

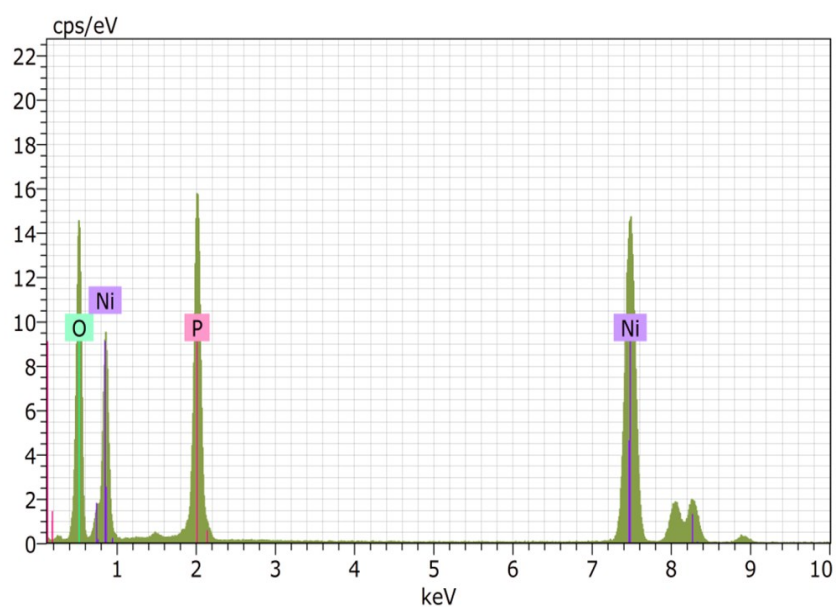
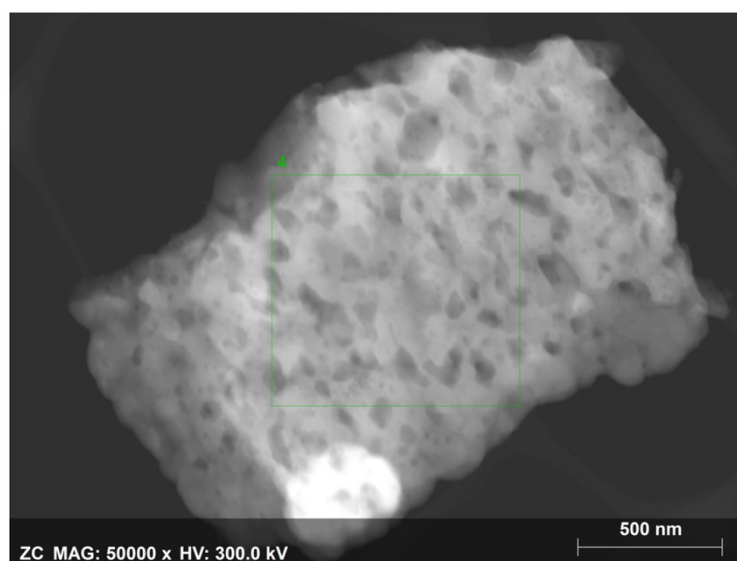
Ni₂P₂O₇ Microsheets as an efficient Bi-functional Electrocatalysts for Water Splitting Application

Subramani Surendran,^{abc} Arumugam Sivanantham,^b Sangaraju Shanmugam,^{*b} Uk Sim^{*c} and Ramakrishnan Kalai Selvan^{*a}

^a. Energy Storage and Conversion Devices Laboratory, Department of Physics, Bharathiar University, Coimbatore-641046, Tamil Nadu, India. E-mail: selvankram@buc.edu.in; Fax: +91 4222425706; Tel: +91 422 2428446.

^b. Department of Energy Science & Engineering, Daegu Gyeongbuk Institute of Science & Technology (DGIST), Daegu 42988, Republic of Korea. E-mail address: sangarajus@dgist.ac.kr (S. Shanmugam).

^c. Department of Material Science and Engineering, Chonnam National University, Gwangju 61186, South Korea. E-mail address: usim@jnu.ac.kr (Uk Sim).



Spectrum: 2.xls

El	AN	Series	Net unkn.	C norm.	C Atom.	Error (3 Sigma)
			[wt.%]	[wt.%]	[at.%]	[wt.%]
O	8	K-series	32683	29.04	29.04	53.96
Ni	28	K-series	79323	48.67	48.67	24.65
P	15	K-series	48380	22.29	22.29	21.39
Total:			100.00	100.00	100.00	

Fig. S1 EDS spectrum of $\text{Ni}_2\text{P}_2\text{O}_7$.

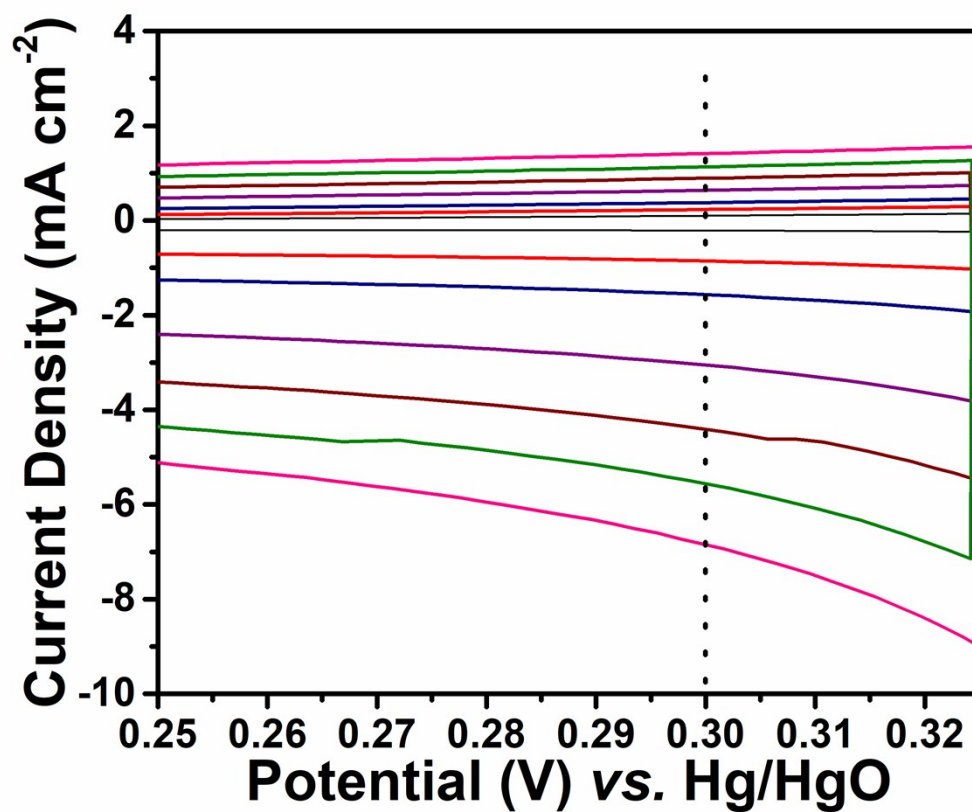


Fig. S2 CV curves of $\text{Ni}_2\text{P}_2\text{O}_7$ electrode at different scan rates on a potential range of 0.250 to 0.325 V vs. Hg/HgO.

Table S1. The Z-fit values of the equivalent circuit.

Sample	R1 (Ohm)	C2 F	R2 (Ohm)	C3 F	R3 (Ohm)	W (Ohm.s ^{-1/2})
$\text{Ni}_2\text{P}_2\text{O}_7$	0.826	0.254	2.639	0.196	143.8	0.160