## **Preface**

This volume contains selected and peer-reviewed papers presented at the 4th Padjadjaran International Physics Symposium (PIPS 2019), which was held on November 13-14, 2019 in Bandung, Indonesia. The conference was organized by Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran Indonesia. The main theme of PIPS2019 was "The Future of Energy and Advanced Materials". In this conference, more than 73 abstract in the subject area of advanced materials for energy and devices were presented.

These selected papers are focused on recent research results in organics and inorganics materials for solar cells, materials for application in batteries and supercapacitors, modelling, synthesis, and characterization of new emerging advanced in magnetics materials and superconductors, carbon materials, ceramics, materials for biomedical practice, polymers and composites, and other functional materials. We hope this volume can bring close collaboration among researchers from multidiscipline areas for better future development of energy and advanced materials.

Finally, we are very grateful to all organizing committee members and reviewers for invaluable supports, comments and suggestions.

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