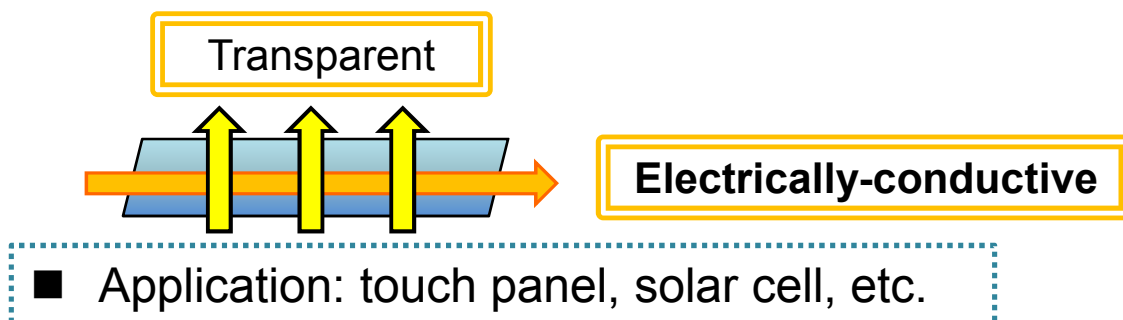


# Preparation of Carbon Nanotube-Based Transparent Conducting Films

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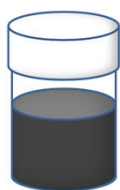
E-mail: kmatsu@gipc.akita-u.ac.jp, mjikei@gipc.akita-u.ac.jp

## Transparent Conducting Film

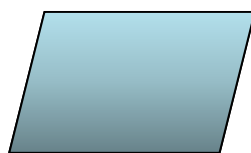


### General Method

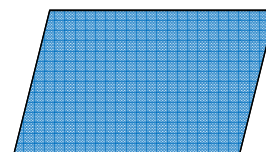
Dispersant: **Organic molecule**



Coating  
→  
heating



**Washing**  
→  
**Removal of dispersant**

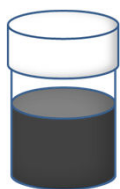


CNT dispersion

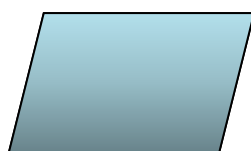
- Difficult to remove dispersant
- Peeling of CNTs during washing process
- Preparation process is tedious

### New Method

Dispersant: **Thermally degradable inorganic salt**



Coating  
→  
heating



- Dispersant can be removed during coating process
- Washing process is not necessary
- No performance degradation

CNT dispersion



Carbon nanotube

← CNT transparent conducting film