

# The Effects of Chemical Etching and Ultra-Fine Grain Structure of Titanium on MG-63 Cell Response

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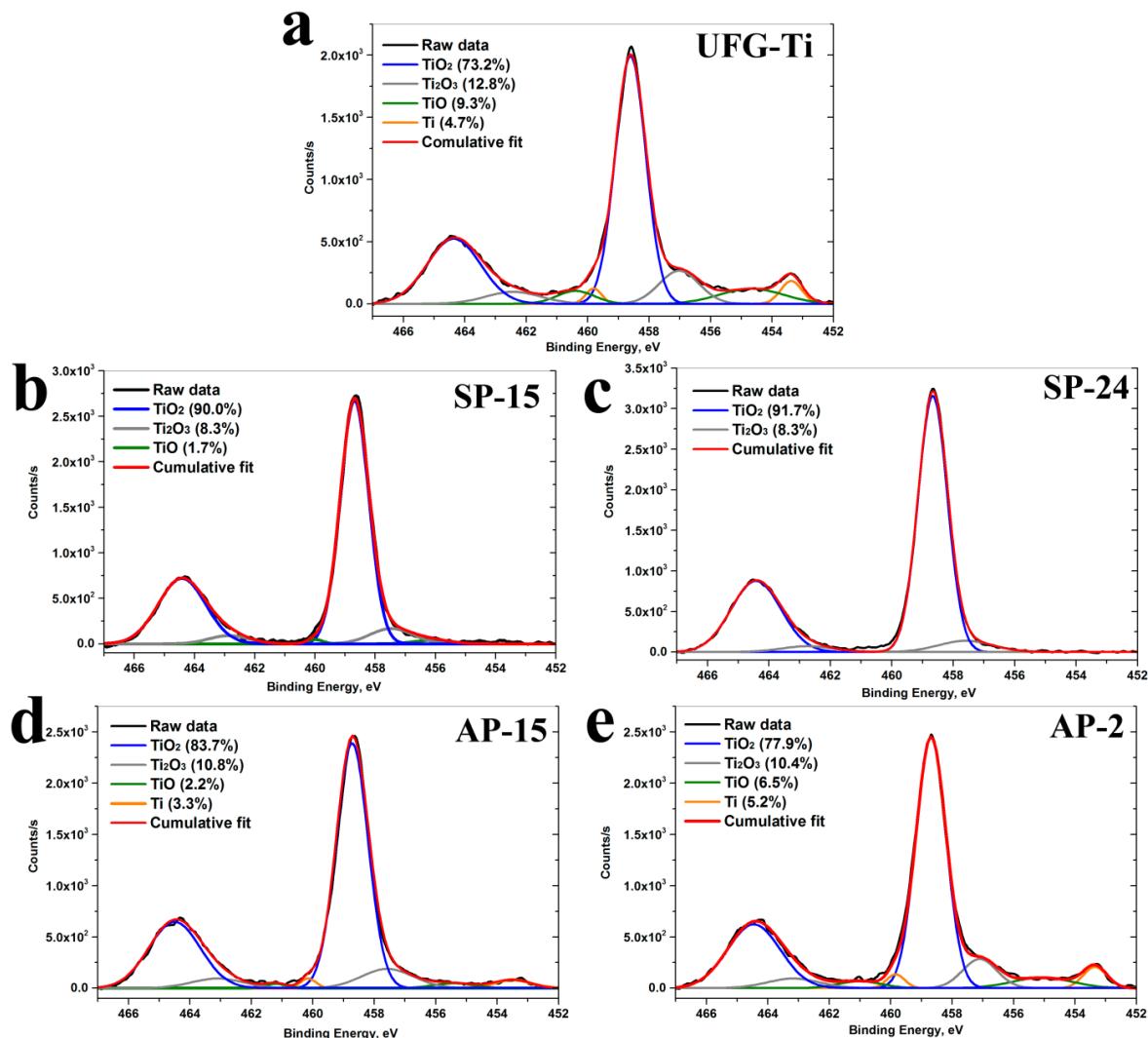


Figure 1. XPS Ti<sub>2p</sub> spectra: (a) UFG-Ti; (b) UFG-SP-15; (c) UFG-SP-24; (d) UFG-AP-15; (e) UFG-AP-2.

