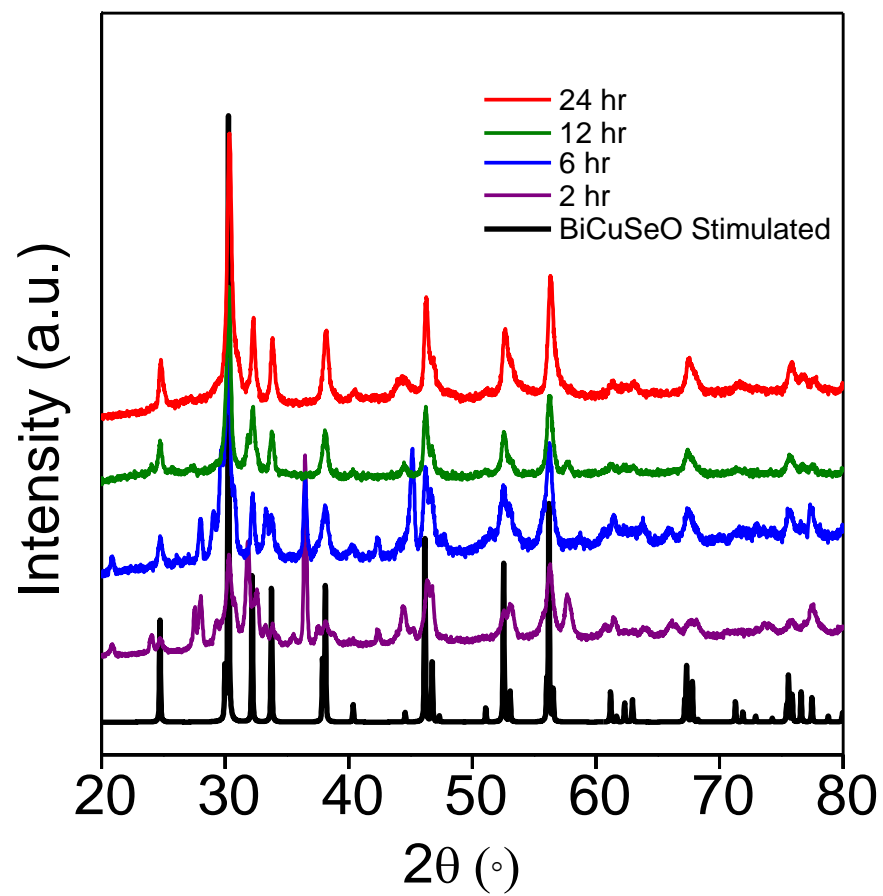


Figure S1. PXRD patterns of different samples obtained after different time intervals of the reaction during synthesis of BiCuSeO.

