

## Preface

The 28th International Toki Conference on Plasma and Fusion Research was held in Toki through 5 to 8 November 2019, organized by the National Institute for Fusion Science. 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. The conference topics cover a wide range of research in various plasma and fusion sciences. In addition, in the 28th ITC, a special session on applied superconductivity and cryogenic systems (focusing on high-temperature superconductors) was organized. The topics selected for the 28th ITC were as follows:

- Magnetically-Confined Plasmas
- Inertially-Confined Plasmas
- Fusion Engineering and Reactor Design
- Basic Plasma Research and Plasma Application
- Fundamental Theory and Simulation Techniques
- Space and Astrophysical Plasmas
- Applied Superconductivity and Cryogenic Systems

This special issue of Plasma and Fusion Research (PFR) contains 49 regular articles which were presented at the conference. These papers have been accepted for publication after being peer-reviewed through the processes administrated by the editors listed below:

### Guest Editors

Daiji Kato (NIFS), Chief  
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Daiji Kato  
Guest Editor-in-Chief  
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