

Supporting Information

Electric-Field-Assisted Synthesis of Cu/MoS₂ Nanostructures for Efficient Hydrogen Evolution Reaction

Surra Yonas^a, Birhanu Bayissa Gicha^b, Samir Adhikari^c, Fedlu Kedir Sabir^a, Van Tan Tran^e, Njemuwa Nwaji^f, Bedasa Abdissa Gonfa^{a,*}, Lemma Teshome Tufa^{a,b,*}

^aDepartment of Applied Chemistry, Adama Science and Technology University, P.O.Box 1888, Adama, Ethiopia

^bResearch Institute of Materials Chemistry, Chungnam National University, Daejeon 34134, Republic of Korea

^cDepartment of Physics, Chungnam National University, Daejeon, 34134, Republic of Korea

^dFaculty of Biotechnology, Chemistry and Environmental Engineering, Phenikaa University, Hanoi 10000, Viet Nam

^fInstitute of Fundamental Technological Research, Polish Academy of Sciences, 02-106, Warsaw, Poland

Corresponding authors: BAG, bedassa.abdissa@astu.edu.et; LTT, lemmat2003@yahoo.com

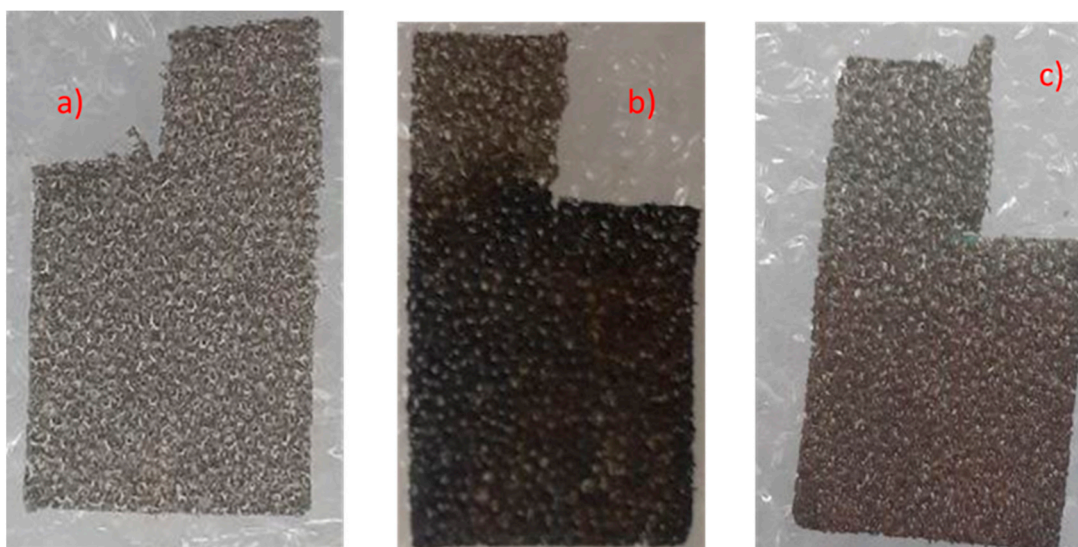


Figure S1. Digital photographs of (a) bare NF, (b) MS, and (c) CMS NSs

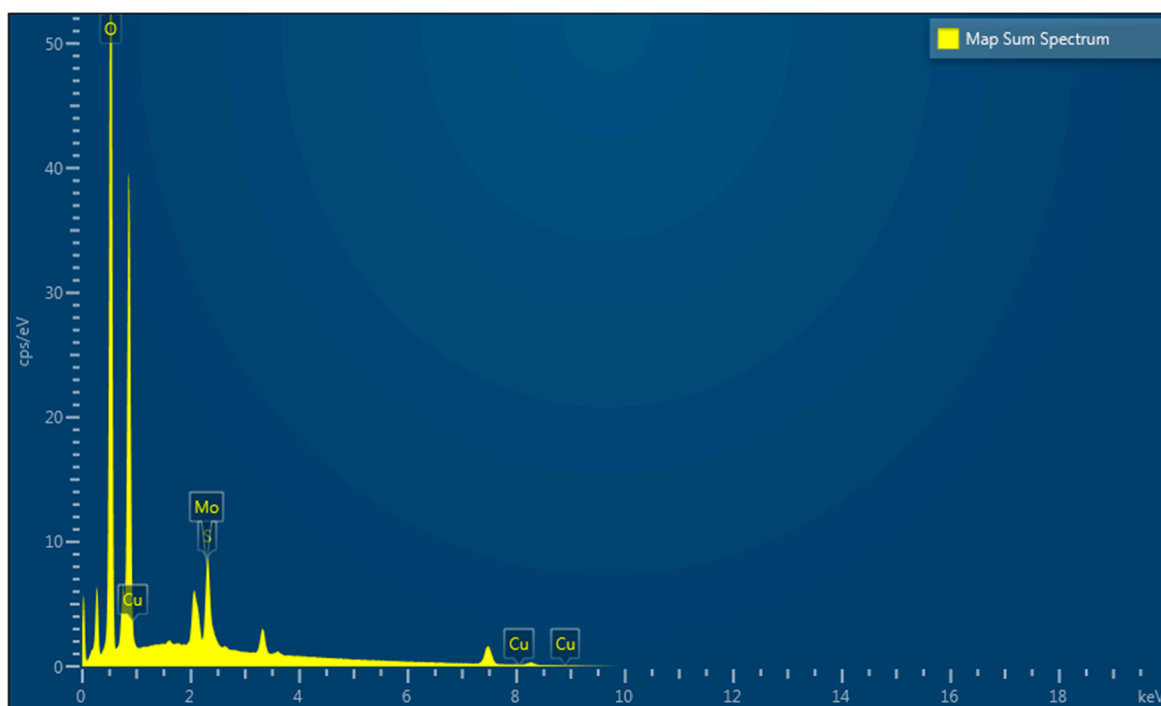


Figure S2. SEM-EDS spectrum of 10-CMS

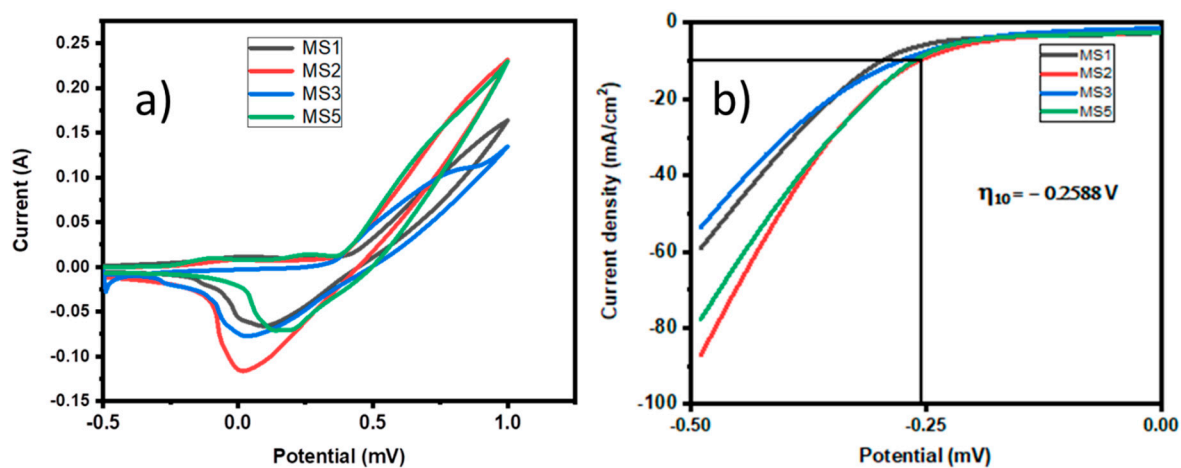


Figure S3. (a) CV curves recorded at a scan rate of 50 mV s^{-1} , Electrochemical performance of various MS NSs electrodes carried out under a constant current density of 10 mA cm^{-2} in 1 M KOH aqueous solution. (b) HER polarization curves

