Supplementary Information (SI) for Environmental Science: Nano.
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(Supporting information)

Construction of Cu-MOF@Bi_2MoO_6 Z-scheme heterostructure mediated by Bi nanoparticles and oxygen vacancies for ciprofloxacin degradation and mechanism investigation

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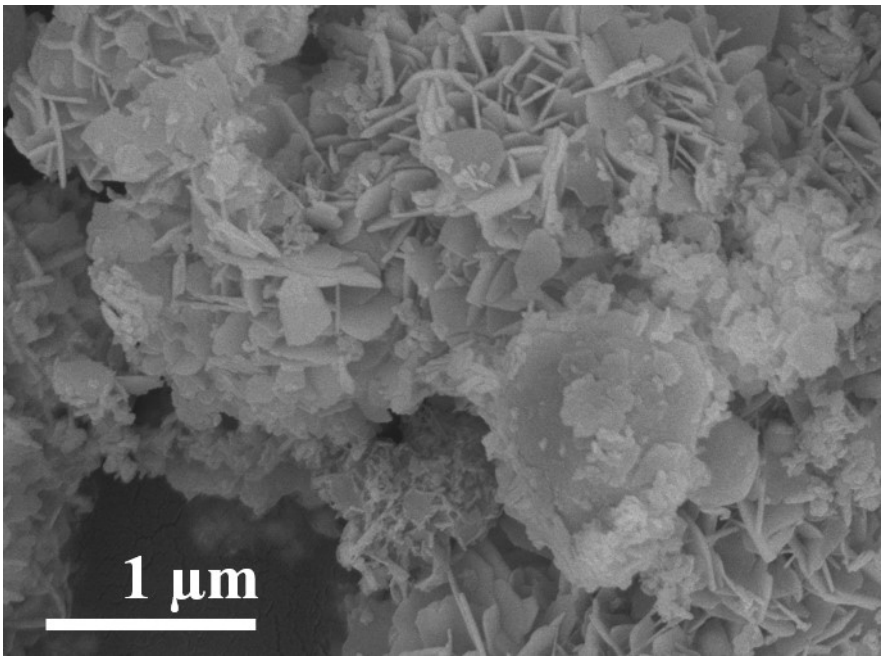

Fig. S1. FESEM image of Cu-MOF.

