

eBook Information

Thermoelastic Fracture Mechanics

Multiple Crack Interactions

Vera Petrova and Siegfried Schmauder

Monograph / PDF eBook DRM Free

The book deals with the thermal and mechanical fracture of functionally graded materials on homogeneous substrate (FGM/H) structures.

Keyword: Thermal Fracture, Mechanical Fracture, Functionally Graded/Homogeneous Bimaterial, Thermo-Mechanical Loading, Mathematical Modelling, Thermal Stress Intensity, Fracture Criteria, Crack Closure, Systems of Cracks, Edge Cracks, Internal Cracks, Cracks Imitating a Curved Interface, Multiple Cracks Interaction, Thermal Barrier Coating, Thermal Fracture Resistance

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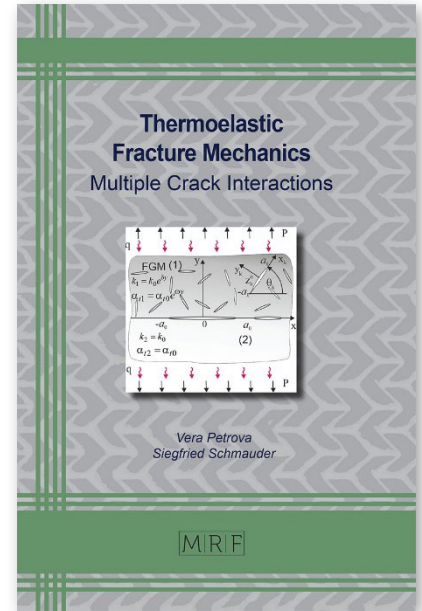
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Summary:

The book deals with the thermal and mechanical fracture of functionally graded materials on homogeneous substrate (FGM/H) structures. Emphasis is placed on multiple crack interactions. FGMs have a wide range of engineering applications; especially in thermal barrier coatings. Potentially desirable thermal and mechanical properties of functionally graded coatings (FGCs) are analyzed as well as available real material combinations, e.g. (ceramic/metal)/metal.



Print Book Information

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