

## Supporting Information

# The exchange between anions and cations induced by coupled plasma and thermal annealing treatment for room-temperature ferromagnetism

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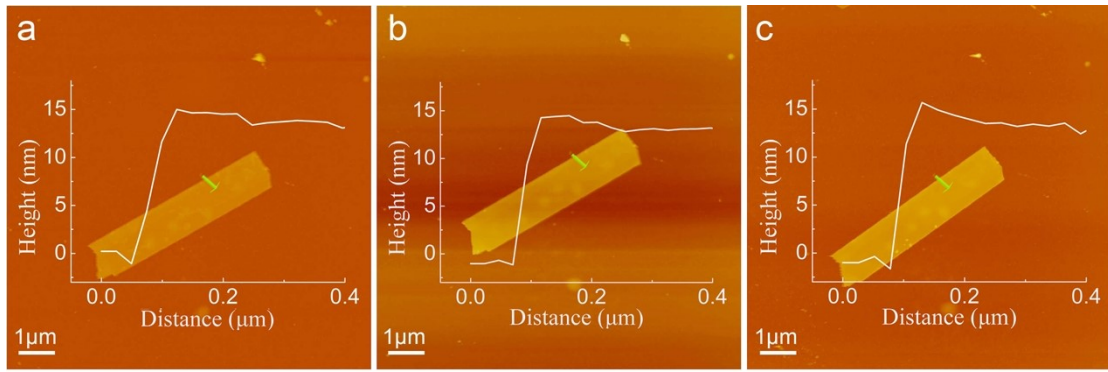


Fig. S1 AFM image of the (a) pristine, (b) plasma-treated and (c) plasma-annealing-treated ReS<sub>2</sub> films. Inset: Height profile along the yellow line indicating the layer thickness.

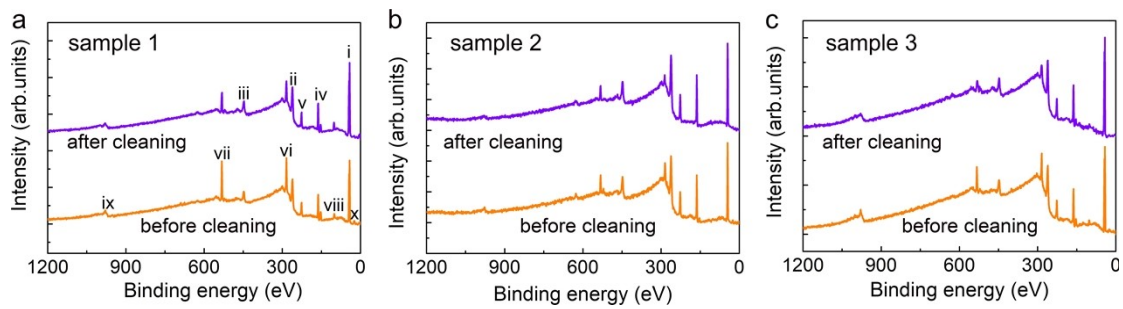


Fig. S2 XPS survey spectra shown from 0 to 1200 eV of the (a) pristine, (b) plasma-treated and (c) plasma-annealing-treated  $\text{ReS}_2$  films before and after the sample cleaning.