Supplementary Information

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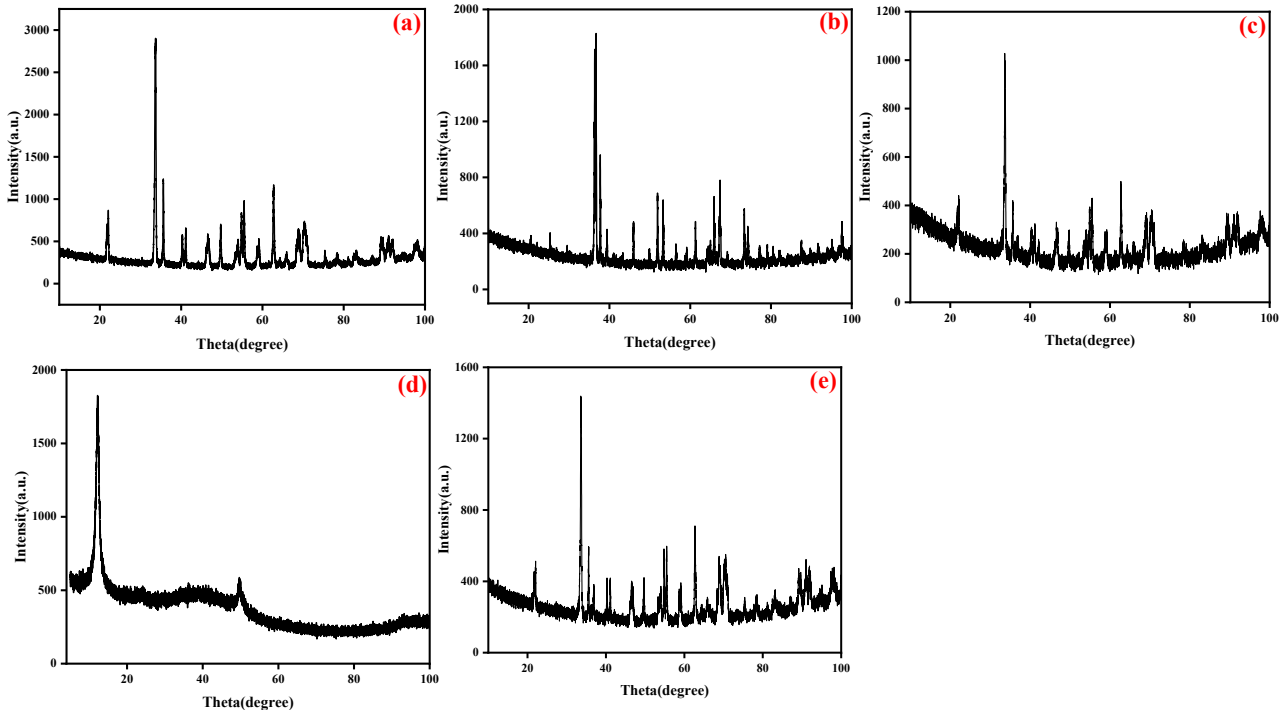

Figure S1: Expanded XRD plot for (a) $BiVO_4$, (b) Ag_2CrO_4, (c) $BiVO_4/Ag_2CrO_4$, (d) GO and (e) $GO/BiVO_4/Ag_2CrO_4$.

$$D = \frac{K\lambda}{\beta COS\theta}$$

S2

D is the crystallite size in nm, K is Scherrer's constant ≈ 0.9, λ is the wavelength of the X-ray radiation (Co Kα= 1.789 nm), β is the corrected band broadening (full width at half-maximum (FWHM)) of the diffraction peak, and θ is the diffraction angle.

