



## Probabilistic Fiber Composite Micromechanics

By National Aeronautics and Space Administration (NASA)

Biblioscholar Mrz 2013, 2013. Taschenbuch. Book Condition: Neu. 246x189x12 mm. This item is printed on demand - Print on Demand Neuware - Probabilistic composite micromechanics methods are developed that simulate expected uncertainties in unidirectional fiber composite properties. These methods are in the form of computational procedures using Monte Carlo simulation. The variables in which uncertainties are accounted for include constituent and void volume ratios, constituent elastic properties and strengths, and fiber misalignment. A graphite/epoxy unidirectional composite (ply) is studied to demonstrate fiber composite material property variations induced by random changes expected at the material micro level. Regression results are presented to show the relative correlation between predictor and response variables in the study. These computational procedures make possible a formal description of anticipated random processes at the intra-ply level, and the related effects of these on composite properties. 198 pp. Englisch.



## Reviews

Very good e-book and valuable one. It can be writter in basic words and phrases and not confusing. You will not really feel monotony at whenever you want of your own time (that's what catalogues are for concerning should you check with me).

-- Mr. Antwon Frami

Complete manual! Its such a great study. It really is writter in straightforward phrases rather than hard to understand. You are going to like the way the article writer create this publication.

-- Ike Fadel