

## Atsuo Yamada

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There is a pressing need to use renewable energy (solar, wind, geothermal, etc.) as well as to provide efficient storage and supply of mobile energy to enable the application of consumer electronics to commuter vehicles. In the energy-storage sector, electrochemical energy storage based on the reversible conversion of chemical energy and electrical energy both having a common carrier, i.e., electrons, has dominated over two centuries. I will try to illustrate a road toward rechargeable battery with ultimate sustainability