Table S1: Textural characteristics of the fabricated nanocomposites

Photocatalyst Material	**Crystalline size (nm)**
$BiVO_4$	44.72
Ag_2CrO_4	30.85
GO	9.33
$BiVO_4/Ag_2CrO_4$	32.68
$GO/BiVO_4/Ag_2CrO_4$	36.16

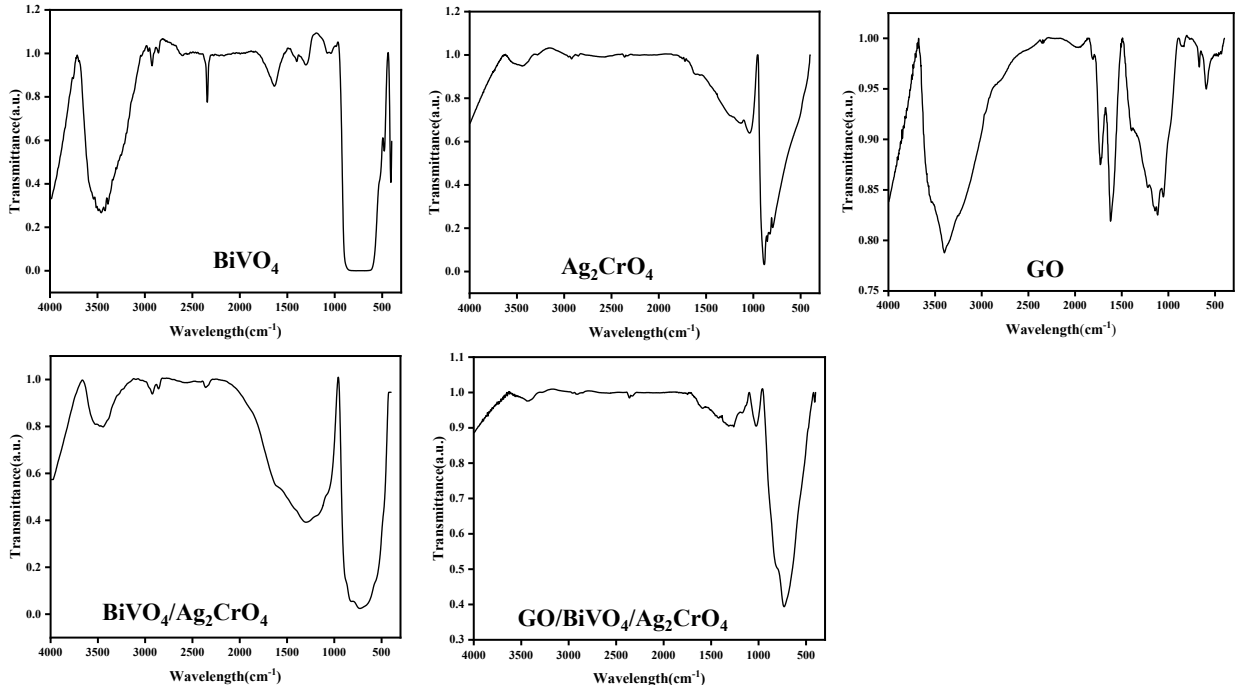

Figure S2: Expanded FTIR plot for the fabricated nanocomposites

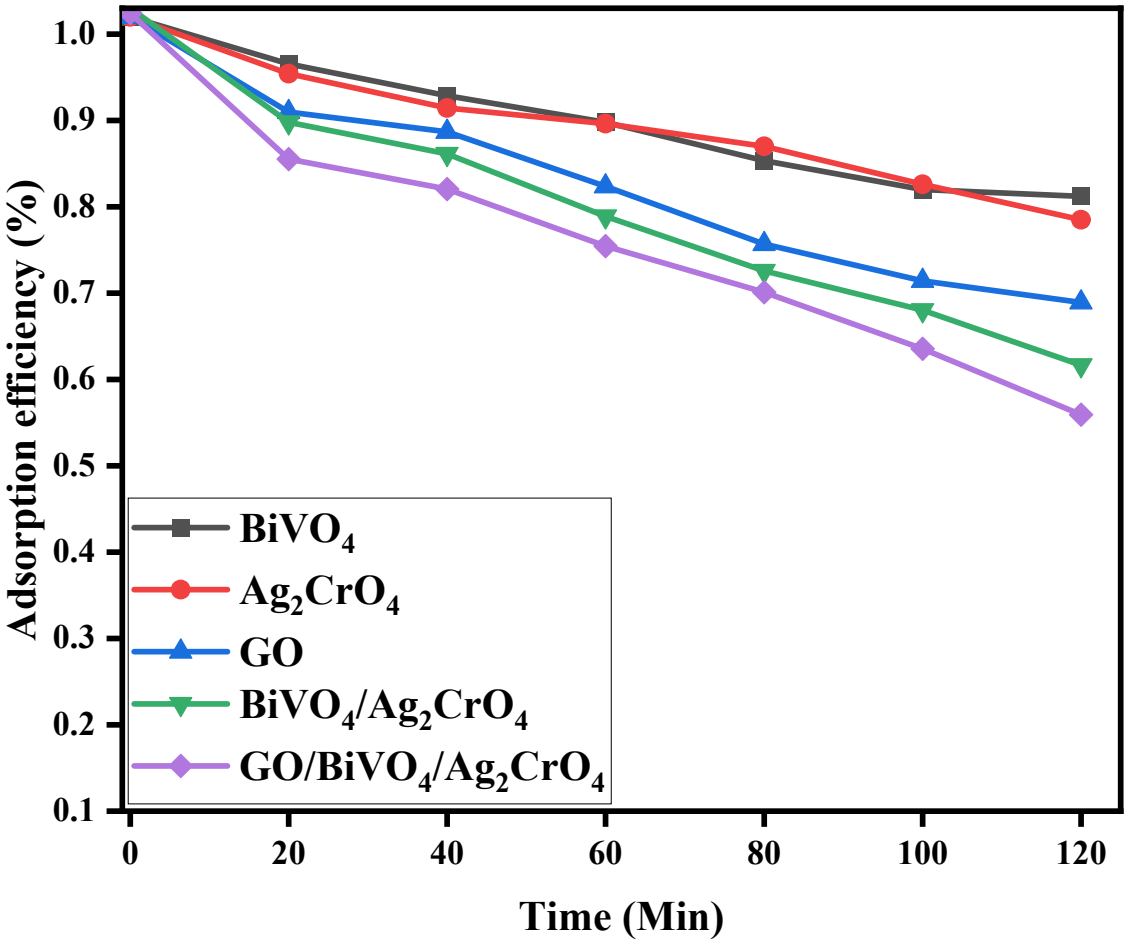

Figure S3: Adsorption performance of fabricated nanocomposites for the removal of ciprofloxacin

S4: Point of zero charge (pHzpc) evaluation

The point of zero charge (pHzpc) of the synthesized photocatalyst materials were evaluated using the pH drift method [1]. This was done by adjusting the pH of 20 mL 0.1 M KCl with 0.1 M of HCl and NaOH in the range 2, 4, 6, 8, 10, 12. An amount of 0.1 g of the fabricated GO/$BiVO_4$/Ag_2CrO_4 photocatalyst was added and shaken at room temperature for 24 h. The pHzpc of the photocatalysts were obtained by subtracting the final pH of the aqueous solution from the initial pH while the point of intersection with the horizontal axis (initial pH) shows the PZC of value of the material [2].

