

## Facile Synthesis of Ternary Mxene Nanocomposites as an Electrode for Supercapacitive Application

Rutuja A. Chavan<sup>1</sup>, Desta.M. Uliss<sup>1</sup>, Akash S. Rasal<sup>2</sup>, Jia-Yaw Chang<sup>2</sup>, and Anil Vithal Ghule<sup>1\*</sup>

<sup>1</sup>Green Nanotechnology Laboratory, Department of Chemistry, Shivaji University, Kolhapur 416004, Maharashtra, India.

<sup>2</sup>Department of Chemical Engineering National Taiwan University of Science And Technology, Taipei 106335, Taiwan

Corresponding author: Prof. Anil V. Ghule ([avg\\_chem@unishivaji.ac.in](mailto:avg_chem@unishivaji.ac.in))

### Supporting Information

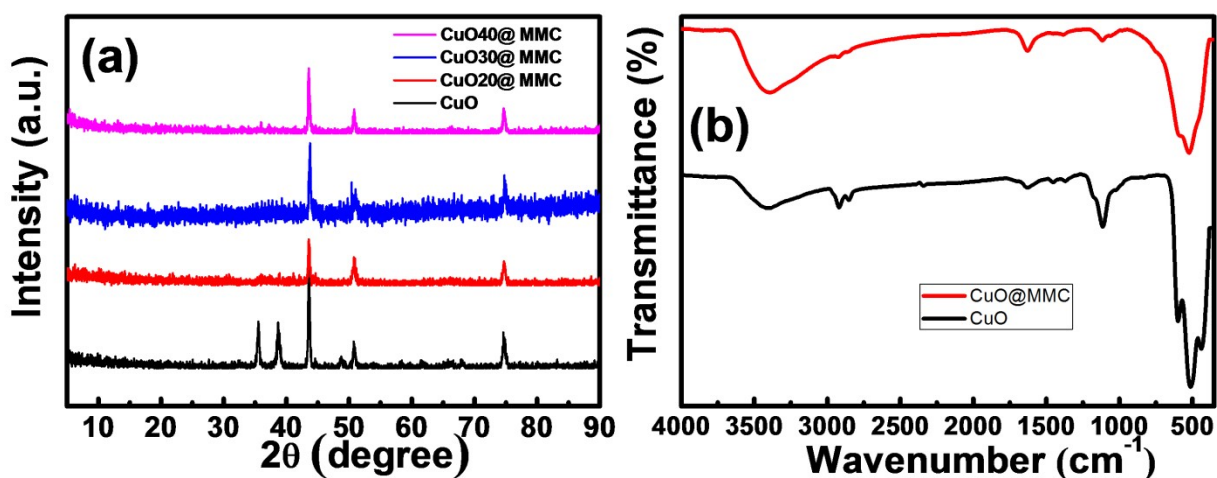
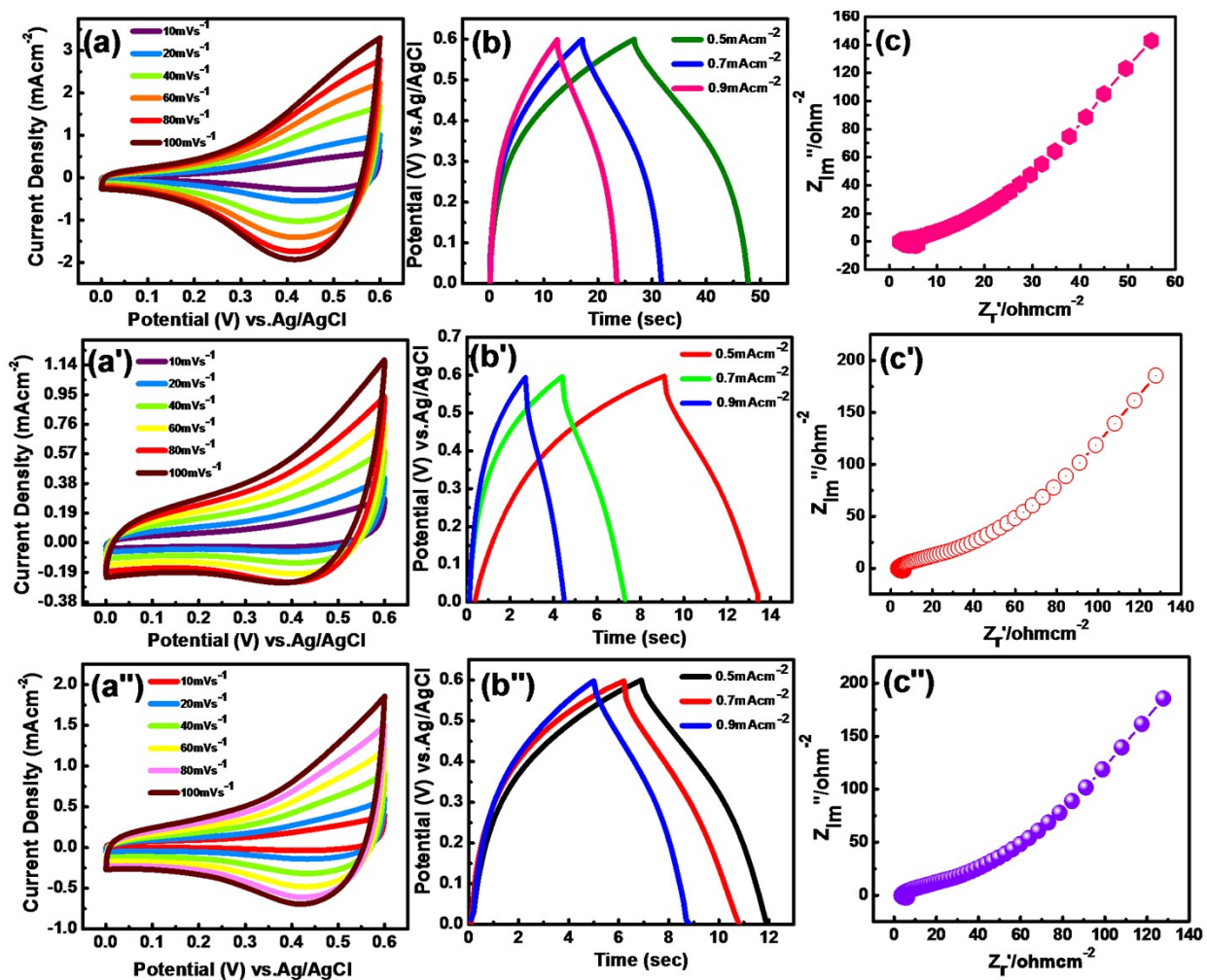


