Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Optimized Electromagnetic Enhancement and Charge Transfer in MXene/Au/Cu_2O Hybrids for Efficient SERS

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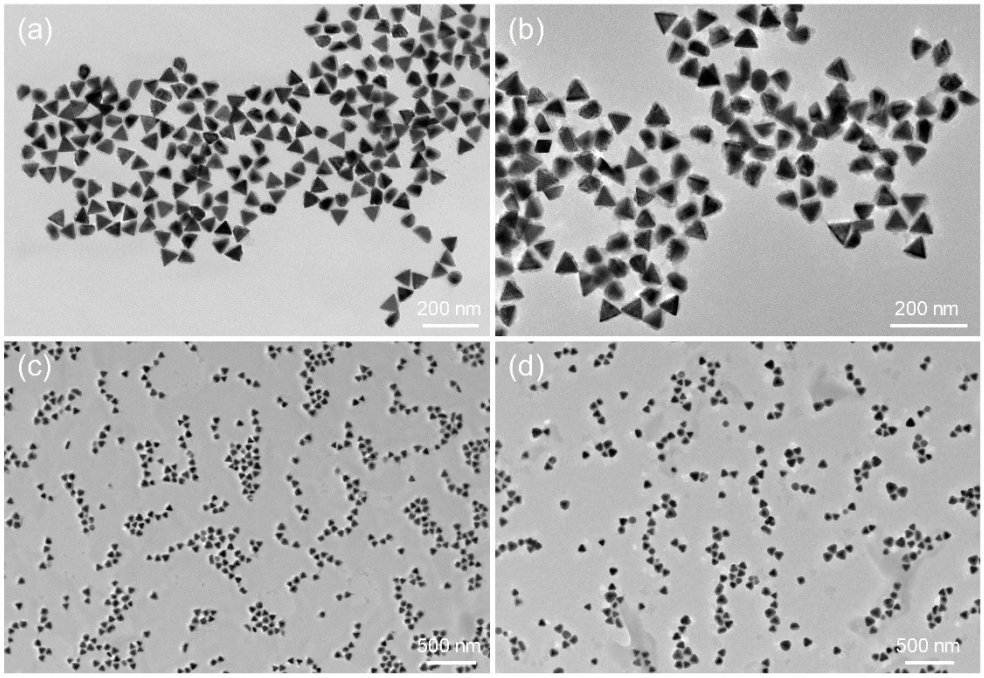

Fig. S1 The large-scale TEM images of Au/Cu_2O (700 nm) (a), Au/Cu_2O (730 nm) (b), Au@Cu_2O (810 nm) (c), and Au@Cu_2O (950 nm) (d).

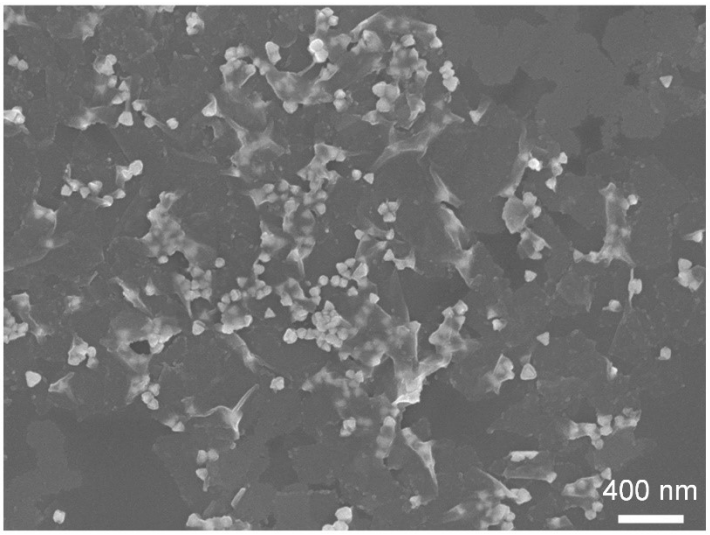

Fig. S2 SEM image of MXene/Au/Cu_2O hybrids.

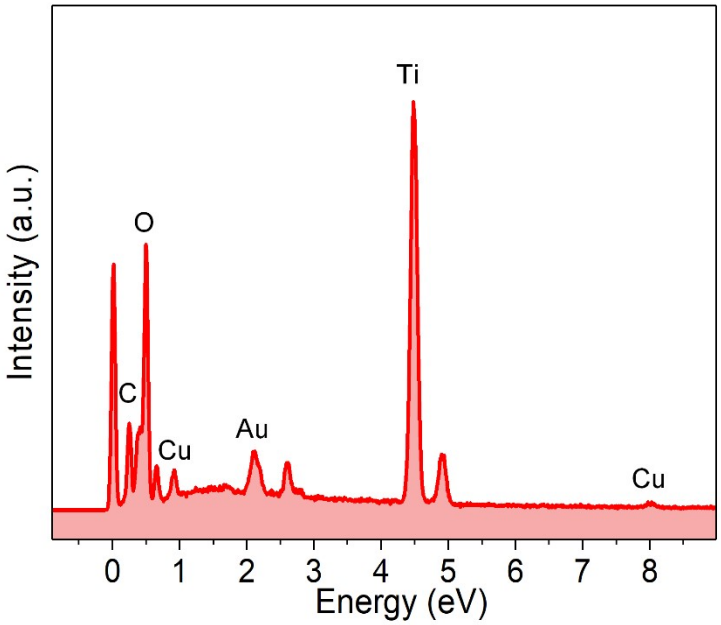

Fig. S3 EDS spectrum of MXene/Au/Cu_2O hybrids.

