

**Encouraging tribomechanical and biological responses of hydroxyapatite coatings
reinforced by various levels of niobium pentoxide particles**

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Supplementary figures

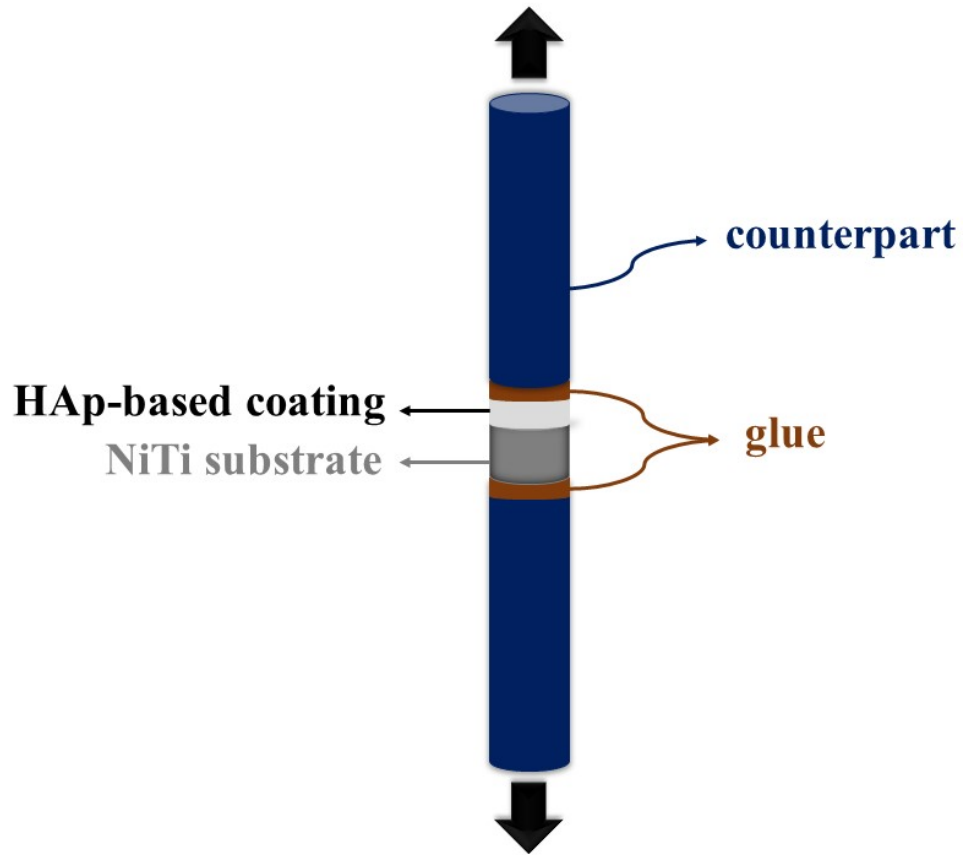


Figure I. Schematic exhibition of the pull-off test.

