

Electronic Supplementary Information

Compliments of Confinements: Substitution and Dimension Induced Magnetic Origin and Band-Bending Mediated Photocatalytic Enhancements in $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ Particulate and Fiber Nanostructures

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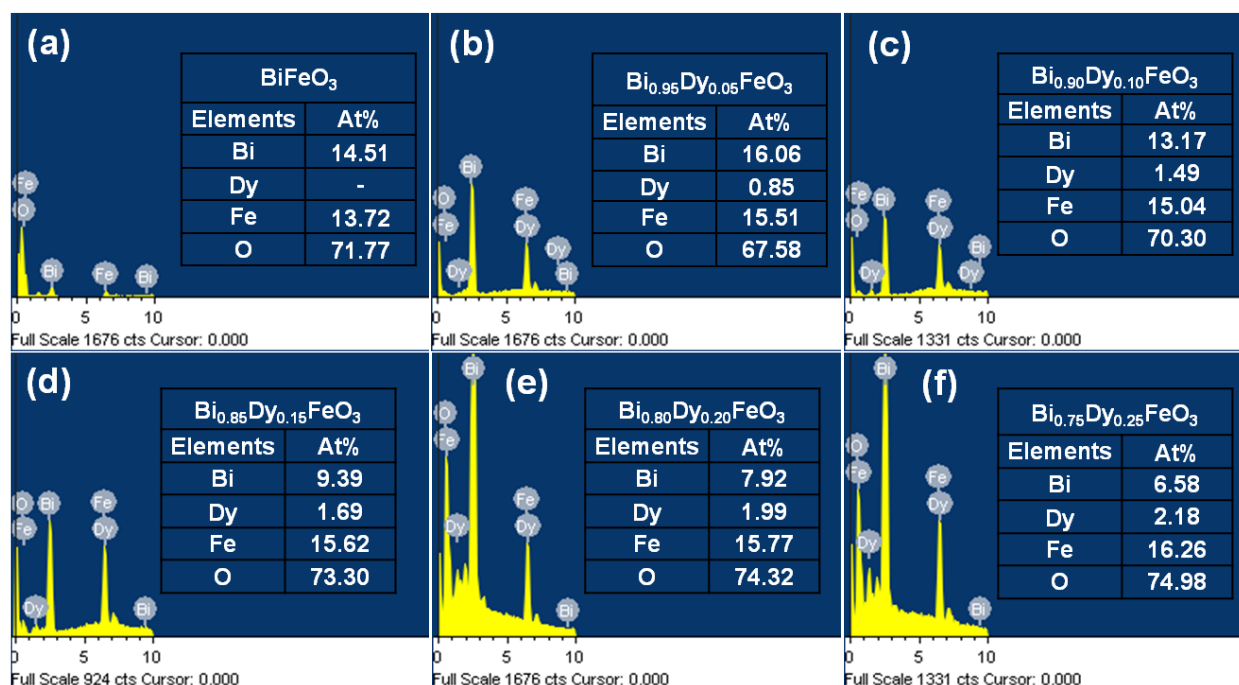


Fig. S1(a)-(f) Energy dispersive X-ray spectra and estimated atomic percentage of the elements in $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ particulate compositions

