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Titolo	Hydrologic networks and methods : transactions of the interrergional Seminar on Hydrologic Networks and Methods, held at Bangkok, Thailand, from 14 to 27 july 1959) / United Nations, Economic Commission for Asia and Far East
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Abstract; 1. Introduction; 2. Micromechanisms of Fracture; 3. Fracture Mechanism Maps; 4. Maps for Metals and Ceramics; 5. Mechanisms of Fracture and Order of Magnitude of Kc and Gc; 6. Mechanisms of Fracture and Fatigue Crack Growth; 7. Summary; Acknowledgements; References; CHAPTER 2.THEORETICAL BACKGROUND TO ELASTIC FRACTURE MECHANICS; Summary; 1. Introduction; 2. Modes of Crack Surface Displacement
3. Stress Intensity Factors4. Effect of Yielding; 5. Measuring Fracture Toughness; 6. Fatigue Crack Growth; 7. Short Crack Limitations; 8. Combined Mode Behaviour; 9. Conclusions; Acknowledgements; Notation; APPENDIX; REFERENCES; CHAPTER 3.APPLICATION OF FRACTURE MECHANICS TO INDUSTRIAL PROBLEMS; Summary; 1) INTRODUCTION; 2) FATIGUE CRACKING IN A LARGE GENERATOR ROTOR; 3) CREEP CRACKING IN CrMoV PIPEWORK WELDS; 4) STRESS-CORROSION CRACKING IN STEAM TURBINE DISCS; 5) CONCLUDING REMARKS; 6) ACKNOWLEDGEMENT; 7) REFERENCES; CHAPTER 4.GREEN'S FUNCTIONS IN FRACTURE MECHANICS; Summary
1. Introduction2. Basic principles of Green's functions; 3. Stress intensity factors as Green's functions; 4. Systematic use of Green's functions; 5. Available Green's functions; 6. Simple methods expressed as Green's functions; 7. Applications of Green's functions; 8. Conclusions; References; CHAPTER 5.VARIABLE AMPLITUDE FATIGUE OF WELDED STRUCTURES; INTRODUCTION; ANALYSIS OF VARIABLE AMPLITUDE FATIGUE; CRACK SHAPE PROBLEMS; K HISTORY; CONCLUSIONS; ACKNOWLEDGEMENTS; NOMENCLATURE; REFERENCES; CHAPTER 6.PROBABILISTIC FRACTURE MECHANICS; Abstract; 1. INTRODUCTION; 2. GENERAL PHYSICAL ASPECTS
3. GENERAL MATHEMATICAL FORMULATION4. THE DISTRIBUTION FUNCTIONS; 5. APPLICATIONS; 6. CONCLUSIONS; References; CHAPTER 7.ELEVATED TEMPERATURE FRACTURE MECHANICS; SUMMARY; INTRODUCTION; CRACK CHARACTERISATI0N; CREEP CRACK GROWTH; FATIGUE AND CREEP-FATIGUE CRACK GROWTH; CONCLUDING REMARKS; REFERENCES; APPENDIX: CAVITY LINKAGE BY A CRACK DISPLACEMENT FIELD; CHAPTER 8.FRACTURE MECHANISMS IN FIBROUS COMPOSITES; Abstract; 1. Introduction; 2. Models of Fracture; 3. Statistical Analysis of Fracture; 4. Estimation of Fracture Energy; 5. Energies of Crack Initiation and Crack Propagation
6. ConclusionsReferences; Acknowledgements; CHAPTER 9.FRACTURE CRITERIA IN ELASTIC AND ELASTIC/PLASTIC SOLIDS; SUMMARY; INTRODUCTION; PLASTIC ZONE SIZE CORRECTION; THE PLANE STRAIN/PLANE STRESS TRANSITION; INITIATION AND PROPAGATION; THE J INTEGRAL CRITERION FOR FRACTURE; THE CRACK OPENING DISPLACEMENT; SLOW CRACK GROWTH; THE PRESENT POSITION; REFERENCES

Sommario/riassunto

Fracture Mechanics