

Supporting Information

Synthesis of Highly Luminescent Core-shell Nanoprobes in a Single Pot for Ofloxacin Detection in Blood Serum, and Water

Pallavi Kadian^a, Astha Singh^a, Manish Kumar^b, Kanchan Kumari ^a, Deepika Sharma^a, Jaspreet Kaur Randhawa^{*b}

^a School of Chemical Sciences, Indian Institute of Technology, Mandi

^b School of Materials and Mechanical Engineering, Indian Institute of Technology, Mandi

*Corresponding Author: jaspreet@iitmandi.ac.in

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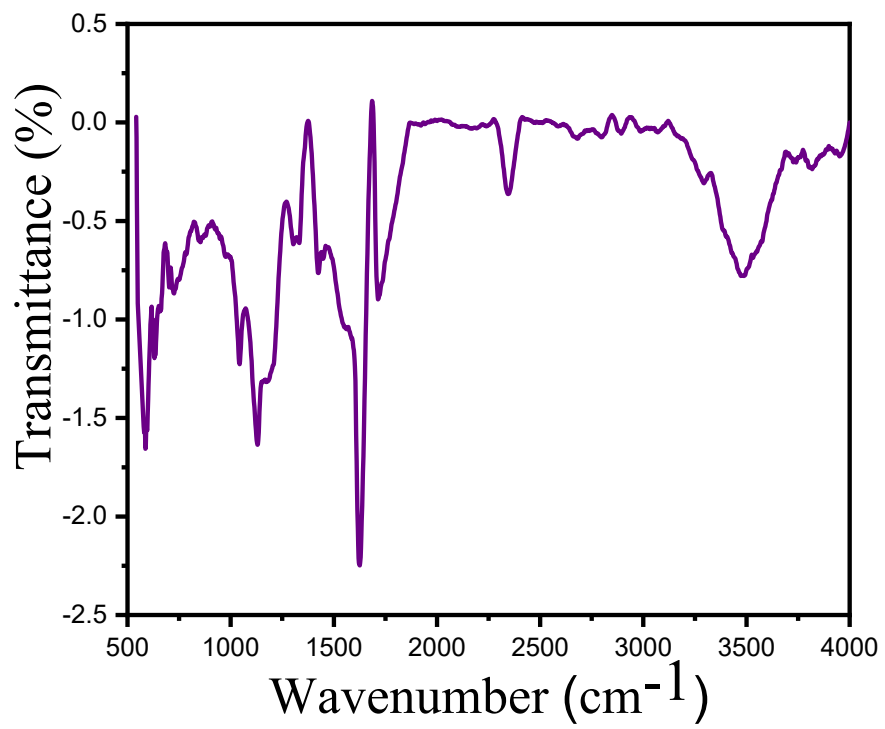


