

Supporting Information

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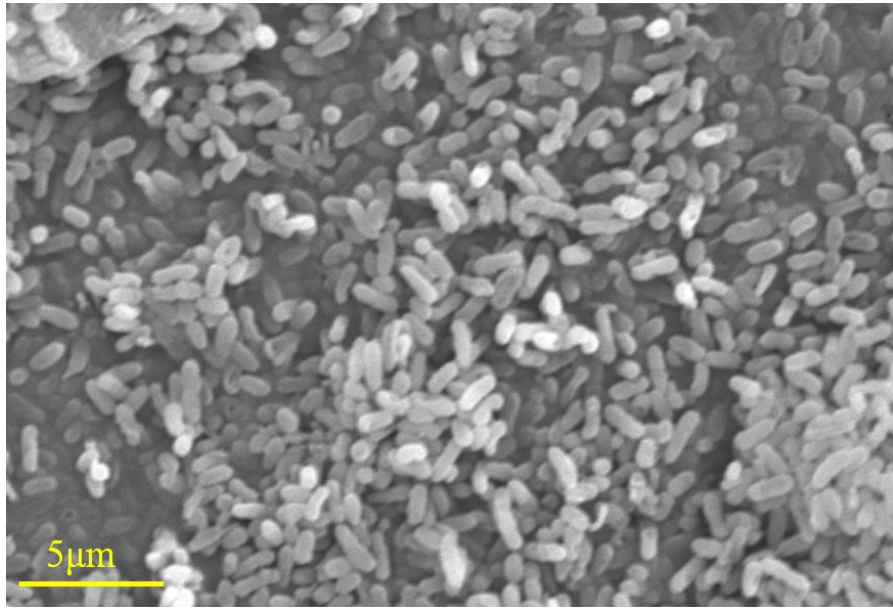


Fig. S1 SEM micrograph of the bacterium ZT-1 ($\times 12$ k)

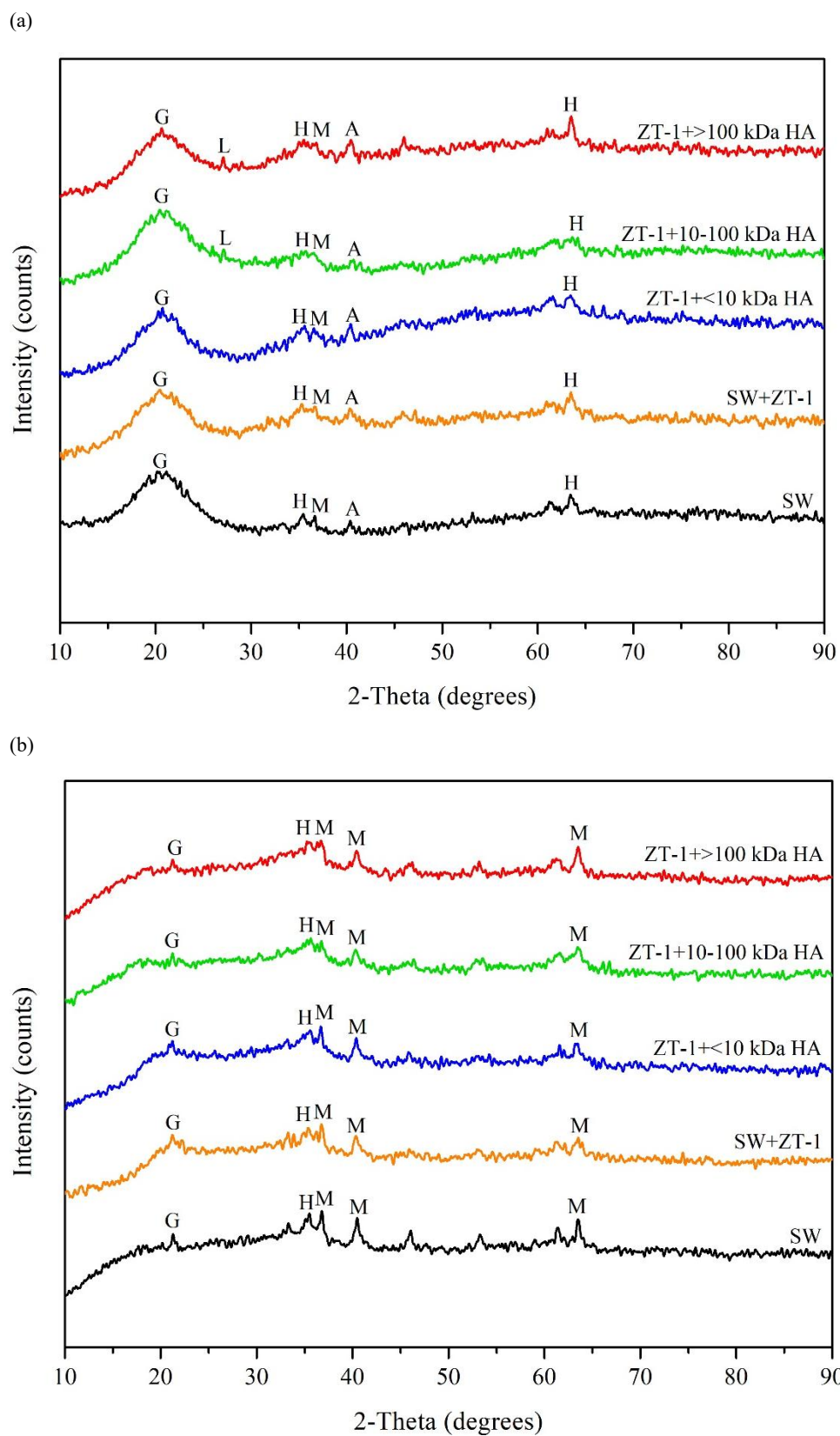


Fig. S2 XRD patterns of the corrosion products at (a) 6 d and (b) 60 d (G-goethite, L-lepidocrocite, H-hematite,

M-magnetite, A-akaganeite)

Table S1 Sterile water quality

Parameter (Unit)	Range	Average	Standard Deviation
pH	7.28-8.20	7.74	0.46
DO (mg/L)	6.14-7.71	6.93	0.79
Conductivity ($\mu\text{s}/\text{cm}$)	75.50-92.60	84.05	8.55
ORP (mV)	192.10-219.90	206.00	13.90
Alkalinity (mg CaCO_3/L)	64.92-68.50	66.71	1.79
Cl^- (mg/L)	10.09-24.65	17.37	7.28
SO_4^{2-} (mg/L)	15.41-30.00	22.71	7.30
Total iron (mg/L)	0.02-0.28	0.15	0.13