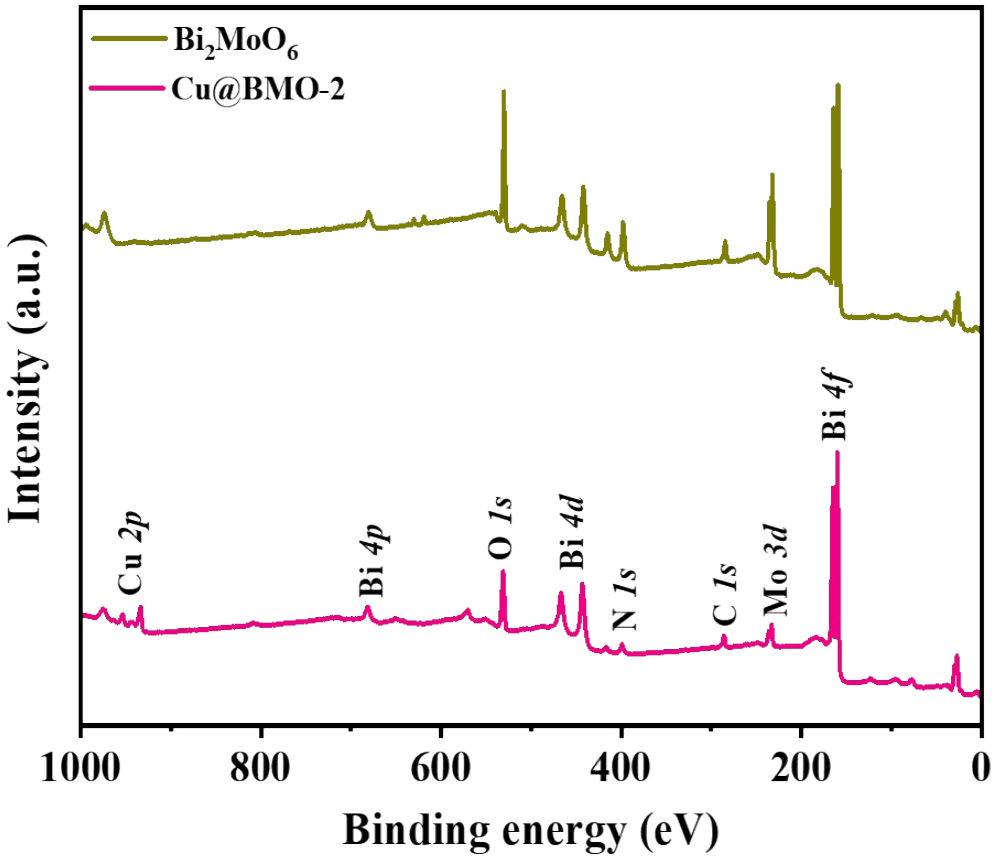

Fig. S2. XPS survey spectra of Bi_2MoO_6 and Cu@BMO-2.

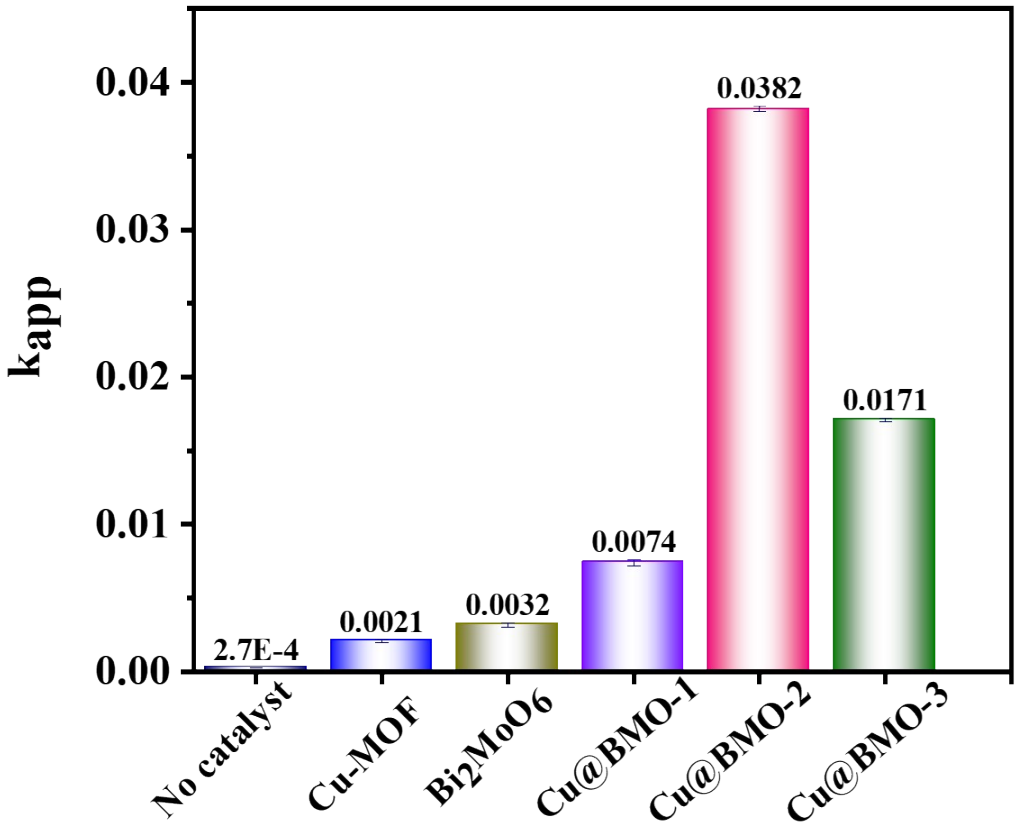

Fig. S3. The rate constant values of different photocatalysts.