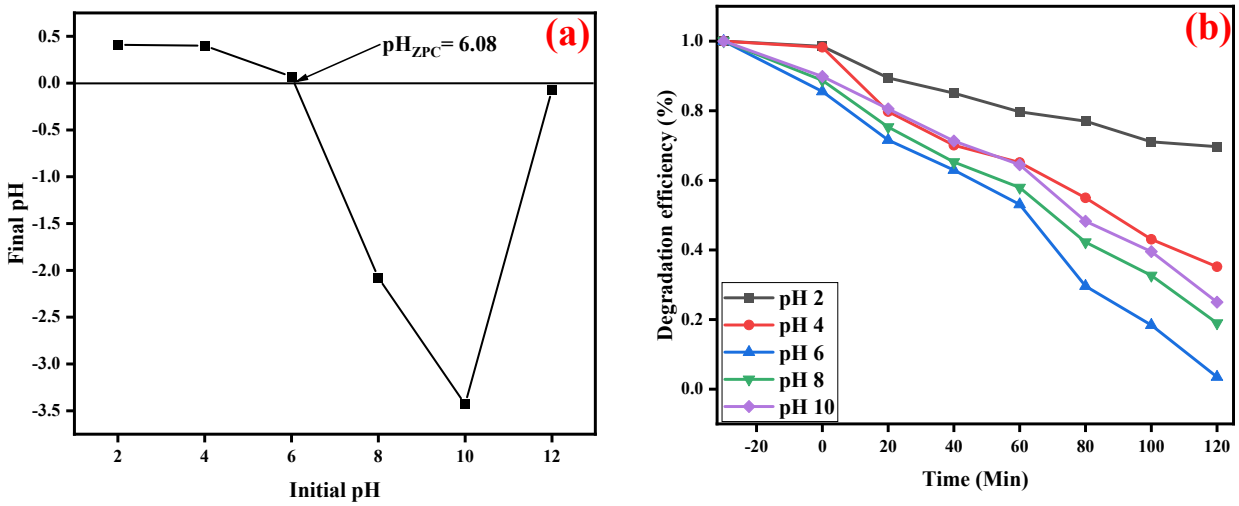

Figure S4: (a) Point of zero charge (pHzpc) plot and (b) effect of pH plot of the fabricated GO/$BiVO_4$/Ag_2CrO_4 photocatalyst

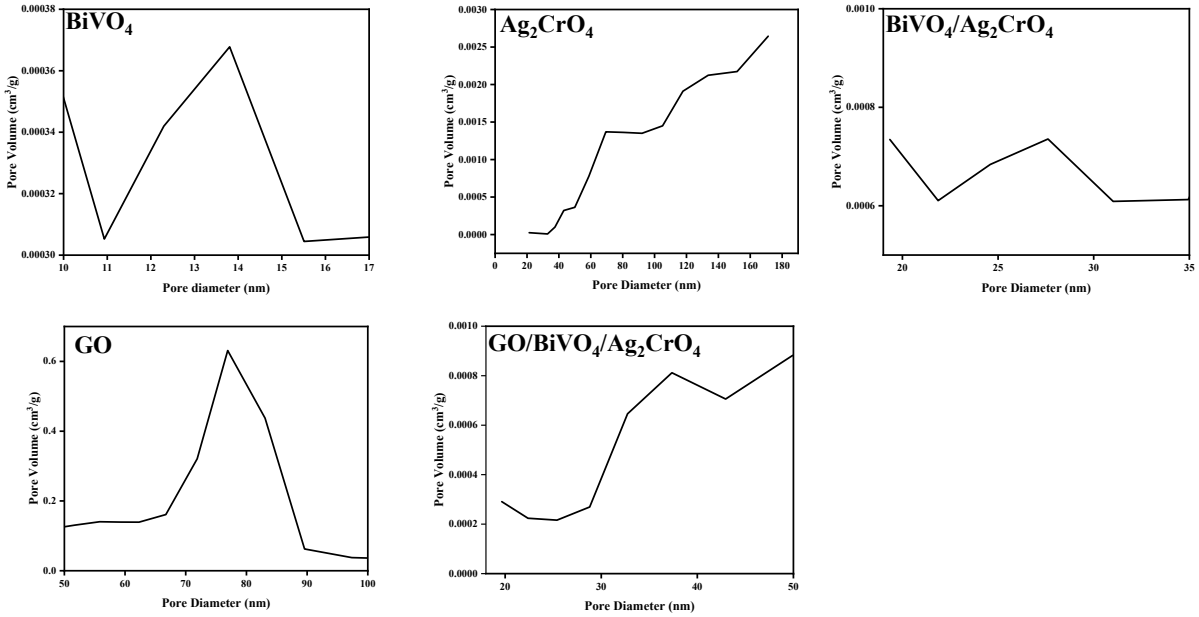

Figure S5: Pore volume and diameter distribution for the fabricated nanocomposites