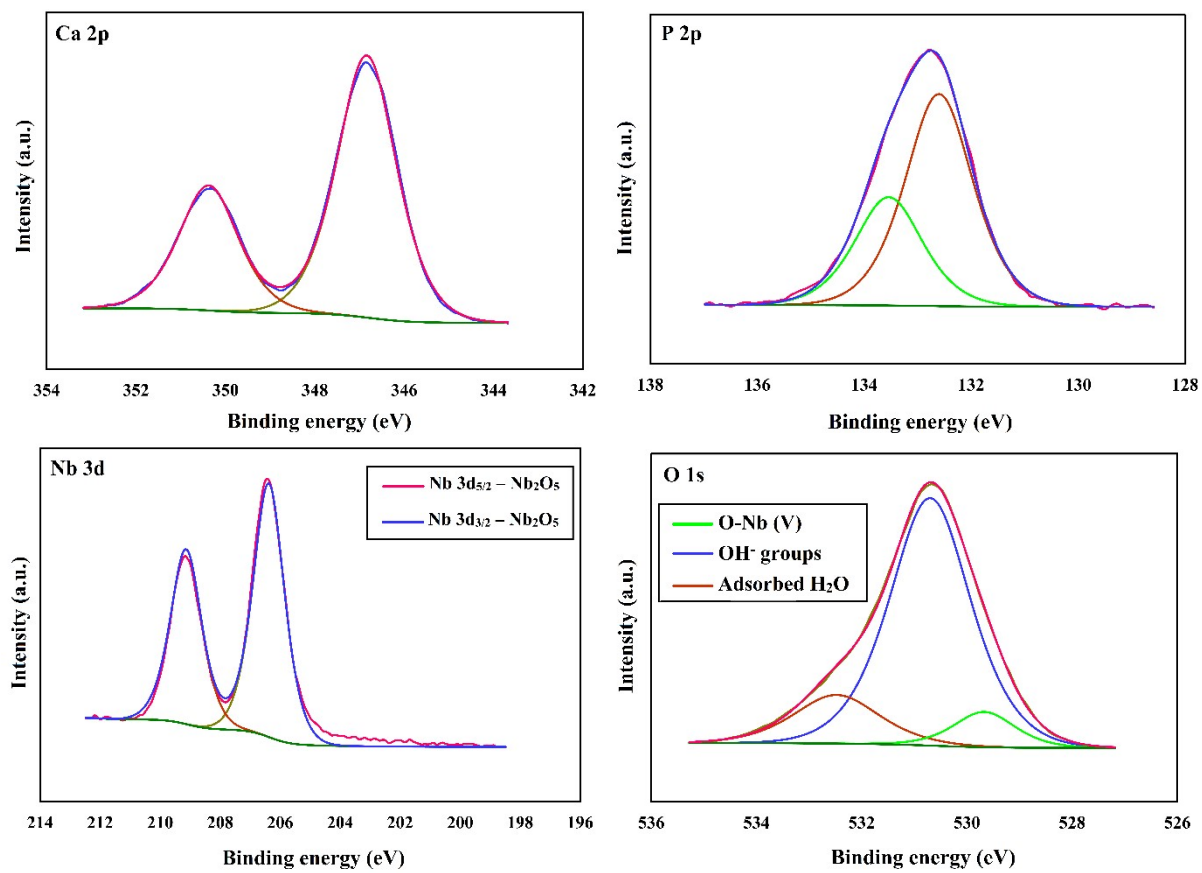


Figure II. XPS high-resolution spectra of Ca 2p, P 2p, O 1s, and Nb 3d regions in the S3 sample.