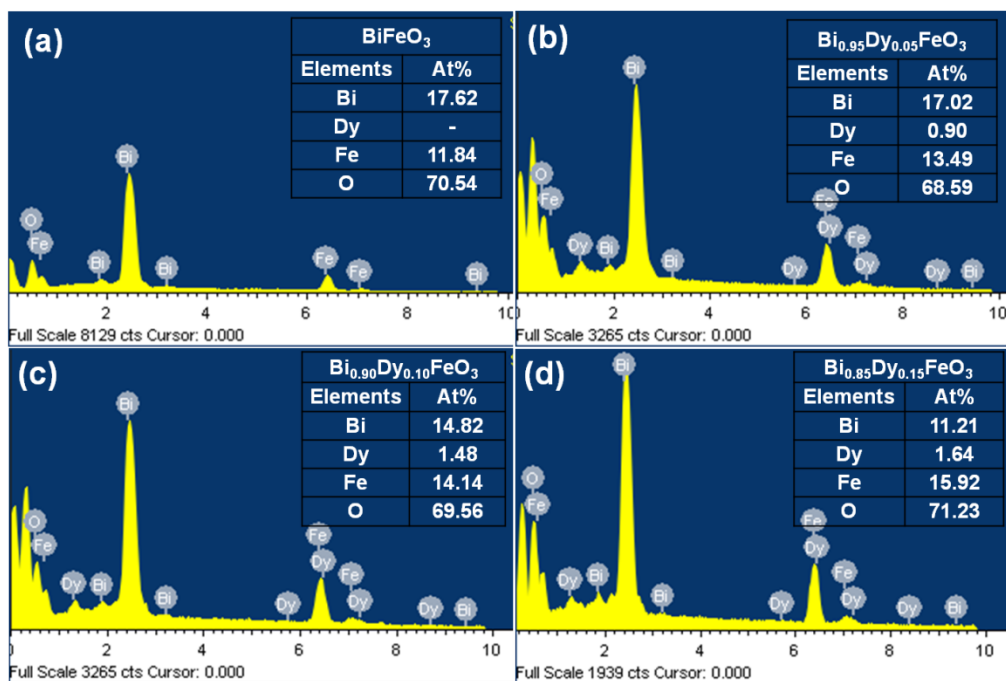


Fig. S2(a)-(d) Energy dispersive X-ray spectra and estimated atomic percentage of the elements in $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ fiber compositions

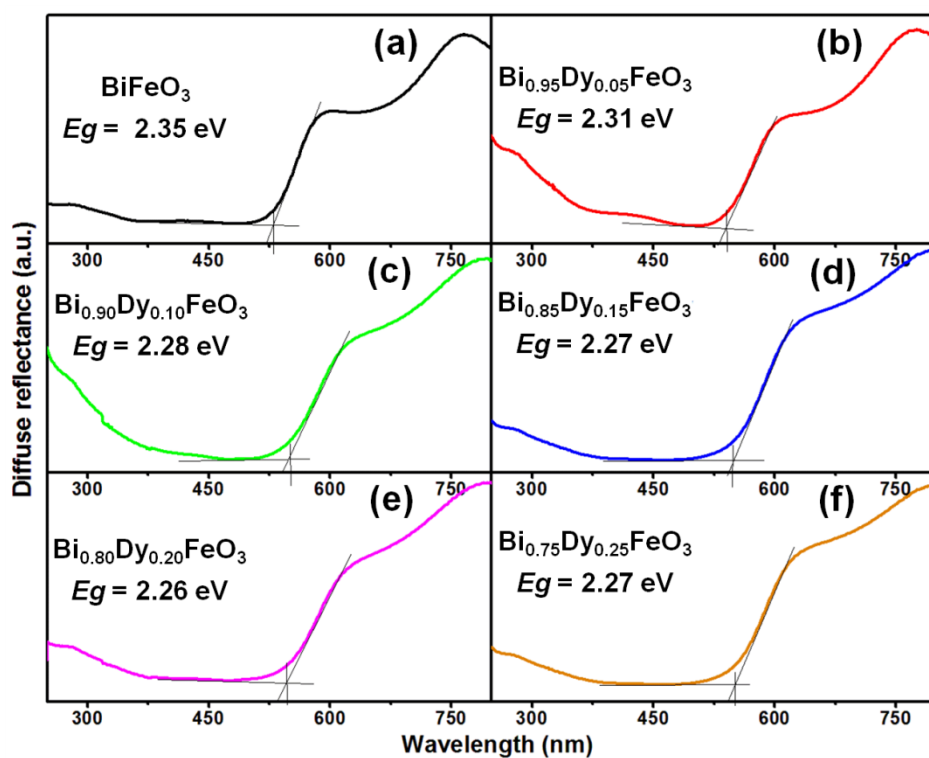


Fig. S3(a)-(f) UV-Vis diffuse reflectance spectra and the estimated band gap energy of $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ particulate compositions

