

Supporting Information

Capture of Iodine from Nuclear-Fuel-Reprocessing Off-Gas: Influence of Aging on Reduced Silver Mordenite Adsorbent after Exposure to NO/NO₂

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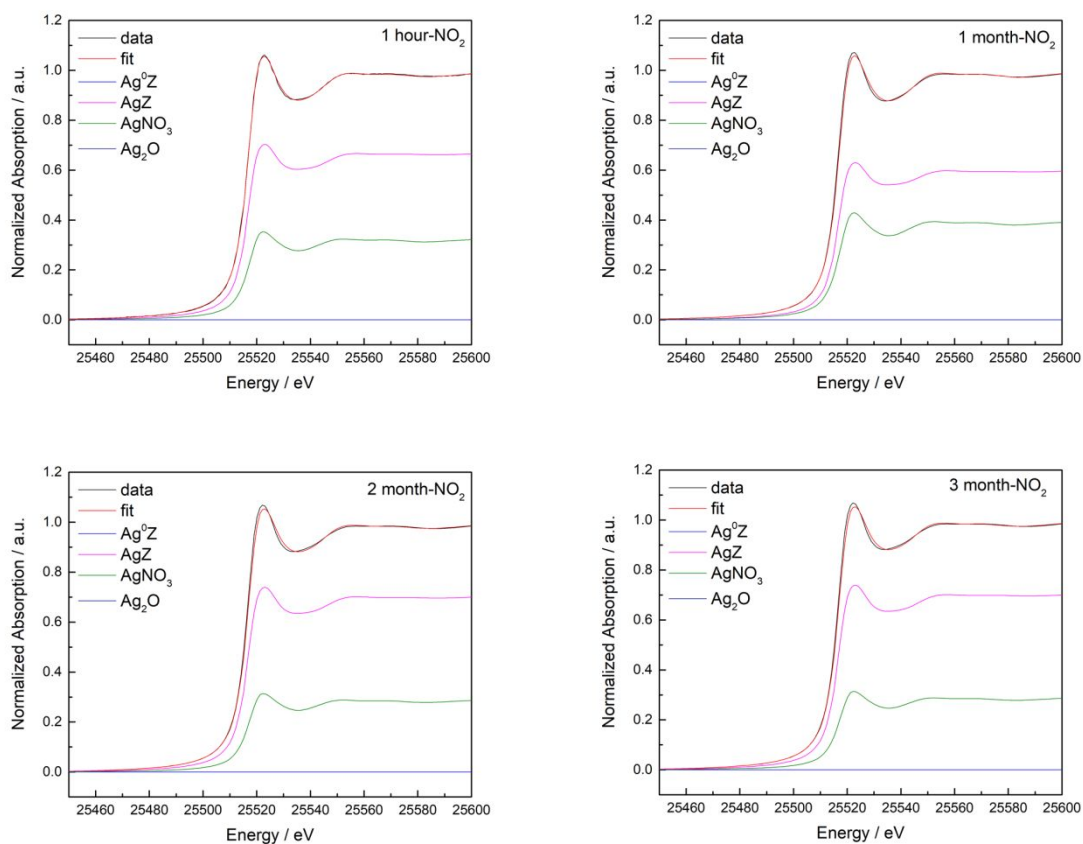


Figure S1. Linear combination fitting (LCF) for Ag^0Z aged in 2% NO_2 in dry air using reference compounds Ag^0Z , Ag_2O , AgNO_3 , and AgZ . Experimental data are in black and the LCF is in red. Reference standards used to achieve the LCFs are plotted beneath and scaled according to their contribution to the fit.

