Supporting information

SF₆ catalytic degradation in a γ -Al₂O₃ packed bed plasma system: A combined experimental and theoretical study

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Fig.S1. Discharge images of three packing systems. (*a*) 1 mm, (*b*) 2 mm, (*c*) 4 mm (*100 mL/min, 3% SF*₆-97 % *Ar*, 80W)



Fig.S2. FTIR spectra of the three packing systems (3% SF₆-97% Ar, 80 W, 100 mL/min)



Fig.S3. N2-TPR results of the γ -Al₂O₃ pellets



Fig.S4. XRD patterns of the γ -Al₂O₃ pellets (a) fresh, (b) spent



Fig.S5. XPS patterns of the γ -Al₂O₃ pellets (a) fresh, (b) spent



Fig.S6. Typical adsorption sites on γ -Al₂O₃(110) surface