

Preface

The 9th Annual International Conference on Material Science and Engineering (ICMSE2021) was successfully held from July 22nd to 24th, 2021. Due to the COVID-19 situation and travel restrictions, ICMSE 2021 was converted into a virtual conference via Tencent Meeting.

The ICMSE2021 is becoming one of the leading international conferences for presenting novel and fundamental advances in material science and engineering in China. We believe that through keynote speeches by outstanding, internationally recognized scholars, oral sessions, and posters presentations, the conference has reflected an overview of the latest developments in materials science. The topics of ICMSE 2021 ensured an exchange of scientific information and opinions in a field with impressive dynamics, considering the research's technological progress and theoretical and practical aspects. This forum provided opportunities for the senior and young researchers and representatives to the academia and industry to exchange new ideas, establish research or business relations, and find partners for future collaboration. We hope that the conference has constituted a significant contribution to the knowledge in this up-to-date scientific field.

This proceeding tends to collect up-to-date, comprehensive, and worldwide state-of-art knowledge on material science and engineering. All the accepted papers were subjected to strict peer-reviewing by 2-3 expert referees. The papers have been selected for this proceedings based on originality, significance, and clarity for the purpose of the conference. The selected papers and additional late-breaking contributions made an exciting technical program at the conference. The conference program was extremely rich, featuring invited keynote speeches, panel discussions, high-impact oral and poster presentations. The keynote speaker was an internationally recognized leading expert in material science and engineering, who has demonstrated outstanding proficiency and has achieved distinction in their profession. We hope this conference not only provided the participants a broad overview of the latest research results on material science and engineering, but also provided the participants a significant platform to build academic connections.

We would like to express our sincere gratitude to all the members of the Technical Program Committee and our keynote speakers for their enthusiasm, time, and expertise. Our deep thanks also go to many volunteers and staff for the long hours and hard work they have generously given to ICMSE 2021.

Finally, we would like to thank all the authors, speakers, and participants of this conference for their contributions to ICMSE 2021, and we also look forward to welcoming you to the ICMSE 2022.

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