

SUPPORTING INFORMATION

CNT/turanite/FeNdCo-alloy electrodes to enhance the capacitance of waterproof/eco-friendly supercapacitors

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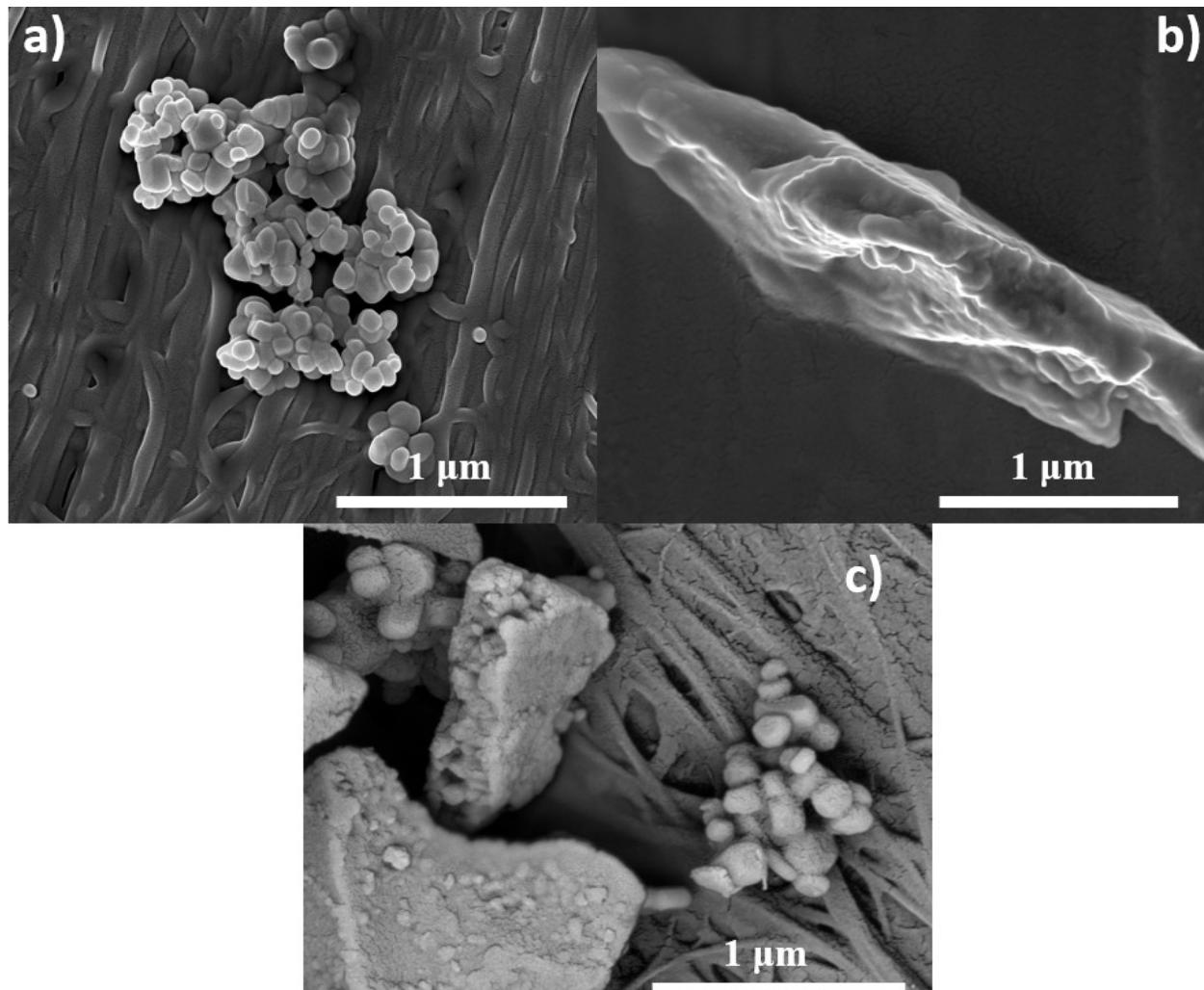


Fig. S1. SEM micrographs for: a) CuVO nanoparticles, b) FNC-E electrode, c) CuVO/FNC-E electrode.

Table S1. Electrochemical parameters of SC devices made with vanadium oxides, Fe and/or Co based metallic alloys.

