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Reliability modeling for mutually dependent competing failure processes due to degradation and random shocks

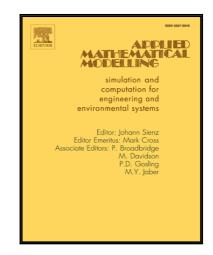
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Highlights

- Reliability model for mutually dependent competing failure processes is proposed.
- Soft, hard failures and their interaction are depicted by Stress-Strength model.
- Hard failure threshold level is positively correlated on degradation performance.
- Numerical double integration is adopted to compute the proposed reliability model.
- Example analysis shows the mutual dependence has important effect on reliability.

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