

Supporting Information

Single-step pyrolytic preparation of Mo₂C/Graphitic carbon nanocomposite as catalyst carrier for the direct liquid-feed fuel cells

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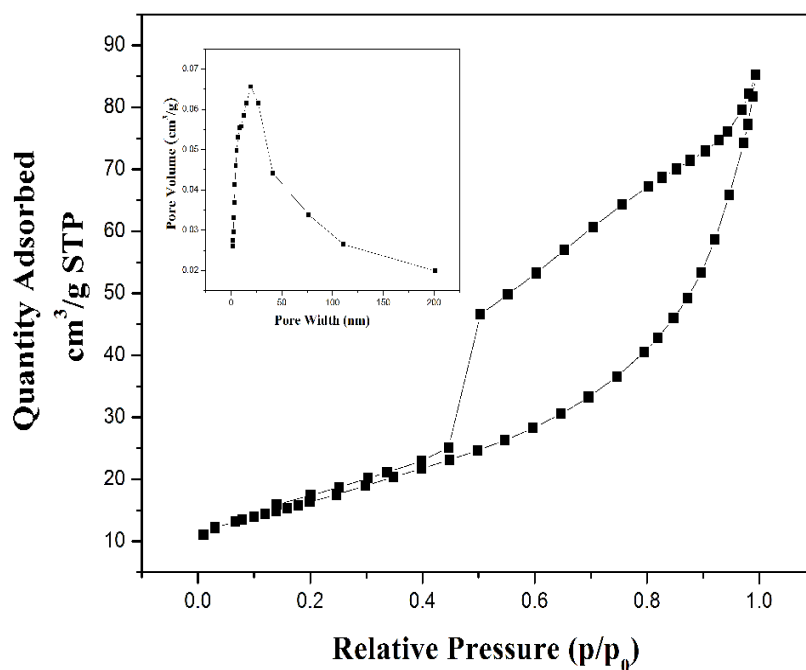


Fig. S1 N₂ adsorption/desorption isotherm of Mo₂C/GC and the inset indicates pore-size distribution obtained by the BJH method.

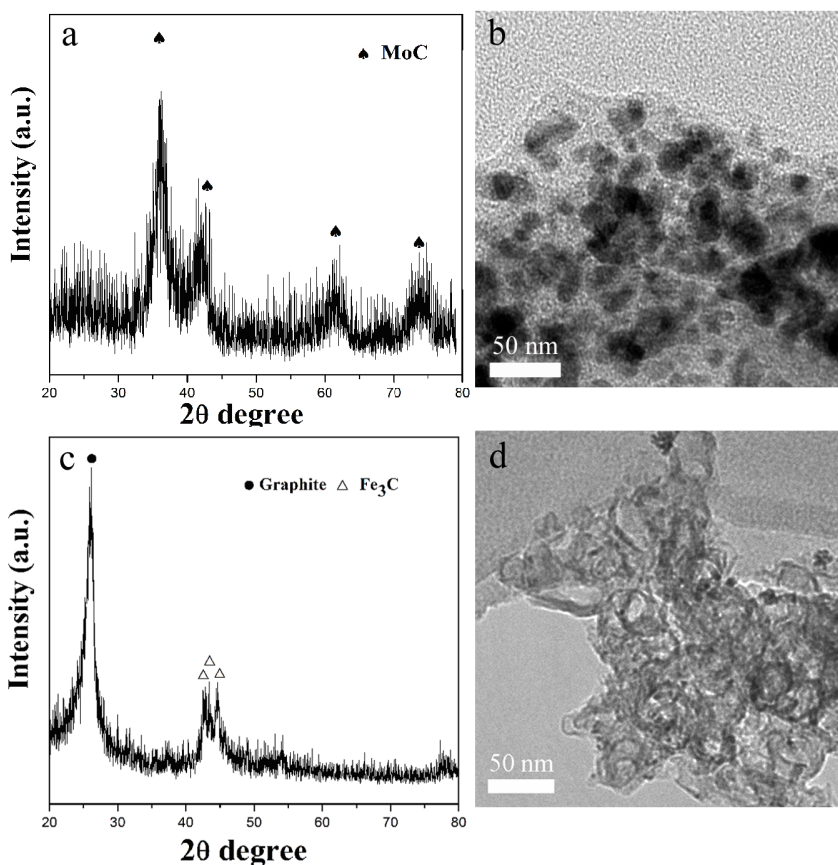


Fig. S2 XRD pattern (a) and TEM image of MoC/AC (b), XRD pattern (c) and TEM image of GC (d)

