Marine sulfate-reducing bacteria cause serious corrosion of iron under electroconductive biogenic mineral crust

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Table S4. Electrical conductivity of selected substances.

Material	Conductivity (S m^{-1})	Reference
Iron, 99.98% pure	$1.1 \cdot 10^{7}$	a
Steel, plain	$5.6 \cdot 10^{6}$	b
Graphite	$1.5 \cdot 10^{6}$	b
Steel, stainless	$1.4 \cdot 10^{6}$	b
Troilite (FeS)	$1.0 \cdot 10^{1} – 1.0 \cdot 10^{6}$	Pearce *et al.* (2006)
Pyrrhotite ($Fe_{1-X}S$), mineral	$2.0 \cdot 10^{4} – 1.0 \cdot 10^{5}$	Parasnis (1956)
Pyrrhotite ($Fe_{1-X}S$), ore	$1.0 \cdot 10^{3} – 1.0 \cdot 10^{5}$	Parasnis (1956)
Magnetite (Fe_3O_4)	$1.0 \cdot 10^{4} – 1.0 \cdot 10^{5}$	Schwertmann & Cornell (2003)
Pyrite (FeS_2), mineral	$2.0 \cdot 10^{1} – 2.0 \cdot 10^{4}$	Parasnis (1956)
Pyrite (FeS_2), ore	$1.0 \cdot 10^{-1} – 1.0 \cdot 10^{4}$	Parasnis (1956)
SRB corrosion crust	$\mathbf{2.7 \cdot 10^{1} – 6.4 \cdot 10^{1}}$	**This study**
Germanium	$2.2 \cdot 10^{0}$	b
G. sulfurreducens biofilm	$0.5 \cdot 10^{0}$	Malvenkar et al. (2011)
Silicon	$1.6 \cdot 10^{-3}$	b
Siderite mineral	$\mathbf{1.2 \cdot 10^{-7}}$	**This study**
Goethite (FeOOH)	approx. $1.0 \cdot 10^{-7}$	Schwertmann & Cornell (2003)
Siderite ($FeCO_3$)	$1.2 \cdot 10^{-10}$	Schön (1996)
Calcite ($CaCO_3$)	$2.0 \cdot 10^{-13} – 1.1 \cdot 10^{-14}$	Schön (1996)

a. CRC Handbook of Chemistry and Physics.
b. www.physics.info/electric-resistance/