

## Supporting Information

### **Magnetically Separable $\text{Ag}_3\text{PO}_4/\text{NiFe}_2\text{O}_4$ composites with Enhanced Photocatalytic Activity**

*Santosh S. Patil<sup>a,b</sup> Mohaseen S. Tamboli,<sup>a</sup> Virendrakumar G. Deonikar,<sup>a</sup> Govind G. Umarji,<sup>a</sup>  
Jalindar D. Ambekar,<sup>a</sup> Milind V. Kulkarni,<sup>a</sup> Sanjay S. Kolekar,<sup>\*b</sup> Bharat B. Kale<sup>\*a</sup> and Deepak  
R. Patil<sup>\*a</sup>*

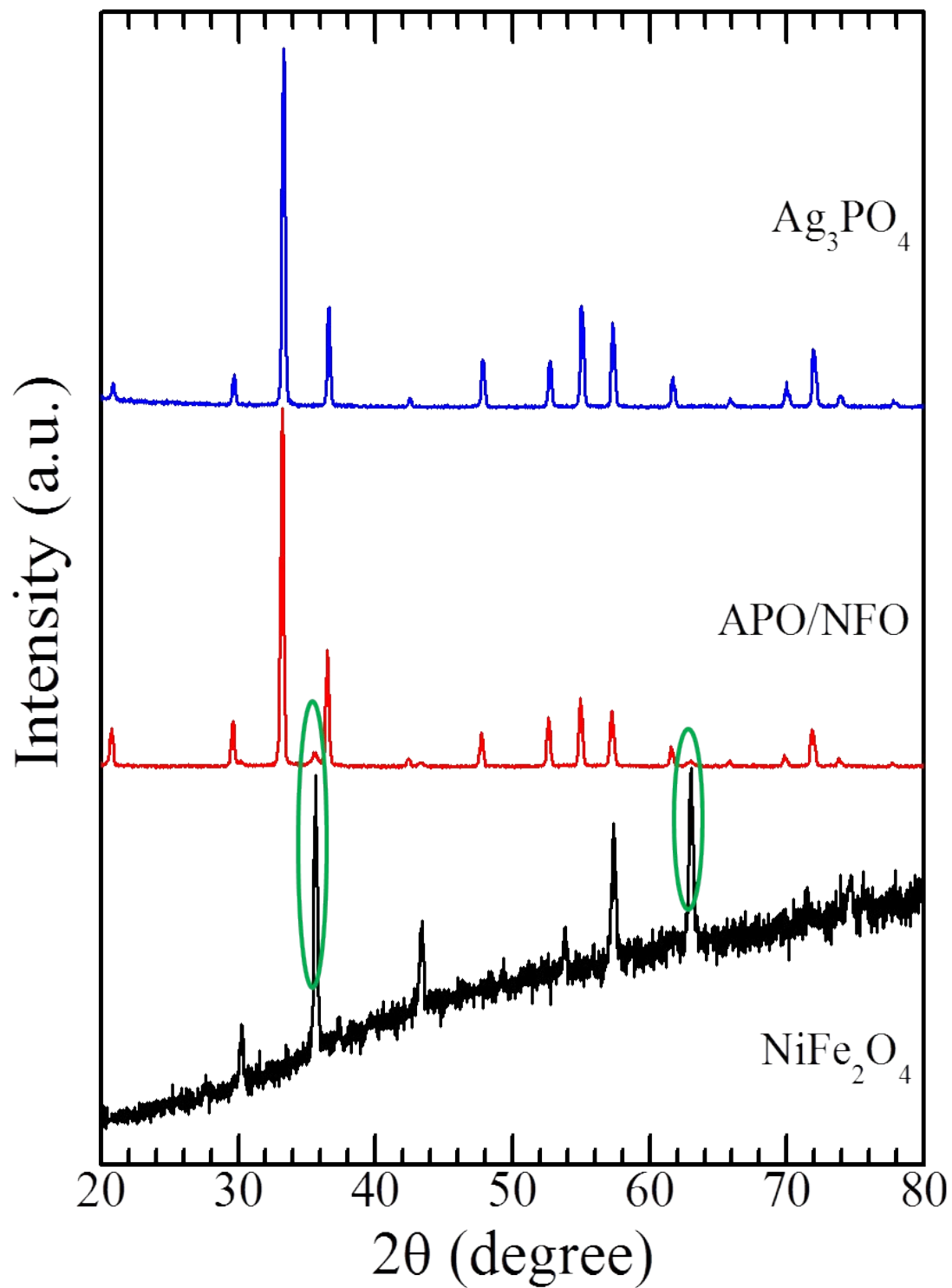
<sup>a</sup>Centre for Materials for Electronics Technology (C-MET), Pune, Department of Electronics and Information Technology (DeitY), Govt. of India

Corresponding author. E-mail address: deepphy24@gmail.com (Dr. Deepak Patil),  
bbkale1@gmail.com (Dr. B. B. Kale), Tel.: +91(020) 25898724; Fax: +91(020)25898085.

