Supplementary Information (SI) for RSC Advances.

A facile synthesis of iron oxide nano-sensor to detect levofloxacin and ciprofloxacin in human blood and evaluation of their biological activities

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Electronic Supplementary Material

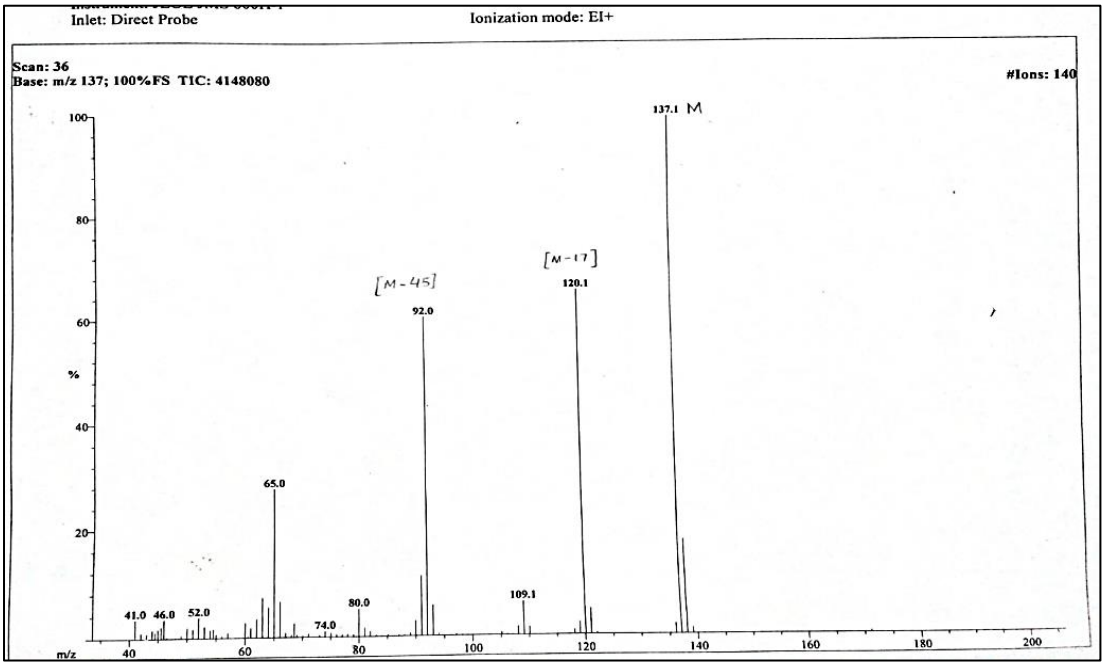

Fig. S1: Mass spectrum of 3-ABA

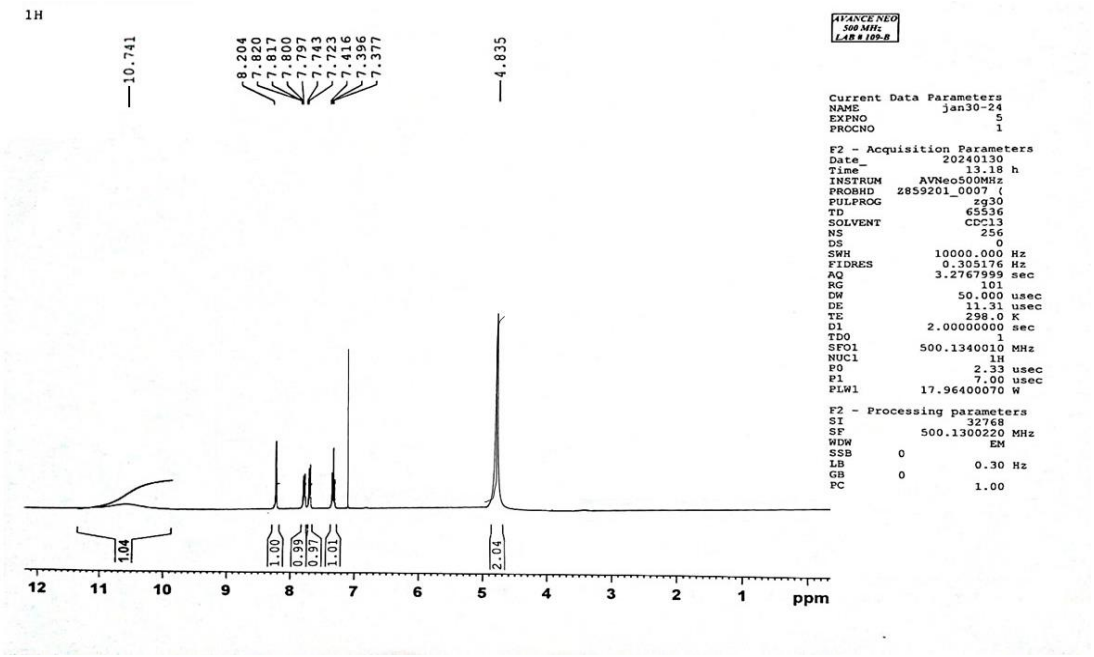

Fig. S2: ^{1}H-NMR spectrum of 3-ABA

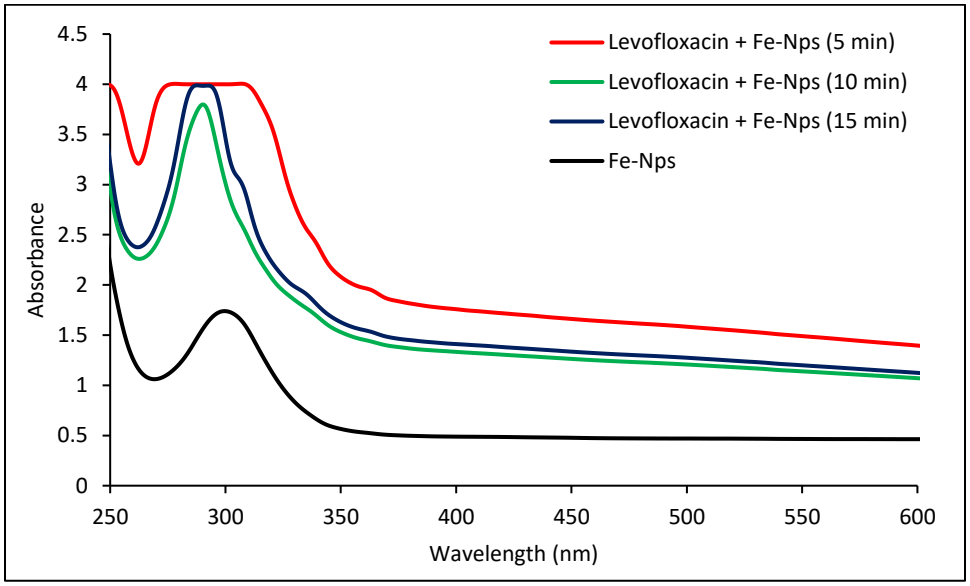

Fig. S3: Temporal study of stable complex formation between levofloxacin and iron oxide nanoparticles

