

Supplementary Information

**Efficient aerobic oxidative desulfurization over Co-Mo-O
bimetallic oxides catalyst**

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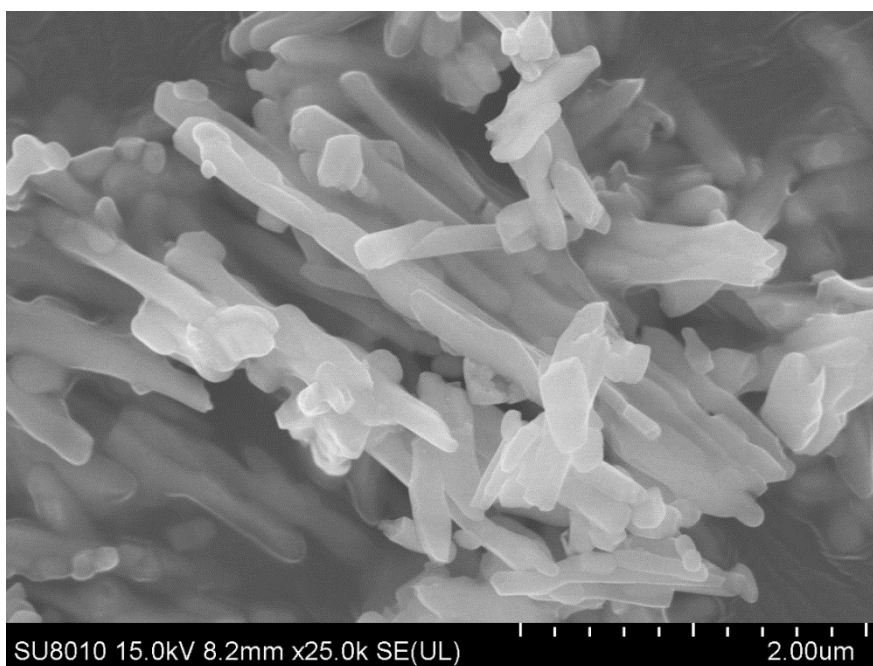


Fig. S1 SEM image of the CoMoO.

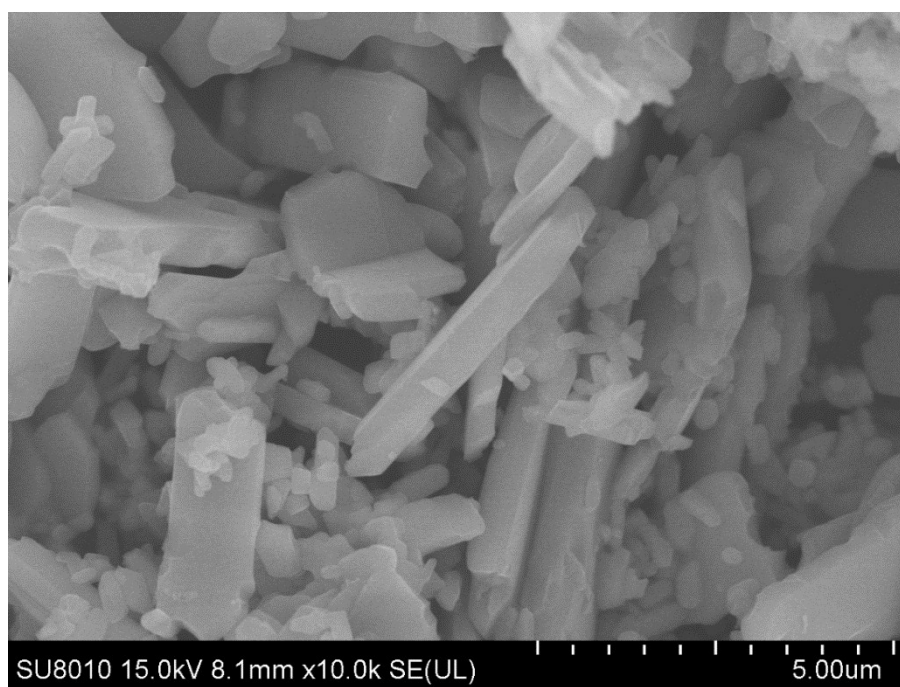


Fig. S2 SEM image of the CoMo₂O.

