

유연 에너지 저장 소자 용 플렉서블 전극 구조 개발
Flexible electrodes for deformable energy storage devices

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Energy conversion & storage is one of the most important technologies, related to not only environmental problems, but also cultures in future society consuming high energy. Especially, energy storage is of critical importance because it is a limiting factor in achieving complete and independent stretchable electronics for the next generation. Here, several types of electrode architectures were introduced to overcome the congested period of the energy storage systems, such as i) transparent and flexible energy storage systems, ii) origami-type electrodes by a patterning approach, iii) omnidirectional stretchable electrodes, and iv) dual planar-helix type wire electrodes. These concepts of new-type electrode architectures can provide noteworthy implications across a number of disciplines toward ultimate energy storage, power supply and stretchable devices for the next generation of electronics.