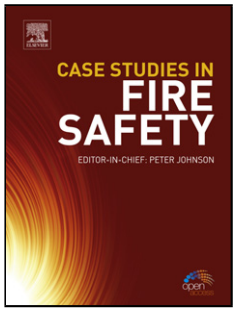

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Semiconductivities of passive films formed on stainless steel bend under erosion-corrosion conditions

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Highlights:

- Passive films at stainless steel bend under erosion-corrosion conditions are n-type semiconductor.
- Donor density of point defects within passive film is higher at the extrados of the stainless steel bend.
- Diffusivity of point defects is faster at the extrados of the bend
- The passive layer at the extrados of bend contains less Fe_3O_4 and Fe_2O_3.