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A semi-analytical model for predicting stress evolution in multilayer coating systems during thermal cycling

Biao Li , Xueling Fan , Kun Zhou , Tiejun Wang

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Highlights

- A semi-analytical model is proposed to predict stress evolution in coating systems.
- Thermal gradient, oxide growth and creep relaxation are considered in the model.
- Creep plays key role in determining stress evolution during thermal cycling.
- Creep in the oxide is beneficial to the durability of the coating system.

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