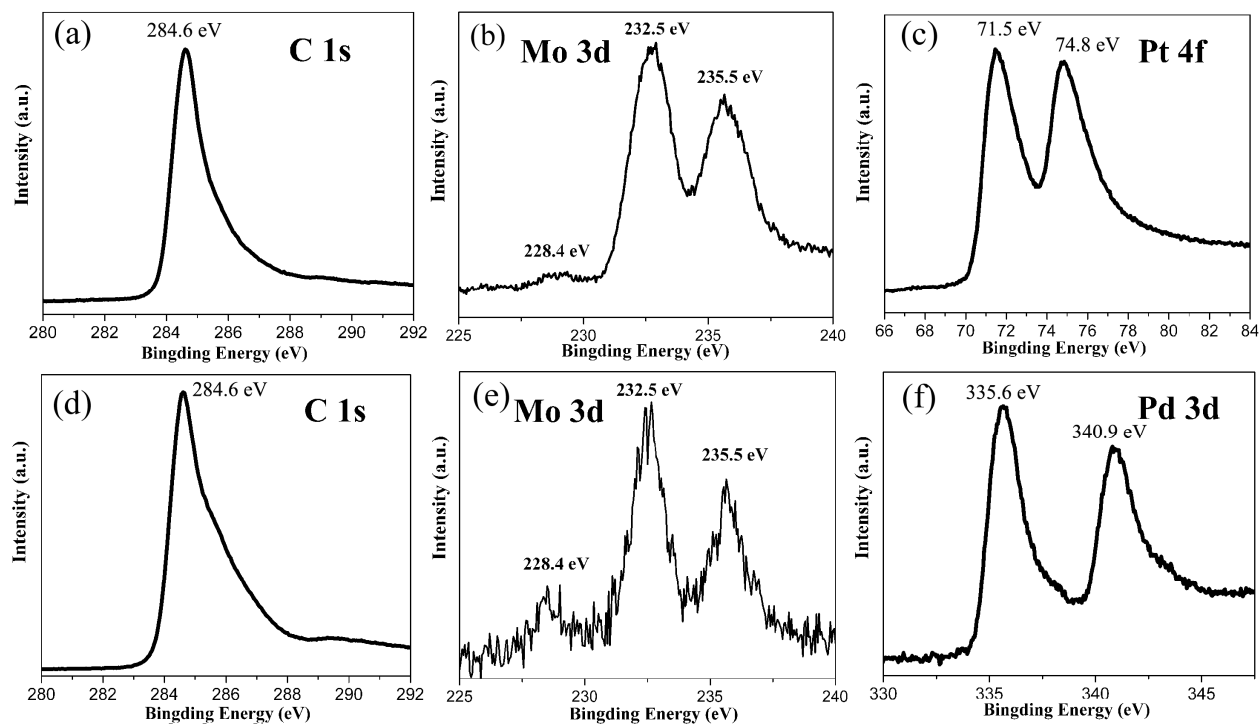


Fig. S3 XPS spectra of the (a) C 1s, (b) Mo 3d, (c) Pt 4f of Pt-Mo₂C/GC and (d) C 1s, (e) Mo 3d, (f) Pd 3d of Pd-Mo₂C/GC.

