

Supporting Information

Defect modification engineering on laminar MoS₂ film for optimizing thermoelectric properties

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Supporting Figures

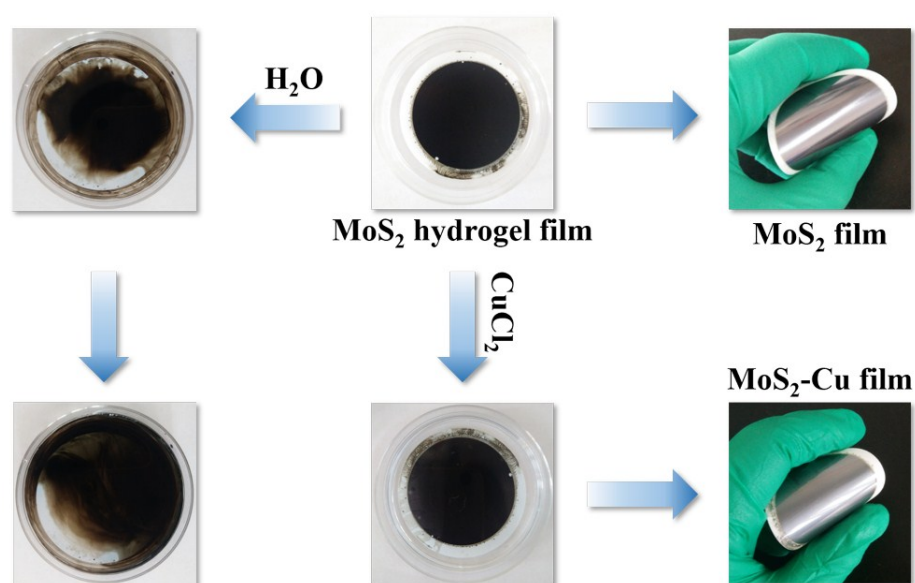


Figure S1 Photographs of MoS₂ hydrogel film soaked in 0.01 M CuCl₂ solution or H₂O, and correspondingly dried MoS₂ and MoS₂-Cu films.

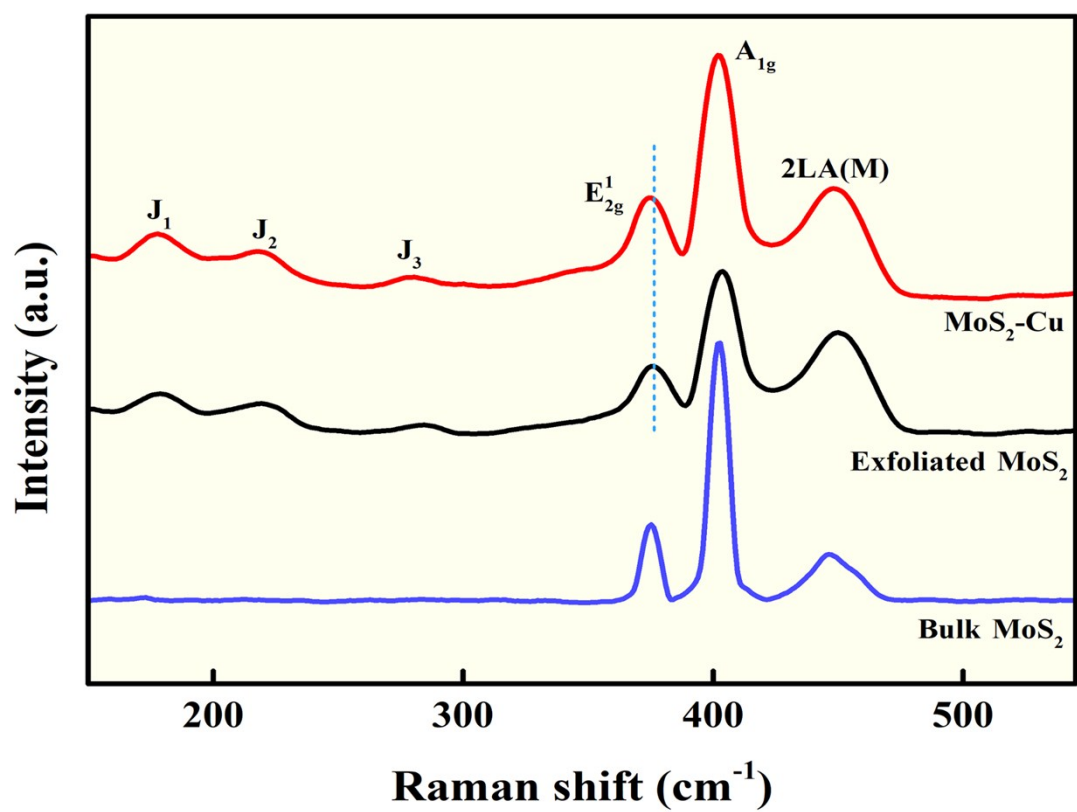


Figure S2 Raman patterns of bulk MoS₂, exfoliated MoS₂ and MoS₂-Cu films at 633 nm laser.

