

Supplementary Information

The effect of 2D tungsten disulfide nanoparticles on Lewis lung carcinoma cells in vitro

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Figure S1. Aqueous solution of WS₂ (0,1 mg/ml).

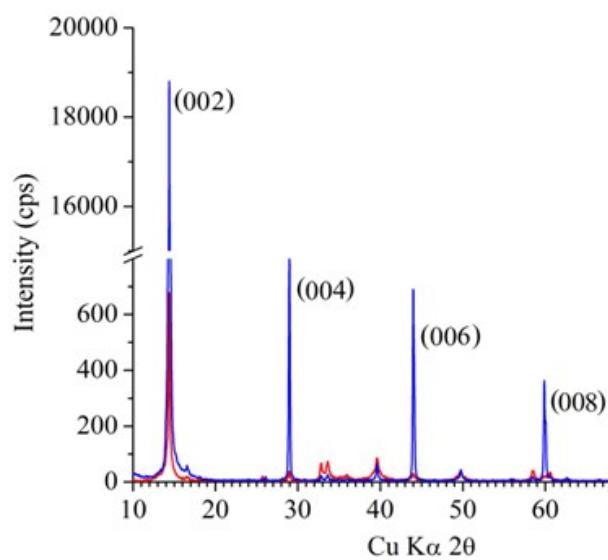


Figure S2. XRD of mechanochemically treated WS₂ nanoparticles (blue — before, and red — after treatment). Indexation was performed according to PDF2 08-0237. [O.Yu. Posudievsky, O.A. Khazieieva, A.S. Kondratyuk, V.V. Cherepanov, G.I. Dovbeshko, V.G. Koshechko and V.D. Pokhodenko, Nanotechnology, 2018, 29, 085704. doi:10.1088/1361-6528/aaa381]