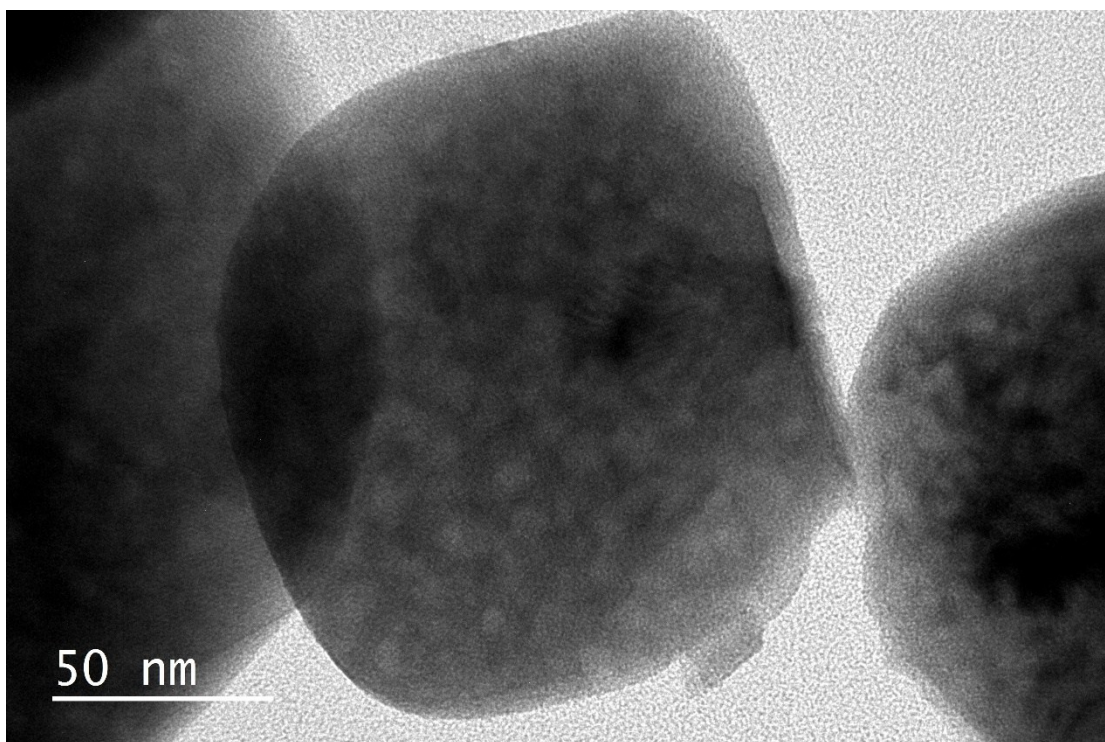


Fig. S3 TEM image of the Co₂MoO₄.

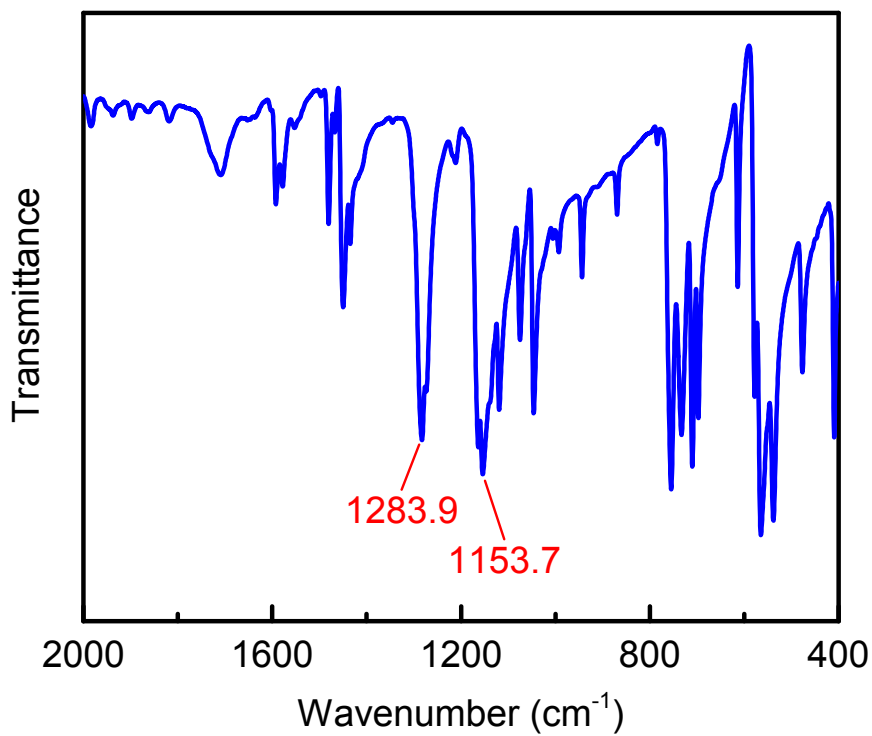


Fig. S4 FT-IR spectrum of the oxidation product of DBT.

