Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Table S2 Comparison of the supercapacitive activity of SiQDs-MoS_2/rGO with those recently reported.

Material	**Solution**	**Capacitance ($F\ g^{-1}$)**	**Capacitance retention**	**Power density ($KW\ Kg^{-1}$)**	**Energy density ($W\ h\ Kg^{-1}$)**	**Reference**
SiQDs-MoS_2/rGO-2	6 M KOH	912.4 (0.5 A g^{-1})	88.20% (10000 cycles at 1 A g^{-1})	11.3	71.3	This work
$NiCo_2S_4$-g-MoS_2	6 M KOH	1002 (5.0 A g^{-1})	94.8% (4000 cycles at 5 A g^{-1})	5.2	30.28	1
GN-$CoMoS_4$	3 M KOH	774 (1.0 A g^{-1})	94.49% (6000 cycles at 8 A g^{-1})	0.9	42.85	2
Co_9S_8/α-MnS@N-C@MoS_2	2 M KOH	1938 (1.0 A g^{-1})	86.9% (10000 cycles at 10 A g^{-1})	0.729	64.2	3
MoS_2/PPy-2	1 M KCl	695 (0.5 A g^{-1})	85% (4000 cycles at 1 A g^{-1})	46	57.5	4
M-MoS_2-H_2O	1 M Li_2SO_4	380 (1.0 A g^{-1})	88% (10000 cycles at 5 A g^{-1})	1	51	5
PANI-MoS_2	1 M H_2SO_4	538 (0.5 A g-1)	93% (2000 cycles at 0.01 A g^{-1})	9.8	128	6
MoS_2	1M Na_2SO_4	138 (1 A g^{-1})	86% (5000cycle at 200 mv s^{-1})	0.4	12.26	7
MoS_2/G	1M Na_2SO_4	155 (0.5A g^{-1})	89.6% (1000 cycles at 0.6 A g^{-1})	0.25	37.5	8

MoS_2−Gr	1M Na_2SO_4	243 (1 A g^{-1})	92.3% (1000 cycles at 1 A g^{-1})	19.8	73.5	9
MoS_2@HCS	3 M KOH	458 (1 A g^{-1})	86% (1000 cycles at 8 A g^{-1})	0.616	13.7	10

1 J. F. Shen, P. Dong, R. Baines, X. W. Xu, Z. Q. Zhang, P. M. Ajayan and M. X. Ye, *Chem. Commun.*, 2016, **52**, 9251.
2 M. Wei, C. Wang, Y. B. Yao, S. H. Yu, W.-H. Liao, J. W. Rene, R. Sun and C.-P. Wong, *Chem. Eng. J.*, 2019, **355**, 891.
3 S. Kandula, K. R. Shrestha, N. H. Kim and J. H. Lee, *Small*, 2018, **14**, 1800291.
4 H. J. Tang, J. Y. Wang, H. J. Yin, H. J. Zhao, D. Wang and Z. Y. Tang, *Adv. Mater.*, 2015, **27**, 1117.
5 X. M. Geng, Y. L. Zhang, Y. Han, J. X. Li, L. Yang, M. Benamara, L. Chen and H. L. Zhu, *Nano Lett.*, 2017, **17**, 1825.
6 M. S. Raghu, K. Y. Kumar, S. Rao, T. Aravinda, B. P. Prasanna, M. K. Prashanth, *Polym. Bull.*, 2018, **75**, 4359.
7 Neetika, A. Sanger, V. K. Malik and R. Chandra, *Int. J. Hydrogen Energ.*, 2018, **43**, 11141.
8 R. Thangappan, S. Kalaiselvam, A. Elayaperumal, R. Jayavel, M. Arivanandhan, R. Karthikey and Y. Hayakawad, *Dalton Trans.*, 2016, **45**, 2637.
9 K. J. Huang, L. Wang, Y. J. Liu, Y. M. Liu, H. B. Wang, T. Gan and L. L. Wang, *Int. J. Hydrogen Energ.*, 2013, 8, 14027.
10 T.-W. Lin, M.-C. Hsiao, A. Y. Wang and J. Y. Lin, *ChemElectroChem.*, 2017, **4**, 620.