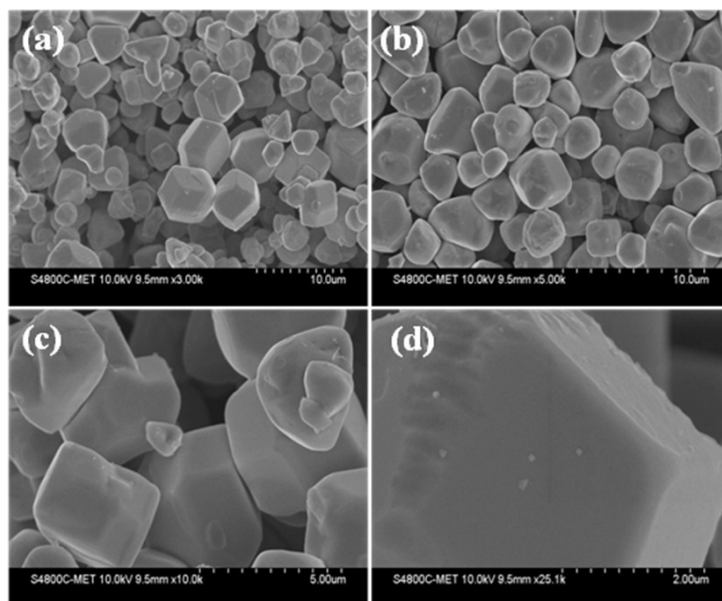
<sup>b</sup>Analytical Chemistry and Material Science Research Laboratory, Department of Chemistry,  
Shivaji University, Kolhapur, India

sskolekar@gmail.com (Dr. S. S. Kolekar)

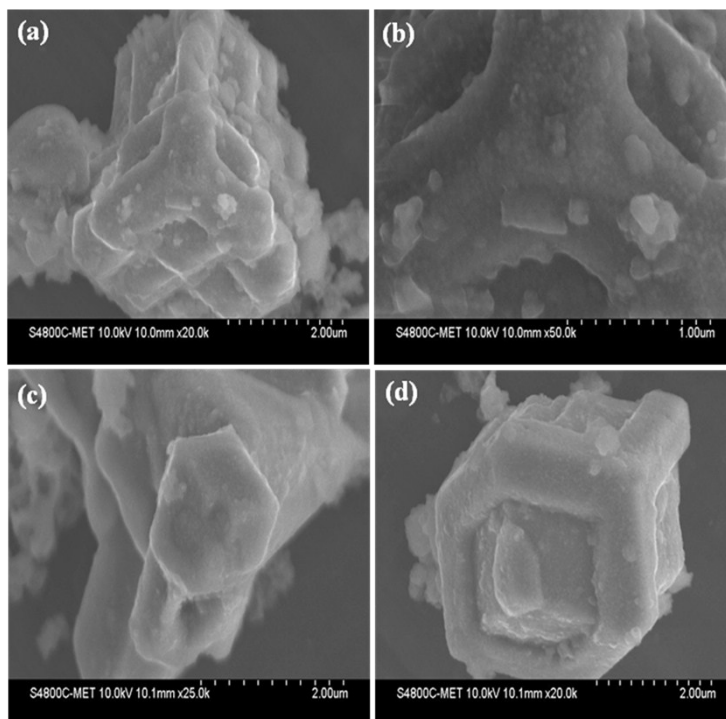
Figure S1: XRD pattern of APO, NFO and APO/NFO heterojunction photocatalyst



