



*materials*



*Special Issue Reprint*

## **Innovative Technologies and Materials for the Production of Mechanical, Thermal and Corrosion Wear-Resistant Surface Layers and Coatings**

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Welding technologies of applying surface layers from innovative metal, ceramic, and cermet materials, called heat surfacing and spraying, are an important component of rational repair management and modern design of machine parts and devices with special operating properties. This reprint, which is a collection of current scientific works by international authors in the field of surface coating with welding technologies, presents the following:

- Analysis of the causes of wear of working surfaces of machine parts and equipment;
- Description of most materials used in world industry for surfacing and thermal spraying;
- Extensive discussion of all modern technologies of applying surface layers (from gas cladding, through plasma spraying, to laser cladding);
- Examples of technological conditions of surfacing and thermal spraying processes of parts of various types and shapes.

The Editors of this Special Issue, titled "Innovative Technologies and Materials for the Production of Mechanical, Thermal and Corrosion Wear-Resistant Surface Layers and Coatings", recommend this reprint to students of materials engineering and welding engineers. Undoubtedly, its reprint should be in the handy library of everyone who professionally deals with welding, especially repair management.



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