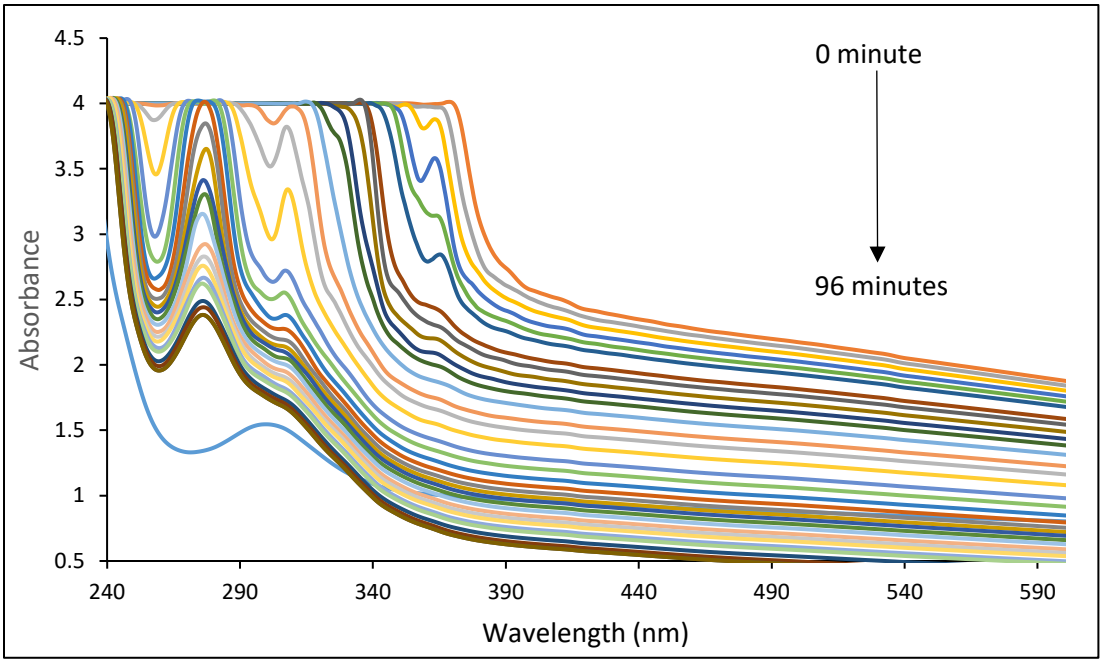

Fig. S4: Temporal study of stable complex formation between ciprofloxacin and iron oxide nanoparticles on 3min interval

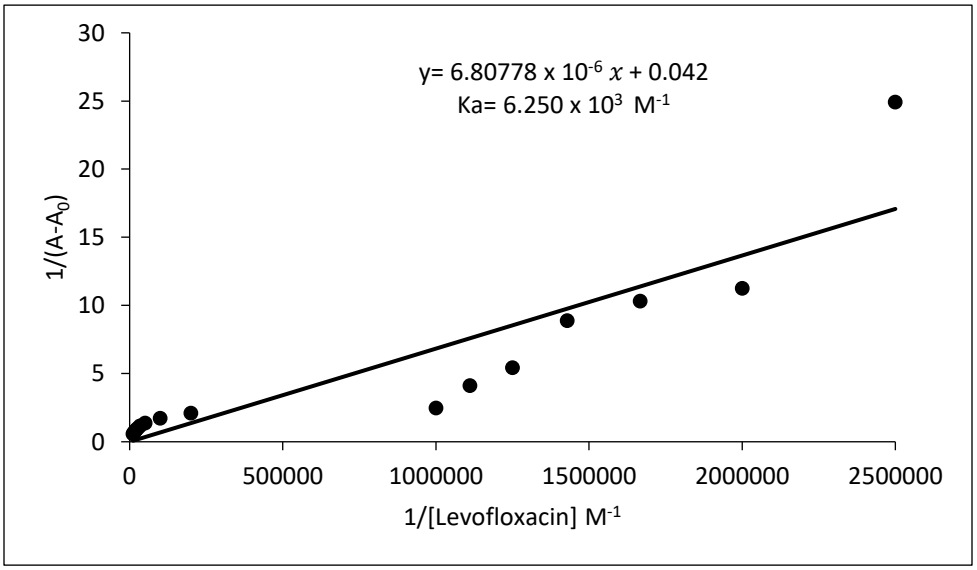

Fig. S5: Stability constant of complexation between Levofloxacin and Fe-Nps measure by applying Benesi Hildebrand equation

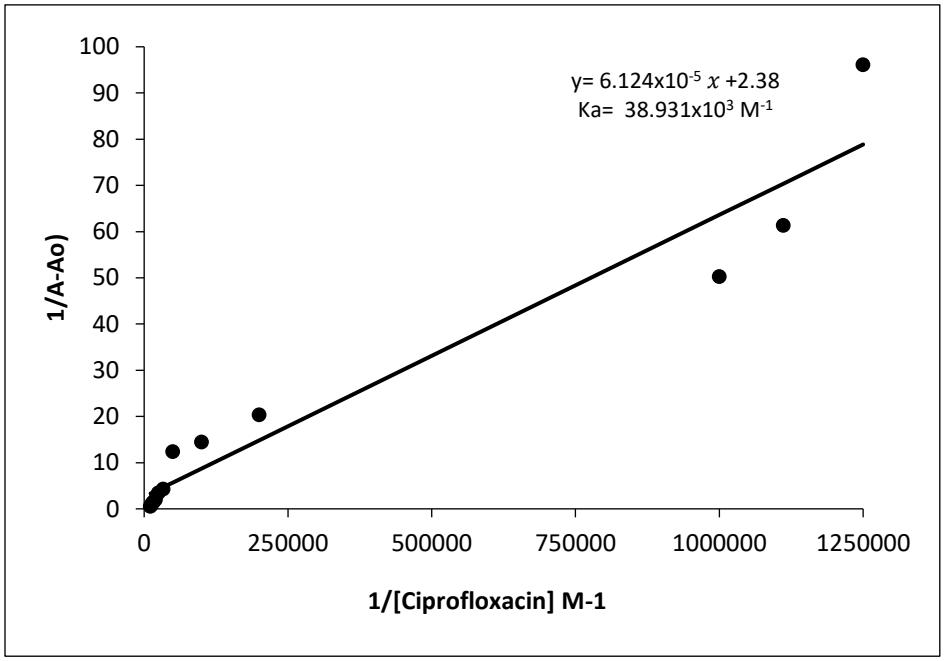

Fig. S6: Stability constant of complexation between ciprofloxacin and Fe-Nps measure by applying Benesi Hildebrand equation

