

Supplementary Information for

Preparation and performance of DOPO-nano-SiO₂ modified polyacrylic acid-based flame retardant dust suppressant for coal

Shuili Lai,^{*abc} Gong Chen,^{abc} and Wen Hu,^{abc} Baojian Liu,^{abc} Xin Yang,^{abc} Kai Gao^{abc}

^a College of Chemistry and Chemical Engineering, Shaanxi University of Science and Technology, Xi'an 710021, People's Republic of China

^b Shaanxi Key Laboratory of Chemical Additives for Industry, Shaanxi University of Science and Technology, Xi'an 710021, People's Republic of China

^c Key Laboratory of Chemical Additives for China National Light Industry, Shaanxi University of Science and Technology, Xi'an, 710021, People's Republic of China

***Corresponding Author:**

Name: Shuili Lai

Address: College of Chemistry and Chemical Engineering, Shaanxi University of Science and Technology, Xi'an, Shaanxi Province, People's Republic of China

E-mail: 1808102@sust.edu.cn

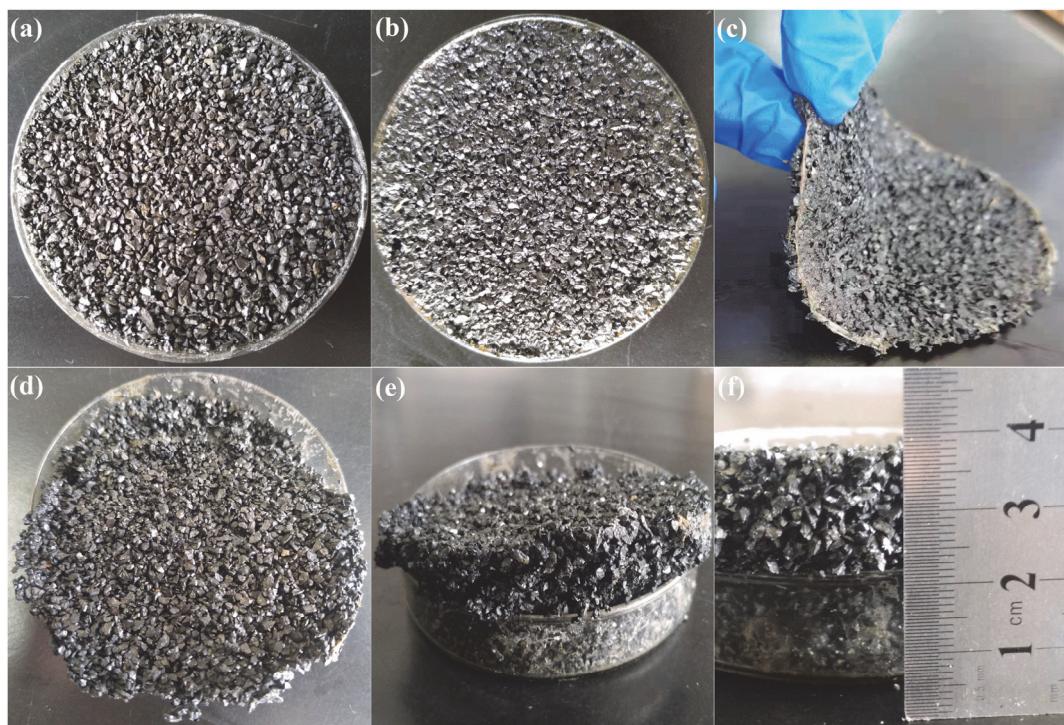


Figure S1. Surface morphology of pulverized coal sprayed with water (a) and flame retardant dust suppressant (b); (c) flame retardant dust suppressant soft film formed on the surface of pulverized coal; (d~f) consolidation layer formed on the surface of pulverized coal.