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Damage mechanisms and life assessment

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**High temperature fatigue and creep-fatigue behaviors in a Ni-based superalloy:****Damage mechanisms and life assessment**

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**Abstract**

The low cycle fatigue (LCF) and creep-fatigue behaviors of Ni-based GH4169 superalloy are investigated by uniaxial strain-controlled fully-reversed testing at 650 °C. Compared with LCF tests, the effects of tensile and compressive strain hold times on creep-fatigue lifetimes are experimentally explored with varying total strain ranges in the present work. In order to elucidate the damage mechanisms under

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