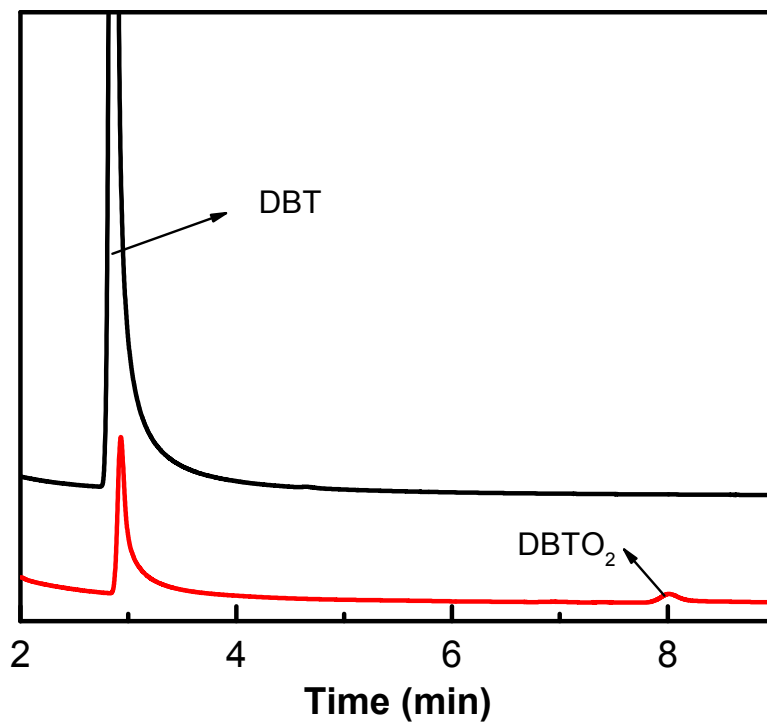


Fig. S5 GC chromatograms of the oil phase before and after the reaction.

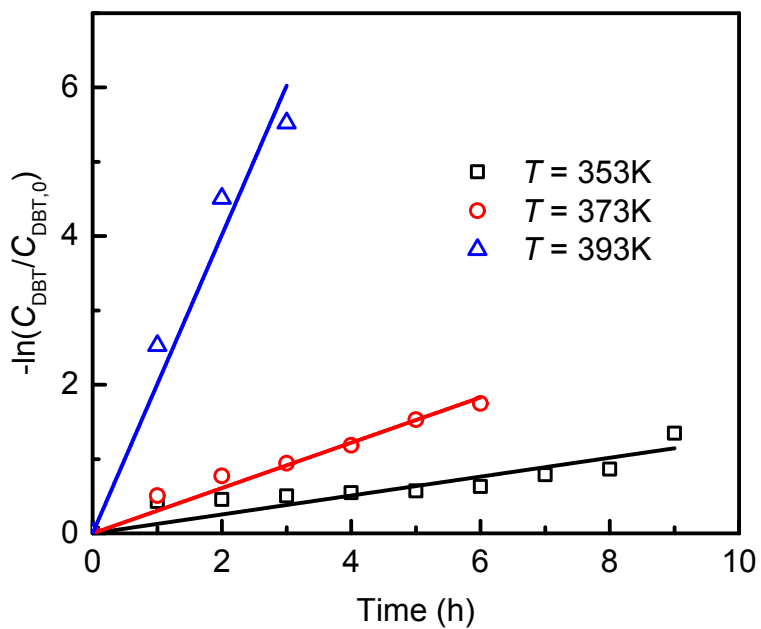


Fig. S6 Fitting of the kinetic data with pseudo-first-order model.

