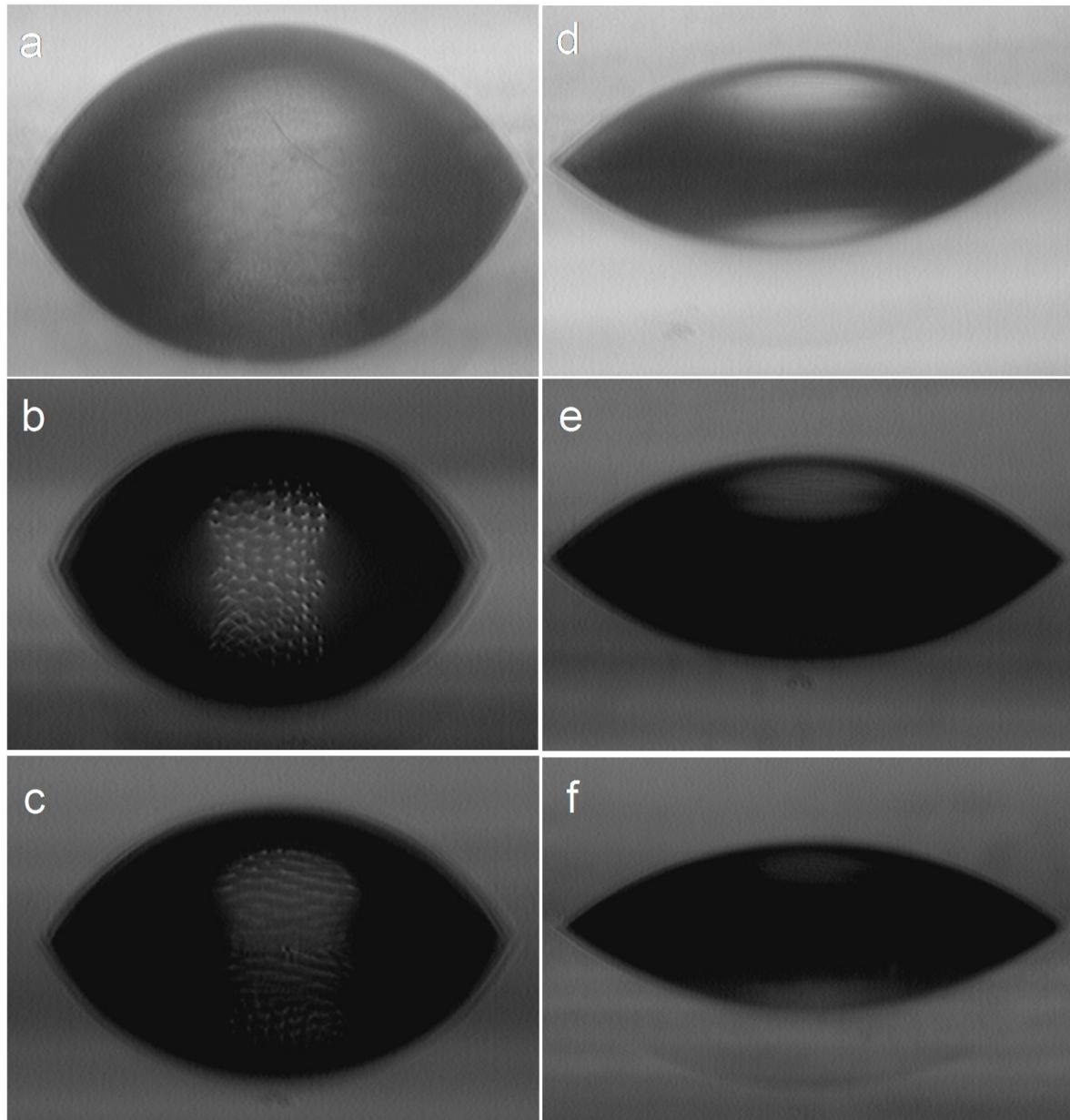


## SUPPORTING INFORMATION



**Figure S1** – TiN (a), Ta (b) and TiTa (c) pre-piranha treatment . TiN (d), Ta (e) and TiTa (f) post-piranha treatment

	TiN	TiTa	Ta
Thickness	50.24 ± 0.3 nm	57.36 ± 2.3 nm	50 nm ± 5 nm
Root mean square roughness (nm)	1.35	3.35	6.29
Sz (Maximum Height of the Surface) (nm)	12.13	25.20	40.93
Ssk (Skewness)	0.10	0.19	0.29
Elemental composition	TiN	TiTa	Ta
Ta (wt%)	-	60.2	92.8
Ti (wt%)	22.3	23.2	0
O (wt%) (oxygen/metal ratio)	60.6 2.7	16.6 0.2	7.2 0.1
N (wt%)	17.1	0	0

**Table S1** - Characterization of metal alloy deposition by SEM (a-c) and AFM (d-f)