

Development of novel polymer electrolyte and low friction surfaces.



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Status	Professor
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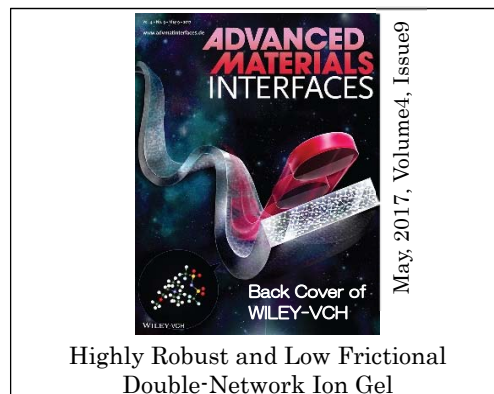
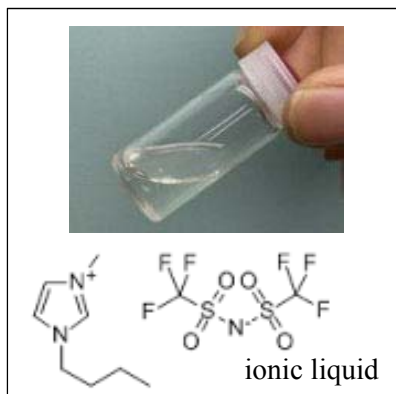
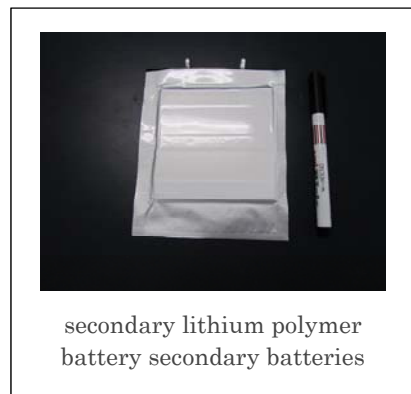
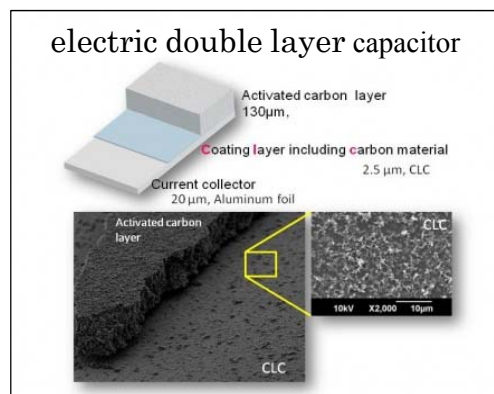
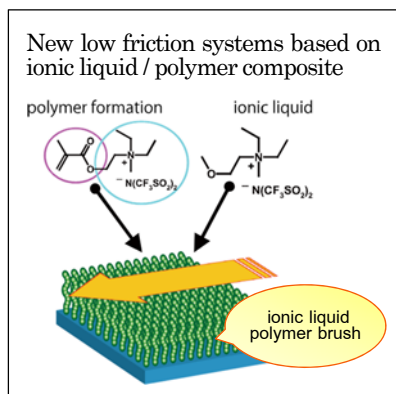
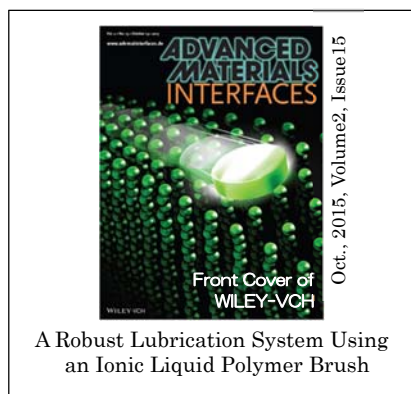
Affiliations	Dept. of Creative Engineering
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Keywords	Energy storage devices and related materials, Ionic liquids, Tribology
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Technical Support Skills	<ul style="list-style-type: none"> • Battery and capacitor and evaluation system for fuel cells. • Development of the lithium ion battery and the electric double layer capacitor.
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Research Contents Development of novel polymer electrolyte and low friction surfaces.

- Design of energy storage devices and evaluation, e.g.; lithium ion battery, electric double layer capacitor, polymer electrolyte fuel cell. Our laboratory can assist some material design and the evaluation of various energy devices.
- Preparation and physicochemical evaluation of ionic liquid materials. (Organic synthesis, electrochemical performances and application development)
- New low friction systems based on ionic liquid / polymer composite.
- Our lab. can cover various research fields such as fibrous materials and processing, plastic materials, carbon material, functional polysaccharide, low friction surface design and its evaluation.



Available Facilities and Equipment

Tribology evaluation equipment	
FT-NMR	
charge / discharge cycling equipment	
Fuel Cell Evaluation Equipment	
low oxygen grove boxes	