

**ADVANCED
HEALTHCARE
MATERIALS**

Supporting Information

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Ultrathin 2D Titanium Carbide MXene ($\text{Ti}_3\text{C}_2\text{T}_x$) Nanoflakes
Activate WNT/HIF-1 α -mediated Metabolism Reprogramming
for Periodontal Regeneration

*Di Cui, Na Kong, Liang Ding, Yachong Guo***, Wenrong Yang**,
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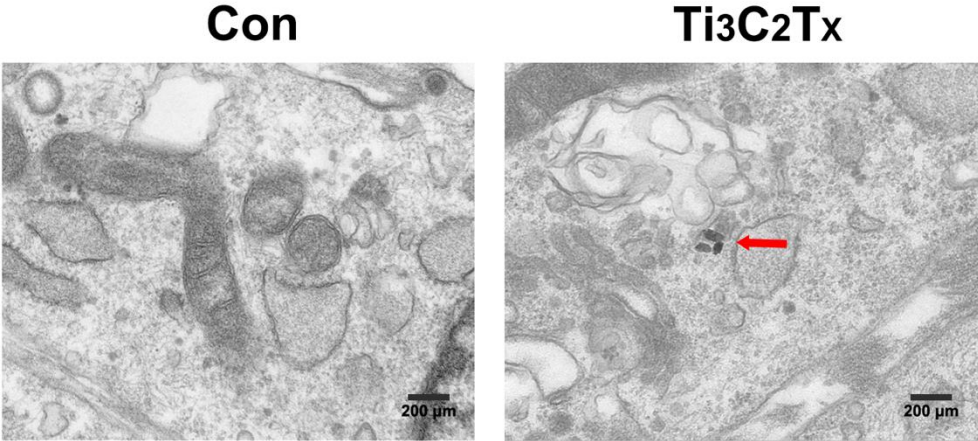


Fig. S1. TEM images of hPDL cells incubated with $Ti_3C_2T_x$ on day 7. The arrows indicate the internalized $Ti_3C_2T_x$.

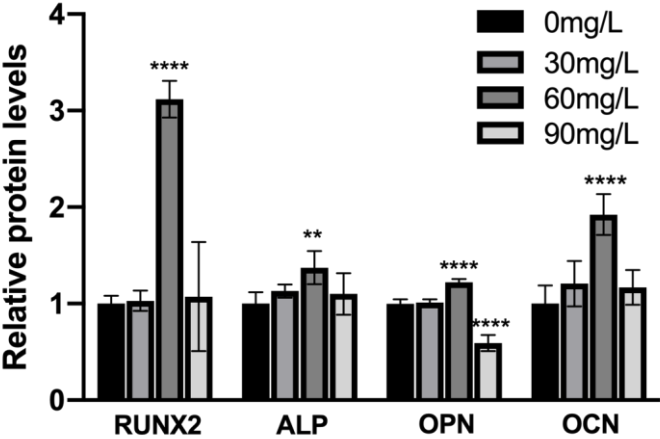


Fig. S2. Relative protein levels of the osteogenic factors determined by western blots in hPDL cells stimulated with $Ti_3C_2T_x$ on day 7.

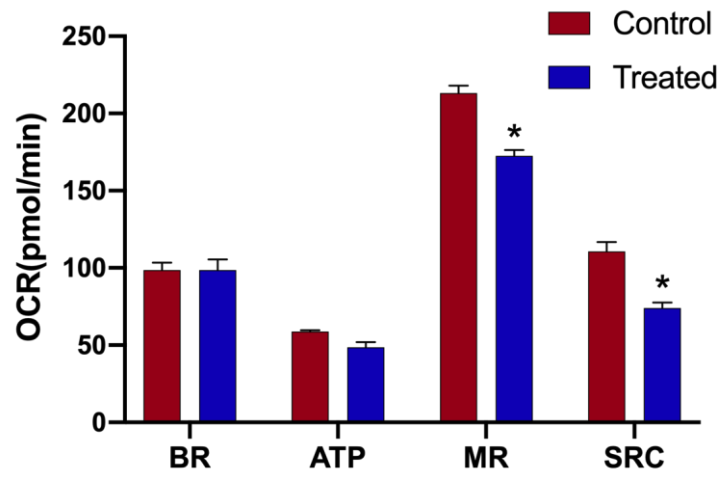


Fig. S3. Real-time changes of the OCR in PDLSCs stimulated with $Ti_3C_2T_x$ for 24 h.