Figure S1: FTIR spectra of CSIONPs

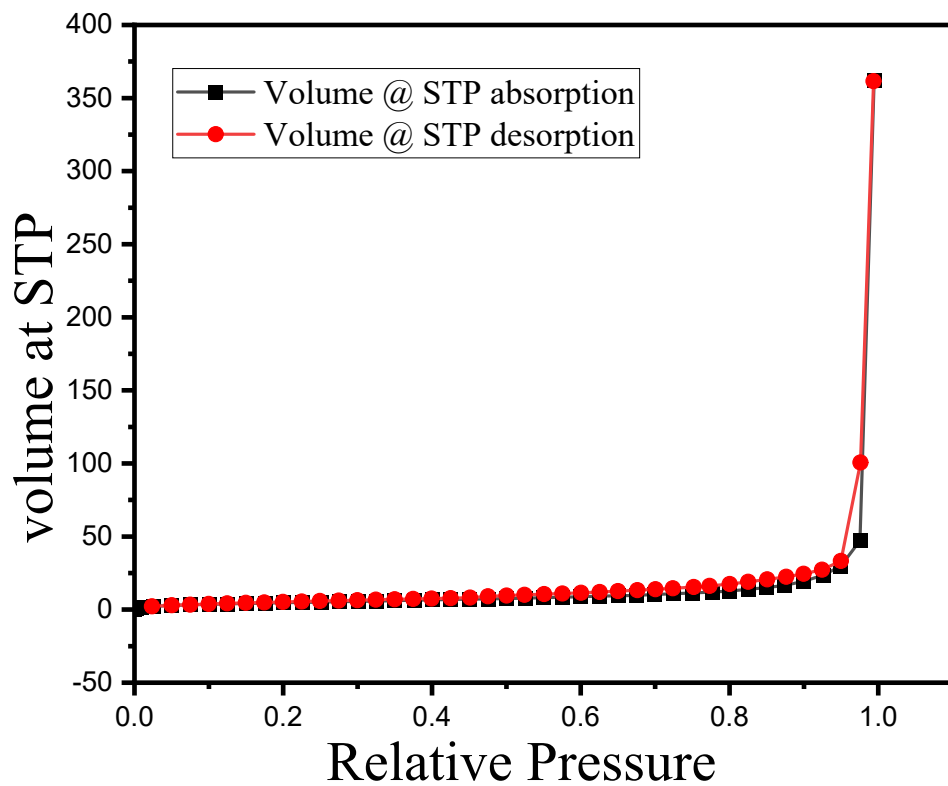


Figure S2: N₂- adsorption isotherm of CSIONPs

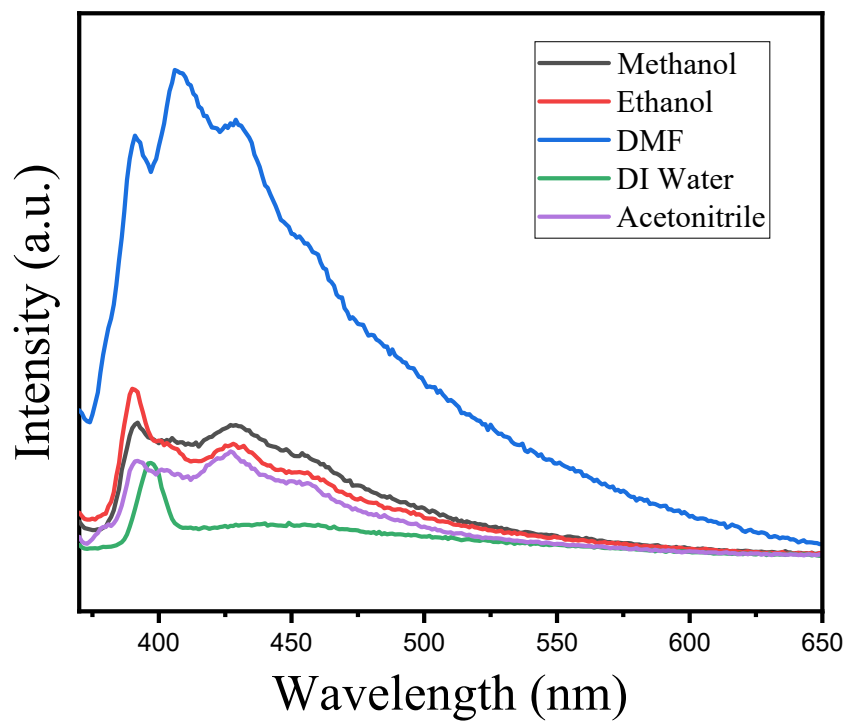


Figure S3: Fluorescence emission spectra of CSIONPs in different solvent

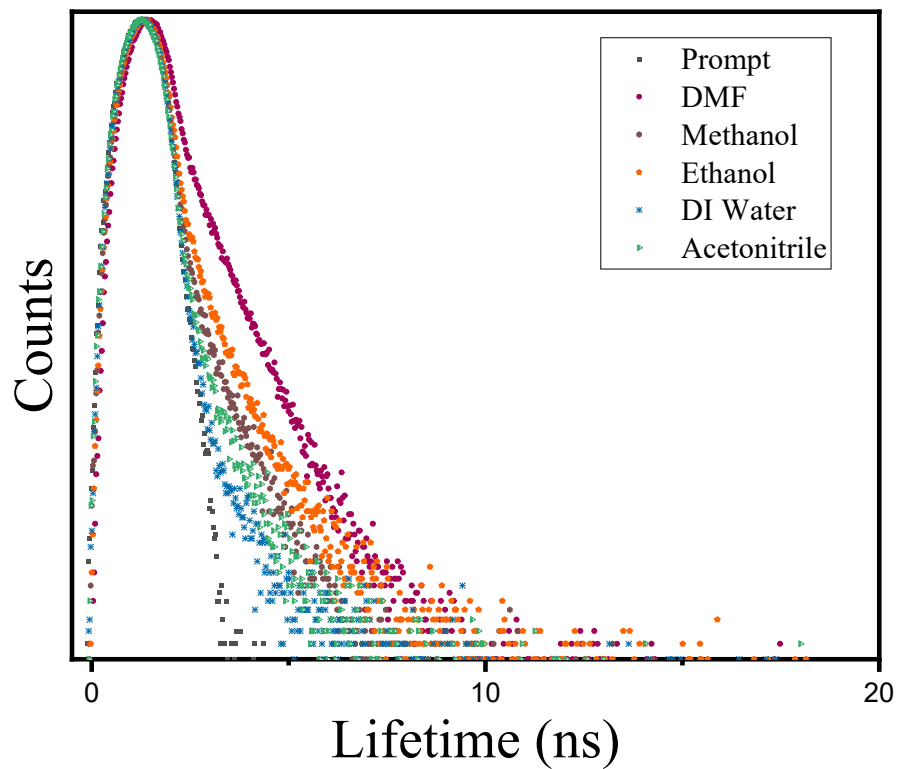