Table S2: Comparison of ciprofloxacin degradation by various heterojunction photocatalysts

Photocatalyst	**Amount/mg/L**	**Photocatalytic efficiency (%)**	**Light source**	**Reference**
ZnAl MMO/RGO_{20}	10	90.58 in 2 h	800 W xenon lamp	[3]
Ag/Ag_2S/rGO	20	87.60 in 1 h	300 W xenon lamp	[4]
N-TiO_2	10	54.50 in 3 h	14 W blue LEDs lamp	[5]
P-g-C_3N_4	10	60.00 in 3 h	simulated solar irradiation	[6]
WO_3-CNDs	10	62.50 in 3 h	simulated solar irradiation	[7]
g-C_3N_4/TiO_2/kaolinite	10	92.00 in 4 h	xenon lamp (90 mW/cm^2)	[8]
NiAl LDH/Fe_3O_4-RGO	10	91.00 in 3 h	500 W xenon lamp	[3]
Fe_3O_4/TiO_2/C-dot	20	90.00 in 3 h	Mercury vapor lamp	[9]
Bi_3TaO_7 QDs/g-C_3N_4	10	91.00 in 2 h	86 W blue LED lamp	[10]
Ag/AgBr/$BiVO_4$	10	91.00 in 2 h	300 W xenon lamp	[11]
GO/$BiVO_4$/Ag_2CrO_4	10	94.56 in 2 h	200 W fluorescent lamps	This study

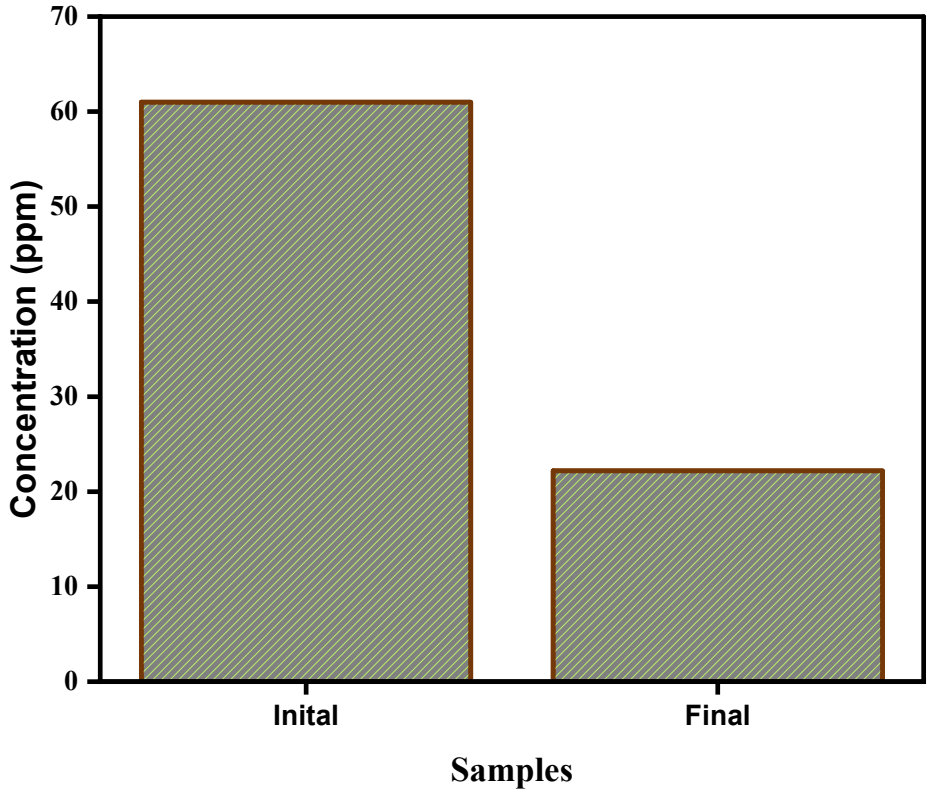

Figure S6: Total Organic Carbon test for CIP mineralization

References

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