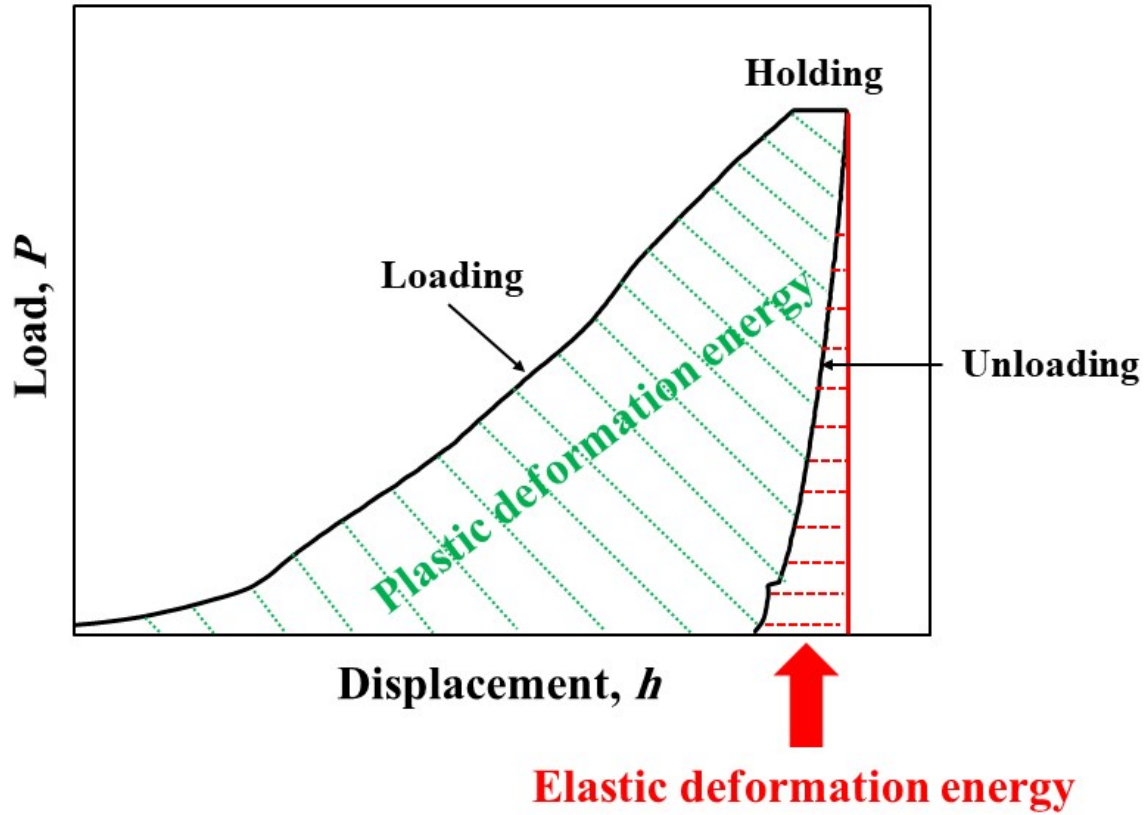


Figure III. Loading and unloading paths, as well as plastic deformation and elastic deformation areas on the typical load-displacement curve.

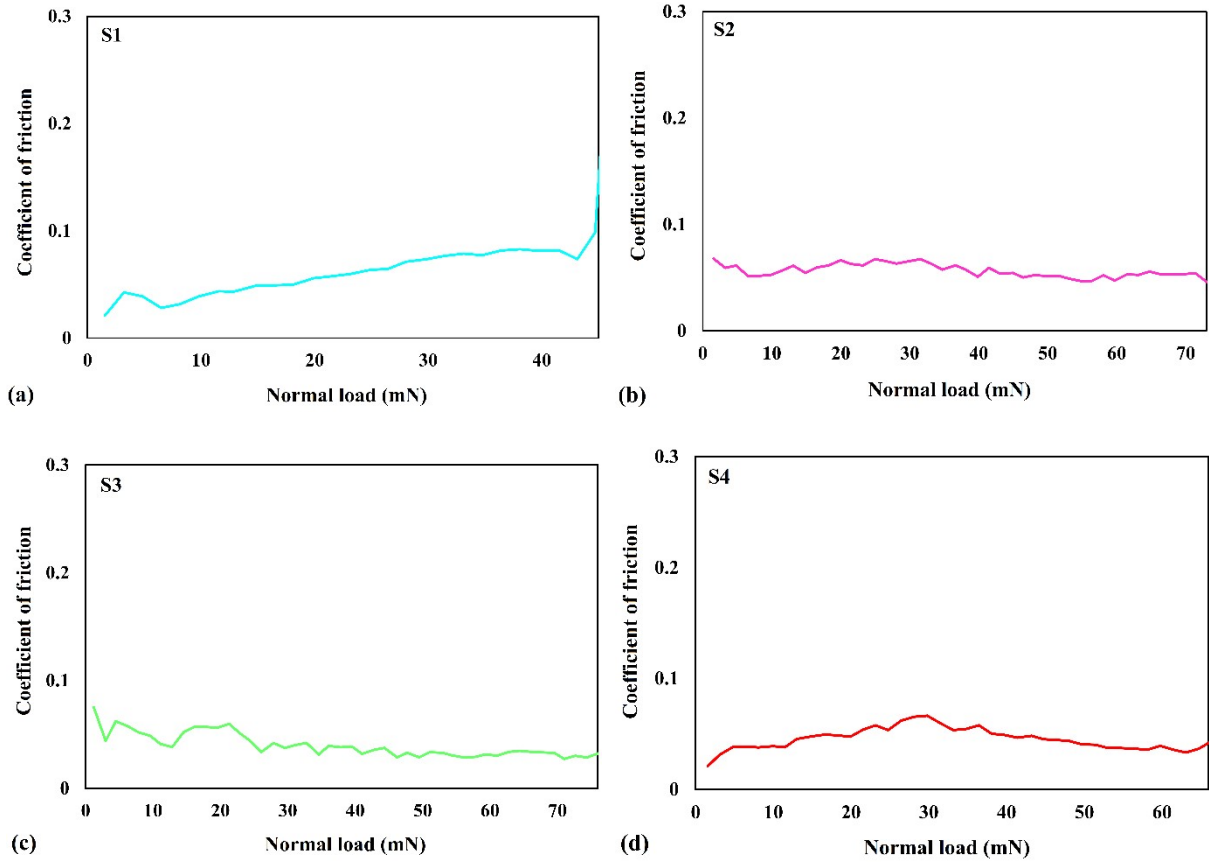


Figure IV. The COF-load curves obtained from the scratch test data: (a) S1, (b) S2, (c) S3, and (d) S4.