Figure S4: Lifetime decay plot of CSIONPs in different solvents

Solvent	Lifetime (ns)
DMF	0.230
Methanol	0.062
Ethanol	0.130
DI Water	0.054
Acetonitrile	0.028

Table S1: Lifetime of CSIONPs in different solvents

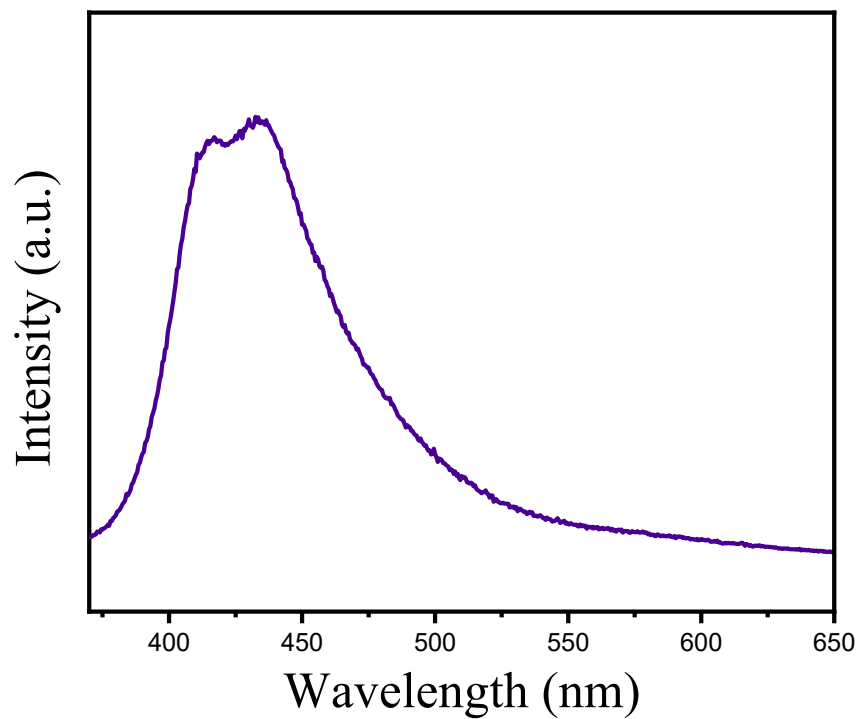


Figure S5: Fluorescence emission spectra of CSIONPs in solid state at 350nm.