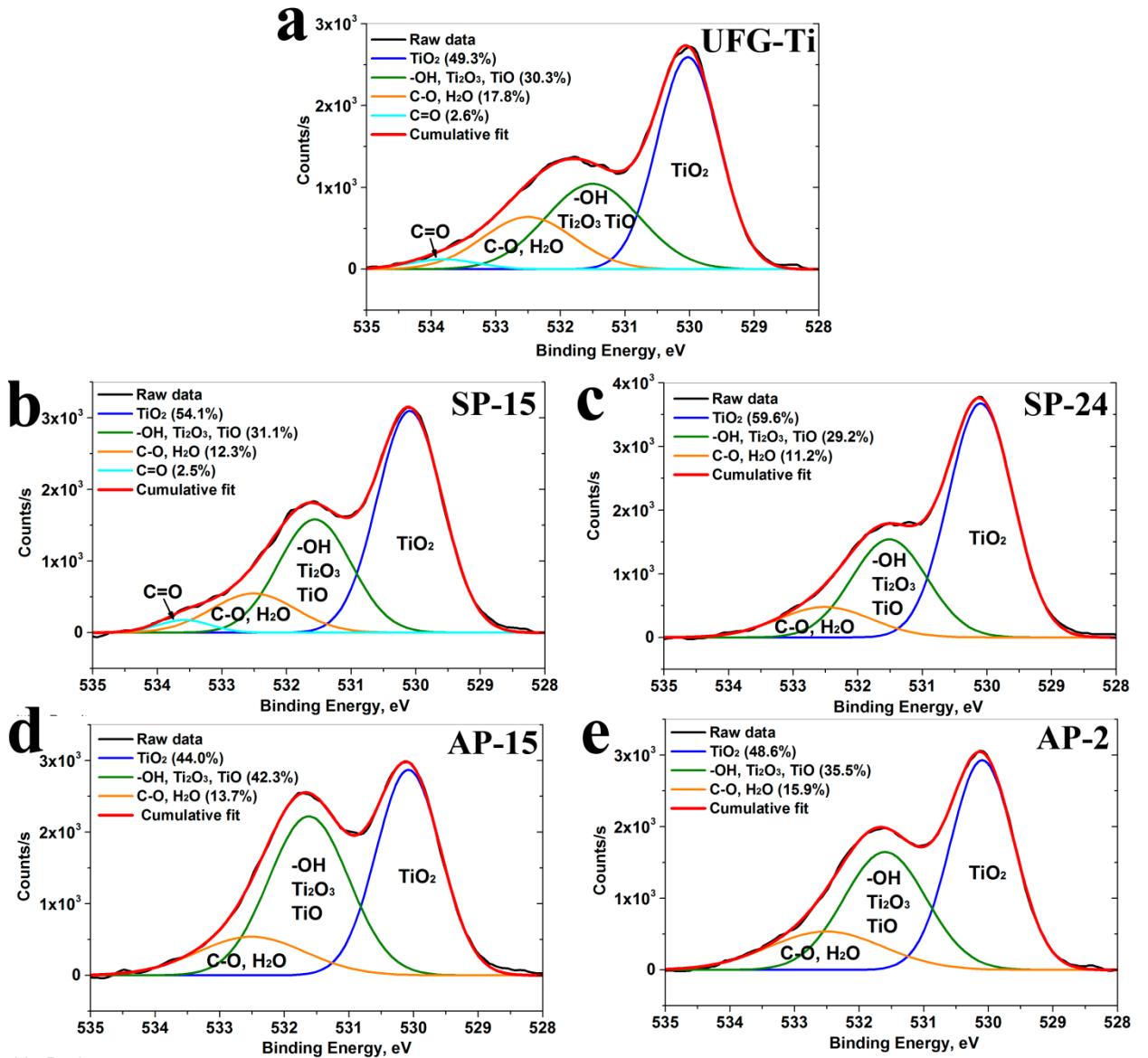


Figure 2. XPS O1s spectra: (a) UFG-Ti; (b) UFG-SP-15; (c) UFG-SP-24; (d) UFG-AP-15; (e) UFG-AP-2.