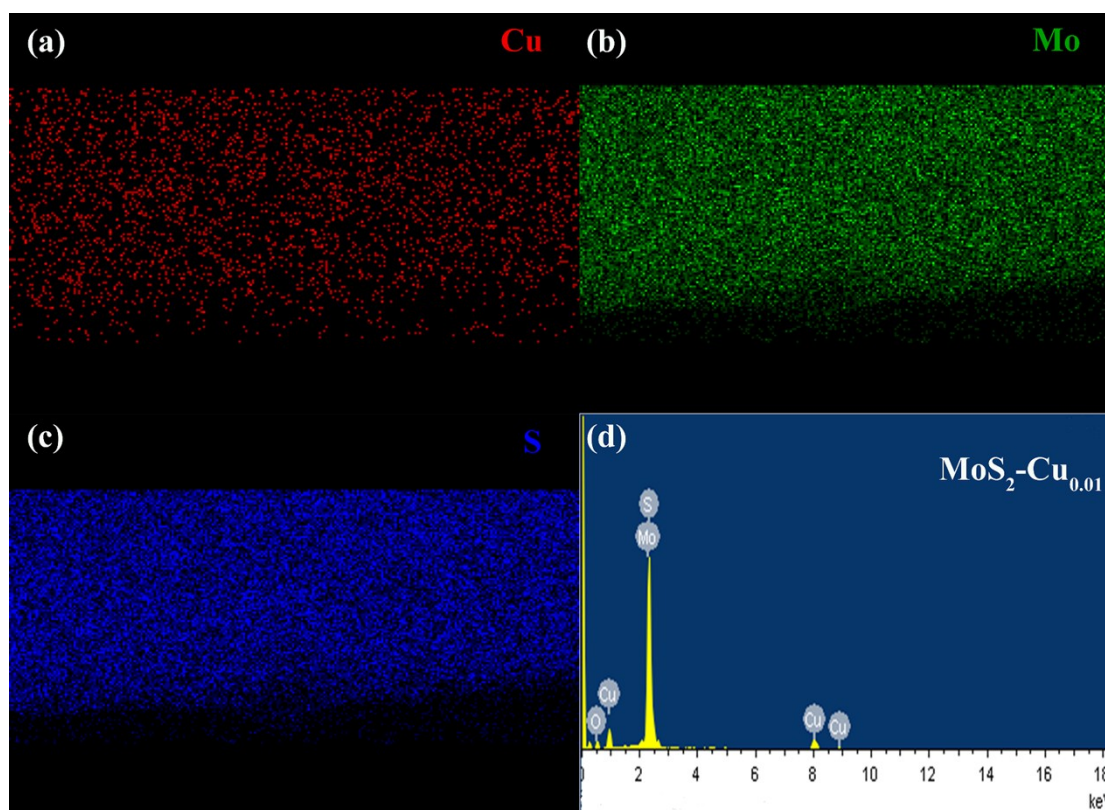


Figure S3 The corresponding element mapping images of (a) Cu, (b) Mo and (c) S and (d) EDX analysis of the $\text{MoS}_2\text{-Cu}$ film.

