

# Table of Contents

## Preface

## Chapter 1: Key Engineering Materials

### Effect of Different Melt Treatment Methods on Microstructure and Thermal Stability of Al-Si Alloy

X.S. Li, R. Liao and W.Y. Zhong 3

### Photoluminescence of Silver-Doped ZnO Nanostructures

B.C.P. Millán, C.E.C. Montufar, F.M. Hernández and E.V. Hernández 11

## Chapter 2: Materials for Biomedical Applications

### Experimental Study on the Wear Characteristics of Textured Joint Surfaces under Bionic Lubrication

C.X. Zhu, X.Y. Wang and W. Ma 19

### Recent Trends and Notable Advances of Alginate Based Nano-Particles for Effective Biomedical Materials: Wound Healing and Drug Delivery

S. Kim 27

## Chapter 3: Materials and Technologies in Construction

### An Example of the Use of Photogrammetry for Archiving the Shapes of Natural Materials and Creations

J. Udvaros and O. Takáč 35

### Smart Contracts in Construction from Management to Materials: Acting as a Bridge between the Two

N. Forman and J. Udvaros 41