Supplementary Information

Magnetoresistance in Au/1,4-benzene-dithiol/Au and Au/1,4-benzene-imethanethiol/Au single-molecule junctions

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Figure S1 shows the MR curves before and after the Savitsky-Golay filtering, which is one of the smoothing methods. This method interpolates the data using a polynomial function and performs a centered moving average.[1] This method is implemented with popular data analysis software such as Origin and Matlab and is often used to remove noise without altering the original data's tendency. As shown in Figure S1, the smoothed resistance did not change the tendency of the raw data.
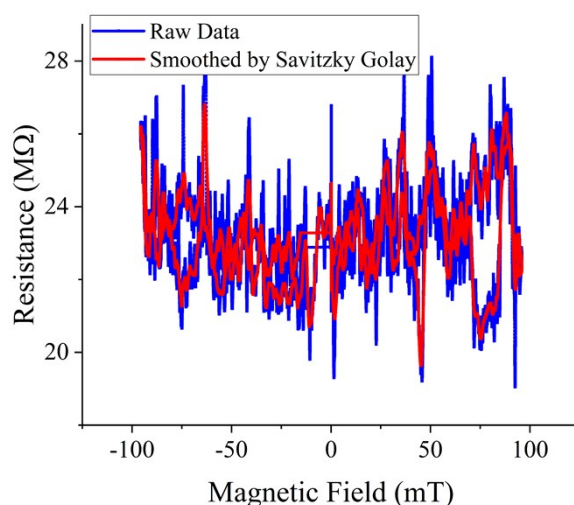

Figure S1. The raw (blue line) and smoothed (red line) MR data curves.
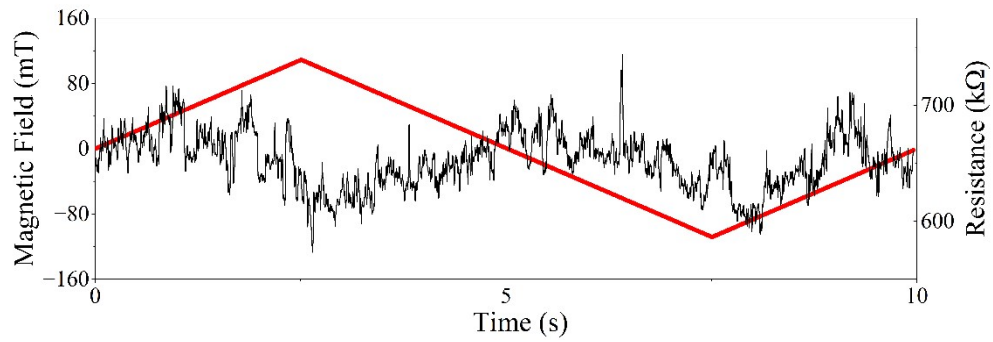
Figure S2 shows the time series data of MR.

Figure S2. Time series data of a magnetic field (red) and resistance (black).

Reference

1   R. W. Schafer, What is a savitzky-golay filter?, *IEEE Signal Process Mag*, 2011, 28, 111–117.