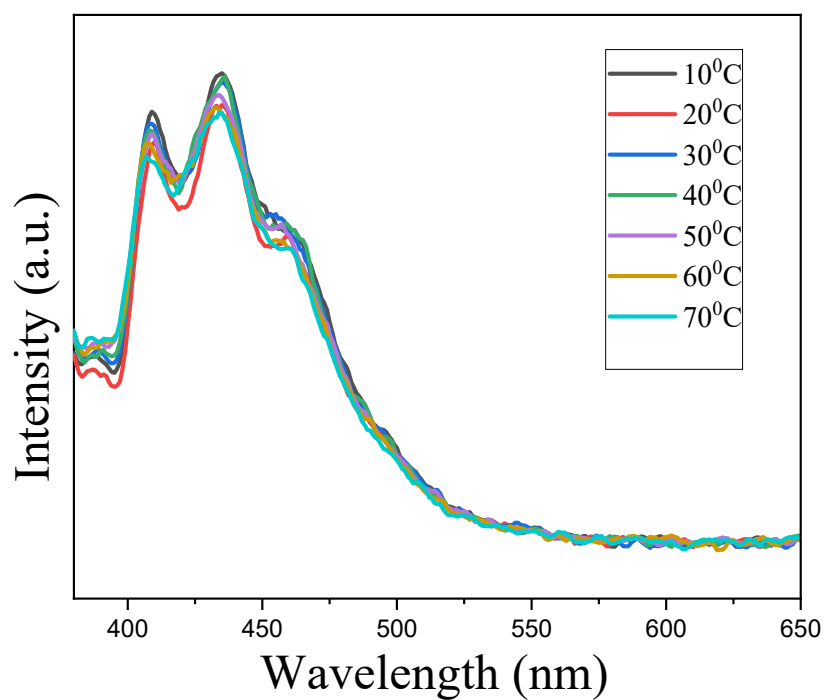


Figure S6: Fluorescence emission spectra of CSIONPs in DMF at different temperature.

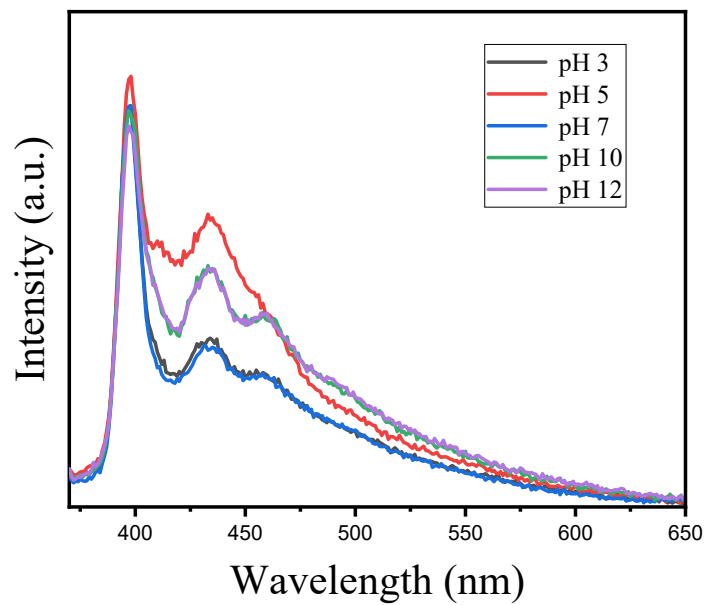


Figure S7: Fluorescence emission spectra of CSIONPs in PBS at different pH.

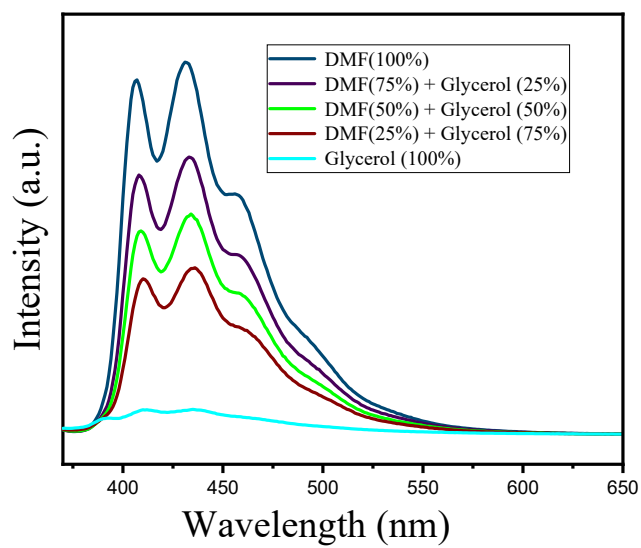


Figure S8: Fluorescence emission spectra of CSIONPs in mixture of DMF and glycerol of varying composition.

