Supporting Information

Electrochemical signature of mismatch in overhang DNA films by scanning electrochemical microscopy

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Figure S1. Approach curve on bare gold surface. Normalized current (ratio of tip current and tip current at infinity) vs Normalized distance (ratio of distance between tip and substrate and the radius of tip).



Figure S2. Current profiles extracted from the images of DNA duplexes presented in Fig. 2 in main text. (A) Normalized current vs. distance extracted from image Fig. 2A. (B) Normalized current vs. distance extracted from image Fig. 2B. In each profile, left: decrease in current for matched DNA films; right: decrease in current for mismatched DNA films except the solid line for 'M'. Lower current corresponds to high color intensity in image.



Figure S3. Approach curves for matched and mismatched ds-DNA films **S1-S3** (A) and **L1-L3** (B).