

Table S1. Base reaction experiment to degrade 50 ppm dye using 60 mM H₂O₂

Sr. No.	Time (Min)	O.D. (570 nm)	(C _f /C _i)	ln (C _f /C _i)	Degradation (%)
1	Blank	0.222	54.30952381	3.9947	0
2	0	0.201	49.30952381	3.898117	9.46
3	30	0.2	49.07142857	3.893277	9.91
4	60	0.193	47.4047619	3.858723	13.06
5	90	0.192	47.16666667	3.853687	13.51
6	120	0.191	46.92857143	3.848627	13.96
7	150	0.19	46.69047619	3.84354	14.41
8	180	0.186	45.73809524	3.822932	16.21

Table S2. Base reaction experiment to degrade 50 ppm dye using 60 mM oxalic acid

Sr. No.	Time (Min)	O.D. (570 nm)	(C _f /C _i)	ln (C _f /C _i)	Degradation (%)
1	Blank	0.222	54.30952381	3.9947	0
2	0	0.21	51.45238095	3.940657	5.41
3	30	0.206	50.5	3.921973	7.21
4	60	0.201	49.30952381	3.898117	9.46
5	90	0.19	46.69047619	3.84354	14.41
6	120	0.187	45.97619048	3.828124	15.76
7	150	0.182	44.78571429	3.801889	18.02
8	180	0.177	43.5952381	3.774948	20.27