

# Preface

The 13th European Conference on Silicon Carbide and Related Materials 2020-2021 (ECSCRM 2020-2021) was held in Tours, France, from October 24th to 28th, 2021. ECSCRM, in alternance with ICSCRM, is the world's premier technical conference series for wide bandgap semiconductor technology based on silicon carbide (SiC) and related materials. In this so particular time, where COVID-19 has deeply changed our lives and our way of living for the last two years, we are extremely proud to have received a total of 660 attendees, 460 in presence in Tours and 200 online in an unprecedented hybrid format of the event, including colleagues from 29 countries that participated in this conference to report and discuss the recent progresses of fundamental research and technological achievements in this SiC field. We thank all the plenary and invited speakers for their outstanding presentations as well as all participants for valuable work.

More than 240 papers were presented during the technical sessions: 3 plenary, 14 invited oral, 4 invited poster, 70 contributed oral, and 152 contributed poster presentations. The papers covered most of the current research efforts on SiC domain and topics going from material growth to power device applications. During the technical exhibition, 59 companies and organizations have presented their great achievements, products, and services at their booths, presently or virtually. This clearly demonstrates that industry has a strong interest in SiC and related materials. We thank all the sponsors and exhibitors. Without them, the event would not have been possible. We also specifically thank NOVASiC for the financial support of this publication. The four major chapters of the proceedings are collections of papers in the areas of material growth and wafer manufacturing, characterization and defect engineering, material and device processing, power devices, packaging, and applications. We delight to thank all the reviewers for their work. Their contribution was crucial to maintain the high scientific standards of this publication, that is, for the first time, in open access.

ECSCRM 2020-2021 was endorsed by Université de Tours, CNRS and INSA de Lyon via the implication of GREMAN and AMPERE labs. We would not have been successful without the backstage labor of the many persons from the lab and the great help and availability of both Steering and Technical Program Committees. The conference was financially supported by local public authorities (Tours Metropole and Region Centre Val de Loire) and 14 companies. We would like to take this opportunity to thank them again for their sponsorship and support, especially during this very difficult period with a one year postpone.

ECSCRM and ICSCRM events have explored, presented and discussed the new achievements in the field of wide-bandgap semiconductors focusing on silicon carbide (SiC) and other related wide bandgap semiconductors. ECSCRM and ICSCRM steering committees have decided in Tours to have a fusion of the two events. In the future, ICSCRM will bring every year together world-leading scientists, distinguished experts, experienced engineers, and young students working in this field from all over the world. The last two years have been particularly intense for SiC technologies and have seen extremely strong market growth for SiC applications, with an impressive increasing maturity. This reflects the dynamism of both the scientific research part and the actions carried out by the industry. Many challenges await us in the coming years and the conference will also be the opportunity to discuss the future of SiC technologies.

The next conference of the series, ICSCRM 2022, will be held in Davos, Switzerland, from September 11<sup>th</sup> to 16<sup>th</sup>, 2022 ([www.icscrm2022.org](http://www.icscrm2022.org)). The conference will be chaired by Prof. Ulrike Grossner (ETH Zürich).

We wish the organizers of the next ICSCRM much success.

The ECSCRM 2020-2021 Publication Committee  
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