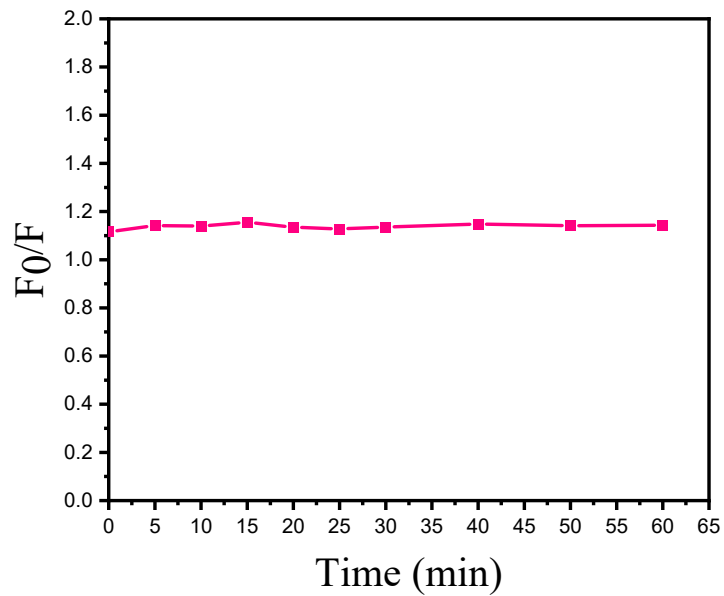


Figure S9: F₀/F vs time plot

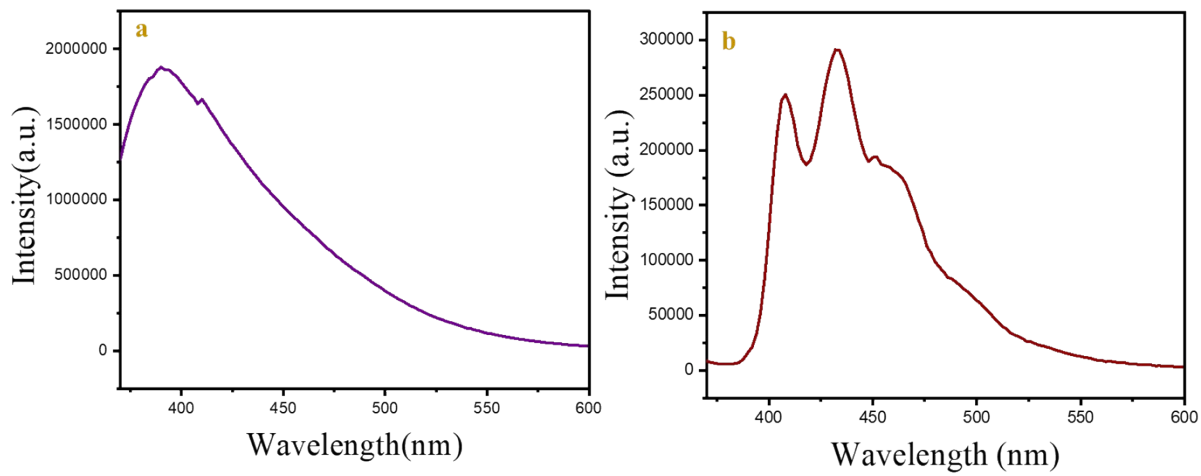


Figure S10: Fluorescence emission spectra (a) quinine sulphate, and (b) CSIONPs at 350nm

