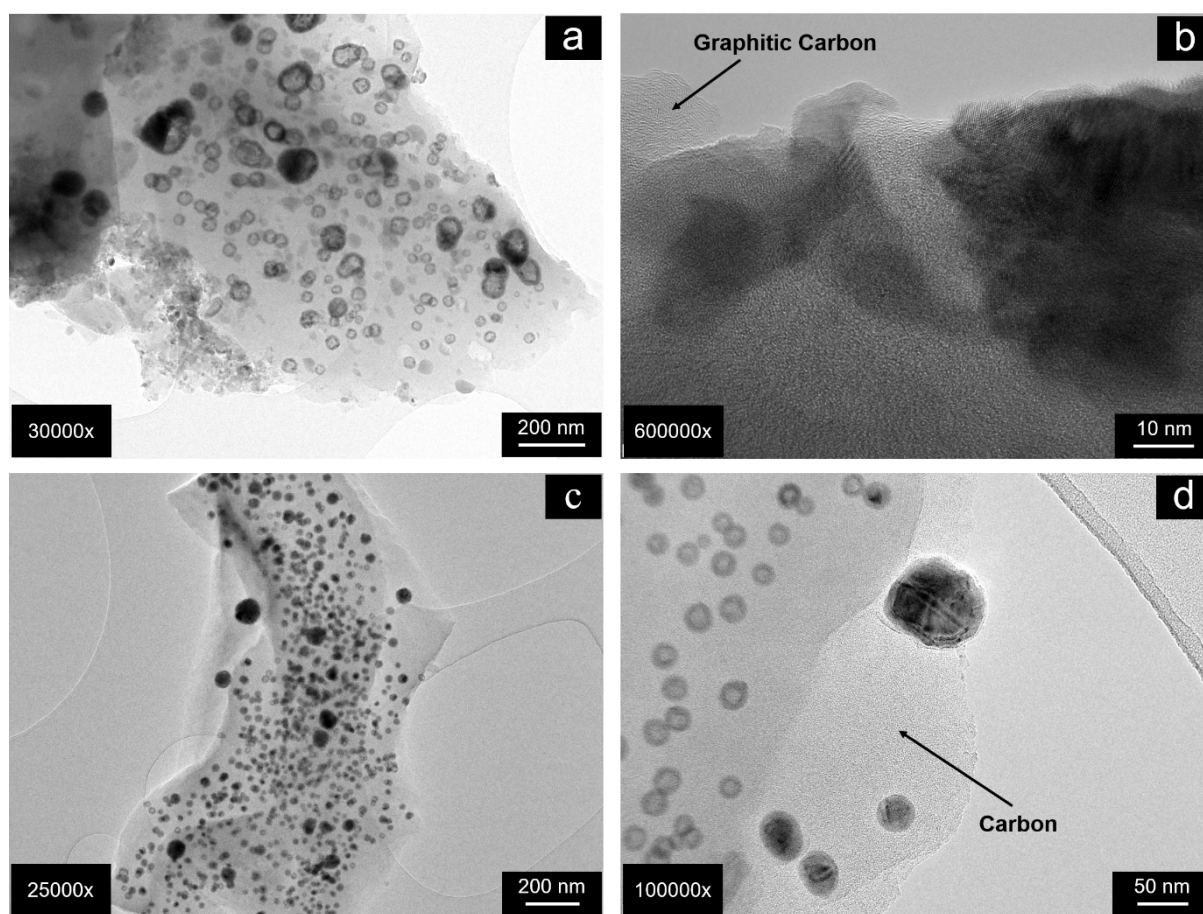


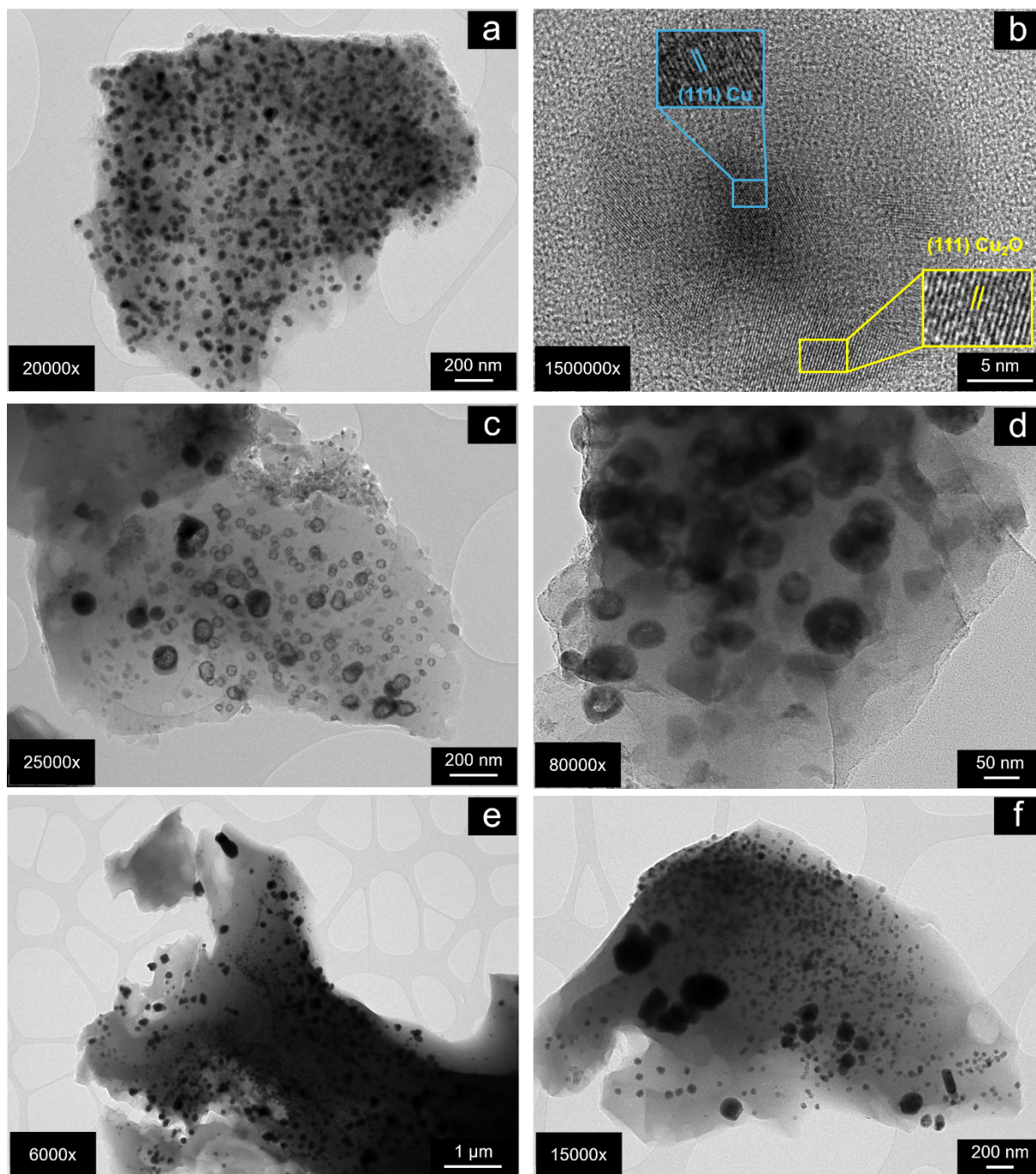
## Supporting information

### Valorisation of Citrus Waste for Sustainable Synthesis of Carbon-Supported Copper Nanoparticles active in CO<sub>2</sub> Electroreduction

