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Nota di contenuto	v. 1. Role of cross-slip of screw dislocations in fatigue behavior of copper single crystals. Crack nucleation in persistent slipbands. Change of dislocation structures and macroscopic conditions from initial state to fatigue crack nucleation. What are the kinetics of slipband extrusion. Substructural developments during strain cycling of wavy slip mode metals. Crystallographic study of the fatigue crack nucleation mechanism in pure iron. Crack growth studies in biaxial fatigue. Unified treatment of deep and shallow notches in rotating bending fatigue. Influence of stress state on crack growth retardation. Critical behavior of nonpropagating crack in steel. Fatigue damage accumulation during cycles of nonproportional straining. Significance of sliding mode crack closure on mode III fatigue crack growth. Critical comparison of proposed parameters for high-strain fatigue crack growth. Toward an understanding of mode II fatigue crack growth. Propagation of short fatigue cracks at notches. Study of the mechanism of striation formation and fatigue crack growth in engineering alloys. Elastic-plastic behavior of short fatigue crack in smooth specimen. Use of nondestructive evaluation techniques in studies of small fatigue cracks. Is the concept of a fatigue threshold meaningful in the presence of

compression cycles? Crack closure and variable-amplitude fatigue crack growth -- v. 2. What creep cavitation studies are needed to develop stainless steels resistant to time-dependent fatigue? Limits of linear elastic fracture mechanics in the characterization of high-temperature fatigue crack growth. Effect of small-scale creep on crack initiation and propagation under cyclic loading. Cyclic stress-diametral strain response and microstructural evolution during low-cycle fatigue of a bainitic steel. Influence of void nucleation and growth rates on high-temperature fatigue. Near-threshold fatigue crack growth in air and vacuum. Effects of surface dissolution and passivation on the cyclic deformation of nickel. Role of surface plasticity on the corrosion-fatigue mechanisms of FCC and BCC stainless steels. Corrosion fatigue crack initiation of carbon steels in seawater. On the intergranular cracking of sensitized stainless steel in high-temperature water. Critical assessment of the model for transport-controlled fatigue crack growth. Modifications in fatigue damage processes induced by atmospheric environment in polycrystalline copper. Corrosion fatigue and electrochemical reactions in steels. Ethylene inhibition of gaseous hydrogen embrittlement in high strength steel. Influence of cyclic straining on crack-tip chemistry. Three-dimensional measurements of fatigue crack opening and closure. Life-limiting process in composite laminates.

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