## Determination of the local corrosion rate of magnesium alloys using a shear force mounted scanning microcapillary method

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Fig.S1 Shearforce spectra recorded when the micropipet is placed far (full line) and in proximity to the surface (dash line) for the phase signal (red curves) and amplitude (black curves) for an unfilled pipet of 500 nm diameter and 2 mm taper distance with a stimulation amplitude of 1V.



Fig.S2 a) Schematic representation of a Hg drop placed on top of a 1.6 mm diameter Pt working electrode scanned using the hoping mechanism with a micropipet. b) Hg drop topography line scan recorded in SF (black circle line).

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