

Supplementary information file:

Optimizing the supercapacitive performance of MoS₂ by multivalent tungsten ion doping

Ion Nesterovschi,^{a,b} Ameen Uddin Ammar,^a Adriana Popa,^a Maria Stefan,^a Dana Toloman,^a Sergiu Gabriel Macavei,^a Cristina Leostean,^a Lucian Barbu Tudoran,^a Maria Mihet,^a Ana Varadi,^{a,c} Emre Erdem,^{a,d} and Arpad Mihai Rostas^{*a}

^a National Institute for Isotopic and Molecular Technologies, Donat 67-103, Cluj-Napoca, Romania.

^b Doctoral School of Physics, Babes-Bolyai University, Mihai Kogalniceanu 1, Cluj-Napoca, Romania.

^c Doctoral School of Chemistry, Babes-Bolyai University, Mihai Kogalniceanu 1, Cluj-Napoca, Romania.

^d Faculty of Engineering and Natural Sciences, Sabanci University, Tuzla, Istanbul, Turkey.

* Corresponding author: arpad.rostas@itim-cj.ro

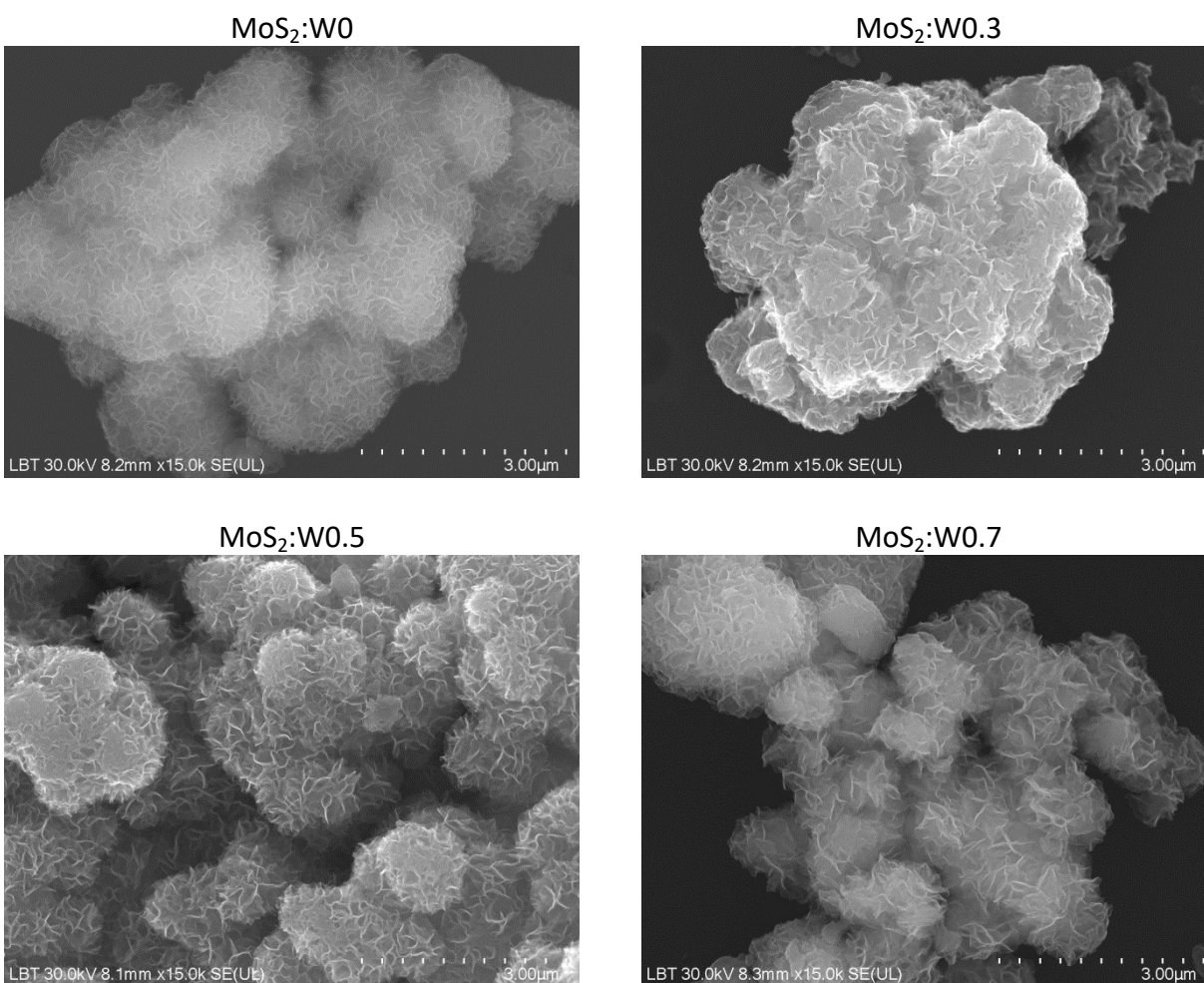


Figure S1: STEM micrographs of the undoped and W-doped MoS₂ samples.

