

# Preface

This special edition contains a series of articles on research results in areas of materials for applications in opto- and microelectronics and power electronic devices based on silicon carbide. A part of the edition is devoted to properties investigation of green building materials with the use of some waste materials as replacements for conventional components.

The first two sections are devoted to opto- and microelectronics materials and to research structures and structure optimisation of power electronic devices based on silicon carbide. Gallium nitride and silicon carbide are basic materials for electronic devices investigated in these sections.

Properties and synthesis technologies of some building materials where industrial waste is used for the replacement of conventional components are studied in the last chapter. The use of ferrous foundry slag for geopolymer synthesis, utilisation of plastic waste and waste rubber tyres to modify bitumen binder in road construction, etc. are investigated here.

The special edition will be helpful to many specialists whose activity is related to the electronic industry and green construction.