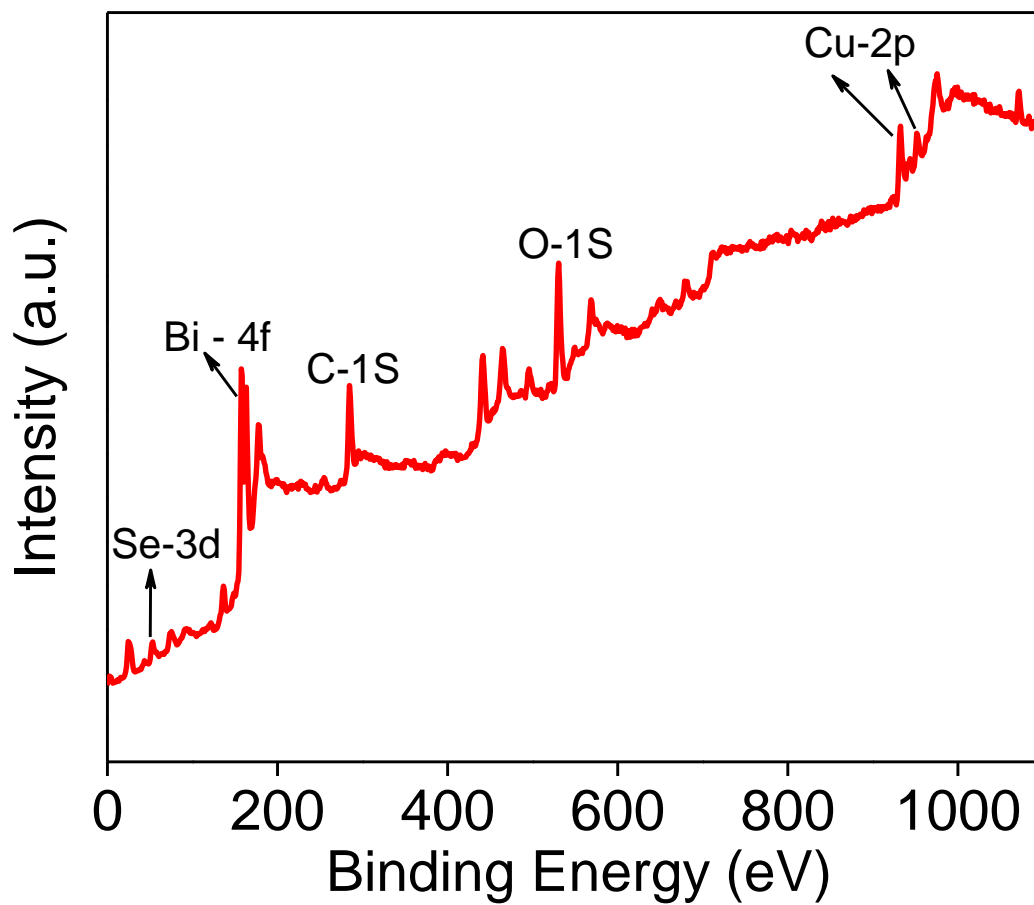


Figure S2. XPS survey scan spectra of BiCuSeO.

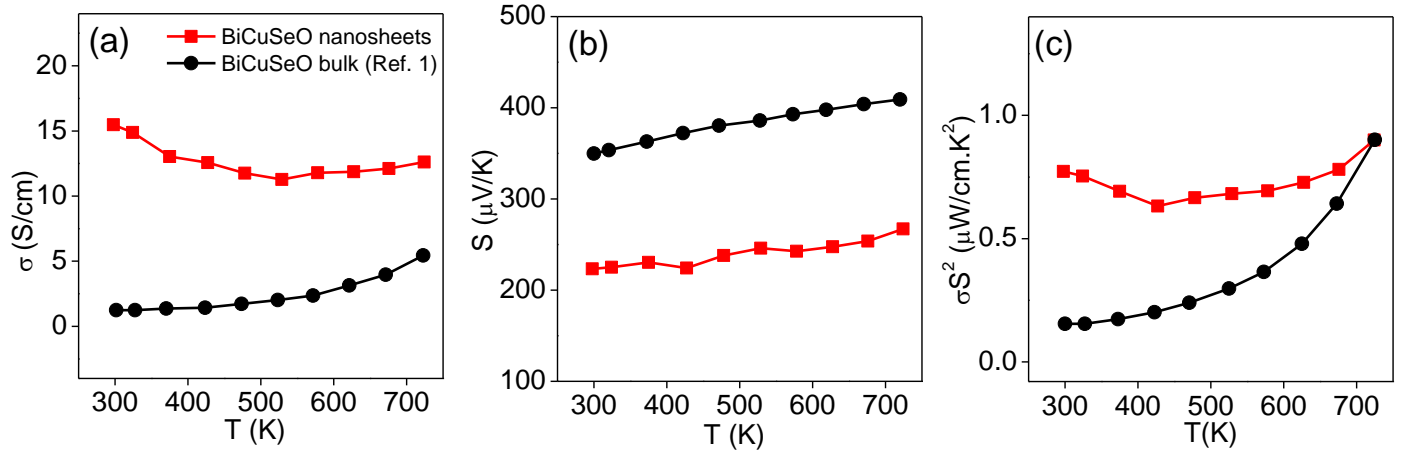


Figure S3. Temperature dependent (a) electrical conductivity (σ), (b) seebeck coefficient (S) and (c) power factor (σS^2) of BiCuSeO nanosheets and bulk BiCuSeO.¹