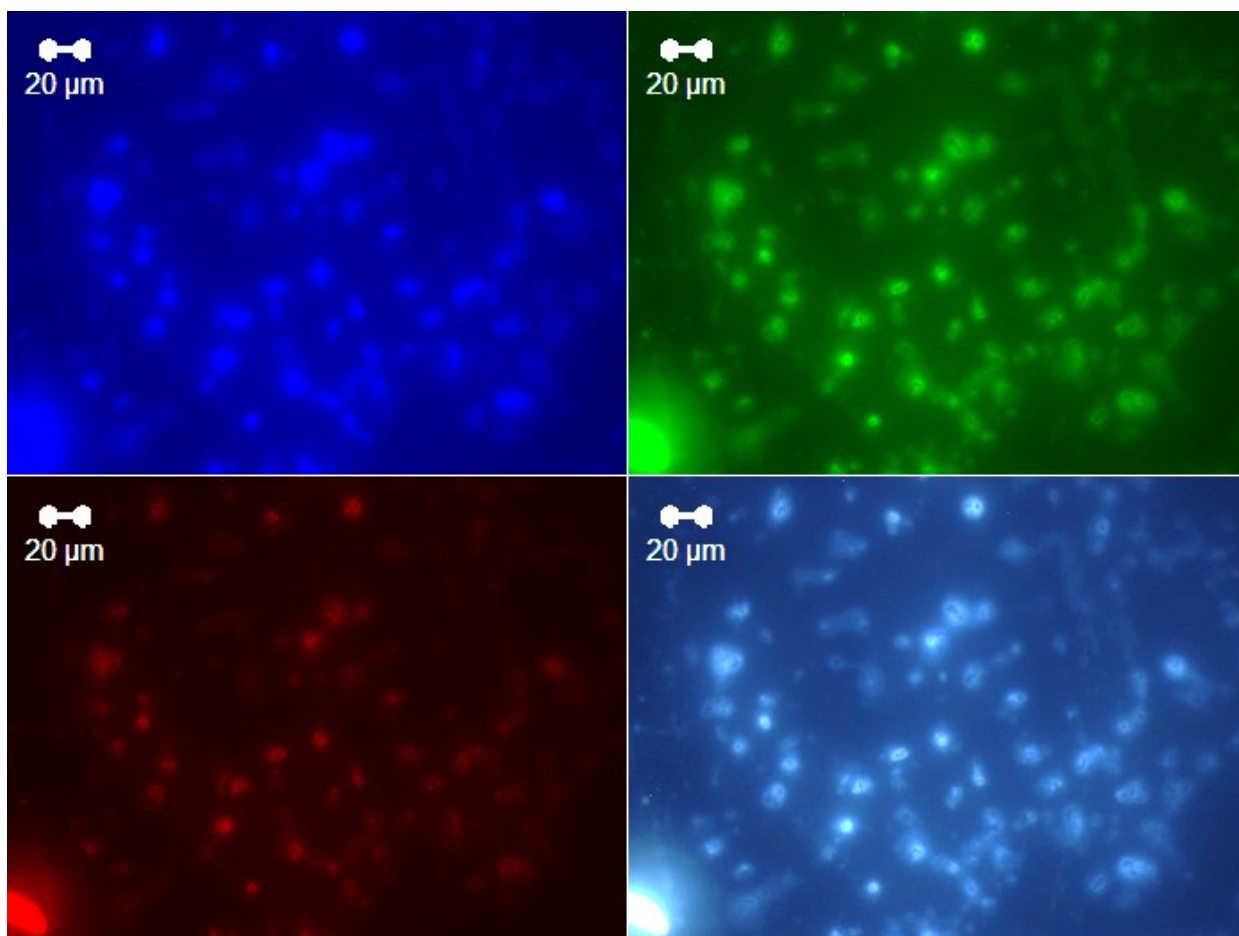


Figure S3. Confocal microscopy images of WS2 nanoparticles on a gold substrate; (a) transmission (excitation was provided by 405 nm diode laser) and (b) fluorescent (excitation 365 nm, Hg lamp HBO-100) images of 2D WS2 nanoparticles; Raman spectrum of 2D WS2 nanoparticles, $\lambda_{exc}= 488$ nm (c)

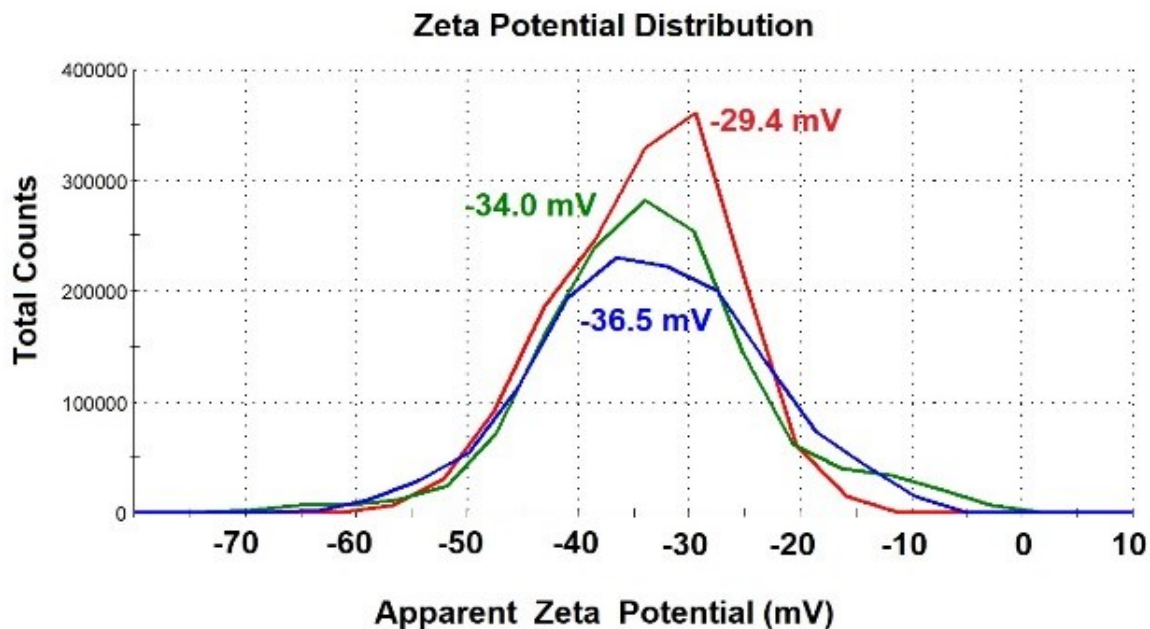


Figure S4. Z-potential distribution of 2D-WS2 nanoparticles.

