

14th International Conference on Fracture (ICF14)
Rhodes, Greece, June 18-23, 2017

Mini-symposium

Fracture Nanomechanics

Mechanical behavior of nano- and micro-components such as thin films, wires, tubes, and dots has been drawing much attention with recent dramatic advances in nano/microtechnology utilizing the intriguing functionalities of small materials. To ensure high reliability, it is essential to understand the mechanics and the mechanisms of deformation and failure of nano/micro-materials. This mini-symposium “Fracture Nanomechanics” is aimed to discuss the following topics from a nanoscopic viewpoint.

- Fracture at stress concentrated sites such as cracks, notches, and interfaces
- Fatigue, creep, and environmentally assisted fracture at small scales
- Deformation and fracture of nanostructured materials
- Characteristic deformation properties in nano/micro-materials
- Size effects on strength and mechanical properties
- Surface, interface, and microstructural effects
- Multiphysics characteristics of nano/micro-materials
- Mechanical testing and characterization techniques for small components

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