

BOUNDARY ELEMENT METHODS WITH APPLICATIONS TO NONLINEAR PROBLEMS

Author :Goong Chen Jianxin Zhou / Category :Mathematics /

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Summary: Free boundary element methods with applications to nonlinear problems pdf download - boundary element methods have become a major numerical tool in scientific and engineering problem-solving with particular applications to numerical computations and simulations of partial differential equations in engineering boundary element methods provides a rigorous and systematic account of the modern mathematical theory of boundary element methods including the requisite background on general partial differential equation methods sobolev spaces pseudo-differential and fredholm operators and finite elements it aims at the computation of many types of elliptic boundary value problems in potential theory elasticity wave propagation and structural mechanics also presented are various methods and algorithms for nonlinear partial differential equations this second edition has been fully revised and combines the mathematical rigour necessary for a full understanding of the subject with extensive examples of applications illustrated with computer graphics this book is intended as a textbook and reference for applied mathematicians physical scientists and engineers at graduate and research level it will be an invaluable sourcebook for all concerned with numerical modeling and the solution of partial differential equations

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