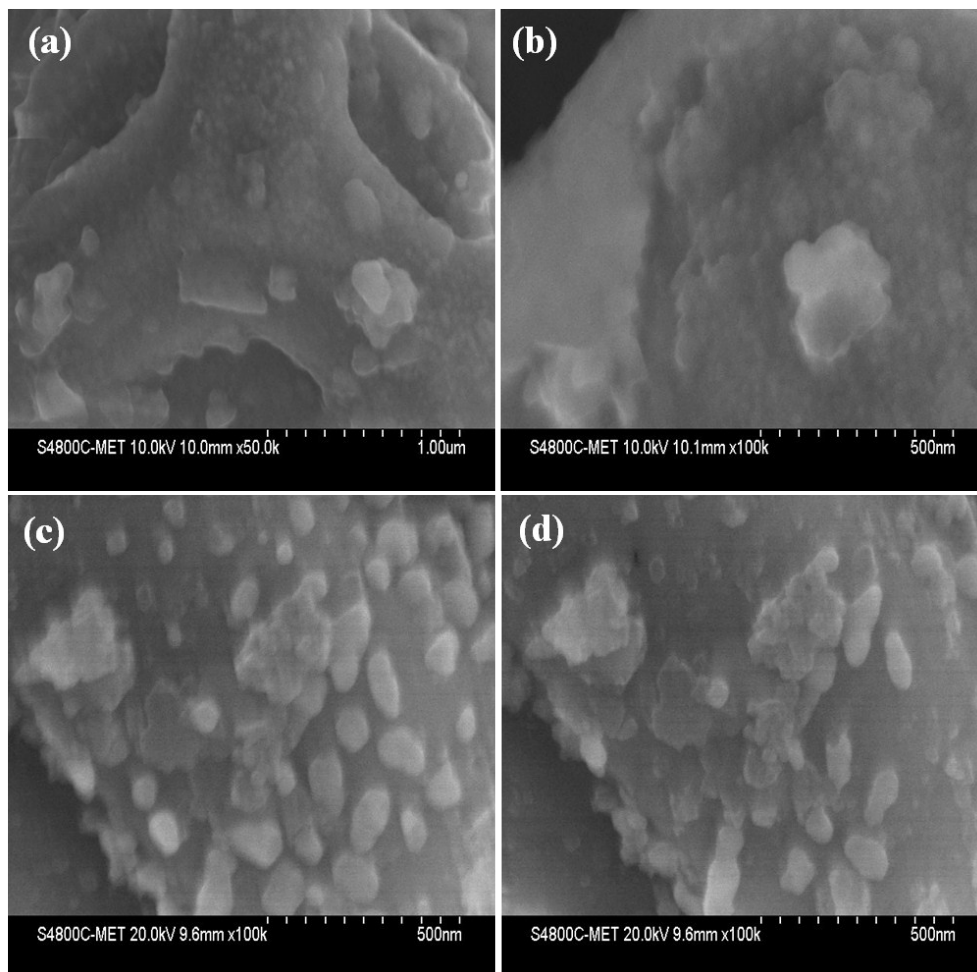
**Figure S2: FESEM images of APO**



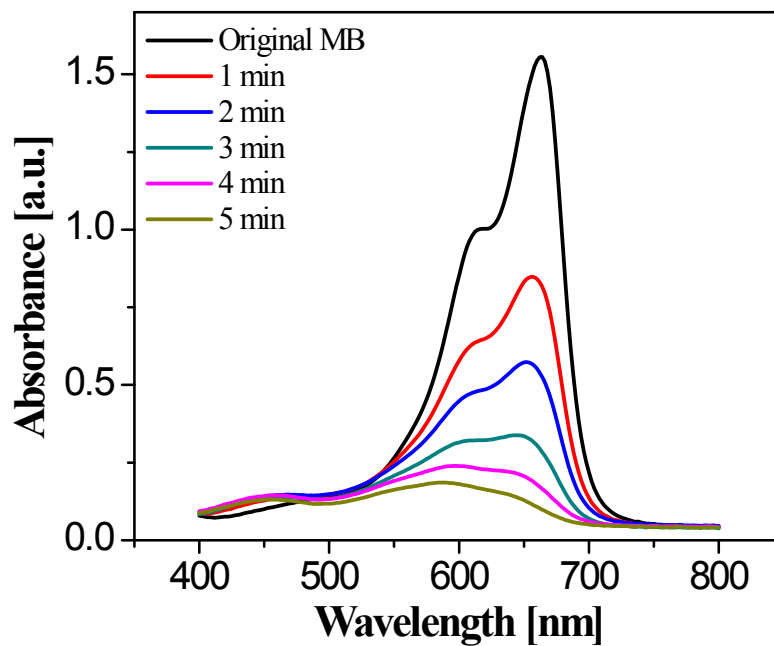
**Figure S3: FESEM images of APO/NFO composite with low magnifications**



**Figure S4: FESEM images of APO/NFO with high magnifications**



**Figure S5: Photocatalytic activity for MB degradation using APO/NFO5 photocatalyst**



**Fig.S5** UV-Visible spectra of the MB solution before and after exposure to visible light irradiation using APO/NFO5 photocatalyst

**Table S1: Recyclability photocatalytic activity study of APO/NFO5**

Catalyst	Experiment	MB degraded (%)
APO/NFO	First run	98
	Second run	96
	Third run	95