

2018

# Performance of some Variational ImplicitDeformable Models on Segmenting OpticalMicroscopy Images

**Y. Boutiche, N. Cheteh, N. Ramou**

**Abstract :** Industrial micrographs are used to evaluate a steelsor alloys. This assessment consists of visualizing and describingthe basic element (at the nanoscale) constituting the material.The information provided by the micrographic images needto be highlighted by image processing methods. In this paperthe performance of some region-based variational models arepresented. Such study allows to choose best models that give themore accuracy segmentation in less processing time.

**Keywords :** Material microstructures, Microscopy images, segmentation, deformable models, region-based active contours