**Time-resolved study of site-specific corrosion in a single crystalline silver nanoparticle**

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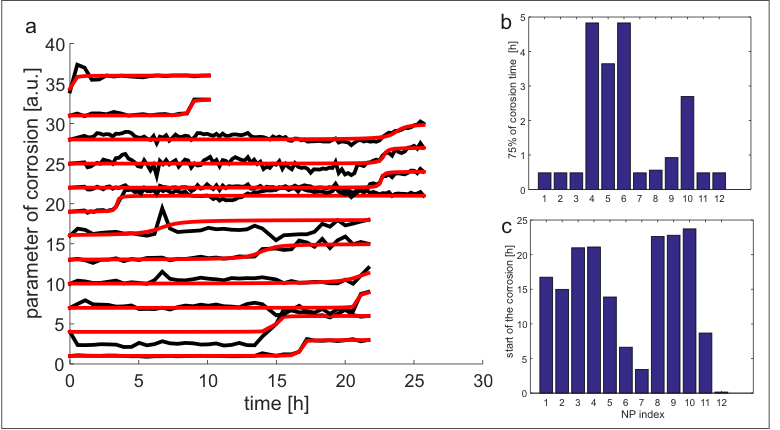
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Fitting procedure of the curve CPn(t) curves

1. CPn(t) curve was scaled to from -1 to 1.
2. Non-linear fit with sigmoidal curve y(t) = 2/pi\*atan(a\*(t-b))
   1. b .. Inflection point, a ..slope at the inflection point
   2. due to the limited AFM sampling frequency the lower limit of the parameter a was set to 1
   3. the 75% corrosion time was defined as 2/a\*tan(pi/2\*0.75)



**Figure S1** a- Time evolution of the corrosion parameter (normalized) for each single particle (black line) and their corresponding sigmoidal fit (red line). b – fitted corrosion time (75% of corrosion) for each NP. c – fitted starting point of the corrosion for each NP.



**Figure S2** Graph of the time evolution of the corrosion parameter CPn for an exemplary not altered TrNPs from each measurement set (for better visibility each curve is offset by 1).. Inset – AFM images of the TrNPs at the beginning and at the end of the measurement.