

Preface

The special issue of the "Defects and Diffusion Forum" journal named "Defects and Diffusion Phenomena in Materials for Nuclear Technologies" contains selected peer-reviewed papers covering various aspects of theoretical and experimental study of materials important for the field of nuclear engineering. The present issue is aimed at complex investigation of nuclear fuel and structural materials properties with considering defects features.

Defects and diffusion are key concepts at description of nuclear materials behavior at thermal and radiation impacts. Evolution of various defects (such as point defects, dislocations, grain boundaries) determines changes of the materials properties under operating conditions. The present issue contains new and relevant data about diffusion and defects in nuclear fuel (uranium alloys, oxide and nitride fuel) and structural materials (steel and non-ferrous metals).

We hope that this special issue will be useful for researchers and engineers in the field of material science and nuclear engineering. We wish to thank the authors and reviewers for their contributions to this special issue, cooperation and their efforts in preparing and evaluating of the manuscripts.

Dr. Sergey Starikov
Dr. Daria Smirnova
Dr. Artem Lunev