

Preface

This special edition contains a collection of articles on research results in areas of structural metal materials, materials and semiconductor devices for applications in photovoltaic systems and electronic devices based on silicon carbide, and also in the area of building materials.

Properties of some structural metal materials such as common steel grades and high-strength low alloy, analysis of features of processing technologies - welding, induction hardening, tempering, shaping, etc. are the topics presented in the first section.

The next two sections are devoted to materials for photovoltaics and research structure and structure optimisation of electronic devices based on silicon carbide. The main part of investigated electronic structures is related to high-voltaic electronics.

The special section represents the results of the analysis of the properties and production methods of some building materials and structures such as, for example, concretes with various types of aggregates and cross-laminated bamboo structures.

The special edition will be helpful to many specialists whose activity is related to machinery and construction, solar cell production and the electronic industry.