

Preface

The 30th International Toki Conference on Plasma and Fusion Research (ITC30) was organized by the National Institute for Fusion Science and held from November 16 to 19, 2021, via online connection for video conferencing to prevent the COVID-19 infection spread. The International Toki Conference (ITC) is a topical meeting dedicated to a specific subject related to plasma and fusion science. The series began in 1989 with the founding of the National Institute for Fusion Science and has been held on an annual basis ever since. This year marks the 30th time the series has been held. The conference topics cover a wide range of research in various plasma and fusion sciences.

In recent years, several new experiments have been started, and the construction of new devices is going forward worldwide. Cooperation among experiments, theories, and simulations has become more crucial. Technological development, built on fundamental research topics, will be further utilized for applied plasma research and large-scale plasma science for fusion reactors. The conference topics cover a wide range of plasma and fusion science research. The topics selected for the 30th ITC were as follows:

- Magnetically Confined Plasmas (Experiment)
- Magnetically Confined Plasmas (Theory)
- Inertially Confined Plasmas
- Fusion Engineering and Material
- Basic Plasma Research and Plasma Application
- High Energy Density Science
- Space and Astrophysical Plasmas
- Data Driven Plasma Science
- Medical, Biological, Agricultural, and Environmental Applications of Plasmas

This special issue of Plasma and Fusion Research (PFR) contains 71 regular articles and one review article presented at the conference. These papers have been accepted for publication after being peer-reviewed through the processes administrated by the editors listed below:

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Shinji Yoshimura
Guest Editor-in-Chief
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