Material used for SC electrode	Specific Capacitance (F g^{-1})	Energy density (Wh Kg $^{-1}$)	Current density	Stability	Type	Ref.
FeCo-alloy@FeCo-sulfide	~201	72.1	1 A g $^{-1}$	68.9% (10000 cycles)	Flexible	[36]
$\text{Cu}_3\text{V}_2\text{O}_8@\text{rGO}$	36.68	7.64	0.14 A g $^{-1}$	74% (2000 cycles)	Rigid	[49]
$\text{CuCo}_2\text{V}_2\text{O}_8$	175.9	62.54	2 A g $^{-1}$	94% (7000 cycles)	Rigid	[50]
CuV_2O_6	8	1.6	0.2 A g $^{-1}$	98% (2000 cycles)	flexible	[51]
FeVO_4	73	27	3 mA cm $^{-2}$	100% (1000 cycles)	Rigid	[52]
$\text{Zn}_3\text{V}_2\text{O}_8@\text{MWN CT}$	86	12	1 A g $^{-1}$	81% (5000 cycles)	Rigid	[53]
CoNi-CNF	132	4.60	1 A g $^{-1}$	85.3% (10000 cycles)	Rigid	[54]
CoNi@NCNT	30.8	24.7	0.25 A g $^{-1}$	94.6 % (5000 cycles)	Rigid	[55]
CNT/CuVO/FNC	868.3 Fg $^{-1}$	173	1 A g $^{-1}$	97.5% (500 cycles)	Flexible	This

				cycles)		work
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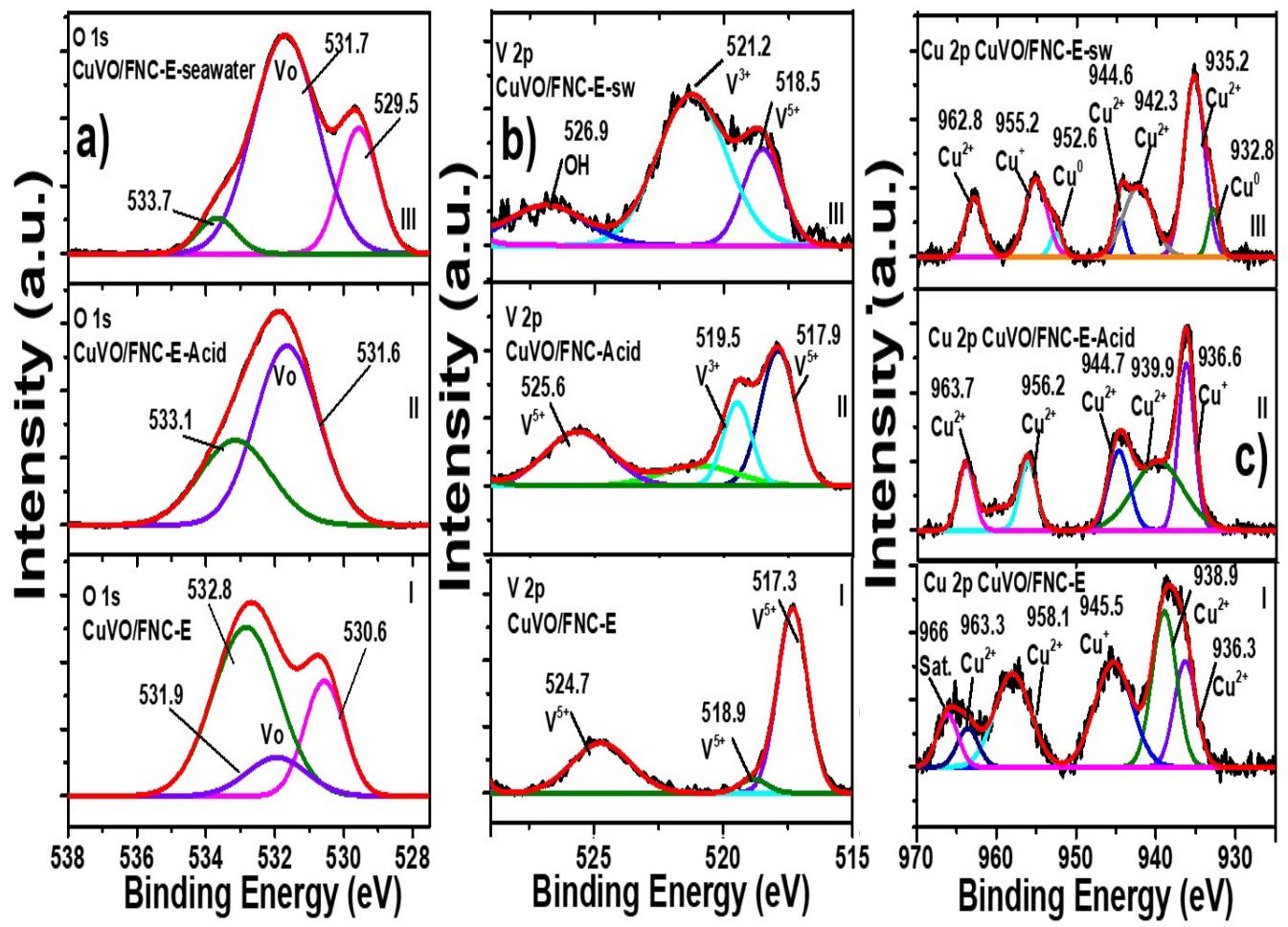


Fig. S2. Deconvoluted XPS spectra for the CUVO/FNC-E, CUVO/FNC-E-Acid, and CUVO/FNC-E-sw electrodes: a) O 1s, b) V 2p and c) Cu 2p orbitals.

