Electronic Supplementary Material (ESI) for Dalton Transactions

The structure of plutonium(IV) oxide as hydrolysed clusters in aqueous suspensions

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Supporting Material

Figure S1. The fit and the individual contribution of the different scattering paths of the EXAFS data of crystalline plutonium(IV) oxide in contact with water. Solid thin line - experimental data, thick line - calculated model function using the parameters given in Table 1. Individual contributions: solid line (offset - -8) - Pu-O single scattering (SS) (offset - -8), Pu--Pu SS (offset - -16), and Pu--O SS (offset - -24).

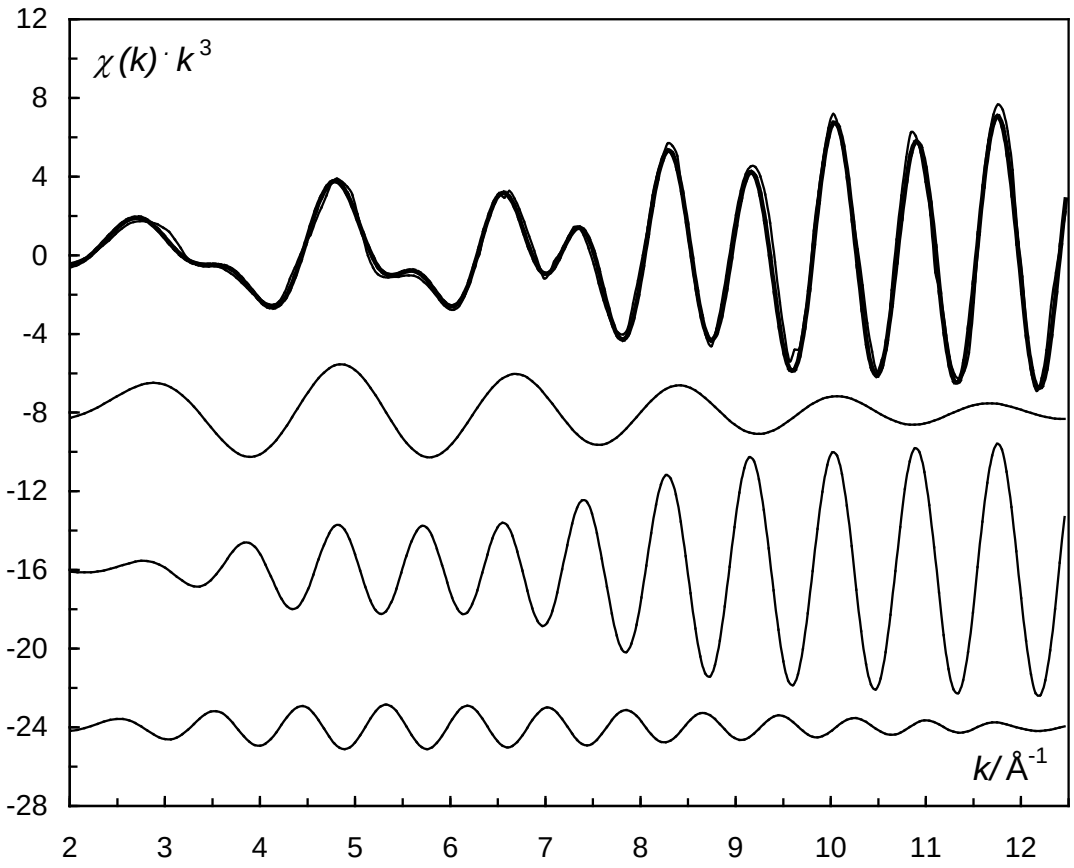

Figure S2. The fit and the individual contribution of the different scattering paths of the EXAFS data of colloidal plutonium(IV) oxide, freshly prepared. Solid thin line - experimental data, thick line - calculated model function using the parameters given in Table 1. Individual contributions: solid line (offset - -4) - Pu-O single scattering (SS) (offset - -8) and Pu--Pu SS (offset - -8).

