Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Supporting Information for

Understanding the unorthodox stabilization of Liquid Phase Exfoliated Molybdenum Disulfide (MoS_2) in water medium

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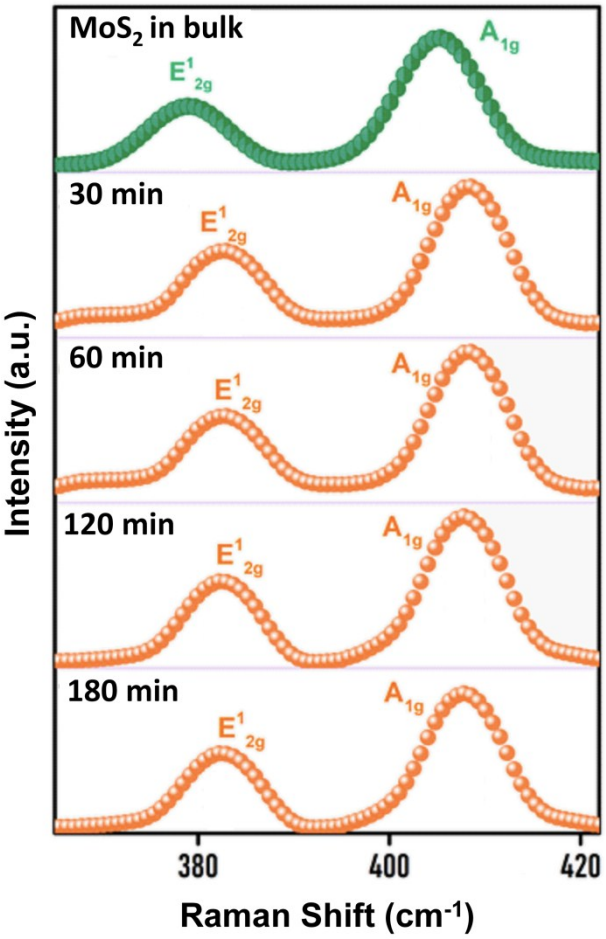

Fig. S1 Raman spectra of MoS_2 vibrational modes E^1_{2g} and A_{1g} present in H_2O dispersions produced with different sonication times.

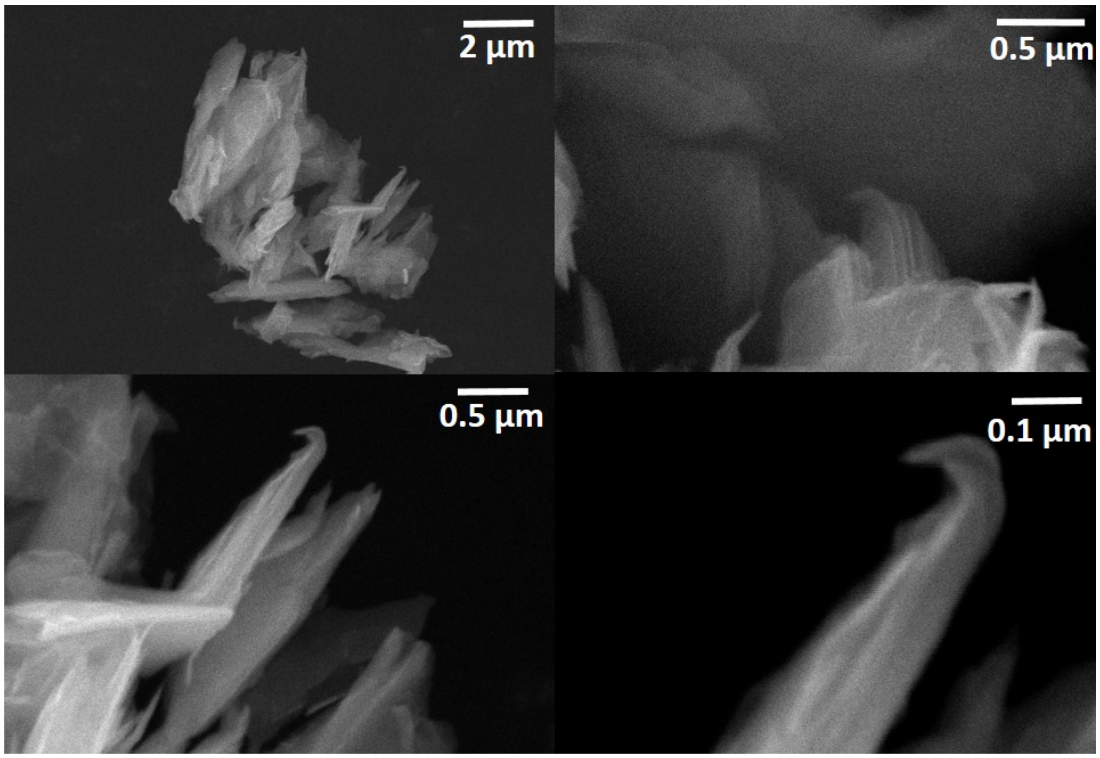

Fig. S2 Morphological characterization raw of MoS_2 in different magnifications (scale bars 2.0, 0.5 and 0.1 µm) where is possible to observe the crystal layers.