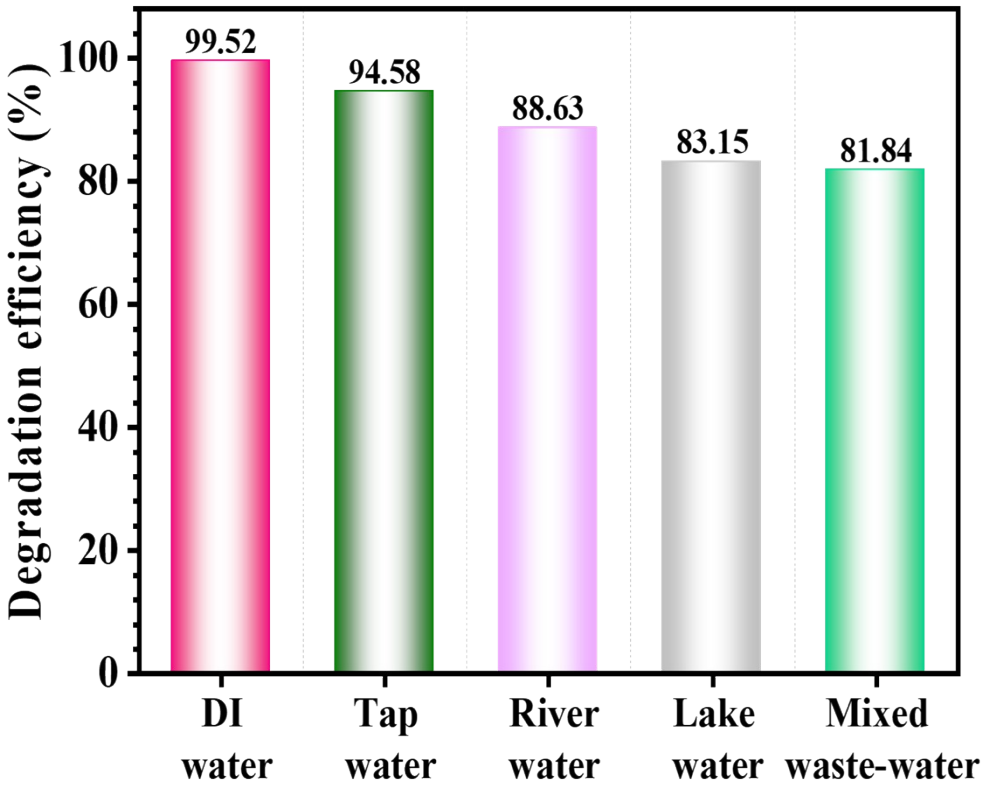

Fig. S4. The photocatalytic degradation of Cu@BMO-2 in different water sources.

