

CONTENTS

Foreword	v
Chapter 1: Metallic, Complex and So Different <i>Jean-Marie Dubois</i>	1
Chapter 2: Solution Growth of Intermetallic Single Crystals: A Beginner's Guide <i>Paul Canfield</i>	93
Chapter 3: Thermal Conductivity of Complex Metallic Alloys <i>Ana Smontara, Ante Bilušić, Željko Bihar and Igor Smiljanić</i>	113
Chapter 4: Thermoelectric Materials <i>Silke Pashen</i>	149
Chapter 5: Magnetism of Complex Metallic Alloys: Crystalline Electric Field Effects <i>Ernst Bauer and Martin Rotter</i>	183
Chapter 6: Electronic Structure of Quasicrystal-Related Compounds Investigated by Ultra-High Resolution Photoemission Spectroscopy <i>Riuji Tamura</i>	249
Chapter 7: First-Principles Calculations and Applications for Materials Design <i>Ryoji Asahi</i>	279

Chapter 8: Simulating Structure and Physical Properties of Complex Metallic Alloys	291
<i>Hans-Rainer Trebin, Peter Brommer, Michael Engel, Franz Gähler, Stephen Hocker, Frohmut Rösch and Johannes Roth</i>	
Chapter 9: Science and Technology of Hydrogen	331
<i>Andreas Züttel and Louis Schlapbach</i>	
Chapter 10: Hydrogen Storage Materials — Recent Development and Future Strategy of Japan	365
<i>Etsuo Akiba</i>	
Chapter 11: Hydrogen Storage Research and Development in Korea	377
<i>Jong Won Kim, Sang Sup Han and Kwang Bok Yi</i>	
Chapter 12: Discovering and Designing Bulk Metallic Glasses	413
<i>Srinivasa Ranganathan, Tripti Biswas and Anandh Subramaniam</i>	