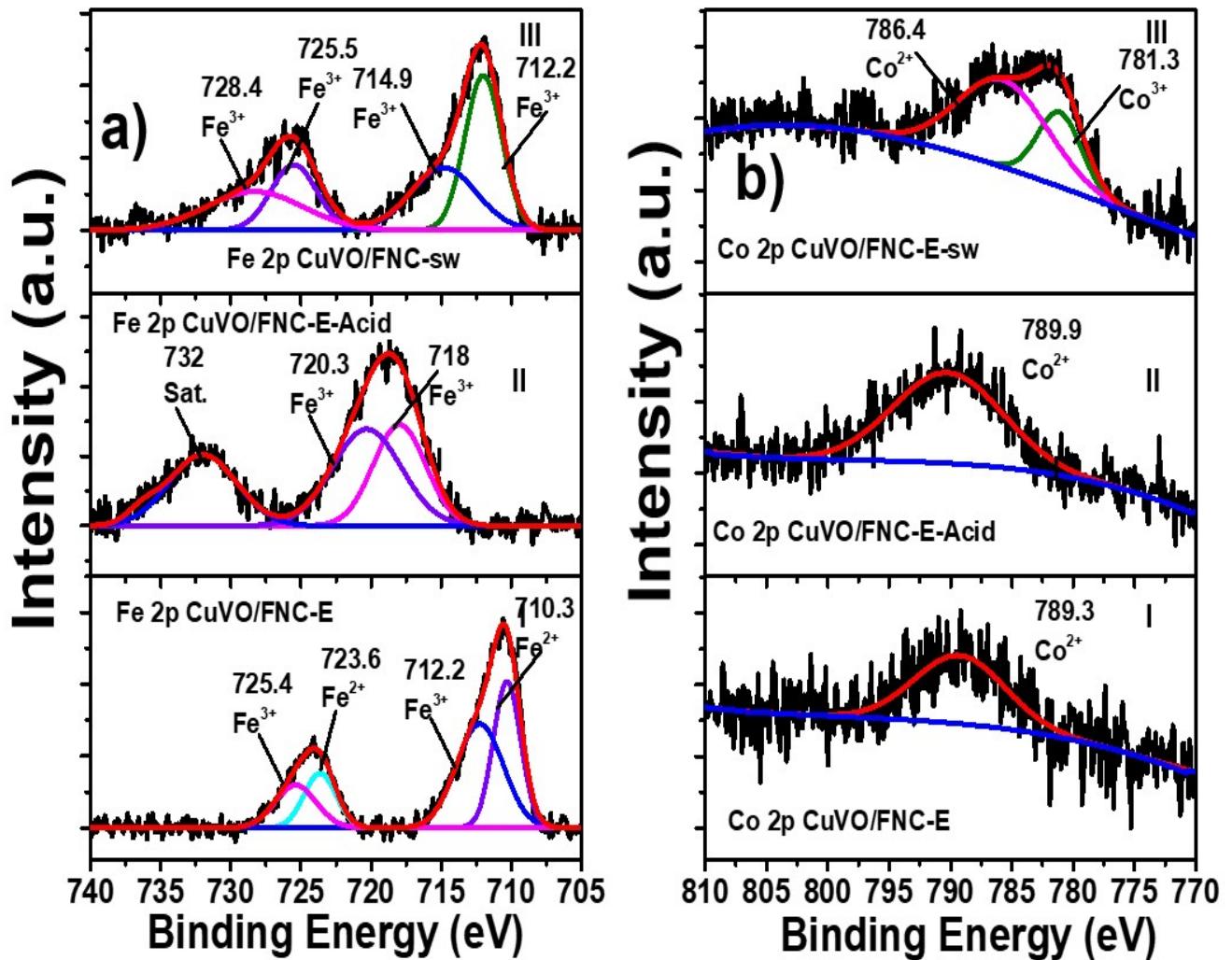


Fig. S3. Deconvoluted XPS spectra for the CUVO/FNC-E, CUVO/FNC-E-Acid, and CUVO/FNC-E-sw electrodes: a) Fe 2p and b) Co 2p orbitals.