Supplementary materials

Figure S1

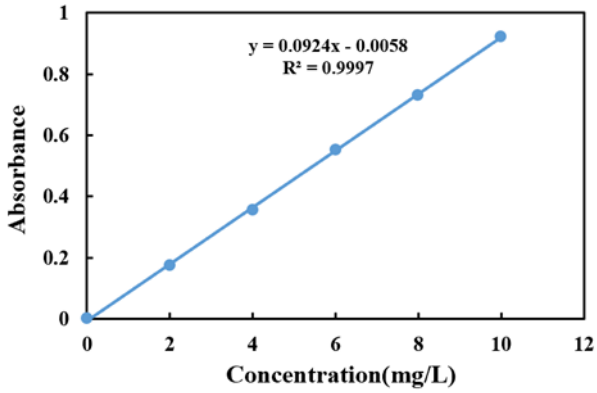
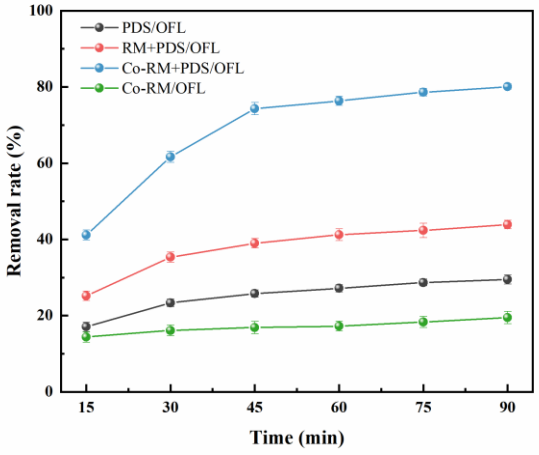


Fig.S1 The standard curve of ofloxacin.

Figure S2



（Experimental condition：$[Co\text{-}RM]_0$=0.4 g/L; $[PDS]_0$=4.0 g/L; $[OFL]_0$=15 mg/L；pH=3.0；T=40℃）

Fig.S2 Removal rate of OFL for different reaction systems.

Figure S3

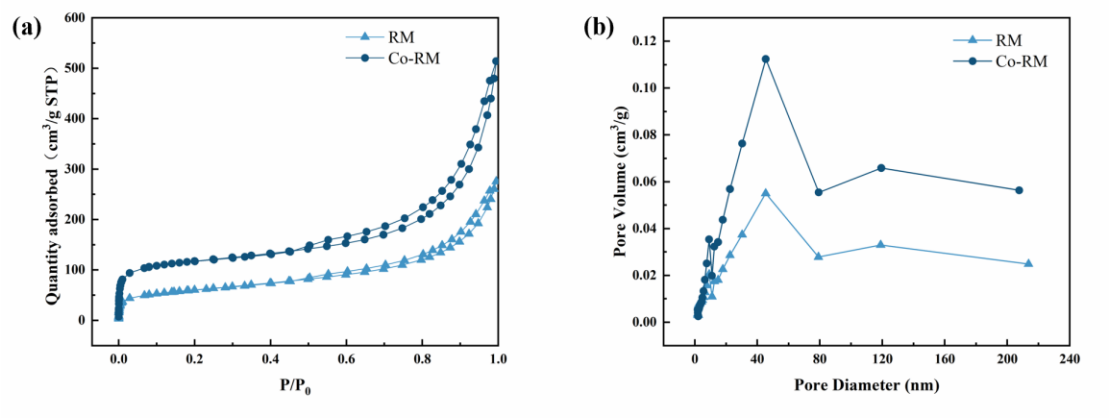


Fig.S3 (a) N2 adsorption-desorption isotherms of RM and Co-RM (b) Pore size distribution of RM and Co-RM.

Figure S4

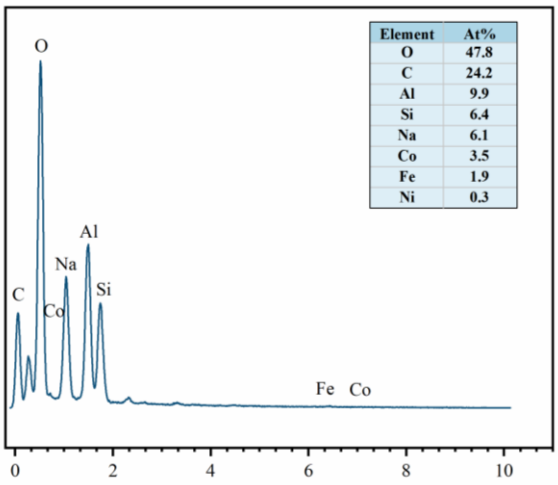


Fig.S4 EDS analysis of Co-RM.

