**Supporting Information**

**Flower-like MoS2 for Next Generation High Performance Energy Storage Device Applications**

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Figure S1. Room temperature PXRD patterns of sample S1 (3h), S2 (12h), S3 (24h), and S4 (40h).

**Table S1:** Comparison of electrochemical capacitance performance of the present supercapacitor with other reported supercapacitors.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Electrode Materials** | **Electrolyte** | **Specific Capacitance (Csp)** | **Current Density** | **References** |
| Spherical MoS2 | 1 M Na2SO4 | 92.85 Fg-1 | 0.5 mAcm-2 | **(**Krishnamoorthy et al, 2014) |
| MoS2 nanostructure | 1 M Na2SO4 | 122 Fg-1 | 0.5 Ag-1 | (Ilanchezhiyan et al., 2015) |
| 3D flower like MoS2 | 1 M KCl | 168 Fg-1 | 1 Ag-1 | (Wang et al., 2014) |
| MoS2 nanosheet | 1 M Na2SO4 | 129.2 Fg-1 | 1 Ag-1 | (Huang et al., 2014) |
| MoS2 Nanowall film | 0.5M H2SO4 | 100 Fg-1 | - | (Soon et al., 2007) |
| MoS2-Co3O4 composite | 1 M KOH | 69 Fg-1 | 0.5 Ag-1 | (Lianga et al., 2015) |
| MoS2-carbon composite | 1 M Na2SO4 | 201.4 Fg-1 | 0.2 Ag-1 | Fan et al. 2015 |
| RuS2 | 0.5 M H2SO4 | 85 Fg-1 | 0.5 mAcm-2 | (Krishnamoorthy et al., 2017) |
| MnS/Graphene | 6 M KOH | 156 Fg-1 | - | (Ramachandran et al., 2017) |
| MoS2/Mo | 1 M Na2SO4 | 192 Fg-1 | 1 mAcm-2 | (Krishnamoorthy et al. 2017) |
| MoS2/C | 3 M KOH | 210 Fg-1 | 1 Ag-1 | (Hu et al., 2013) |
| MoS2-Graphene |  | 243 Fg-1 | 1 Ag-1 | (Huang et al., 2013) |
| Flower-like MoS2 | 1 M Na2SO4 | 350 Fg-1  210 Fg-1 | 0.25 Ag-1  1 Ag-1 | **[This Work]** |

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