

# Contents

1	Introductory Chapter: Microstructure and Mechanical Properties . . . . .	1
	<i>H. Mughrabi</i>	
2	Flow Stress and Work Hardening . . . . .	19
	<i>J. Gil Sevillano</i>	
3	Deformation and Textures of Metals at Large Strain . . . . .	89
	<i>E. Aernoudt, P. Van Houtte, T. Leffers</i>	
4	Dislocation Patterning . . . . .	137
	<i>L. P. Kubin</i>	
5	Solid Solution Strengthening . . . . .	191
	<i>H. Neuhäuser, C. Schwink</i>	
6	Deformation of Intermetallic Compounds . . . . .	251
	<i>Y. Umakoshi</i>	
7	Particle Strengthening . . . . .	311
	<i>B. Reppich</i>	
8	High-Temperature Deformation and Creep of Crystalline Solids . .	359
	<i>W. Blum</i>	
9	Superplasticity in Metals, Ceramics and Intermetallics . . . . .	407
	<i>A. K. Mukherjee</i>	
10	Inelastic Deformation and Fracture of Glassy Solids . . . . .	461
	<i>A. S. Argon</i>	
11	Cyclic Deformation and Fatigue . . . . .	509
	<i>S. Suresh</i>	
12	Fracture Mechanisms . . . . .	565
	<i>H. Riedel</i>	
13	Friction and Wear . . . . .	635
	<i>K. Kato</i>	
	Index . . . . .	681