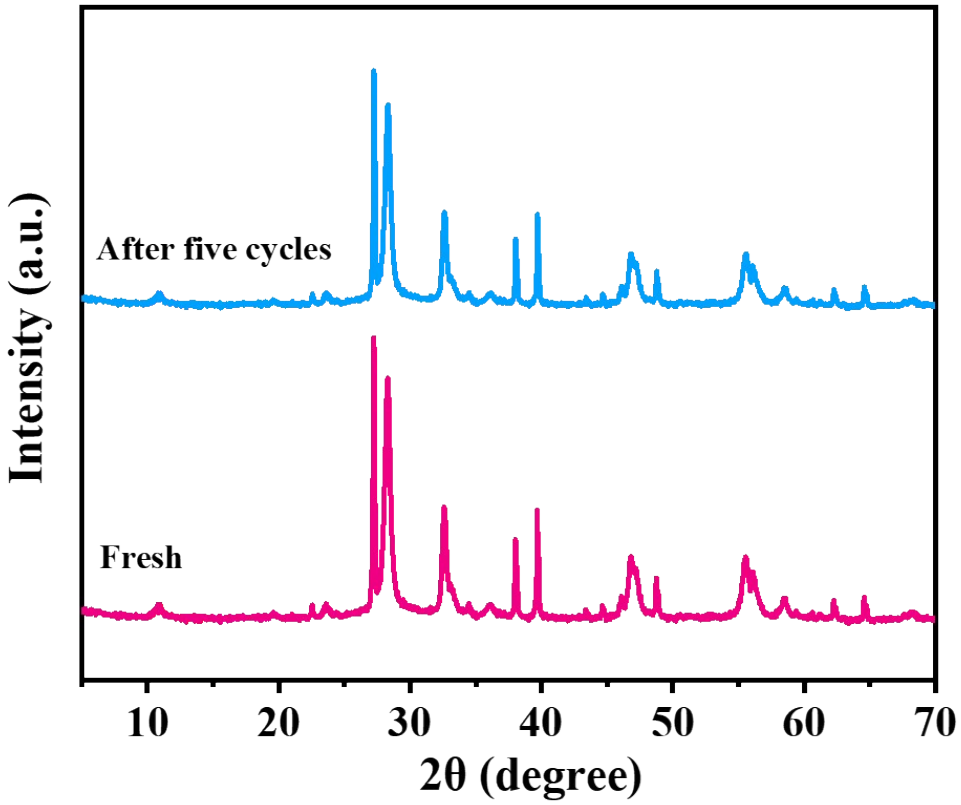

Fig. S5. XRD pattern of Cu@BMO-2 after five cycles.

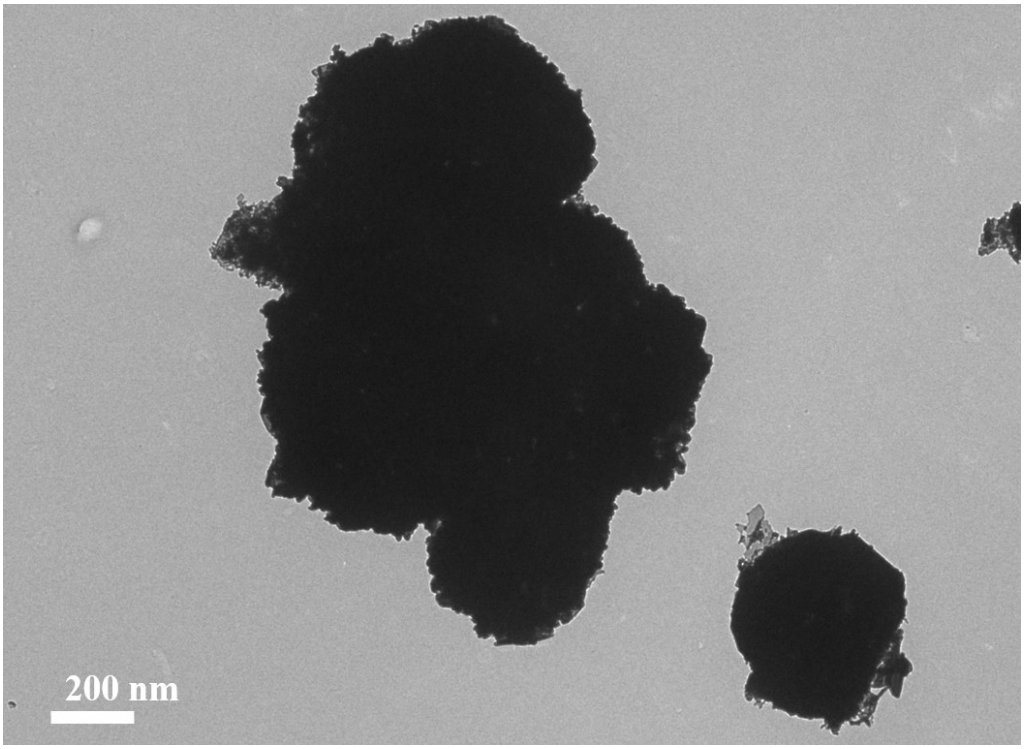

Fig. S6. TEM image of Cu@BMO-2 after five cycles.