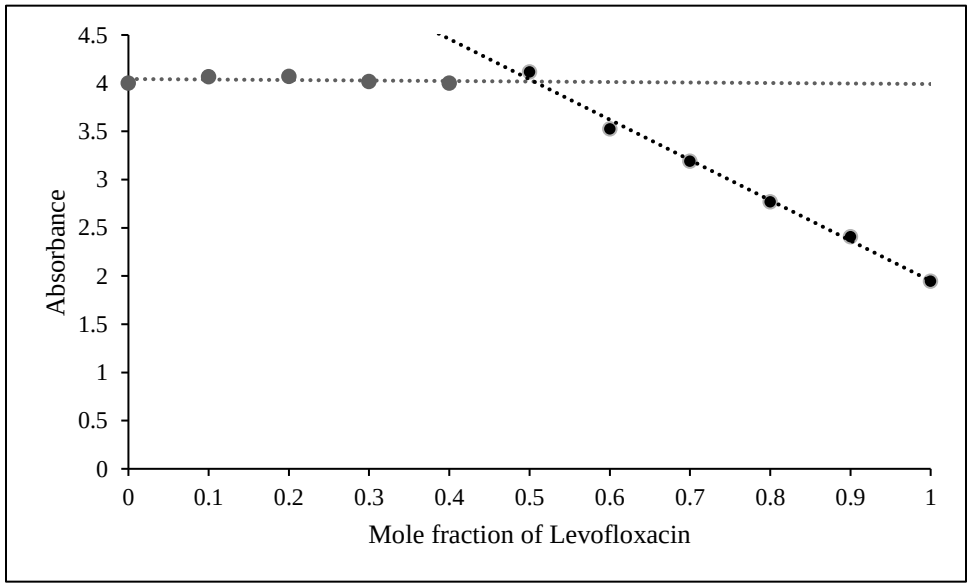

Fig. S7: job's plot for the complexation of levofloxacin and Fe-Np

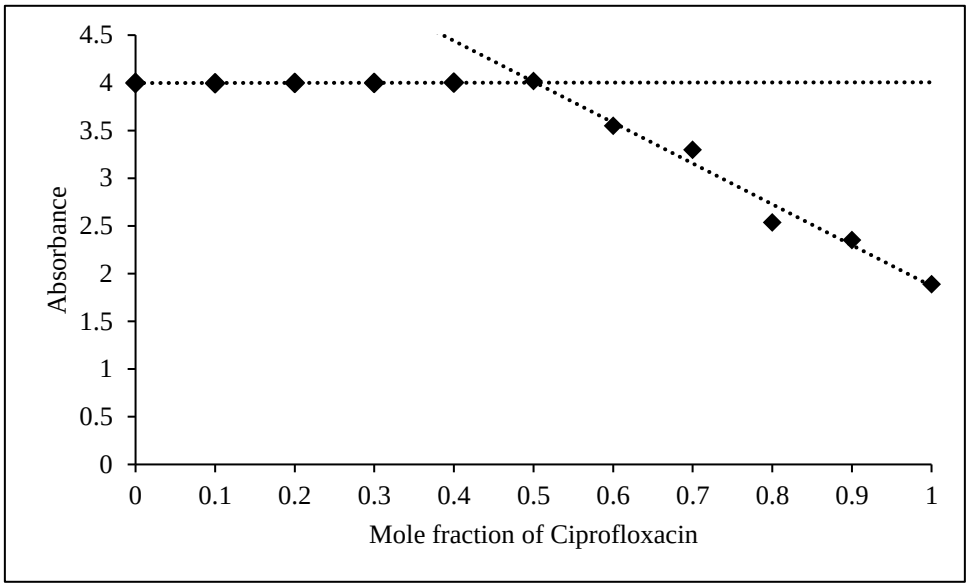

Fig. S8: Job's plot for the complexation of ciprofloxacin and Fe-Nps