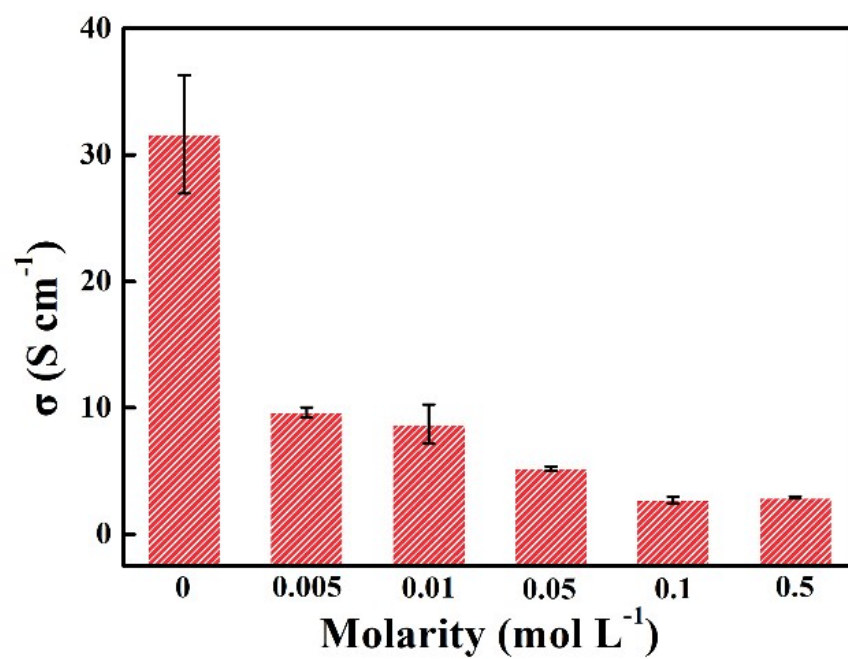


Figure S4 The electrical conductivity of $\text{MoS}_2\text{-Cu}_x$ films.

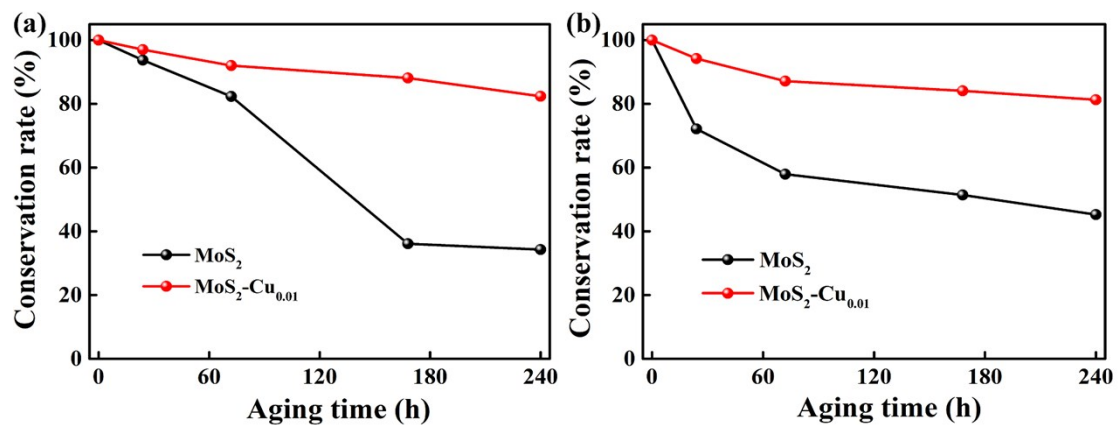


Figure S5 Compared thermoelectric properties of the MoS₂ and MoS₂-Cu films versus aging time: (a) electrical conductivity and (b) Seebeck coefficient.

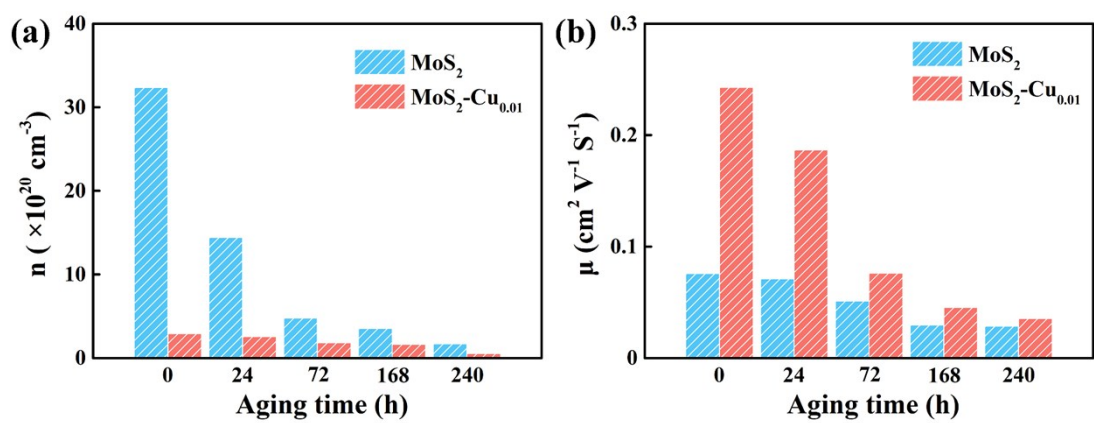


Figure S6 Compared (a) the carrier concentration and (b) the carrier mobility of MoS₂ and MoS₂-Cu films versus aging time.