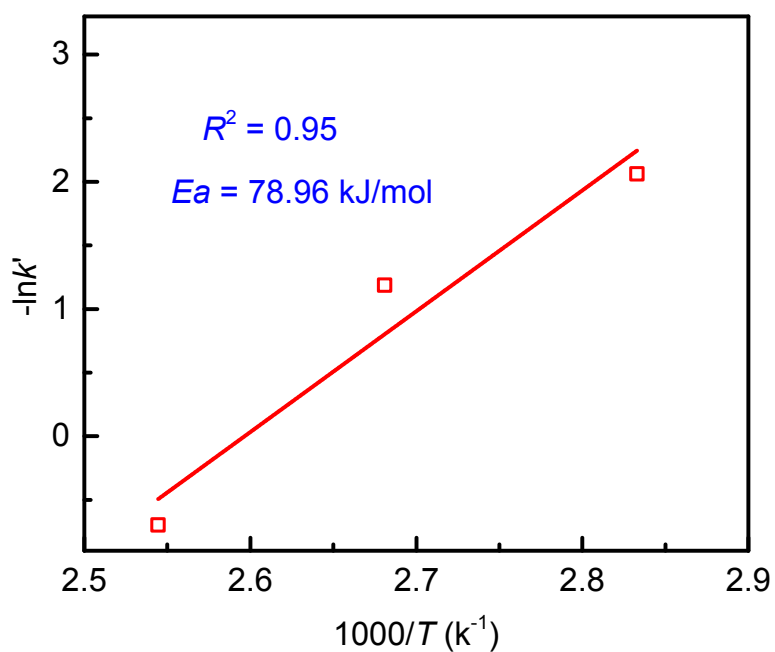


Fig. S7 Calculation of activation energy with Arrhenius equation.

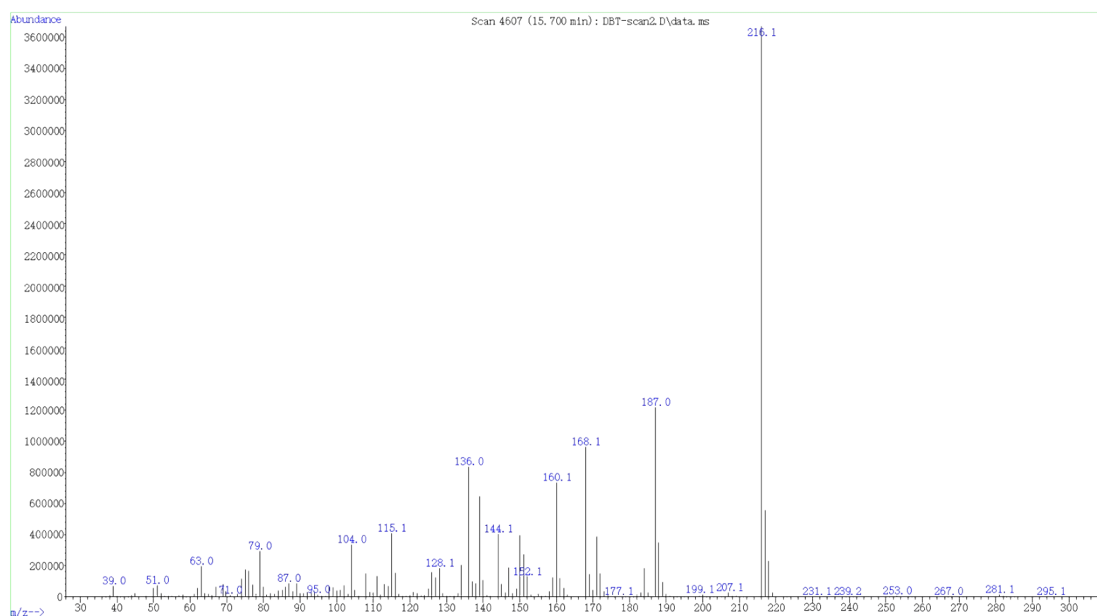


Fig. S8 Mass spectrometry of dibenzothiophene sulfone (DBTO₂).