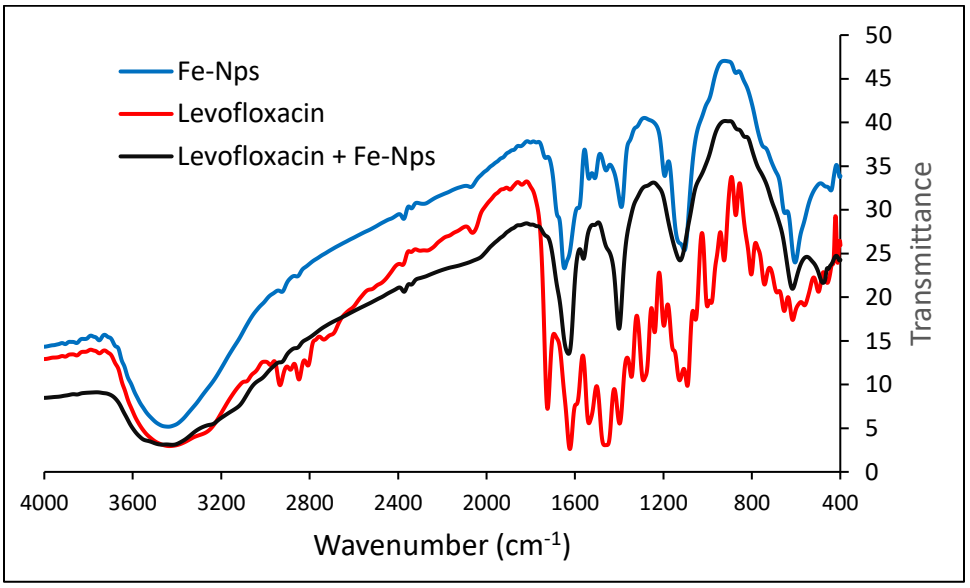

Fig. S9: FT-IR spectra of Fe-Nps, levofloxacin and levofloxacin with Fe-Nps

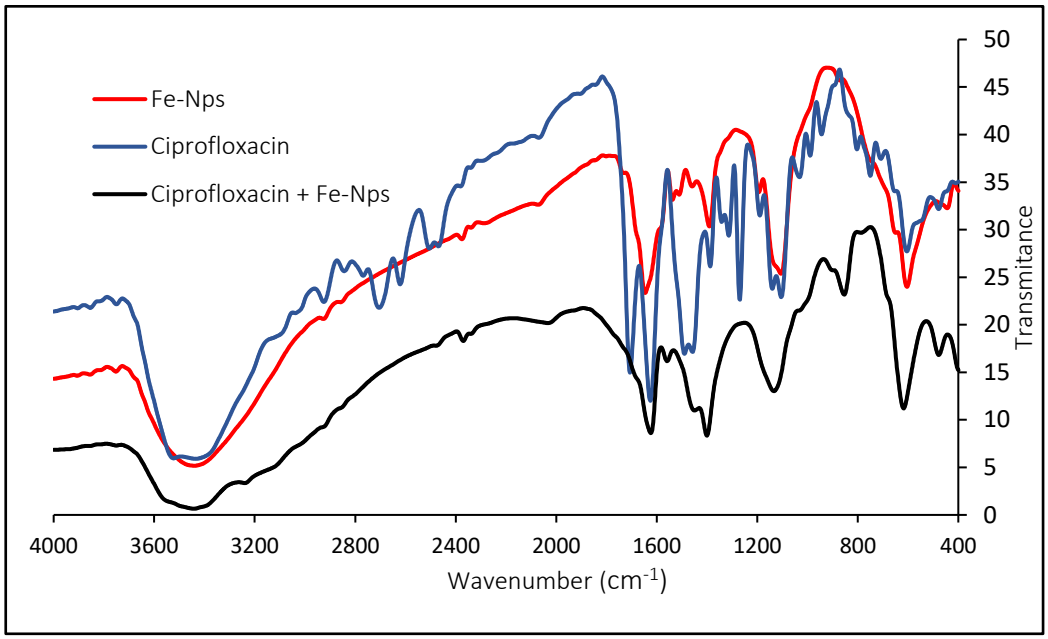

Fig. S10: FT-IR spectra of Fe-Nps, ciprofloxacin and ciprofloxacin with Fe-Nps Complex

