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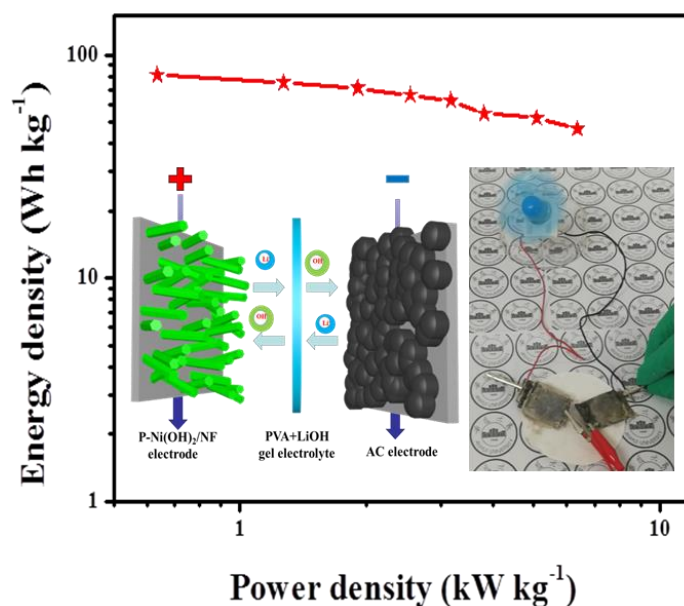
Hydrothermally formed three-dimensional hexagon-like P doped Ni(OH)₂ rod arrays for high performance all-solid-state asymmetric supercapacitors

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Graphical Abstract



Highlights:

- 1. 3D hexagon-like P doped Ni(OH)₂ rod arrays grown on Ni foam were designed and synthesized by a facile and green hydrothermal process.
- 2. The high areal capacitance of P doped Ni(OH)₂ /NF is up to 2.11 C cm⁻² at 2 mA cm⁻².
- 3. The asymmetric supercapacitor exhibited a high energy density and power density.
- 4. The asymmetric supercapacitor devices can easily drive an electric fan.

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