

## Electronic Supplementary Information

### Video 1:

Video of Fig. 3, showing Ar and He bubble generation, mixing, splitting, and expelling.

### Video 2:

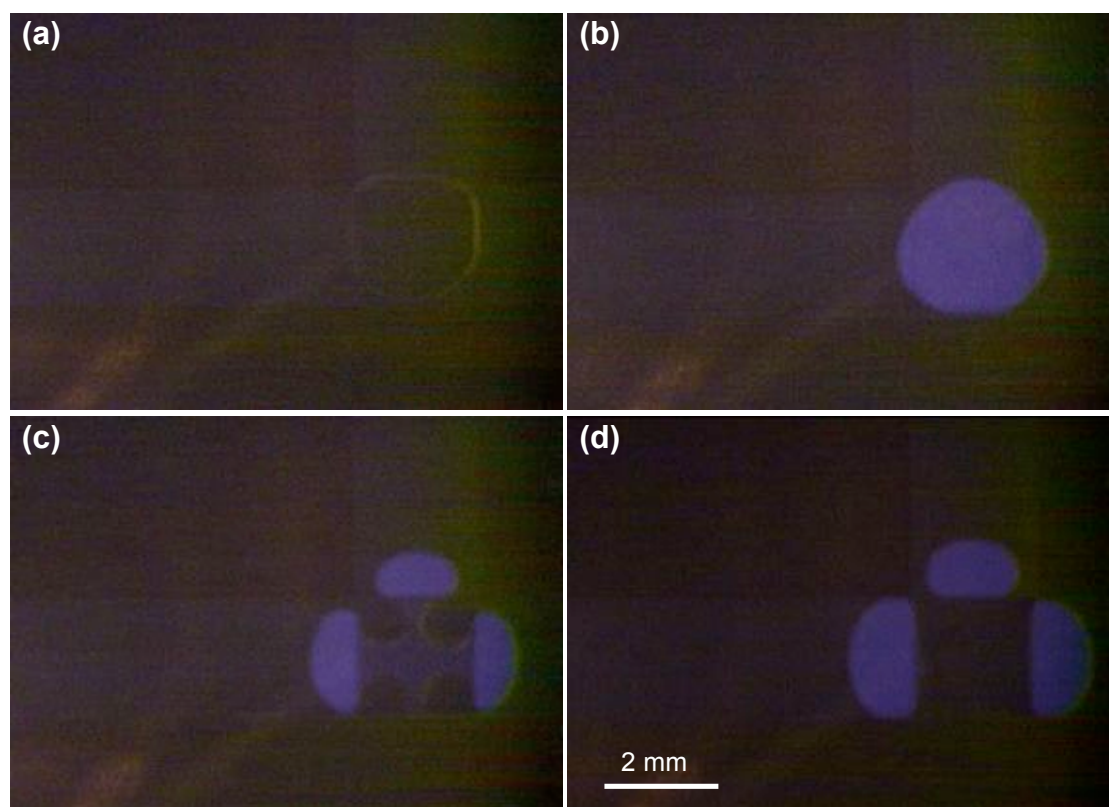
Video of Fig. 5, showing Ar microplasma moved by DEP.

### Video 3:

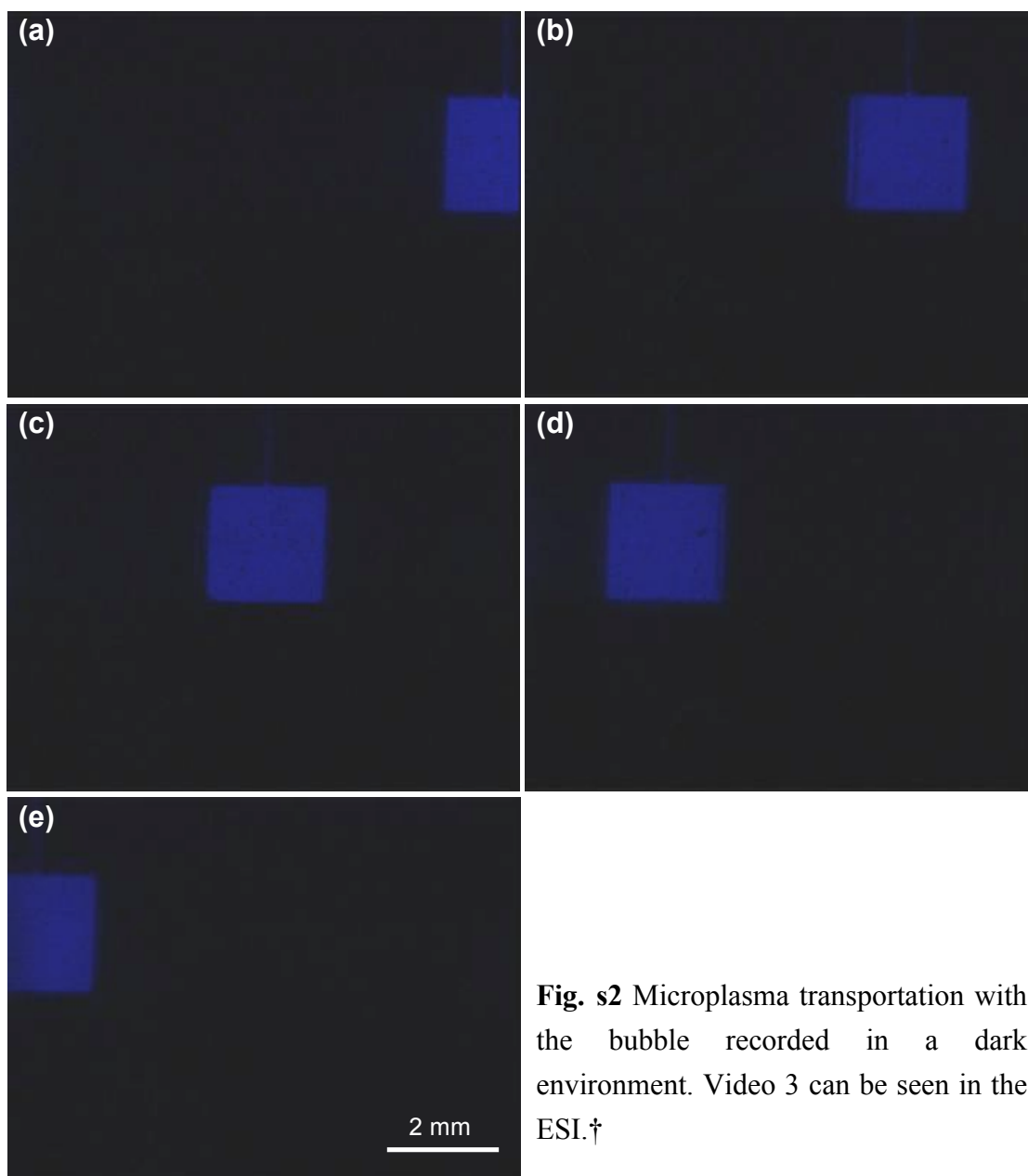
Video of Fig. s2, showing Ar microplasma moved by DEP in a dark environment.

### Video 4:

Video of Fig. 6, showing microplasma split by DEP.



**Fig. s1** Microplasma splitting by the surrounding high electric field.



**Fig. s2** Microplasma transportation with the bubble recorded in a dark environment. Video 3 can be seen in the ESI.†