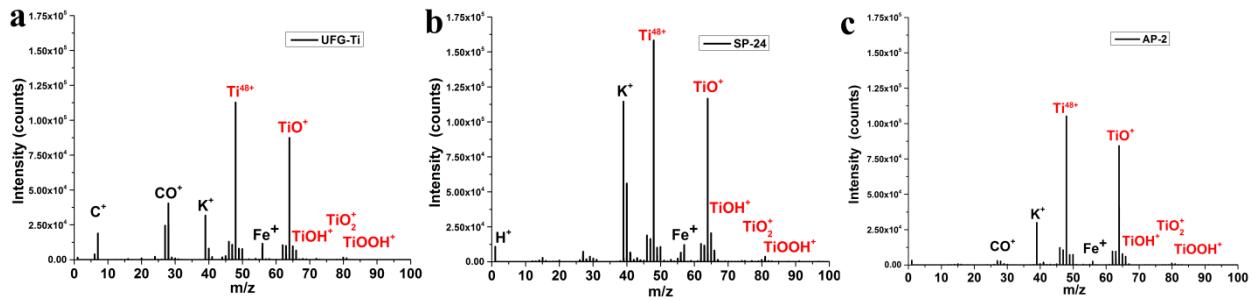


Figure S3. TOF-SIMS spectra of positive ions: (a) UFG-Ti; (b) UFG-SP-24; (c) UFG-AP-2.

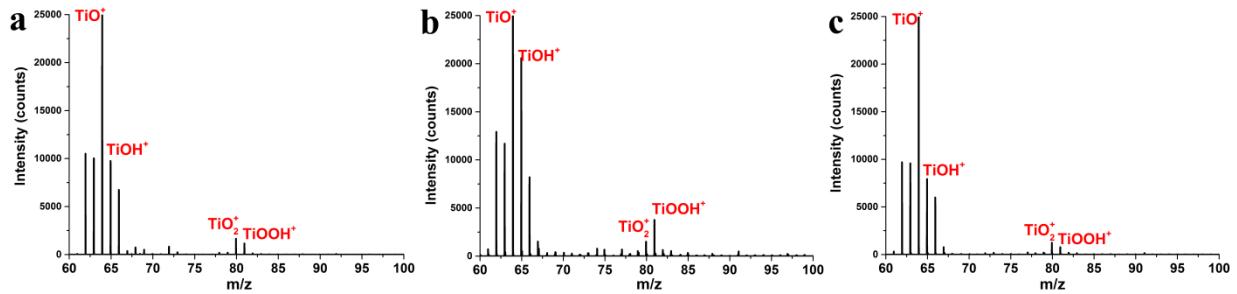
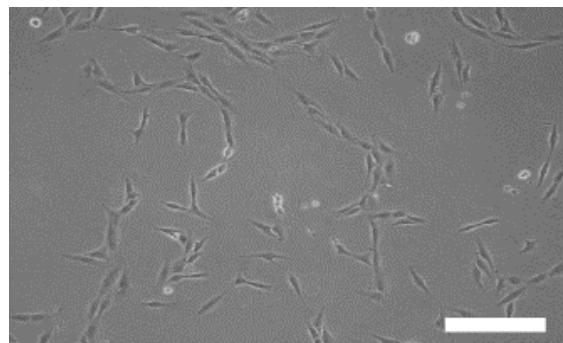
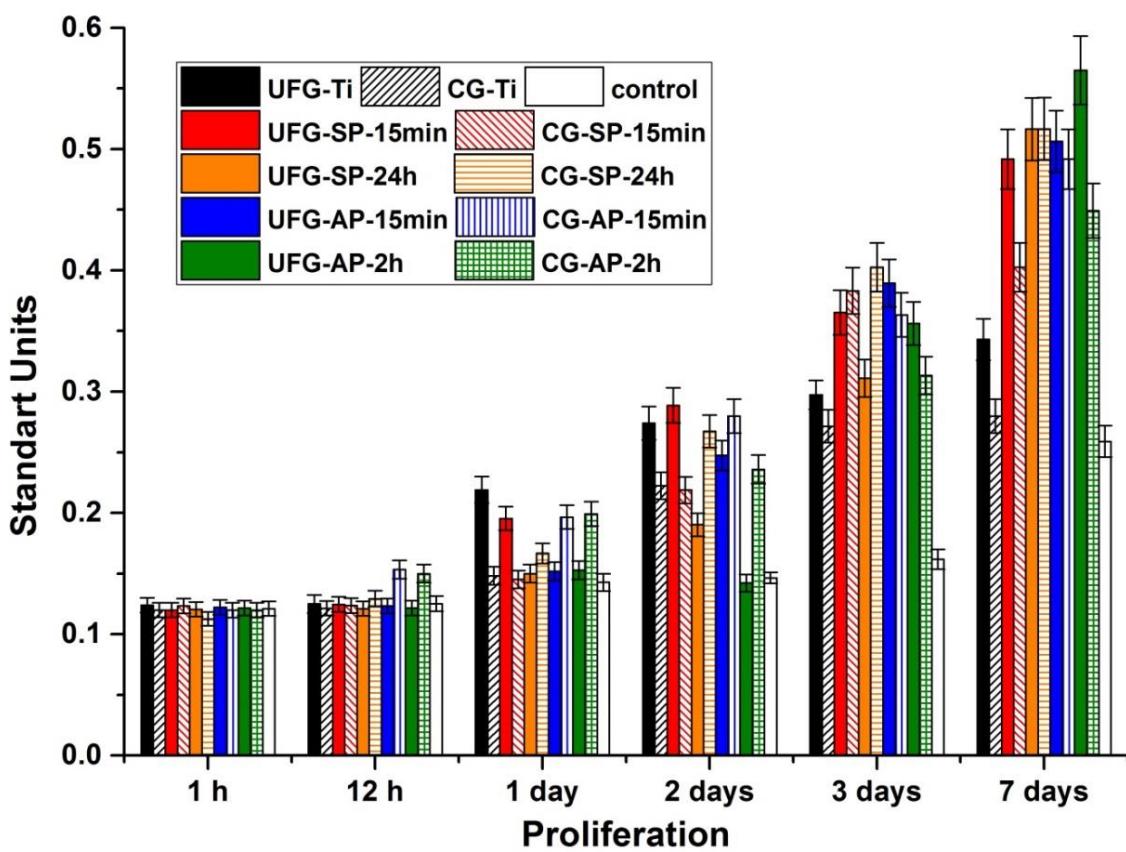