Figure S5

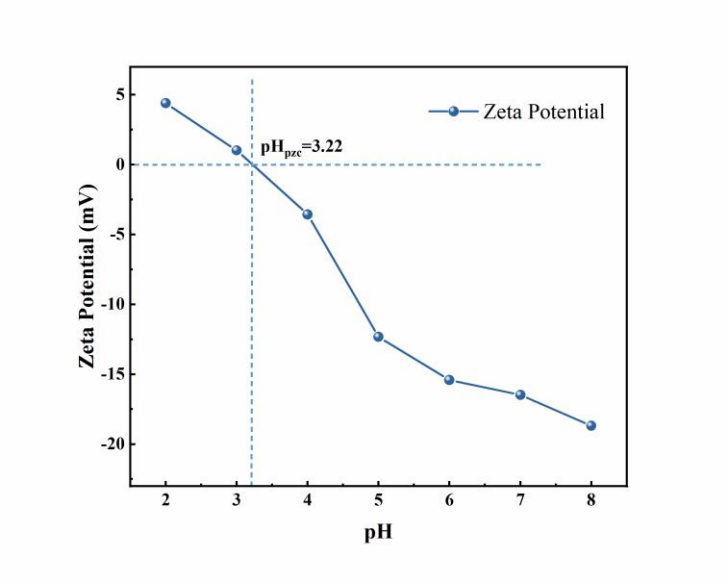


Fig.S5 Co-RM surface zeta potential with pH.

Figure S6

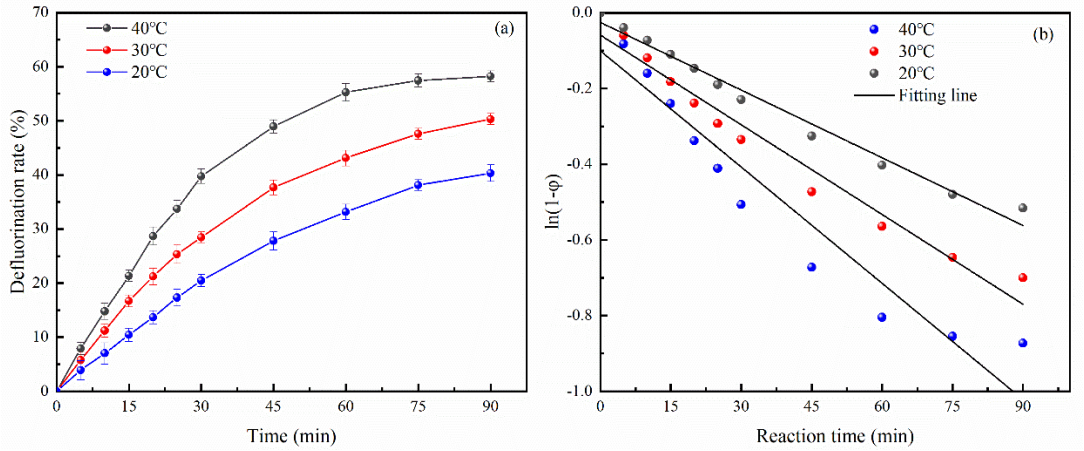
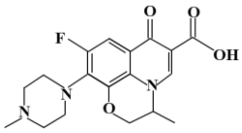
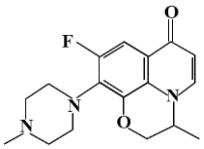
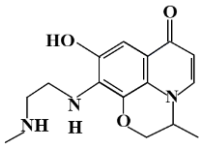
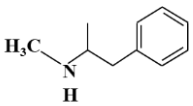
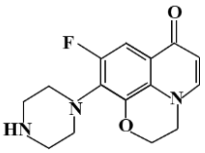
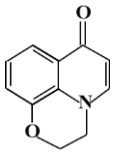
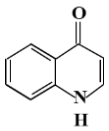
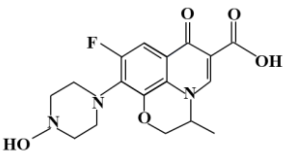
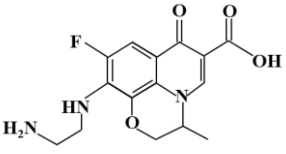
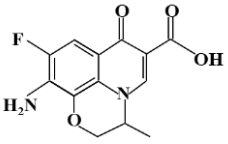
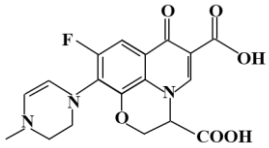


Fig.S6 The influence of Co-RM catalyst activation of PDS on the defluoridation of OFL: (a) defluoridation rate, (b) defluoridation kinetics.

Table.S1

Table.S1 Possible intermediates of ofloxacin (OFL).

Number	m/z	Molecular formula	Proposed structure
OFL	362	$C_{18}H_{20}FN_3O_4$	
P1	318	$C_{17}H_{19}FN_3O_2$	
P2	290	$C_{15}H_{19}N_3O_2$	
P3	149	$C_{10}H_{15}N$	
P4	274	$C_{16}H_{18}N_3O_4$	
P5	212	$C_{11}H_9NO_2$	
P6	145	C_9H_7NO	
P7	363.12	$C_{17}H_{18}FN_3O_5$	
P8	321	$C_{15}H_{16}FN_3O_4$	
P9	278	$C_{13}H_{11}FN_2O_4$	

P10	388	$C_{18}H_{17}FN_3O_6$	
P11	387	$C_{18}H_{16}FN_3O_4$