

ADVANCED FUNCTIONAL MATERIALS

LIQUID CRYSTALS

The application of thermotropic liquid-crystalline (LC) electrolytes to lithium-ion batteries is demonstrated for the first time by T. Kato and co-workers on page 1206. The LC electrolytes form 2D ion-conductive pathways in their LC layered nanostructures. The electrolytes are the mixtures of a carbonate-based rod-like molecule and lithium bis(trifluoromethylsulfonyl)imide. The electrolytes show stable charge–discharge behavior for electrodes of lithium-ion batteries.