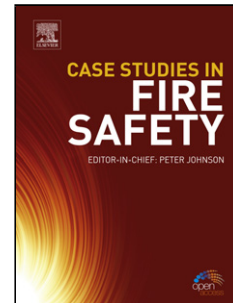


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A novel bilayer system comprising LDH conversion layer and sol-gel coating for active corrosion protection of AA2024

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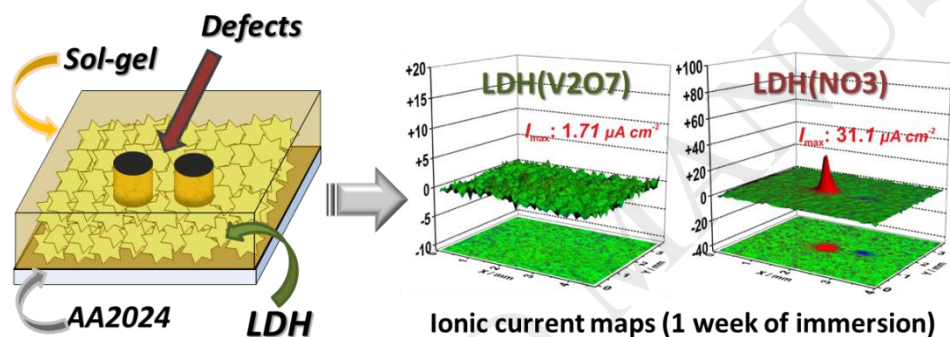
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Graphical abstract



Highlights

- A sandwich coating consisting of a LDH conversion layer and a sol-gel coating was produced
- The sandwich protective system offers long term active corrosion protection to AA2024
- Localized measurements demonstrate efficient self-healing in artificially made defects in the coating
- The main mechanism of inhibition involves release of inhibiting vanadate anions from LDH

Abstract

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