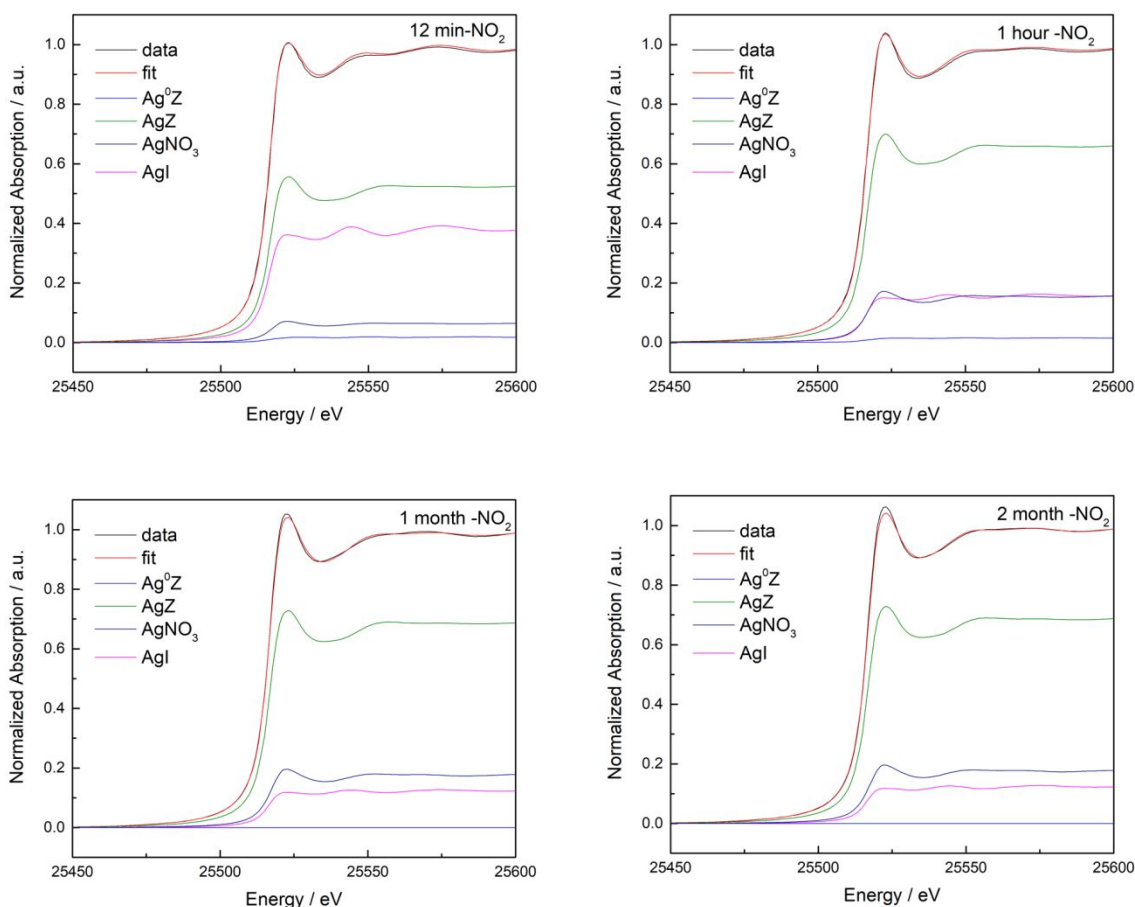


Figure S2. Linear combination fitting (LCF) for Ag^0Z aged in 2% NO_2 in dry air and then exposed to iodine (I_2) at a concentration of 50 ppmv in dry air using reference compounds Ag^0Z , Ag_2O , AgNO_3 , AgZ , and AgI . Experimental data are in black and the LCF is in red. Reference standards used to achieve the LCFs are plotted beneath and scaled according to their contribution to the fit.