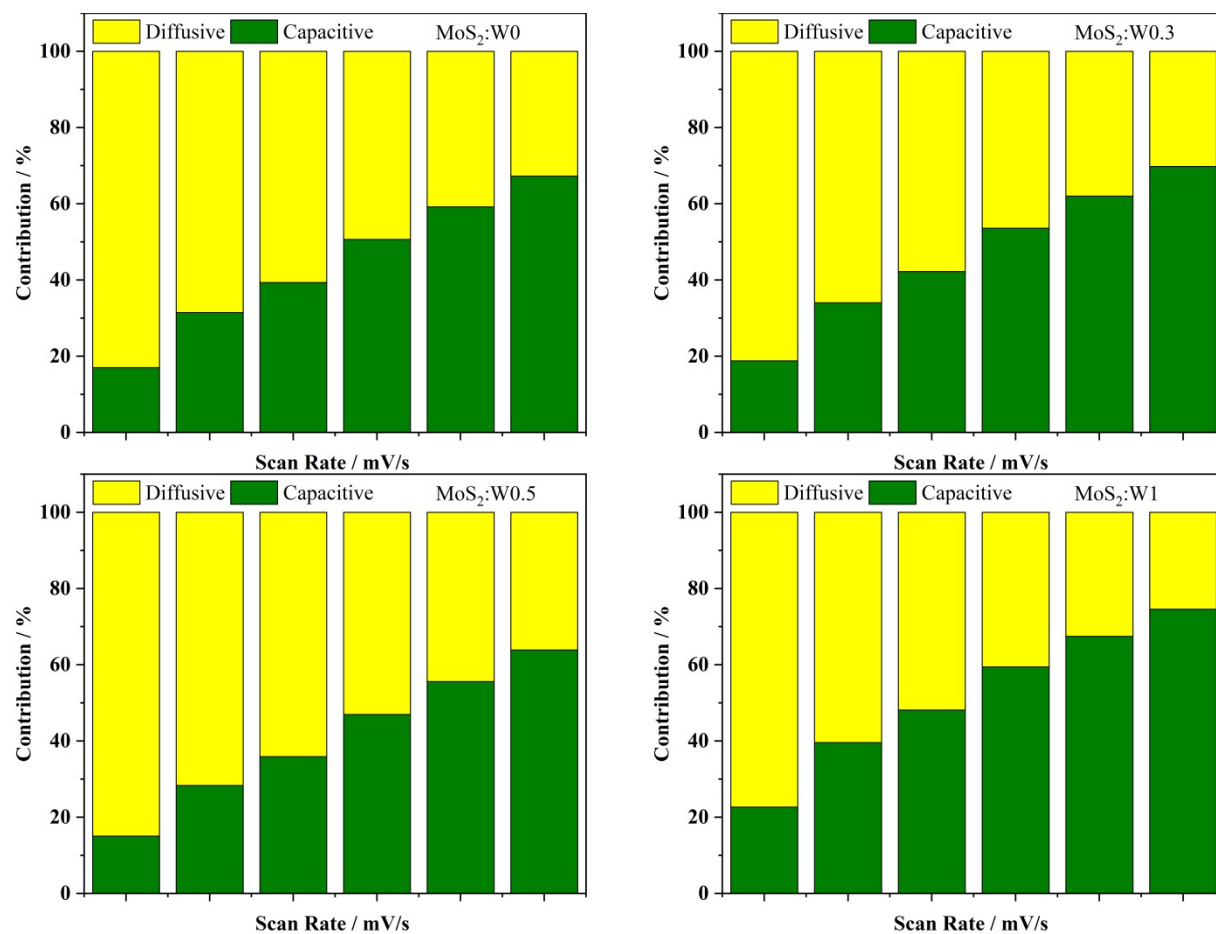


Figure S2: Dunn's analysis results of the undoped and W-doped MoS₂-based symmetric SC devices, showing the diffusive and capacitive contributions at different scan rates.

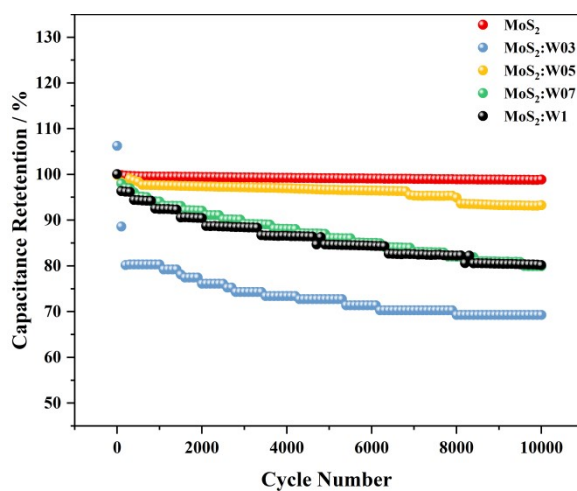


Figure S3: Capacitance Retention as a function of the cycle number measured at 3 A/g for all MoS₂:W samples used as electrode materials for supercapacitors.