Highly-ordered Maghemite/Reduced Graphene Oxide Nanocomposites for High-performance Photoelectrochemical Water Splitting

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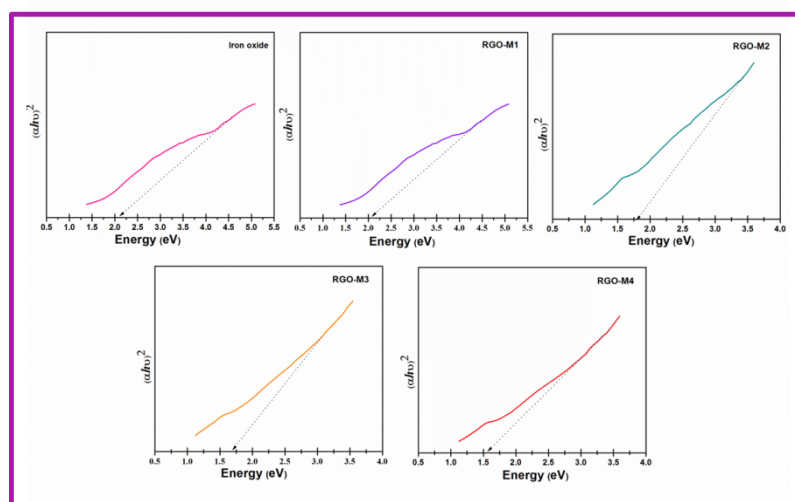*Corresponding Authors: shhur@ulsan.ac.kr (**Seung Hyun Hur**)

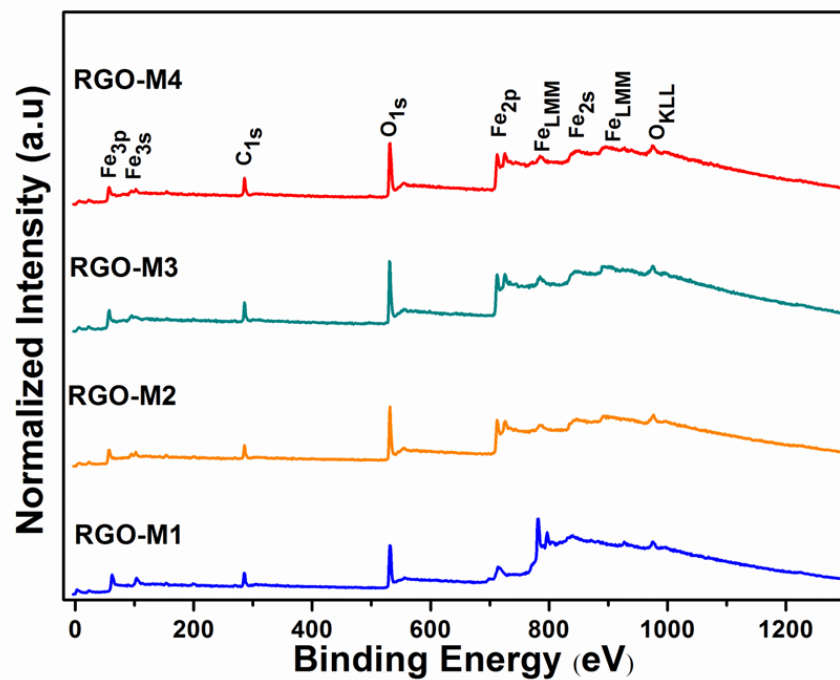**Fig S1.** The Band gap calculation of Iron oxide and RGO/γ-Fe$_2$O$_3$ samples

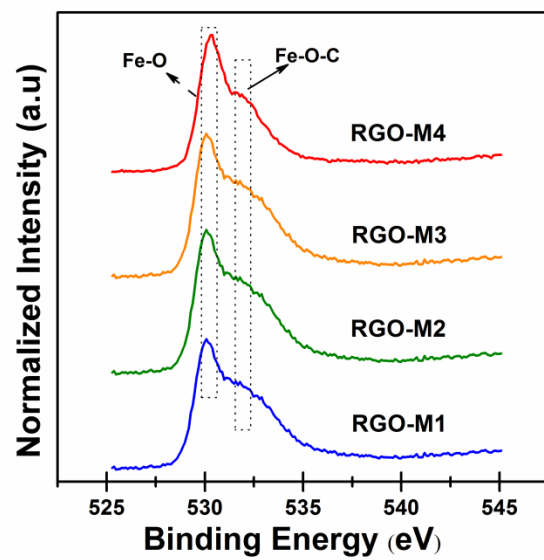**Fig S2.** XPS spectra of RGO/γ-Fe_2O_3 samples

Fig S3. XPS - O1s core level spectra of RGO/γ-Fe$_2$O$_3$ samples

Table S1: Binding energy (B.E.) of Fe-O and Fe-O-C bonds in O 1s spectra

Samples	Binding Energy (eV) values by present work		Reported B.E (eV)		Ref
	Fe-O bond	**Fe-O-C bond**	**Fe-O bond**	**Fe-O-C bond**	
RGO-M1	529.96	531.84	529.8	531.2	18
RGO-M2	530.07	531.96	530.3	531.7	48
RGO-M3	530.08	532.03	530.3	531.7	48
RGO-M4	530.31	532.15	530.3	531.7	48