

Table S5. Synergistic effects of different pretreatment methods on chironomid larvae inactivation

Inactivation Methods	Inactivation Count at 8 h (log)	S_n	$k_{\max} (h^{-1})$	R^2	S_k
UV alone	0.10	—	0.012	0.996	—
[ClO₂]₀=5mg/L					
ClO ₂ alone	0.47	—	0.097	0.990	—
UV/ ClO ₂	1.00	1.698>1	0.165	0.984	1.505>1
UV pre-irradiation	1.35	2.386>1	0.185	0.991	3.567>1
ClO ₂ pre-irradiation	1.03	1.817>1	0.143	0.995	1.306>1
[ClO₂]₀=7mg/L					
ClO ₂ alone	0.71	—	0.127	0.990	—
UV/ ClO ₂	1.20	1.483>1	0.213	0.986	1.533>1
UV pre-irradiation	1.76	2.179>1	0.248	0.974	1.784>1
ClO ₂ pre-irradiation	1.46	1.807>1	0.230	0.995	1.659>1