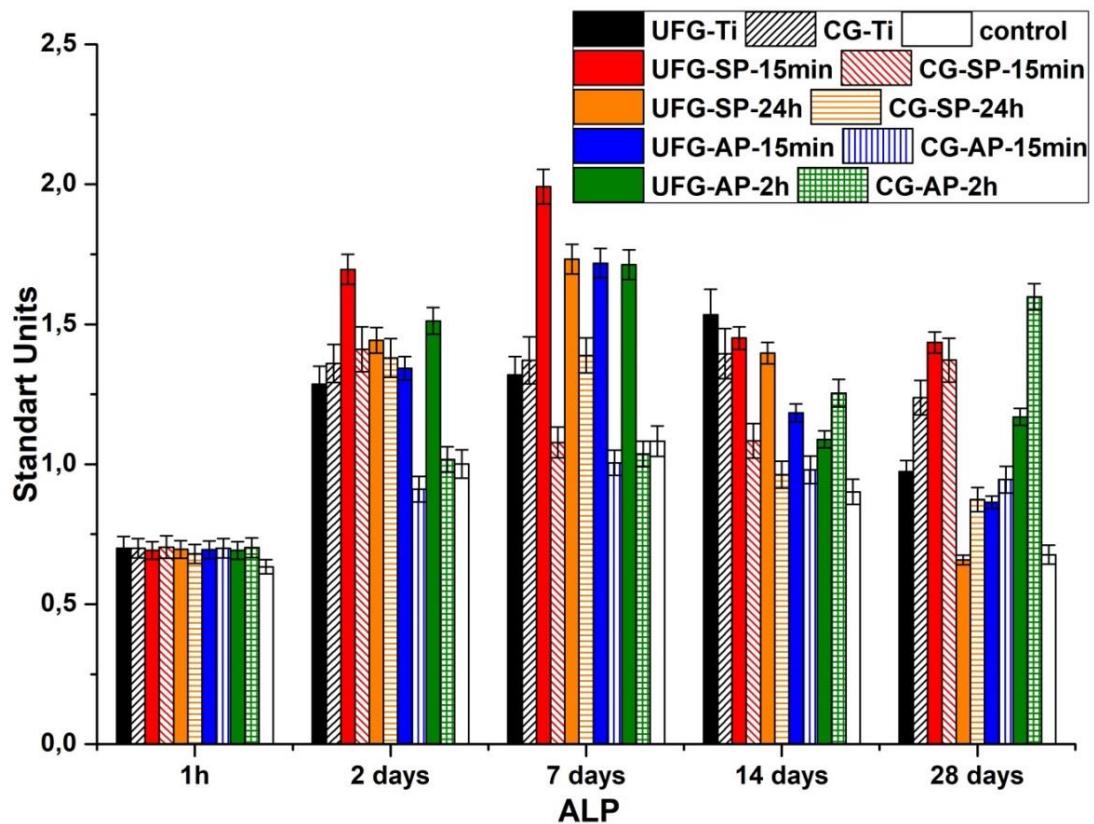
Figure S4. TOF-SIMS spectra of positive ions: (a) UFG-Ti; (b) UFG-SP-24; (c) UFG-AP-2.