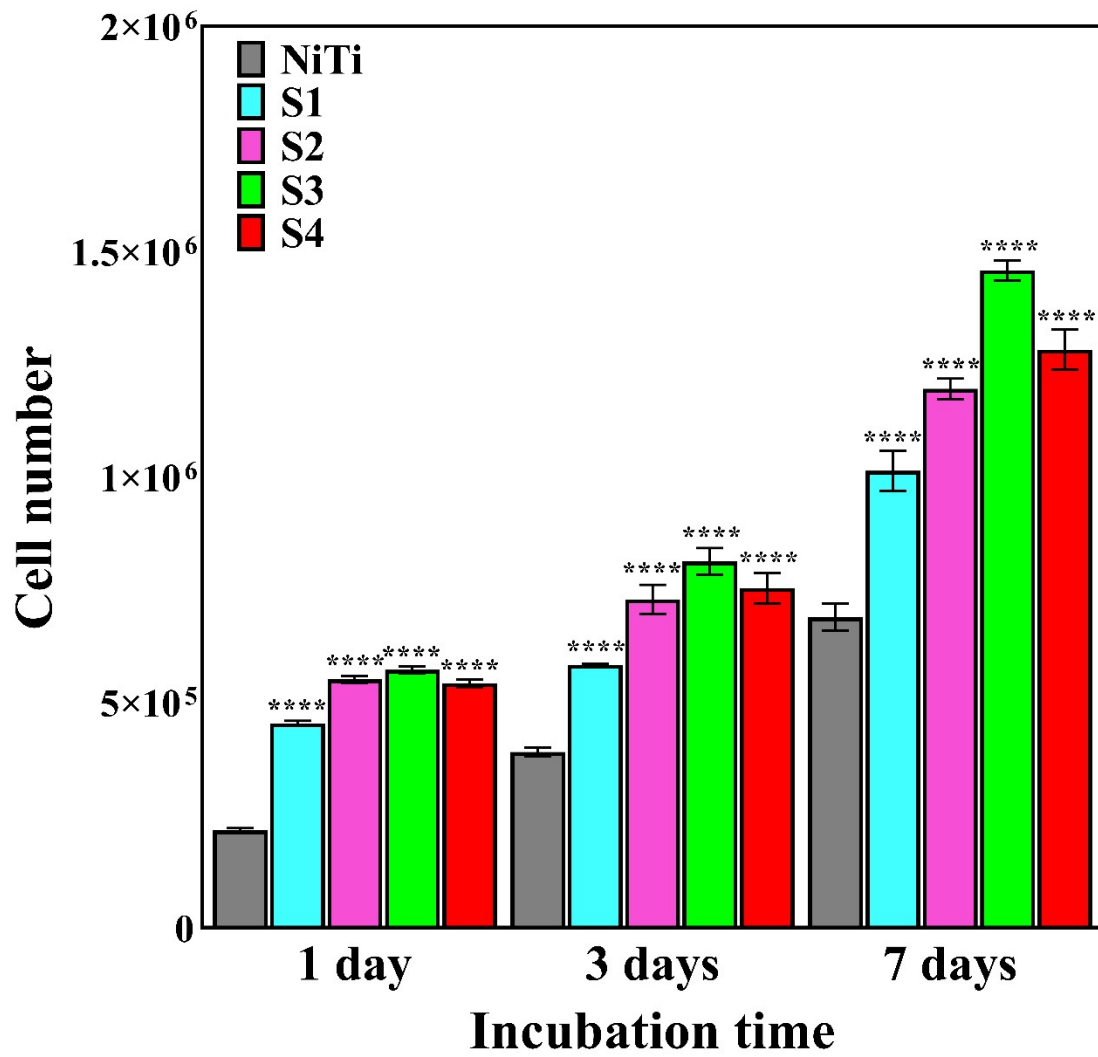


Figure V. The number of NIH3T3 viable cells on the specimens after various culture times

(**** $p < 0.0001$ vs. NiTi).

