

Preface

This special edition includes articles that reflected the results of the latest research in semiconductors for power electronics, special steel coatings, properties of shape memory alloys and building materials such as cement, concrete and materials for intumescent coatings of structural steel for fire protection.

The first chapter of the presented special edition contains articles devoted to the analysis of properties and features of treatment technologies of silicon carbide semiconductors and related compounds and structures based on them for power electronics applications. This section is the main one in the special edition and will be interesting to specialists in semiconductors production and power electronics.

The next two chapters presented research results on the properties of shape memory alloys and carbon nanotube-based composite coating of steel. Here readers can also see the results of the analysis of properties of some types of concrete, cement and materials for coatings of structural steel for fire protection.

This special edition will be helpful to specialists in the electronics industry and materials science in particular in the area of building materials.