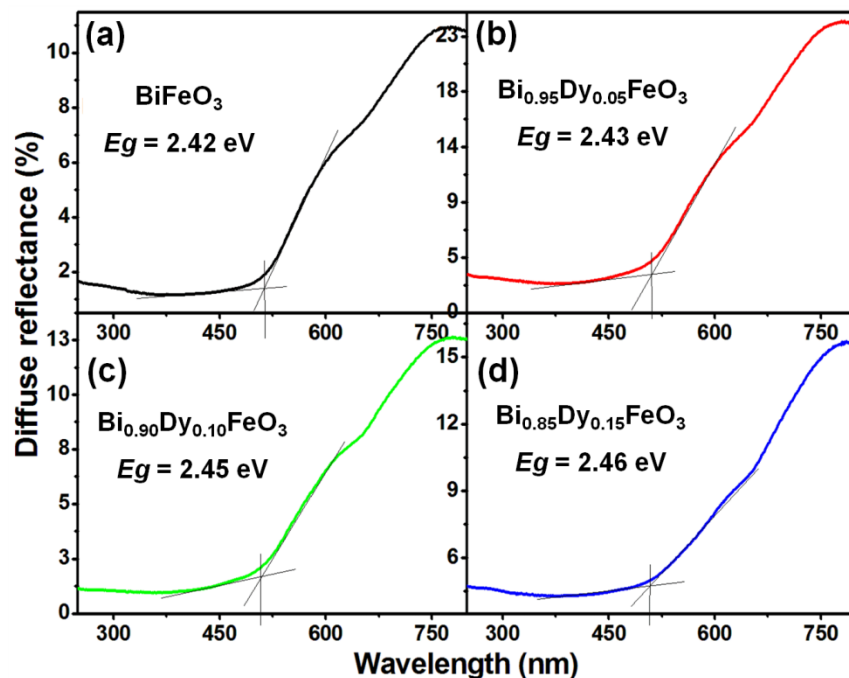


Fig. S4(a)-(d) UV-Vis diffuse reflectance spectra and the estimated band gap energy of $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ fiber compositions

