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Influence of grain boundary sliding near a nanovoid on crack growth in deformed nanocrystalline materials

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Highlights

- Interaction among a crack, a nanovoid and grain boundary sliding
- Expressions for the SIF at left crack tip are obtained
- Consider shielding effect or anti-shielding effect to SIF
- Analyze the effects of disclination dipole, dipole arm, orientation and relative crack length on the SIF.

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