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Nonlinear Step-Stress Accelerated Degradation Modelling considering Three Sources of Variability

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Highlights

- A nonlinear SSADT model considering three sources of variability is proposed.
- Nonlinear Wiener process is used to model nonlinearity and temporal variability.
- Various kinds of variability are modeled as the heterogeneity among test units.
- Measurement errors are considered in both degradation performance and covariates.
- A GA-SIMEX parameter estimation method is developed for reliability assessment.

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