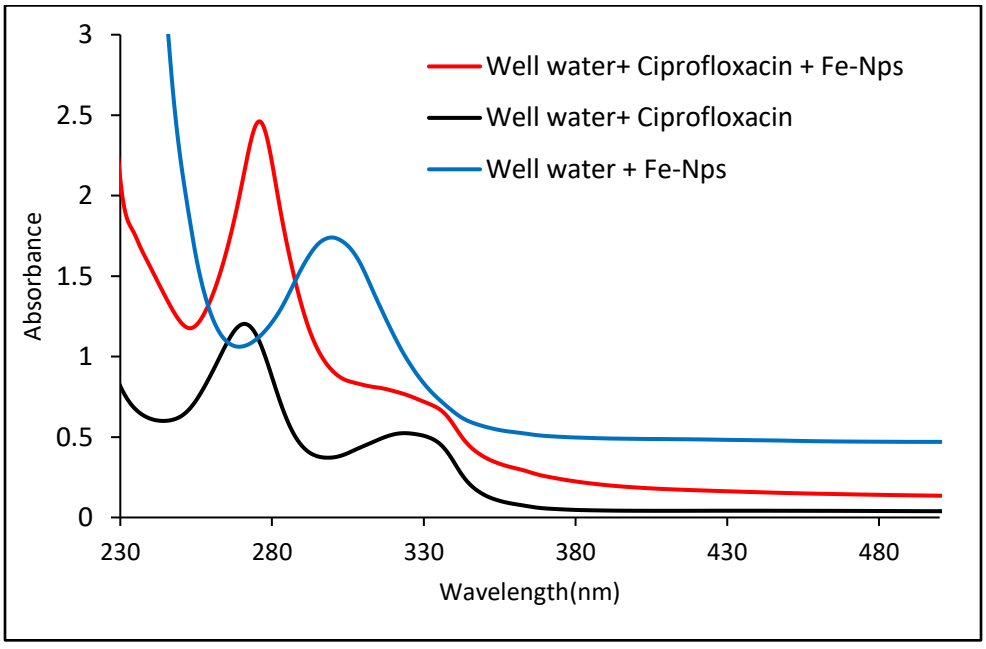

Fig. S11: Analysis of ciprofloxacin in well water

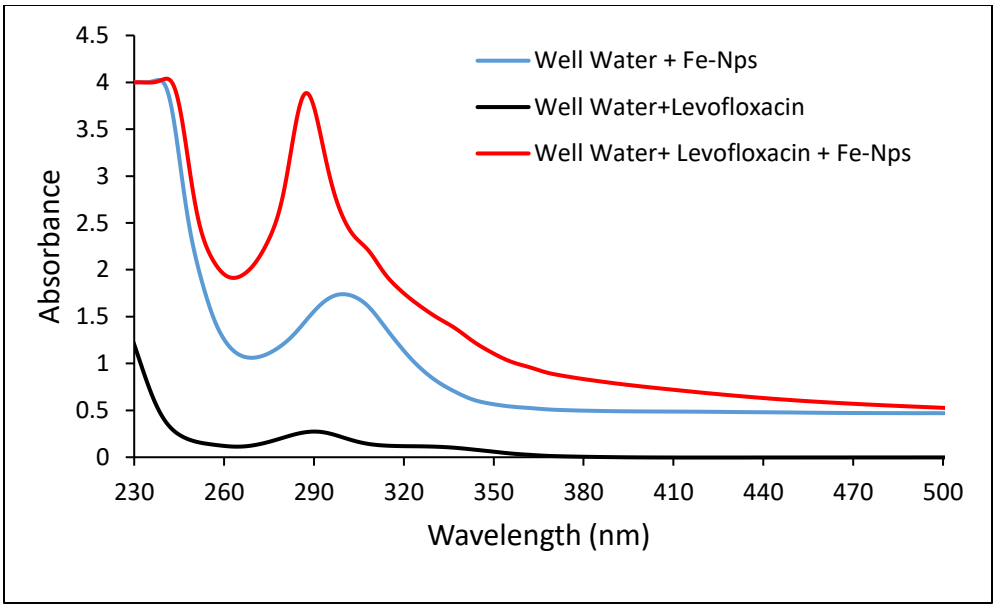

Fig. S12: Analysis of levofloxacin in well water

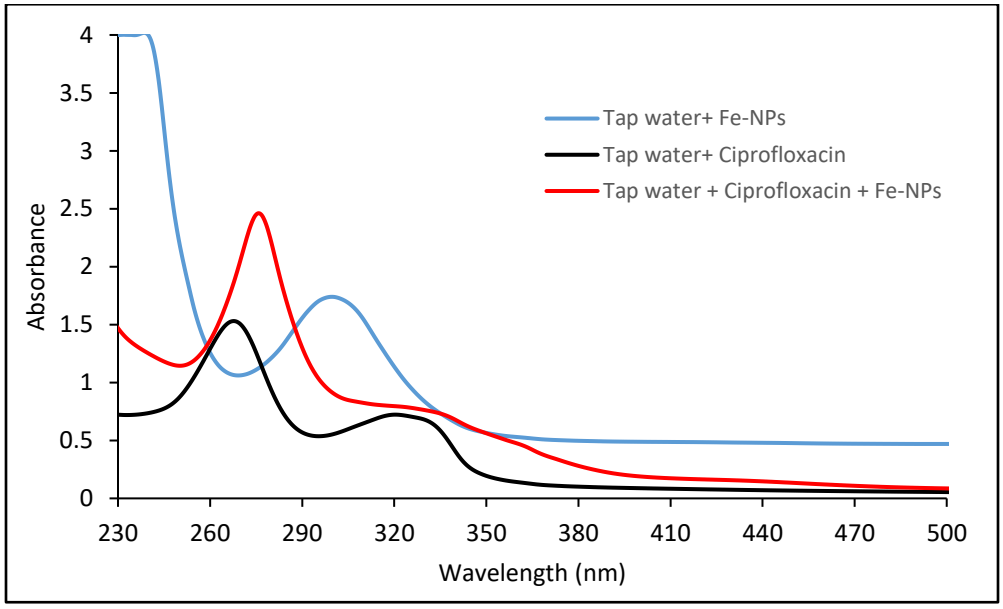

Fig. S13: Analysis of ciprofloxacin in tap water

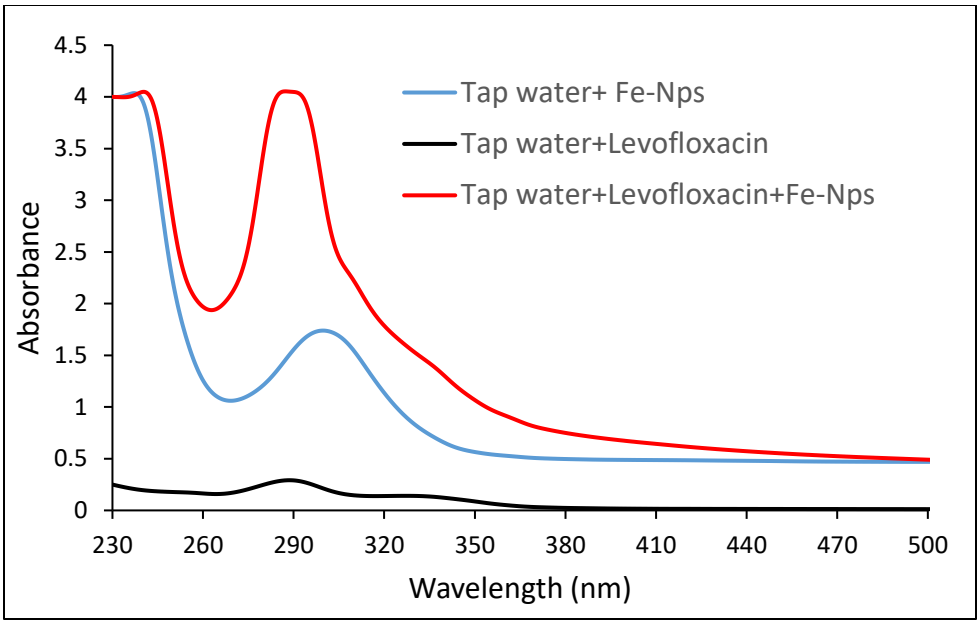