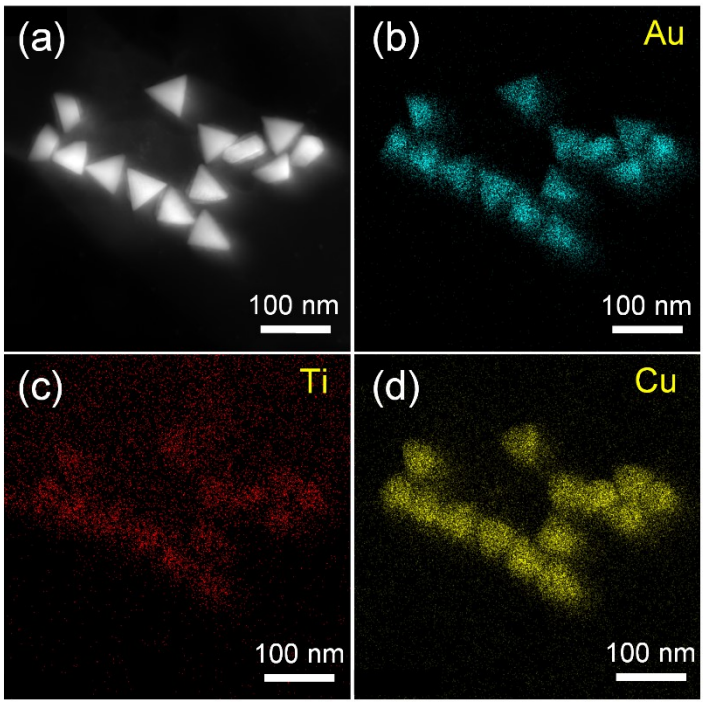

Fig. S4 HAADF-STEM image (a) and corresponding elemental mappings (b-d) of MXene/Au/Cu_2O hybrids.

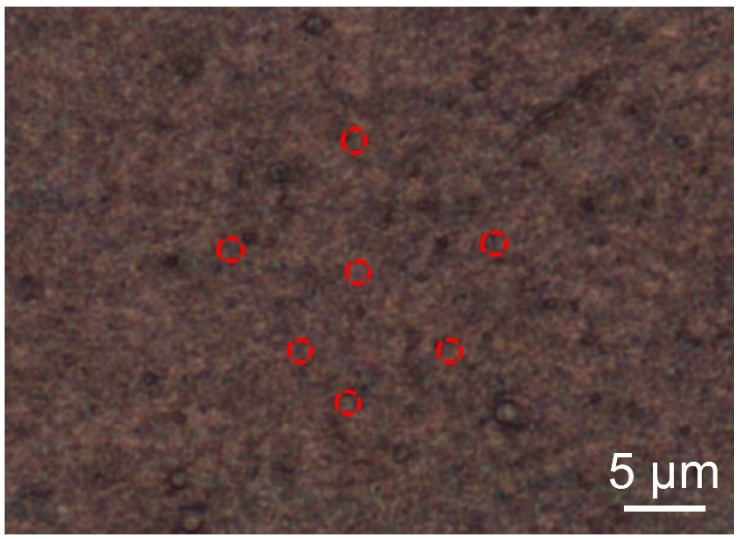

Fig. S5 Optical microscope image of MXene/Au/Cu_2O (730 nm) hybrids.

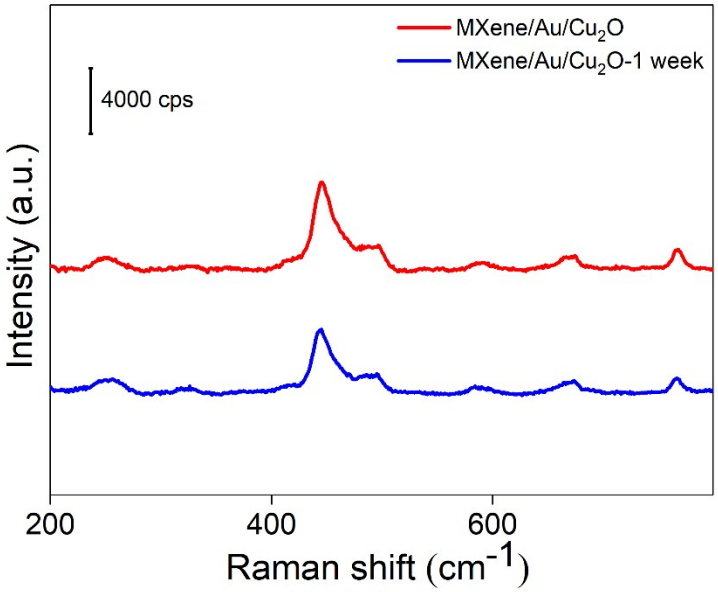

Fig. S6 The SERS spectra of MB (10^{-6} M) obtained on the MXene/Au/Cu_2O before and after storing for one week.