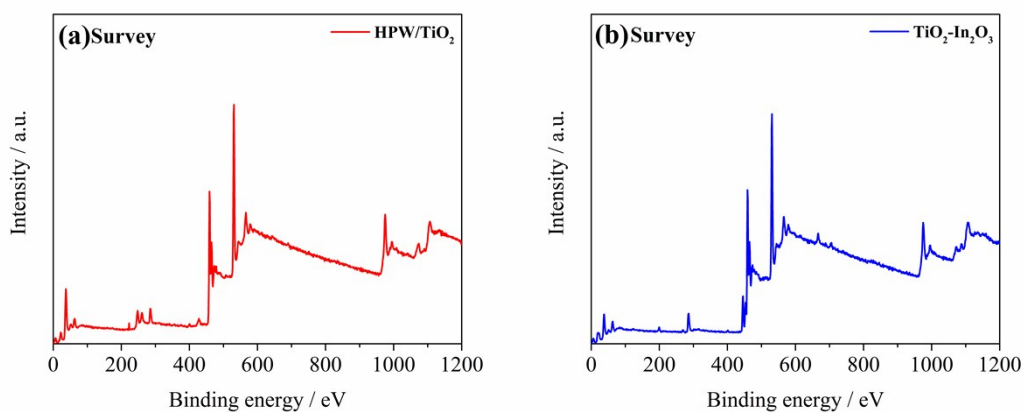


Supplementary Information



Result Section

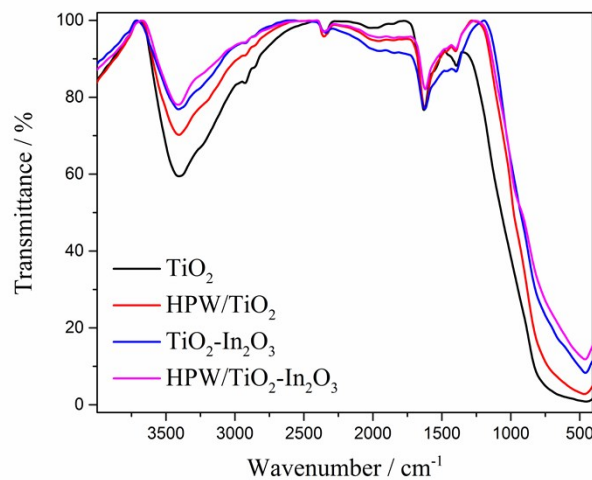


Fig. S1. XPS spectra of HPW/TiO₂ and TiO₂-In₂O₃.

Fig. S2. FT-IR spectra of HPW/TiO₂-In₂O₃, HPW/TiO₂, TiO₂-In₂O₃ and TiO₂.

Fig. S3. Kubelka-Munk reflection plots of HPW/TiO₂, TiO₂-In₂O₃ and TiO₂.

Table S1 XPS results of HPW/TiO₂-In₂O₃, HPW/TiO₂ and TiO₂-In₂O₃.

Catalysts	Binding Energy / eV						
	Ti		In		W		P
HPW/TiO ₂	458.98	464.68	-	-	35.98	37.98	133.88
TiO ₂ -In ₂ O ₃	458.78	464.48	445.18	452.78	-	-	-
HPW/TiO ₂ - In ₂ O ₃	459.28	465.08	445.38	452.88	35.78	37.88	133.88

Table S2 Kinetic parameters for degradation of imidacloprid with different catalysts

Catalysts	Equation	$t_{1/2}$ / h	k / h ⁻¹	R^2
TiO ₂	$C_t = C_0 \times \exp(-0.02691t)$	25.76	0.02691	0.97106
HPW/TiO ₂	$C_t = C_0 \times \exp(-0.06041t)$	11.47	0.06041	0.99377
TiO ₂ -In ₂ O ₃	$C_t = C_0 \times \exp(-0.03613t)$	19.18	0.03613	0.99896
HPW/TiO ₂ -In ₂ O ₃	$C_t = C_0 \times \exp(-0.33611t)$	2.06	0.33611	0.99314

Table S3 The results of ICP-AES

Catalysts	element contents / wt. %		
	Ti	In	W
HPW/TiO ₂ -In ₂ O ₃	46.49	3.21	16.69
HPW/TiO ₂ -In ₂ O ₃ [#]	46.92	3.24	15.99

[#], catalyst used in the recyclability test.