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True stress-control ratcheting behaviour of cold-rolled interstitial-free steel sheet

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Highlights

- Mean stress induced hardening improves ratcheting-fatigue life at fixed σ_a .
- Higher back stress amplitude at fixed $\sigma_{\rm m}$ results in higher ratcheting strain.
- Increase of R at fixed σ_{max} results in lowering of ratcheting deformation.
- Predominantly intergranular failure occurs at low stress amplitude.



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