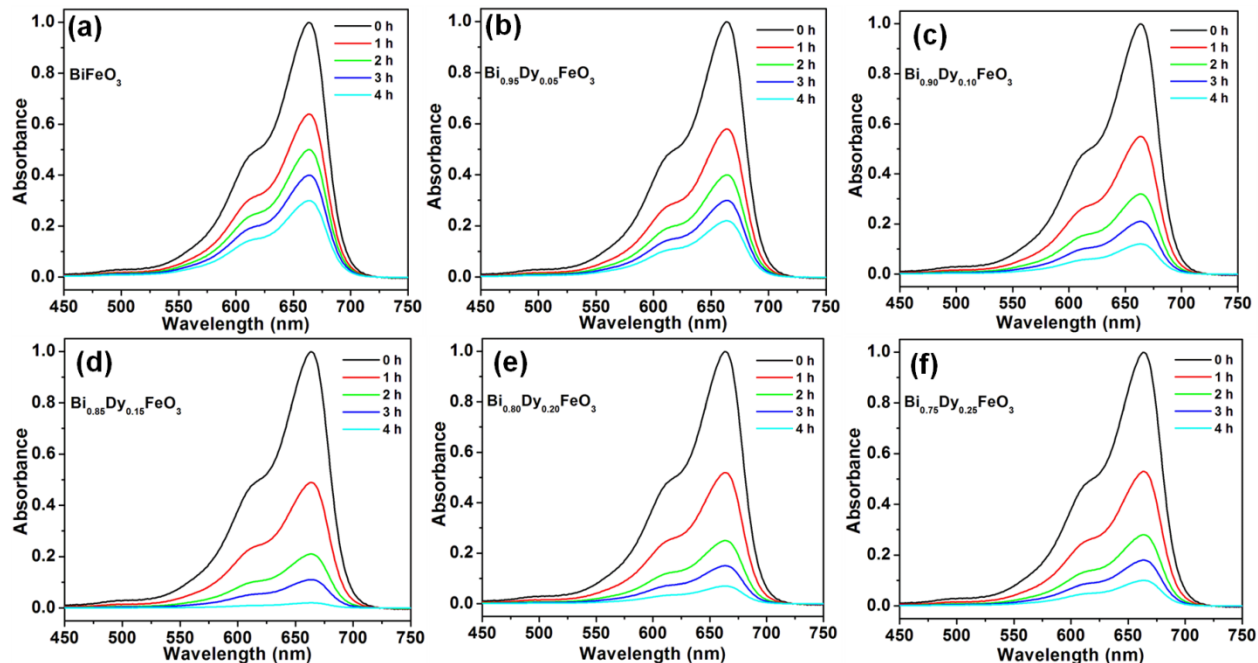


Fig. S5 Photocatalytic degradation spectra of methylene blue by $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ particulates, where $x =$ (a) 0.0, (b) 0.05, (c) 0.10, (d) 0.15, (e) 0.20, and (f) 0.25.

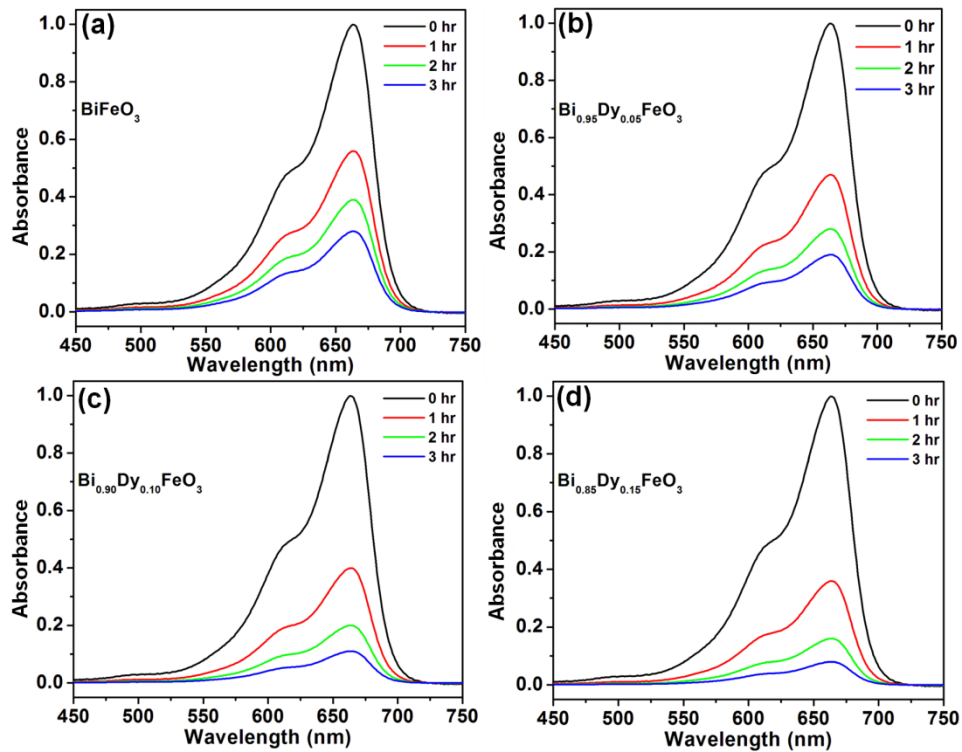


Fig. S6 Photocatalytic degradation spectra of methylene blue by $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ fibers where, $x =$
(a) 0.0, **(b)** 0.05, **(c)** 0.10, and **(d)** 0.15