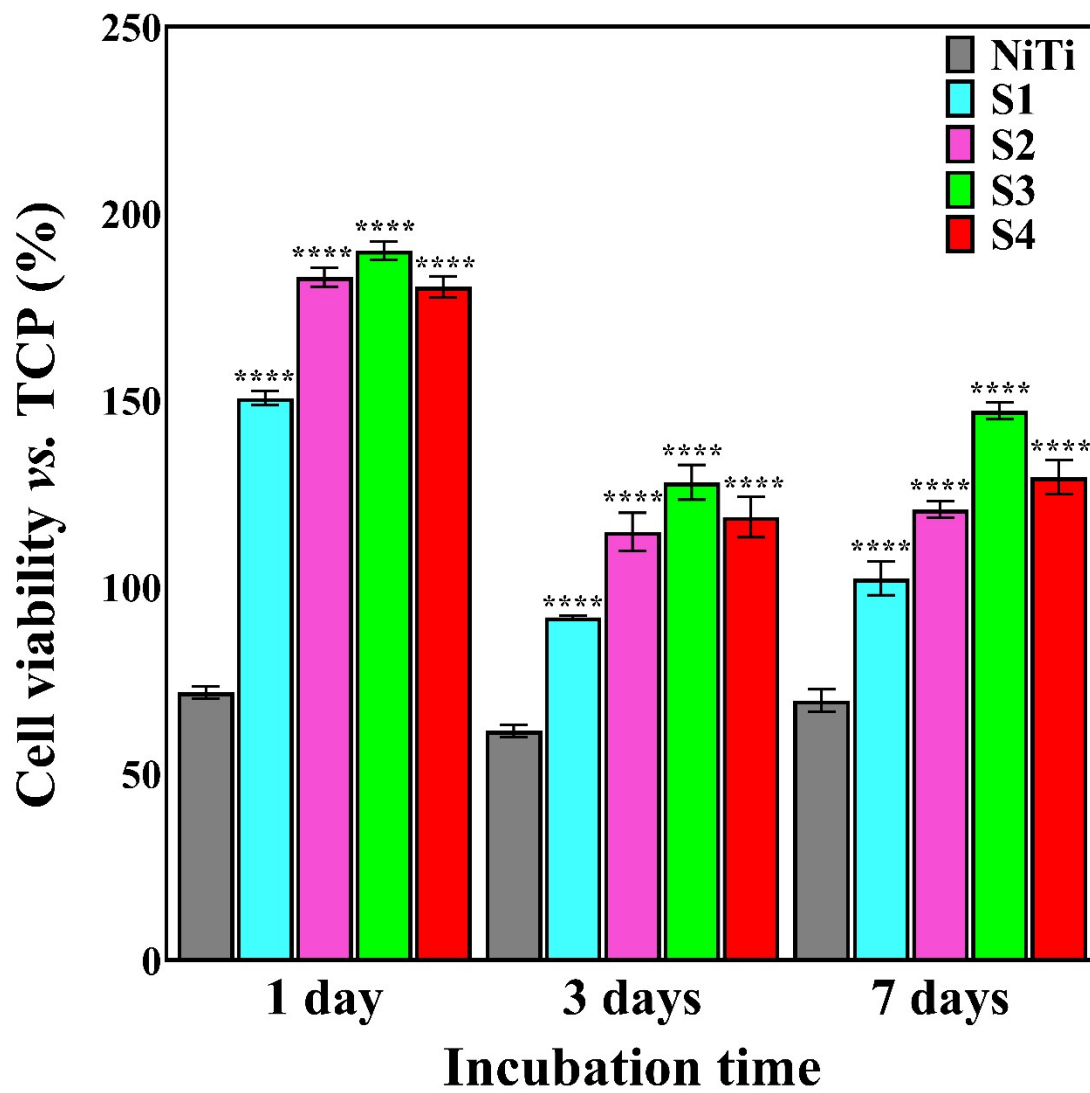


Figure VI. Cell viability of NIH3T3 cells on the specimens versus tissue culture plate (TCP) after various culture times (**** $p < 0.0001$ vs. NiTi).