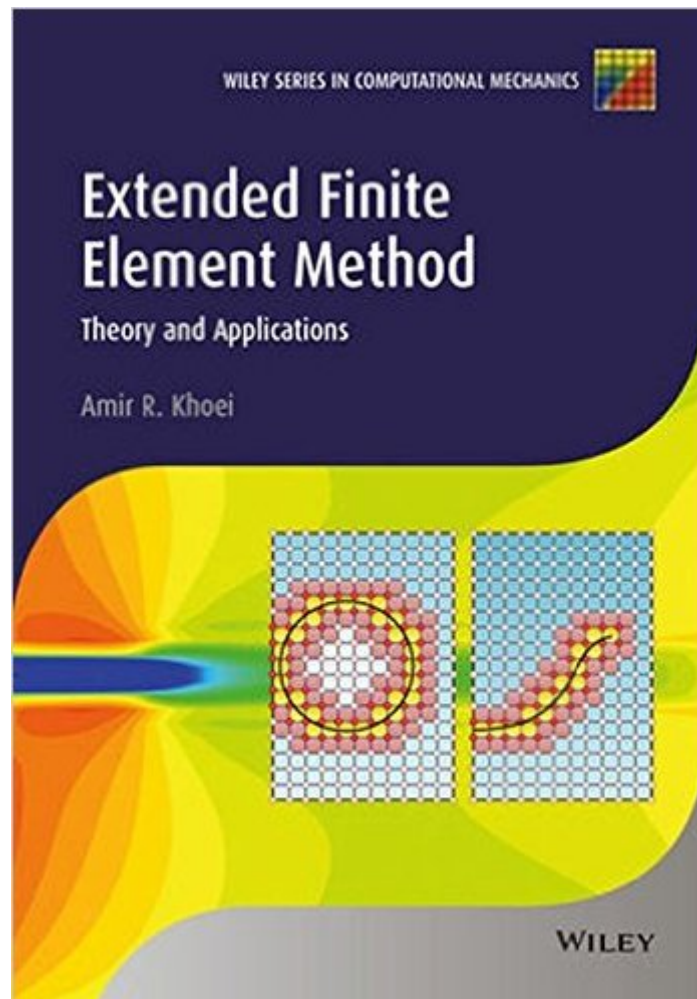# Extended Finite Element Method: Theory And Applications (Wiley Series In Computational Mechanics)

Synopsis

Introduces the theory and applications of the extended finite element method (XFEM) in the linear and nonlinear problems of continua, structures and geomechanics Explores the concept of partition of unity, various enrichment functions, and fundamentals of XFEM formulation. Covers numerous applications of XFEM including fracture mechanics, large deformation, plasticity, multiphase flow, hydraulic fracturing and contact problems Accompanied by a website hosting source code and examples

Book Information

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Customer Reviews

A well-written reference for those who want to understand the underlying theory of the extended finite element method, and how to implement it. Gives simple yet detailed illustrative worked examples to help you understand the theory. Also, gives a comprehensive discussion on how the XFEM is applied to various continuum mechanics and geo-mechanical problems. A good reference for senior undergraduate and graduate students working on XFEM.

The book is not a brand new one which were supposed to be.

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