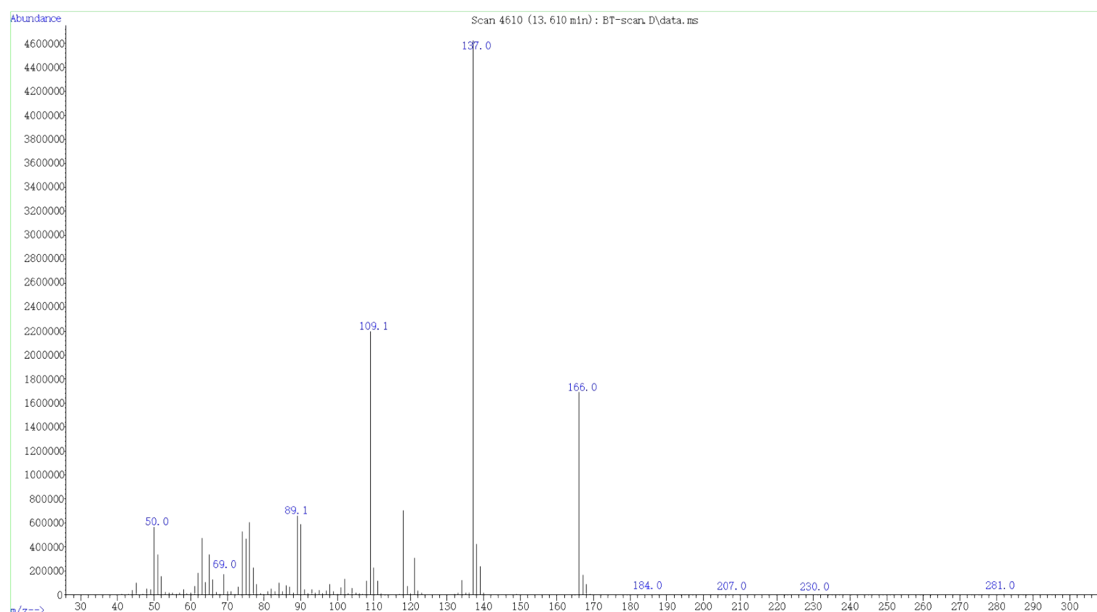


Fig. S9 Mass spectrometry of benzothiophene sulfone (BTO₂).

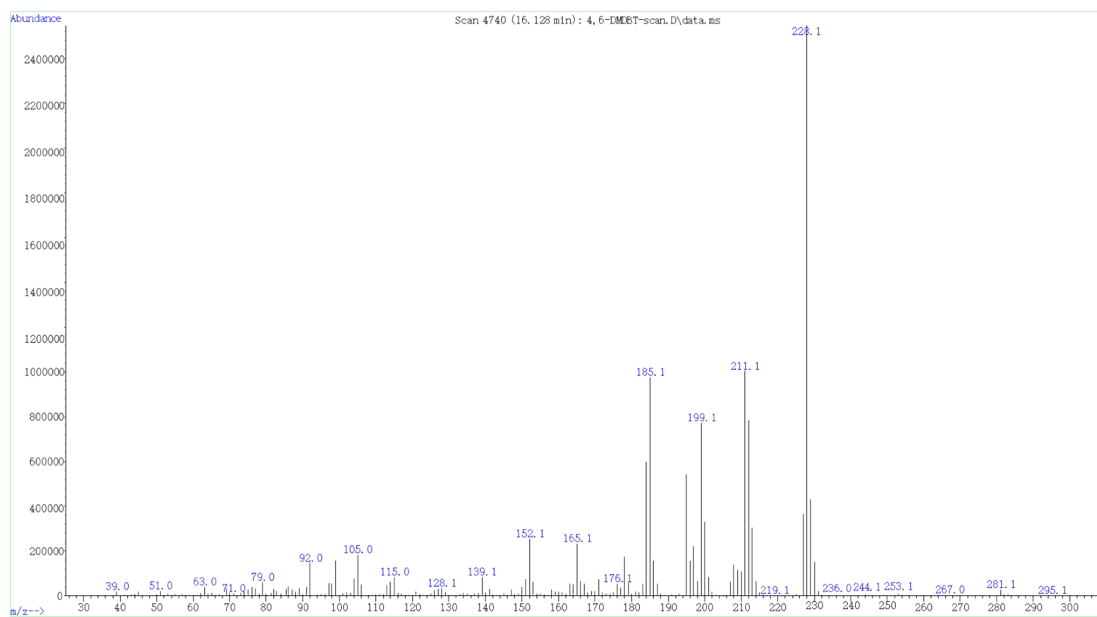


Fig. S10 Mass spectrometry of 4,6-dimethyldibenzothiophene sulfone (4,6-DMDBTO₂).