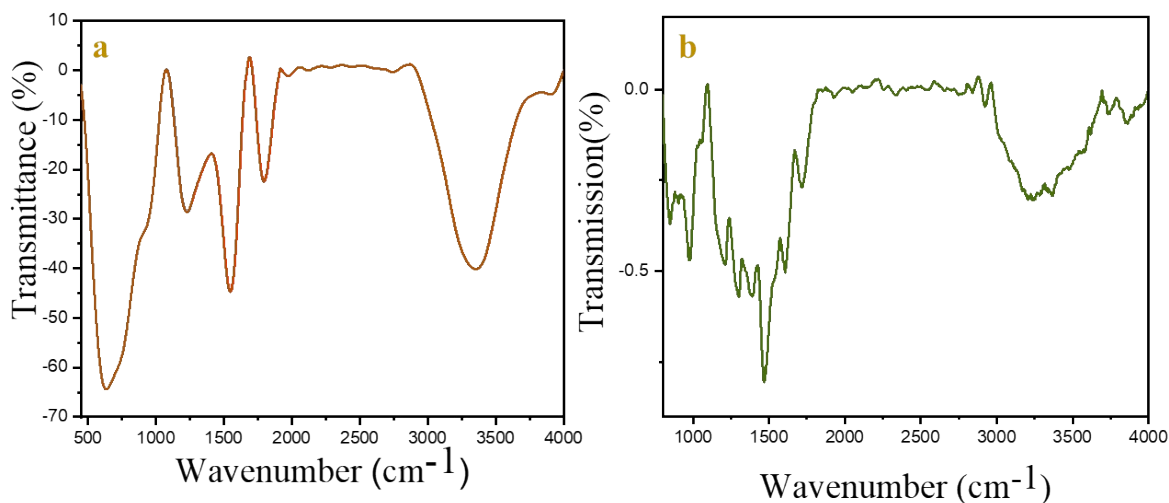


Figure S11: FTIR spectra (a) CSIONPs + OLF and (b) OLF

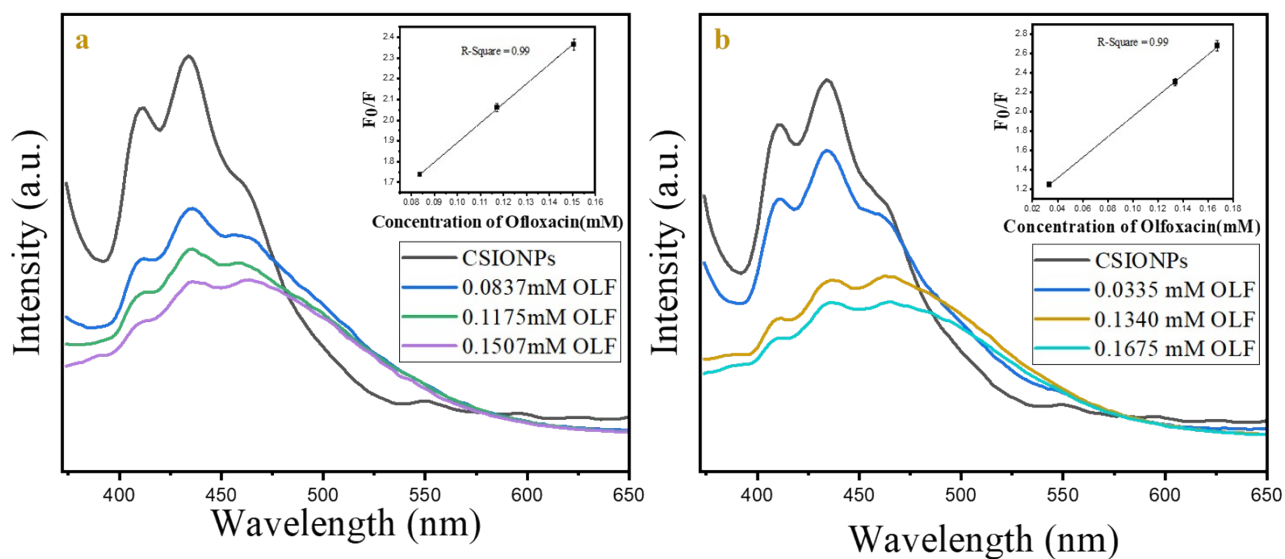


Figure S12: Detection of OLF by CSIONPs in the tap water(a) and the blood serum(b).

Sensing probe	Sensing method	Recovery (%) in water	Recovery (%) in blood serum	Reference
PtNPs/KB/CD-MOFs/GCE	Electrochemical	-	91% to 103%	1

SG-I	Fluorescence	104.47–117.76%	-	2
Aptamer and AuNPs	colorimetric	102.62 to 107.60%	-	3
β -CD/Sm ₂ O ₃ NPs/LIG	Electrochemical	98.00 % ~ 107.30 %	-	4
Ag NCs-Cu ²⁺	Fluorescence	-	98.4–101.5%	5
P-L CuO:Tb ³⁺ NS/GCE	Electrochemical	-	98.3-100.5%	6
CSIONPs	Fluorescence	89.9-96.0%	95.52-103.28%	Our work

Table S2: Documented percentage of ofloxacin recovery in water and blood serum as per the literature.

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