

Electron sponge from naphthalenediimide–viologen conjugates: water-stable, highly electron-deficient polyions with 1 V potential window.

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We report a new class of multi-electron acceptors by integrating for the first time multiple π -cations at the naphthalenediimide-core. These polyions present a remarkably low-lying LUMO with water stability, seven-redox states in a narrow window of ~ 1 V and excellent reversibility. Extended conjugation is manifest in mixed valence states with NIR absorption. X-ray crystallography revealed appealing multiple anion– π interactions.

Adres publiczny

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Strona internetowa wydawcy

<https://www.rsc.org/>