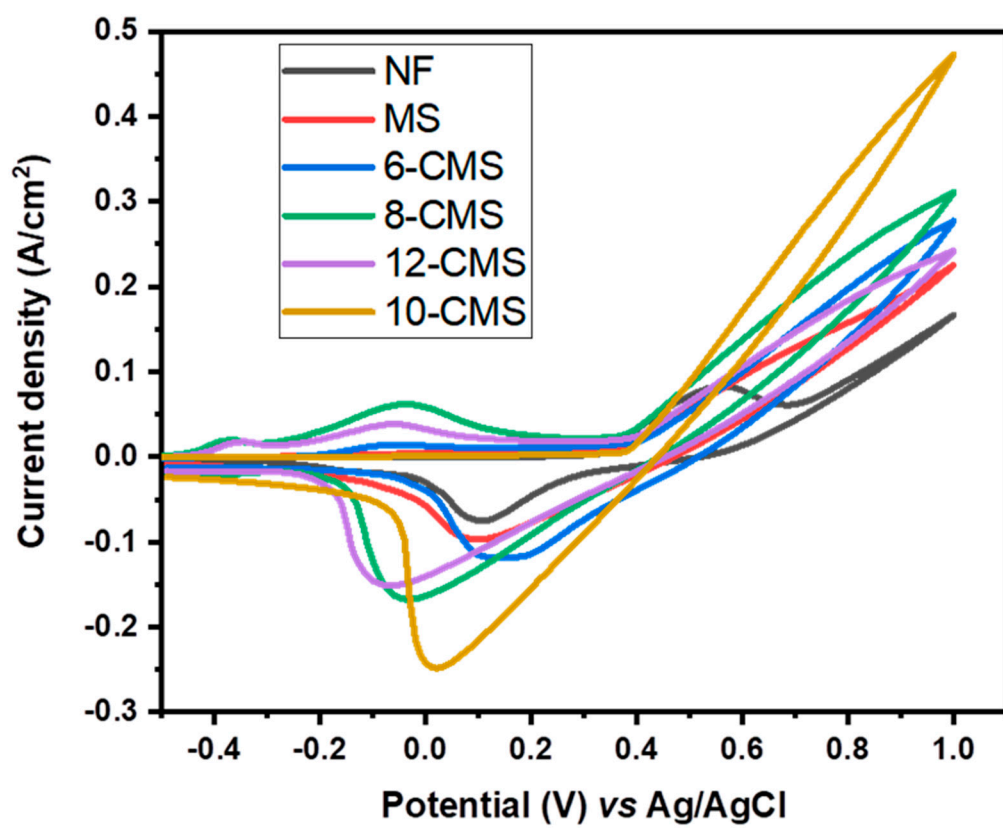


Figure S4 : CV curves of NF, MoS₂, and CMS s recorded at a scan rate of 50 mV s⁻¹.

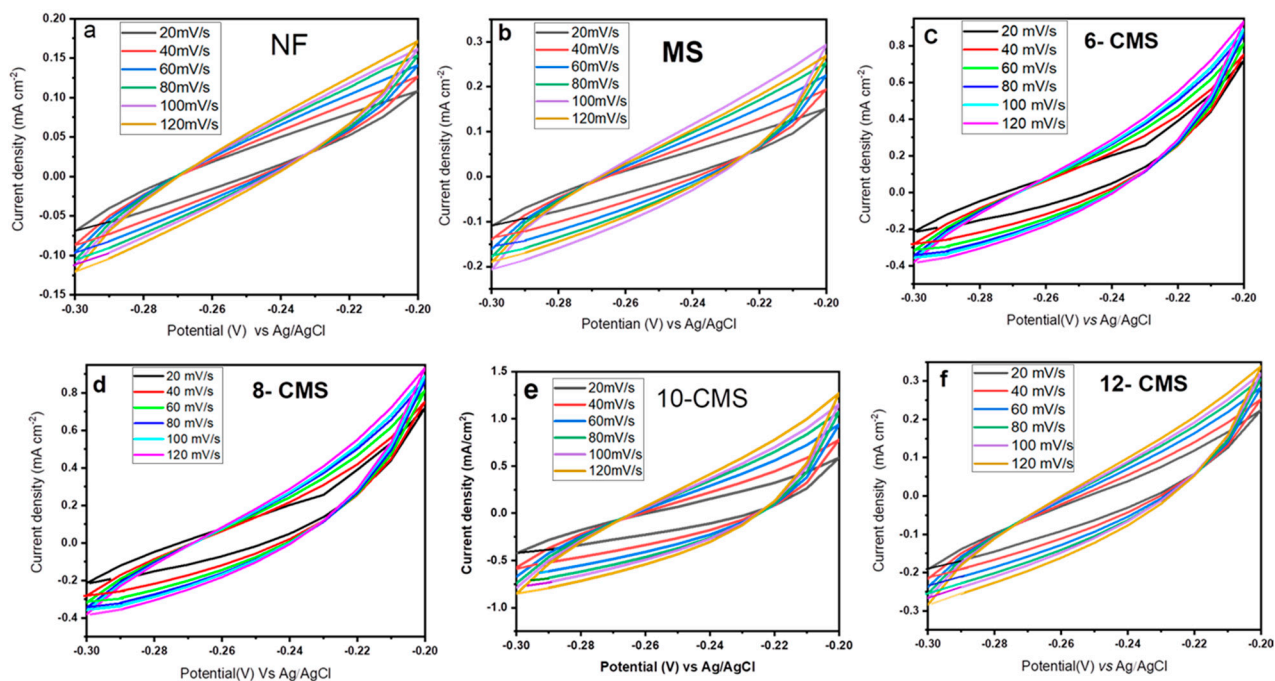


Figure S5: Double layer capacitance measurements with scan rates at 20, 40, 60, 80, 100 and 120 mV/s in the region of -0.3 to -0.2 V vs. Ag/AgCl for CMS/NF.