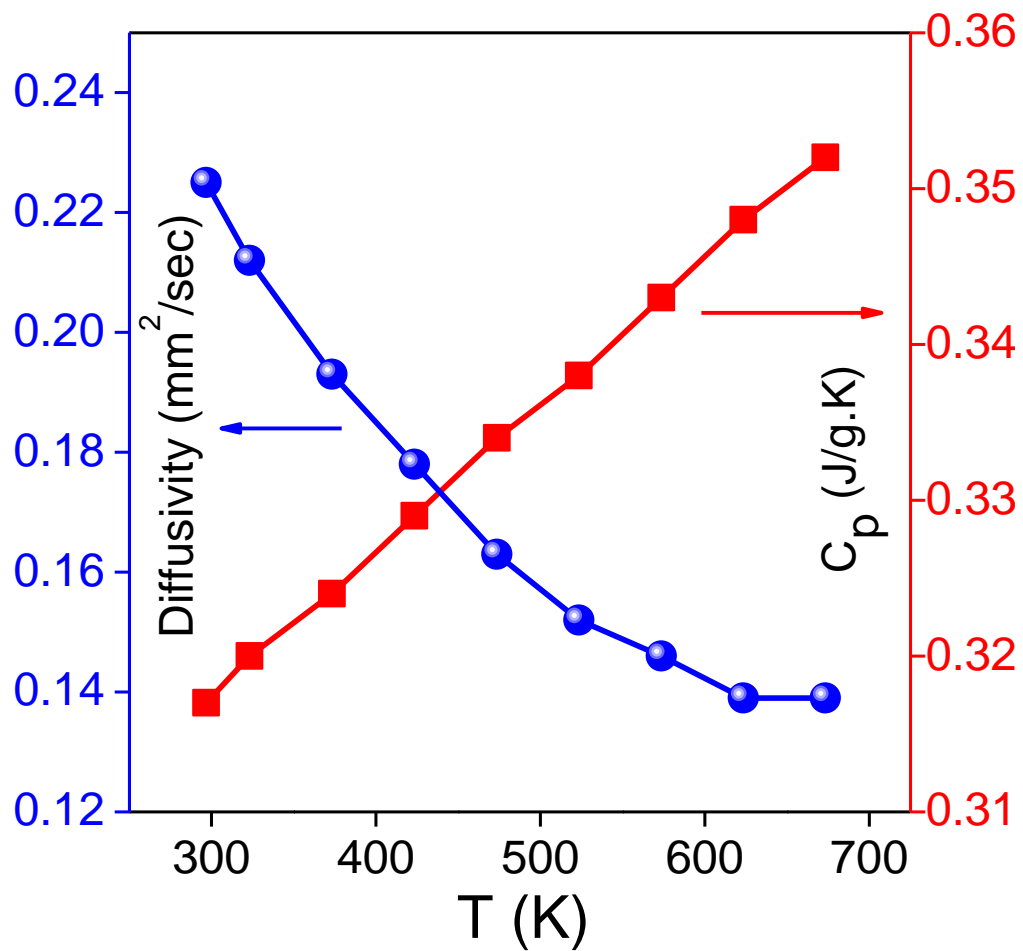


Figure S4. Temperature dependent thermal diffusivity (D) and specific heat capacity (C_p) of BiCuSeO nanosheets.

Reference.

1. L. D. Zhao, J. He, D. Berardan, Y. Lin, J. F. Li, C. W. Nanc and N. Dragoe, *Energy Environ. Sci.*, 2014, **7**, 2900.