Fig. S14: Analysis of levofloxacin in tap water

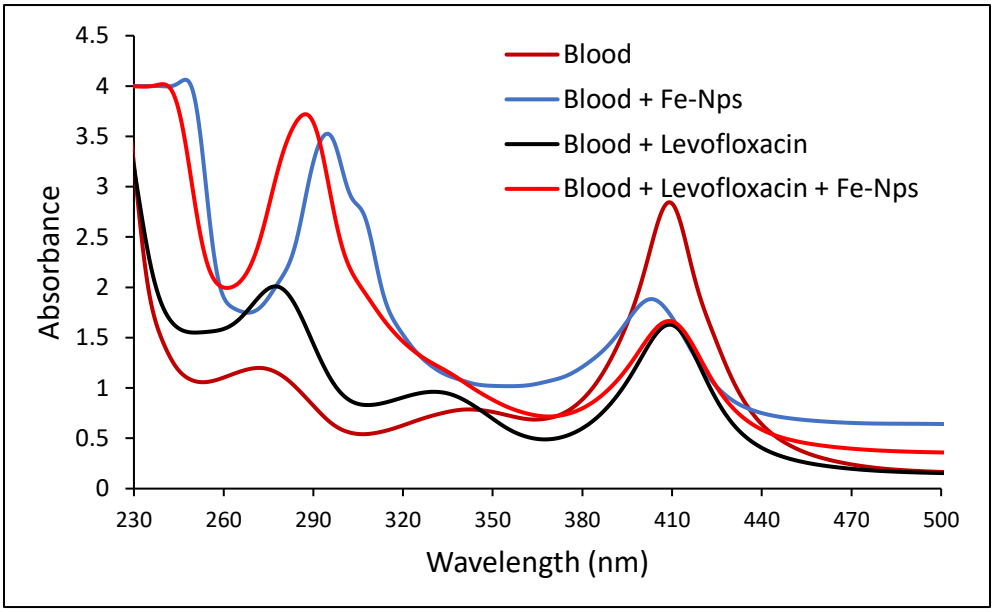

Fig. S15: Analysis of levofloxacin in human blood

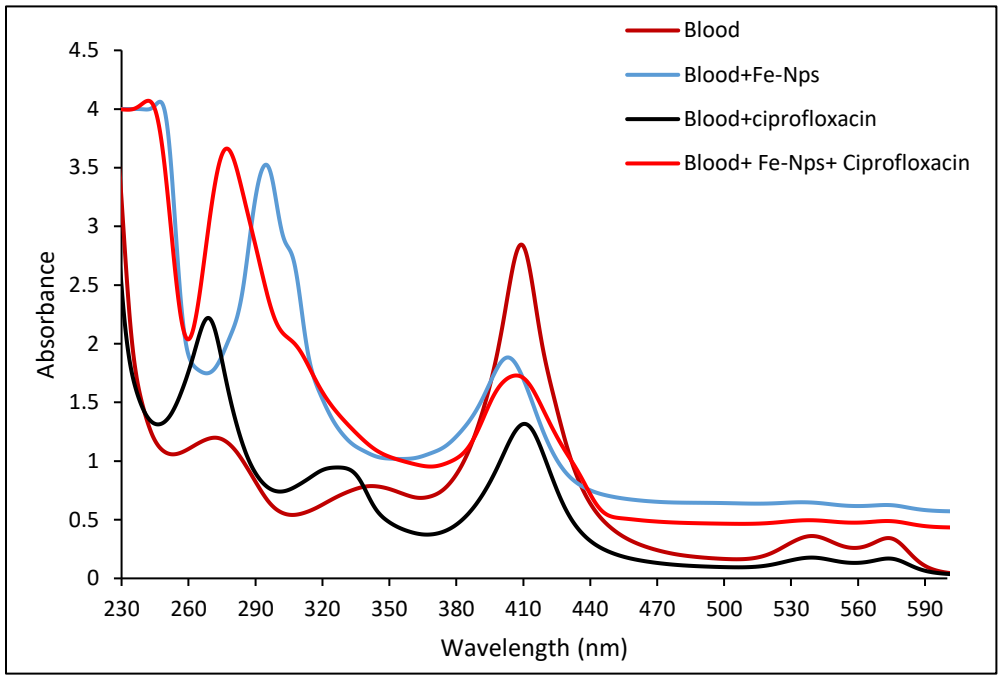

Fig. S16: Analysis of ciprofloxacin in human blood

Table S1 Absorbance at regular time intervals

Time (minutes)	Absorbance	Time (minutes)	Absorbance
Ciprofloxacin			
0	4	**57**	3.808
3	4	**60**	3.6142
6	4	**63**	3.3389
9	4	**66**	3.2429
12	4	**69**	3.06
15	4	**72**	2.8977
18	4	**75**	2.7956
21	4	**78**	2.7101
24	4	**81**	2.6336
27	4	**84**	2.576
30	4	**87**	2.4602
33	4	**90**	2.4177
36	4	**93**	2.3533
39	4	**96**	2.3533
42	4	**Levofloxacin**	
45	4.0008	**5**	4
48	4.0127	**10**	3.8024
51	4.0134	**15**	3.7976
54	3.9678		