

Novel naphthalenediimide based metal-organic framework for electrochromic application

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Metal organic framework (MOF's) derived material have emerging applications such as smart window, smart switches, textile industries, automobile, space and technology. Herein, we have synthesized Naphthalene based MOF's and tested for electrochromic application. The fabricated electrochromic device shows the superior electrochromic properties (such as switching speed, coloration efficiency, color contrast, and cycle life) with retention of 89% colorization efficiency. The superior performance of device is mainly attributed to the high ionic conductivity and stability in wide potential window.