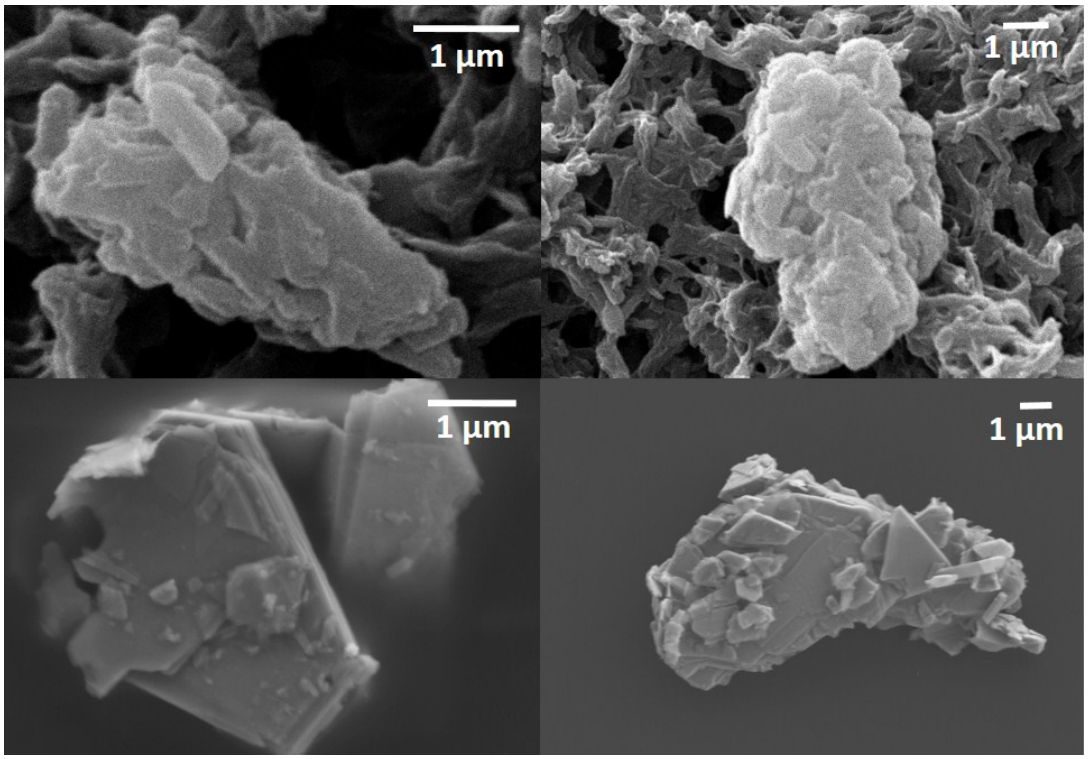

Fig. S3. Morphological characterization after LPE in Ac, these images shown the significantly damage of the MoS_2 crystals edges.

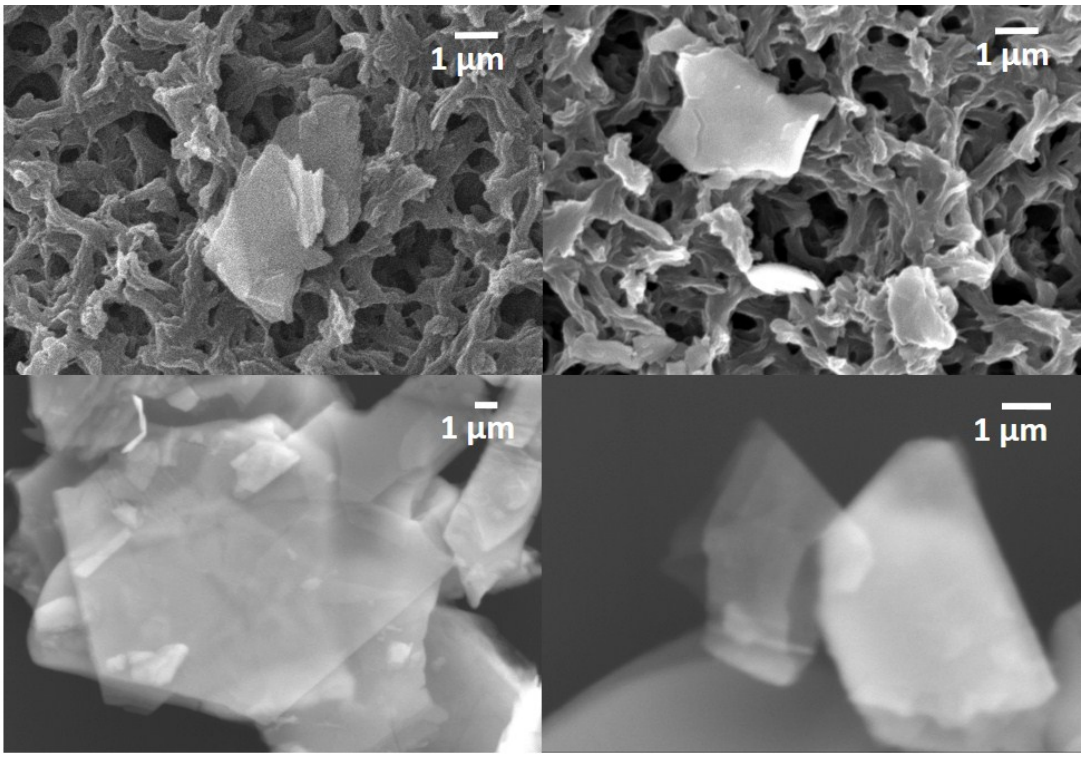

Fig. S4 Morphological characterization after LPE in H_2O. These images suggest that bulk MoS_2 particles are successfully exfoliated and substantially fragmented.