

Preface

The research results on various materials' properties are presented to readers. The list of studied materials is wide: from semiconductors, ceramics, and polymers to metals and building materials.

The separate section is devoted to condensed matter physics research, which contains research results on the structural, optical, and electronic properties of various semiconductors.

Studies of properties and analysis of synthesis technologies of ceramic materials and polymers are the subject of the special book part.

Research on the mechanics of materials is an important section of this edition. The flow stress modelling, fatigue cracks growth, materials behaviour under compressive load, and other research on the mechanics of materials are presented here.

The building materials properties research and analysis of their production technologies also are presented in the separate section of this edition.

This book will be helpful to many engineers and researchers in materials science.