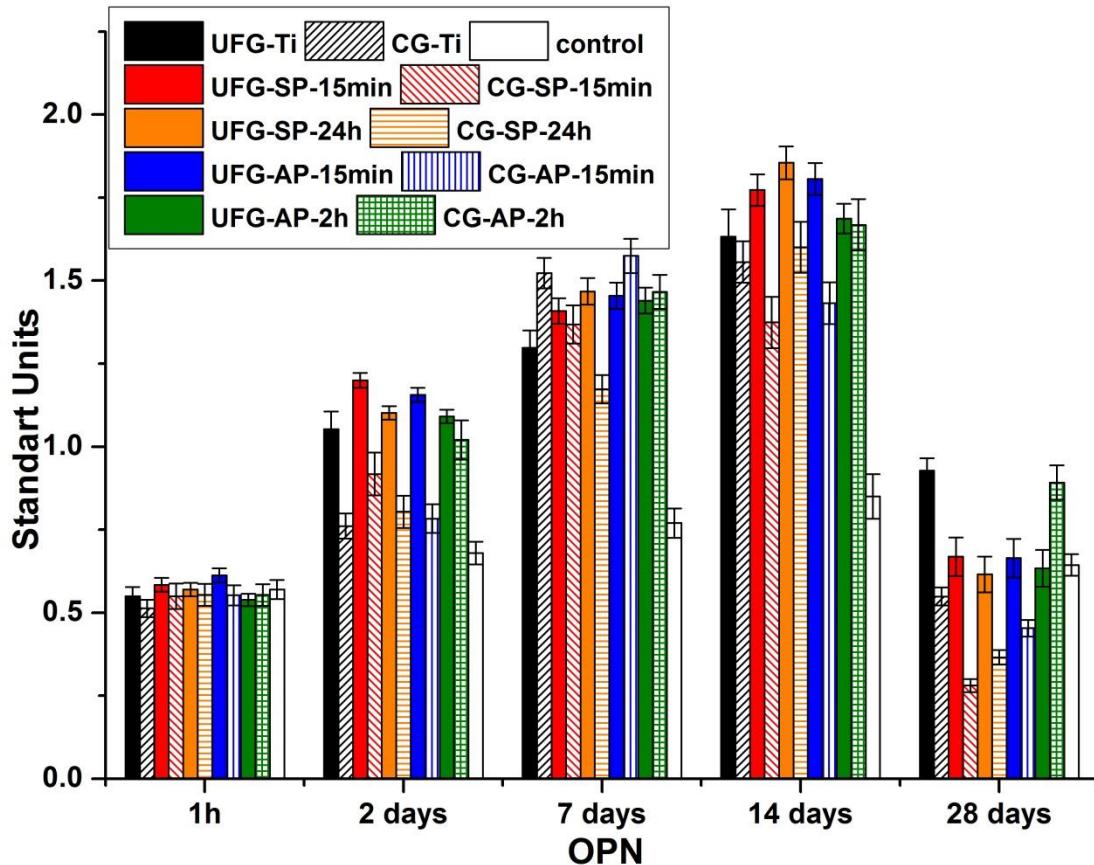
**Figure S5.** The morphology of MG-63 cells co-incubated after 24 hours of cultivation on plastic culture plate. Scale bar - 100  $\mu$ m.



**Figure S6.** MG-63 cells proliferation activity after co-incubation. Data are presented as mean $\pm$ S.D. from five independent series of experiments ( $p < 0.05$ ).



**Figure S7.** Alkaline phosphatase production by MG-63 cells. Each value represents mean  $\pm$  S.D. from five independent experiments ( $p < 0.05$ ).



**Figure S8.** Osteopontin production by MG-63 cells. Each value represents mean  $\pm$  S.D. from five independent experiments ( $p < 0.05$ ).