

Preface

This is the proceedings of the selected papers presented at Chinese Materials Conference 2019 (CMC 2019) held in Chengdu City, Sichuan, China, July 10-14, 2019.

The Chinese Materials Conference (CMC) is the most important serial conference of Chinese Materials Research Society (C-MRS) and is held each year since early 1990s. Chinese Materials Conference 2019 had 42 Symposia and 3 Forums covering four fields of Energy and environmental materials, Advanced functional materials, High performance structural materials, and Design, preparation and characterization of materials. More than 6000 participants attended the congress, and the organizers received more than 300 technical papers. The published papers were chosen by the recommendation of symposium organizers after peer-reviewing. By recommendation of symposium organizers and after peer reviewing 262 papers are published in the present volume, which are divided into nine chapters of

- Chapter 1: High Performance Structural Alloys, Properties and Processing Technologies (62 papers)
- Chapter 2: Steels and Structural Metals, Properties and Processing Technologies (44 papers)
- Chapter 3: Computational Procedures in Materials Science (22 papers)
- Chapter 4: Tubular Goods and Equipment Materials (44 papers)
- Chapter 5: Advanced Functional Materials (30 papers)
- Chapter 6: Materials and Technologies for Energy Storage Devices, Alternative Energy Production (7 papers)
- Chapter 7: Materials and Technologies for Environmental Engineering and Waste Recycling (23 papers)
- Chapter 8: Advanced Building Materials (6 papers)
- Chapter 9: Characterization and Evaluation of Materials (10 papers)
- Chapter 10: Functional Coatings, Surface Treatment and Corrosion Behavior of Structural Materials (10 papers)
- Chapter 11: Mineral Materials (4 papers)

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