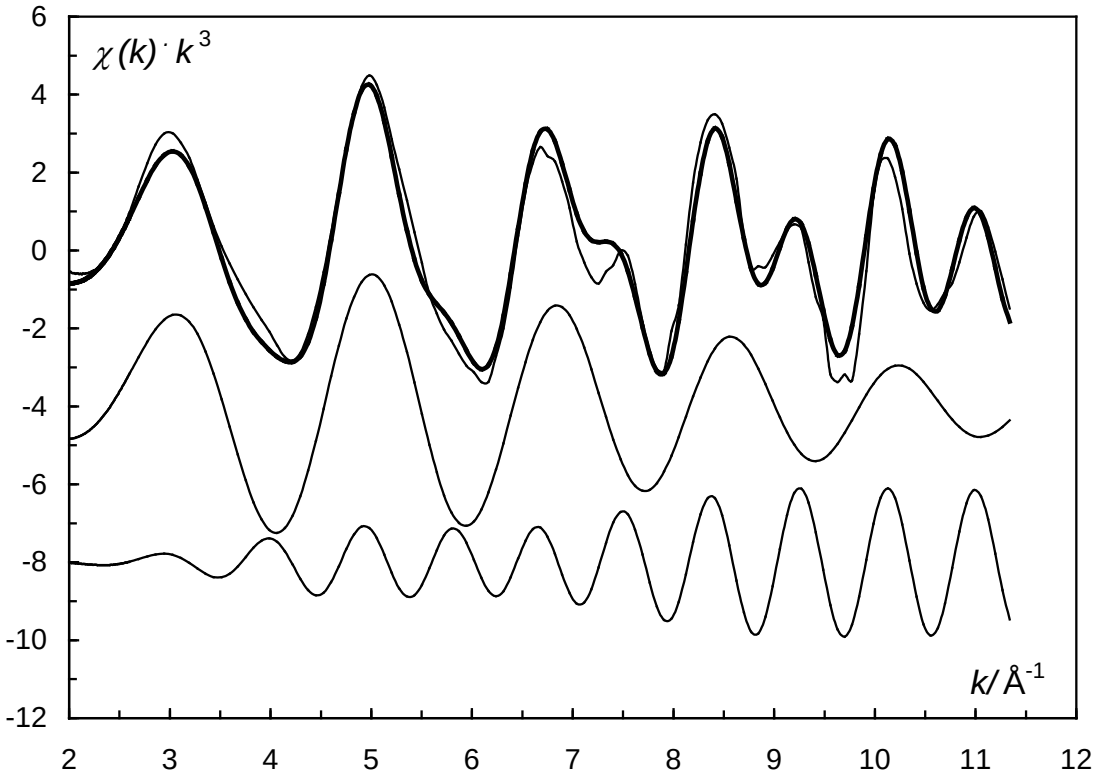

Figure S3. The fit and the individual contribution of the different scattering paths of the EXAFS data of colloidal plutonium(IV) oxide, stored for five years. Solid thin line - experimental data, thick line - calculated model function using the parameters given in Table 1. Individual contributions: solid line (offset - -3) - Pu-O single scattering (SS) (offset - -8) and Pu--Pu SS (offset - -7).

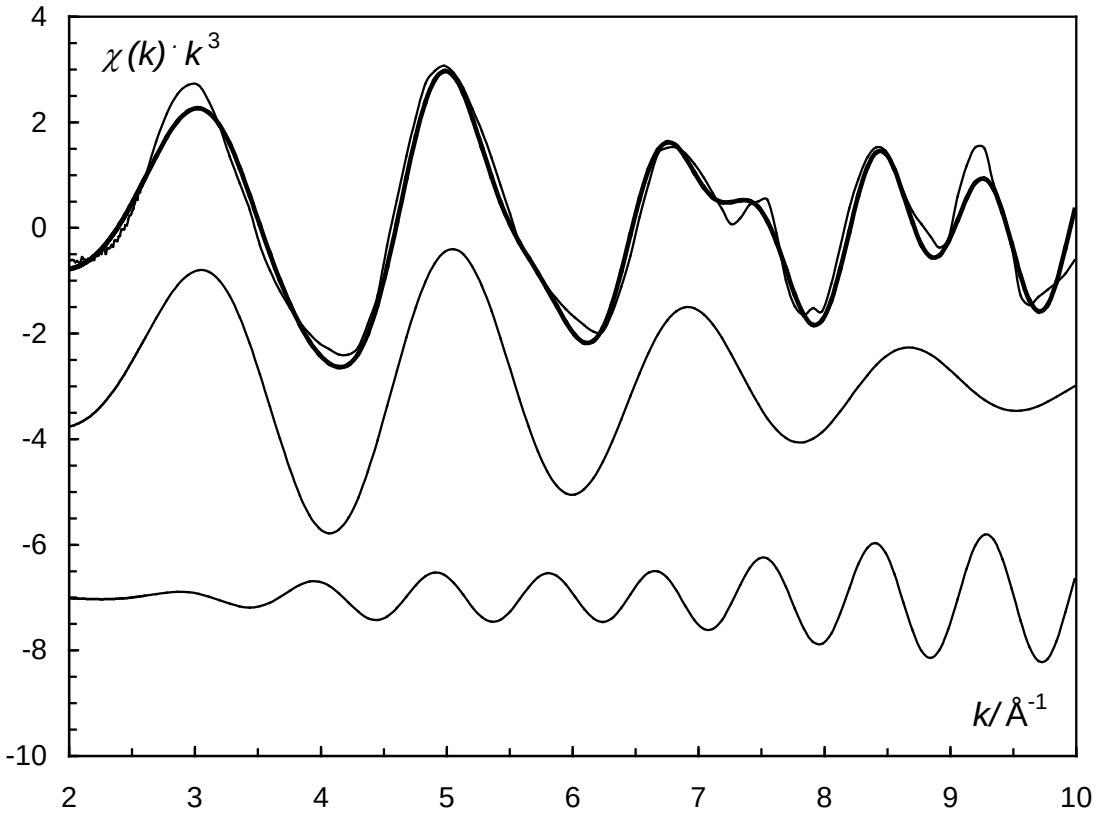

Figure S4. X-ray powder diffractogram of the aged PuO_2 colloid suspension.