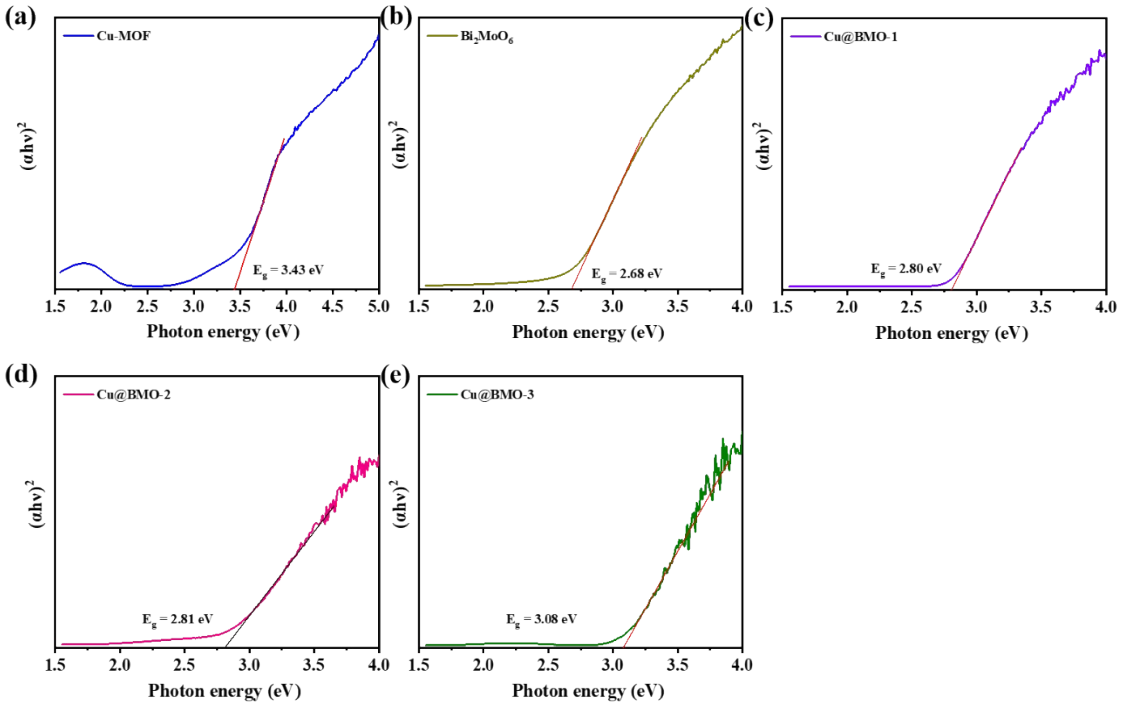

Fig. S7. The Tauc plot of different photocatalysts.

Table S1: Summary of photodegradation of antibiotics using previously reported MOF-based-heterostructure catalysts

Catalysts	Light source	Antibiotic	Degradation efficiency (%)	Total time (min)	Ref
MIL-100(Fe)/TiO_2	Xe-lamp 450 W	Tetracycline	90.79	60	[1]
Fe/MIL101(Fe)		Tetracycline	96.60	120	[2]
C_3N_4@MIL-100 (Fe)	Sunlight	Doxycycline	82.8	30	[3]
Al-MIL	Iodine tungsten lamp	chloramphenicol (CAP)	71	120	[4]
ZIF-8@ZIF-67	Iodine tungsten lamp 200 W	ciprofloxacin	65	120	[5]
Ce-MOF	UV-A light	Tetracycline	81.75	120	[6]
Cd(II) MOF	350 W xenon lamp	oxytetracycline	77	100	[7]
g-C_3N_4@MIL-100 (Fe)	Xenon lamp 200 W	doxycycline	82	30	[8]
CdS/NC–500	Xe–arc lamp 300W	Tetracycline	83	60	[9]
Cu@BMO-2	*250 W xenon arc lamp*	*CIP*	*99.52*	*120*	*This work*

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