Fig. S1 (a) XRD spectra of CuO, CuO20@MMC, CuO30@MMC, and CuO40@MMC b) FTIR spectra of CuO and CuO20@MMC.



**Fig. S2** CVs (a, a' and a''), GCDs (b, b' and b'') and EISs (c, c' and c'') of CuO<sub>20</sub>@FSSM, CuO<sub>30</sub>@FSSM, and CuO<sub>40</sub>@FSSM, respectively.

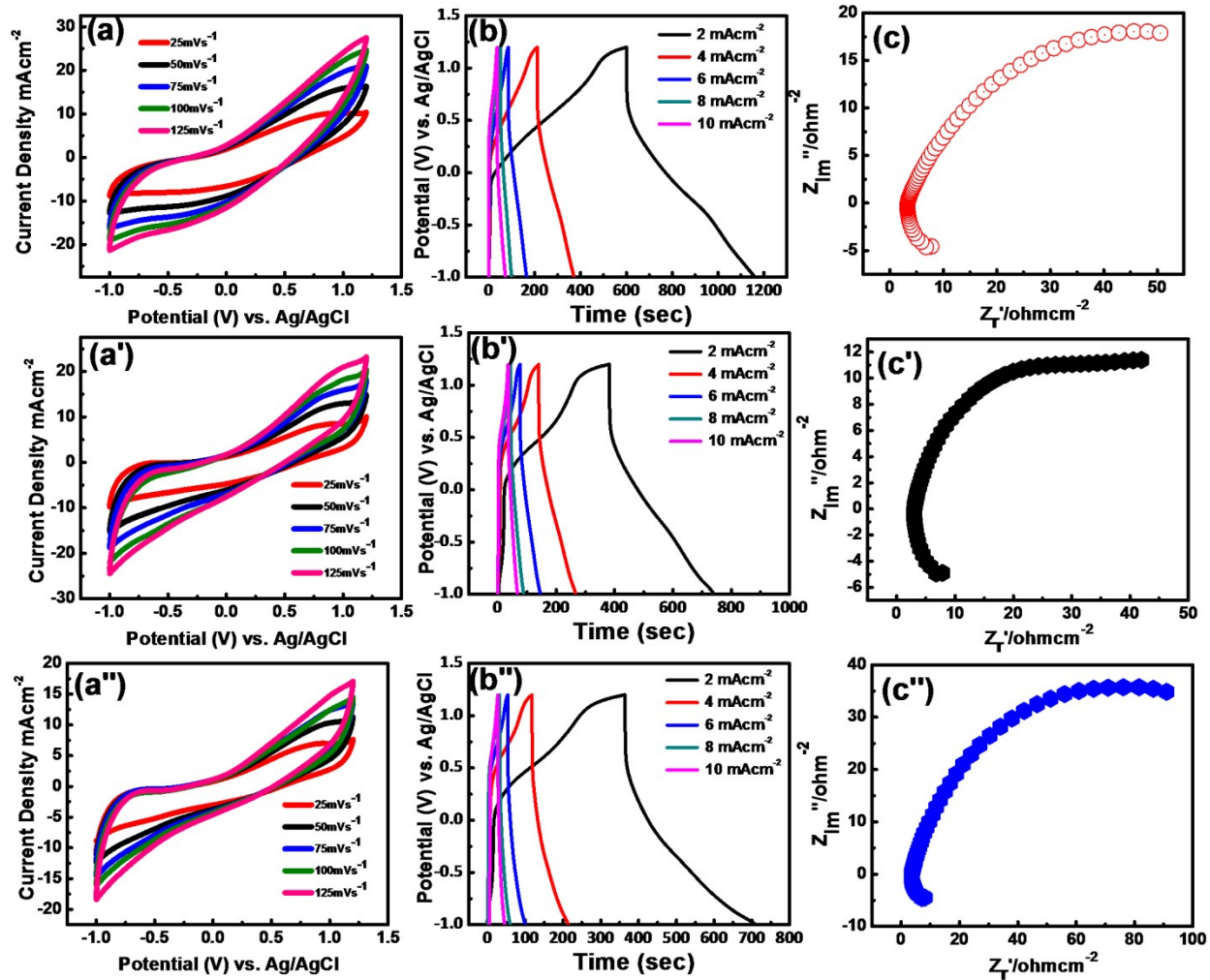


