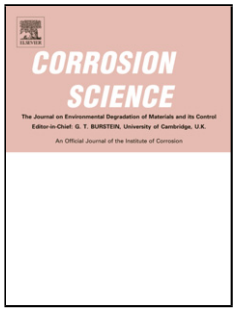

Title: Prediction of film performance by electrochemical impedance spectroscopy

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PII: S0010-938X(15)00224-3
DOI: http://dx.doi.org/doi:10.1016/j.corsci.2015.05.029
Reference: CS 6316

To appear in:

Received date: 22-7-2014
Revised date: 15-5-2015
Accepted date: 16-5-2015

Please cite this article as: C. Su, W. Wu, Z. Li, Y. Guo, X. Guo, Prediction of film performance by electrochemical impedance spectroscopy, *Corrosion Science* (2015), http://dx.doi.org/10.1016/j.corsci.2015.05.029

Highlights

- Study by electrochemical impedance spectroscopy after neutral salt spray tests
- Film performance studied by resistances and phase angles at special frequencies
- Prediction of film lifetime by an empirical relationship
- A single layer of organic fluorocarbon film coated on Mg alloy substrate
- A sandwich-structured composite film coated on Mg alloy substrate