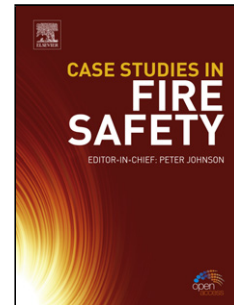


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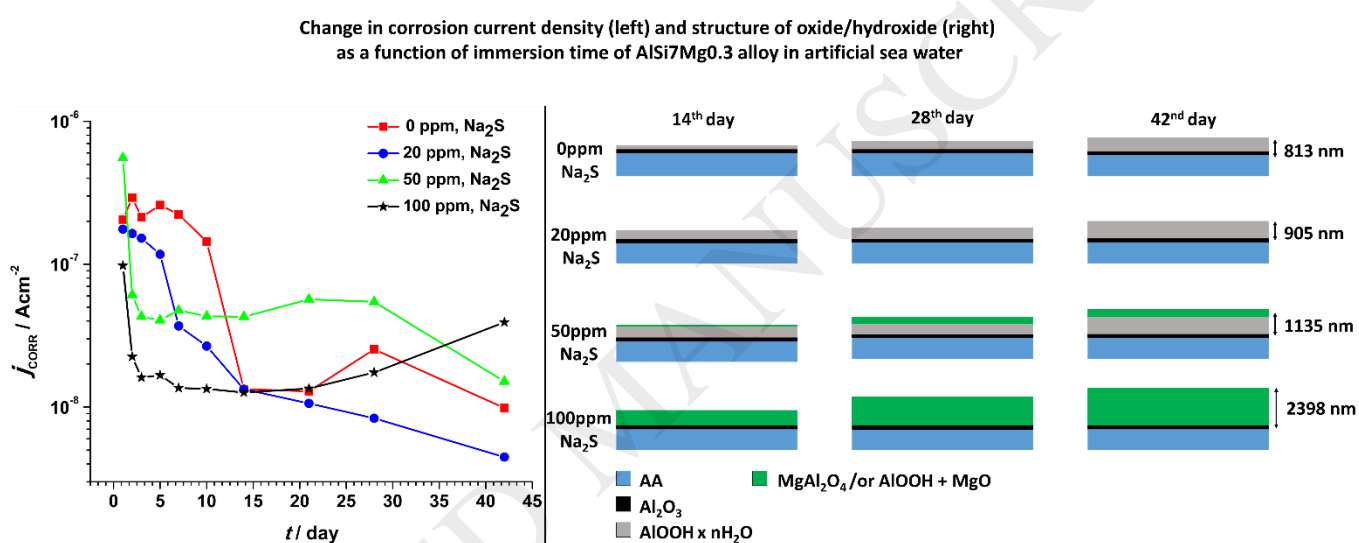
Corrosion of aluminium alloy AlSi7Mg0.3 in artificial sea water with added sodium sulphide

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Graphical Abstract



Highlights

- AlSi7Mg0.3 exhibits good corrosion resistance in artificial sea water during 42 days.
- With 20 ppm Na_2S the resistance is improved due to more crystalline Al oxide layer.
- At $Na_2S \geq 50$ ppm a Al/Mg oxide is formed which is not protective in long term.
- Properties of oxide layer are dependent on immersion time and Na_2S concentration.

Abstract

The corrosion behaviour of aluminium alloy AlSi7Mg0.3 in artificial sea water with added 0, 20, 50 and 100 ppm of Na_2S was investigated over the course of immersion of 42 days.

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