Fig. S3 CV (a, a' and a''), GCD (b, b' and b''), and EIS (c, c' and c'') of CuO<sub>20</sub>@MMC, CuO<sub>30</sub>@MMC, and CuO<sub>40</sub>@MMC, respectively.

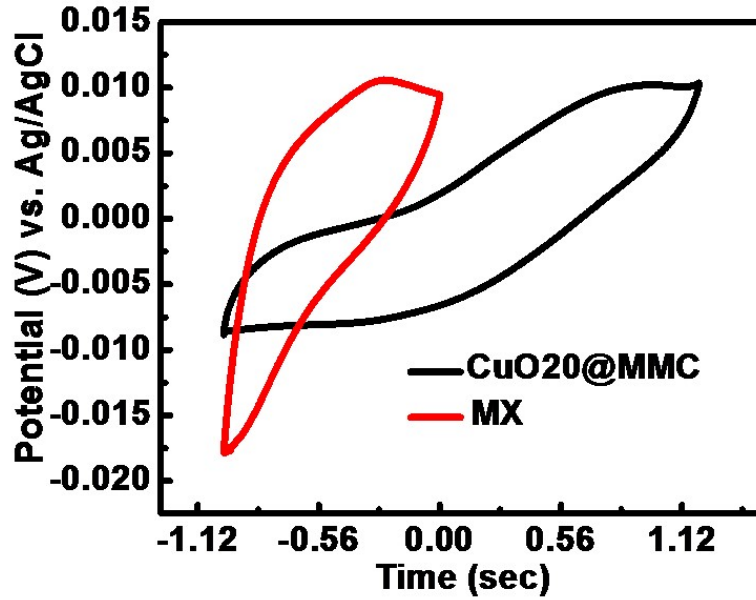


Fig. S4 CV of positive (CuO20@MMC) and negative (MX) electrodes.

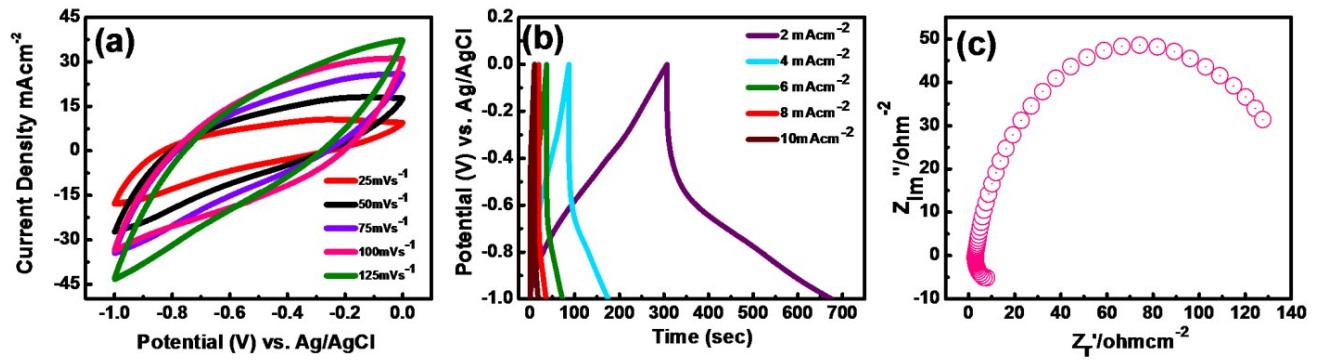


Fig. S5 CV, GCD and EIS of counter electrode MXene.