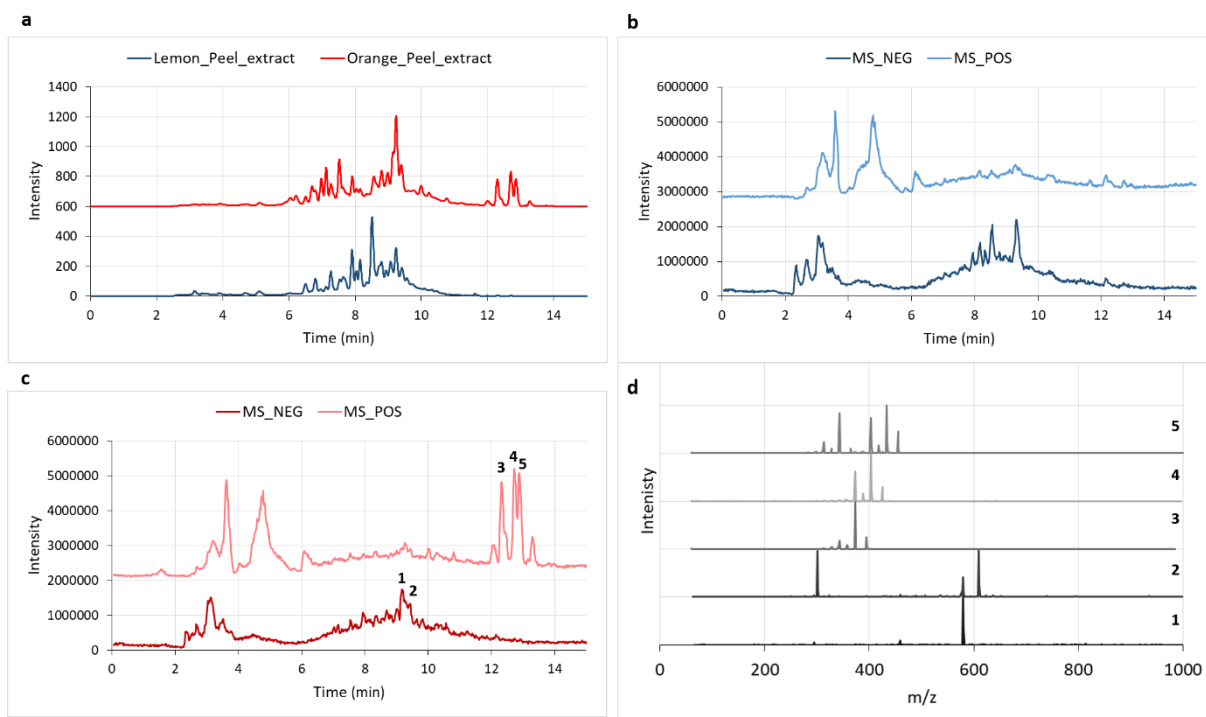
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**Figure S1:** HR-TEM micrographs of orange peel-derived systems: CuCl<sub>2</sub> (a, b) and Cu(NO<sub>3</sub>)<sub>2</sub> (c, d).



**Figure S2:** HR-TEM micrographs of lemon peel-derived systems: CuSO<sub>4</sub> (a,b), CuCl<sub>2</sub> (c,d), and Cu(NO<sub>3</sub>)<sub>2</sub> (e,f).



**Figure S3:** a) LC-UV (320 nm) of lemon peel and orange peel extracts as indicated. b) MS in positive (MS\_POS) and negative mode (MS\_NEG) for lemon peel extract; c) MS\_POS and MS\_NEG for orange peel extract; d) Fragmentation patterns for peaks in c as indicated. Retention times: Peak 1 at 9.2 mins MS-1; Peak 2 at 9.4 mins MS-2; Peak 3 at 12.32 mins MS-3; Peak 4 at 12.72 mins MS-4; Peak 5 at 12.88 mins MS-5. MS-1 main fragment (Mw 580); MS-2 main fragment (Mw 610); MS-3 main fragment (Mw 372); MS-4 main fragment (Mw 402); MS-5 main fragment (Mw 432).