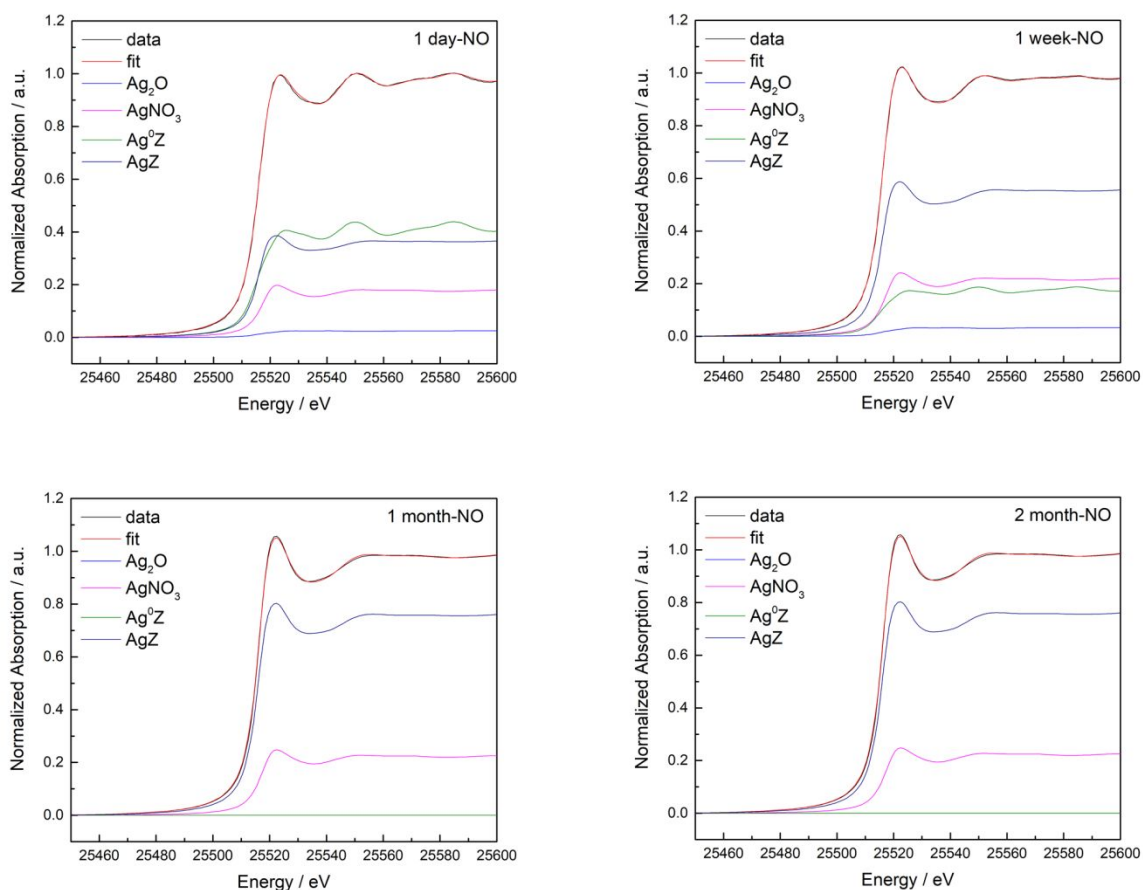


Figure S3. Linear combination fitting (LCF) for Ag^0Z aged in 1% NO in N_2 using reference compounds Ag^0Z , Ag_2O , AgNO_3 , and AgZ . Experimental data are in black and the LCF is in red. Reference standards used to achieve the LCFs are plotted beneath and scaled according to their contribution to the fit.

