



Next-Gen Sodium Batteries

Source: [IND](#)

Recently, scientists from South Korea have developed next-generation **sodium batteries capable of charging in just a few seconds.**

- These **new hybrid sodium-ion batteries** combine materials from traditional batteries with those used in **supercapacitors**.
 - These are **both cheaper and safer than the conventional lithium-ion batteries** found in smartphones and electric cars.
- **Sodium (Na) is also 500 times more abundant than lithium**, while holds the potential for greater charge and efficiency than its Li-ion batteries..
- Sodium-ion batteries haven't been widely adopted due to **drawbacks like slow charging and low energy storage.**
- This new battery offers:
 - Faster charging times than current lithium-ion batteries.
 - Higher energy density than commercial lithium-ion batteries (247 Wh/kg).
 - High power density (34,748 W/kg).
- Its potential applications include **electric vehicles** and **consumer electronics.**

Read more: [sodium-ion batteries](#)

PDF Refernece URL: <https://www.drishtias.com/printpdf/next-gen-sodium-batteries>