*P<0.05, compared with Con.

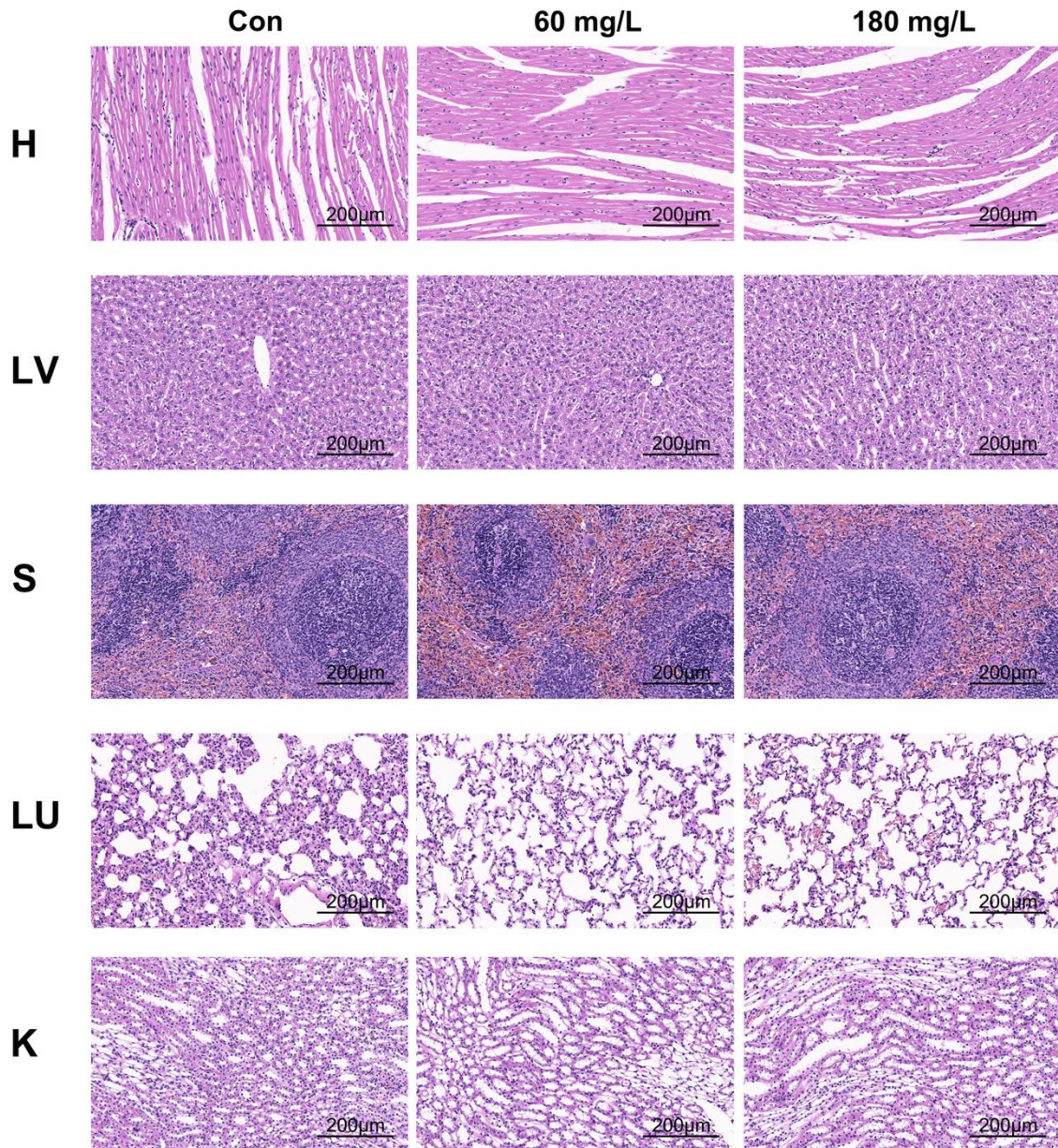


Fig. S4. Representative histopathological images of the heart, liver, spleen, lungs and kidneys after exposure to $Ti_3C_2T_x$ (60 and 180 mg/L). The organs represent all the treatment groups and the control as no abnormalities were detected in all the groups due to the exposure to $Ti_3C_2T_x$.