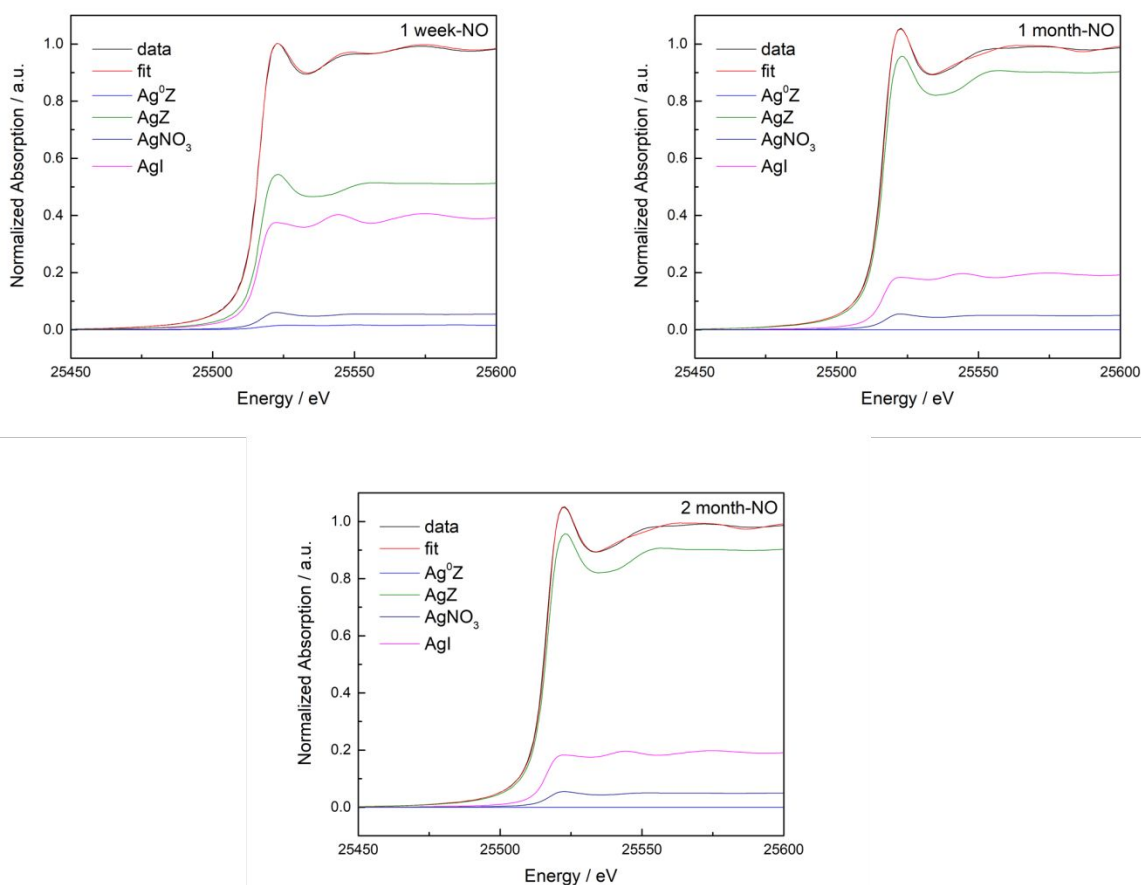


Figure S4. Linear combination fitting (LCF) for Ag^0Z aged in 1% NO in N_2 and then exposed to iodine (I_2) at a concentration of 50 ppmv in dry air using reference compounds Ag^0Z , Ag_2O , AgNO_3 , AgZ , and AgI . Experimental data are in black and the LCF is in red. Reference standards used to achieve the LCFs are plotted beneath and scaled according to their contribution to the fit.

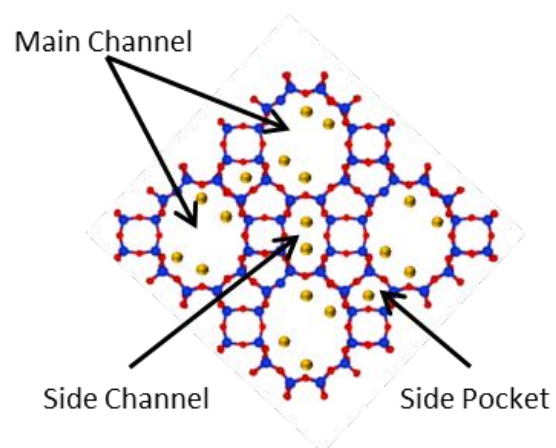


Figure S5. Structure of mordenite crystal where 12-member $7.0 \times 6.5 \text{ \AA}$ main channels, parallel 8-member $5.7 \times 2.6 \text{ \AA}$ side channels, and 5-member side pockets with approximate binding sites shown.