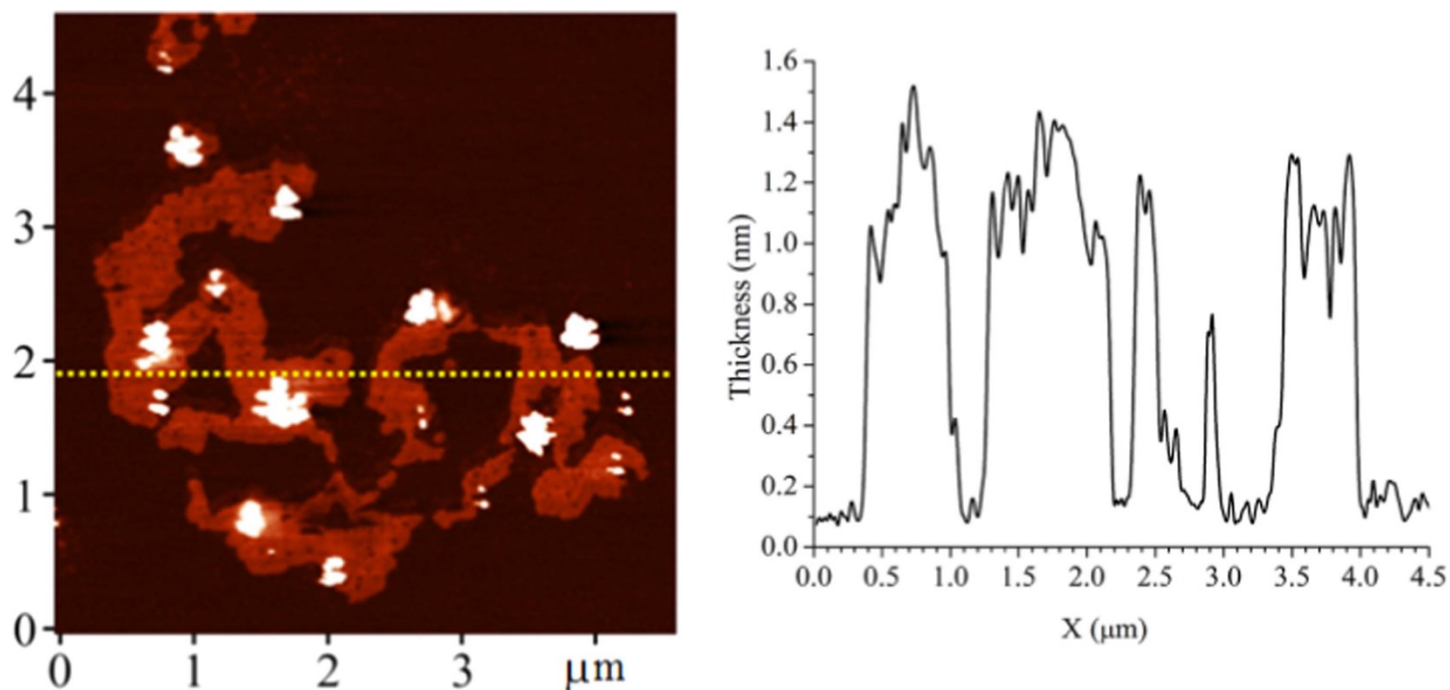


Figure S5. AFM image and cross-section profile for aggregate of 1H-WS2 nanoparticles deposited on the surface of the mica from dispersion. in EtOH. [O.Yu. Posudievsky, O.A. Khazieieva, A.S. Kondratyuk, V.V. Cherepanov, G.I. Dovbeshko, V.G. Koshechko and V.D. Pokhodenko, *Nanotechnology*, 2018, 29, 085704. doi:10.1088/1361-6528/aaa381]