論文 / 著書情報
Article / Book Information

題目(和文)	Development of Anion Exchange Membranes with Convertible Polymer Structure for Solid Alkaline Water Electrolysis
Title(English)	Development of Anion Exchange Membranes with Convertible Polymer Structure for Solid Alkaline Water Electrolysis
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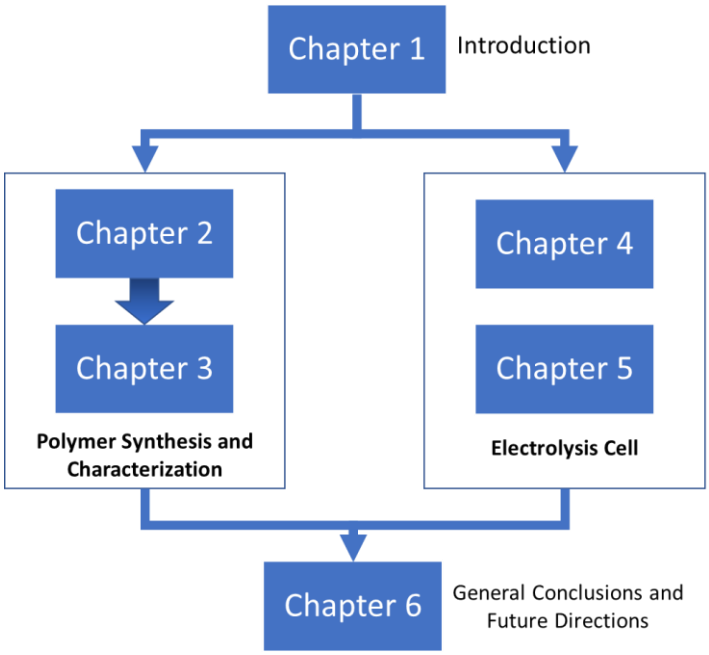
Category(English)	Doctoral Thesis
種別(和文)	要約
Type(English)	Outline

Thesis Outline



This thesis, entitled “Development of Anion Exchange Membranes with Convertible Polymer Structure for Solid Alkaline Water Electrolysis”, consists of 6 chapters. The main content of the thesis is composed from two big parts. The first part is polymer synthesis and characterization part and the second one is electrolysis cell part. List of chapters and its titles is following:

1. **Chapter 1**: Introduction
2. **Chapter 2:** Development of a novel durable aromatic anion exchange membrane using a thermally convertible precursor
3. **Chapter 3**: Effect of backbone structure on the polyelectrolyte property of thermally convertible anion exchange membranes
4. **Chapter 4**: Fabrication and evaluation of solid alkaline water electrolysis cell by using thermally convertible ether-free aromatic anion exchange membrane
5. **Chapter 5**: Evaluation of membrane electrode assembly performance and durability under constant and dynamic water electrolysis operation by using thermally convertible ether-free aromatic anion exchange membrane
6. **Chapter 6**: Conclusions and Future Directions