

SEPARATOR, PREPARATION METHOD FOR THE SAME, AND APPLICATION THEREOF

ABSTRACT

The present invention provides a separator, a preparation method for the same, and an application thereof. The separator includes a substrate and a coating layer disposed on at least one surface of the substrate, wherein the coating layer includes inorganic particles and polymer microspheres; a mass ratio of the inorganic particles to the polymer microspheres is 1:0.25 to 4; an inner layer and an outer layer of the coating layer each independently have inorganic particles and polymer microspheres distributed therein, the number of the inorganic particles in the inner layer of the coating layer is greater than that of the polymer microspheres; and the number of the inorganic particles in the outer layer of the coating layer is less than that of the polymer microspheres. In the present invention, the separator has high bonding force, excellent thermal stability, and good infiltration performance, and a battery including the separator has high safety performance.