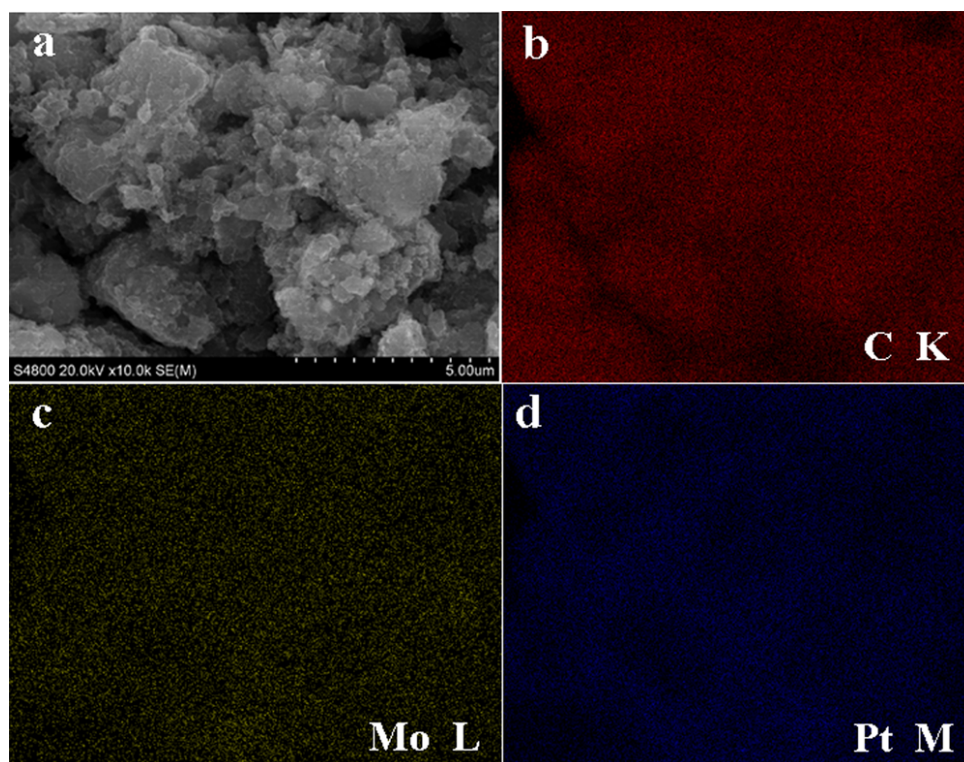


Fig. S4 (a) SEM image of Pt-Mo₂C/GC, (b) SEM-EDS mapping analysis of C-element, (c) Mo-element and (d) Pt-element in Pt-Mo₂C/GC

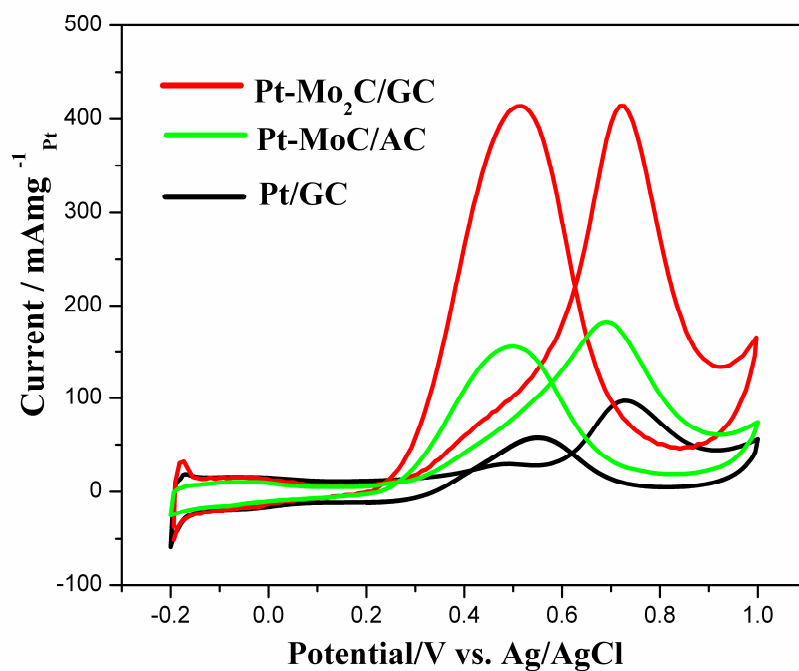


Fig. S5 Methanol electro-oxidation curves for catalysts recorded in a 1.0 M H₂SO₄ + 1.0 M CH₃OH solution with a sweep rate of 50 mV/s.

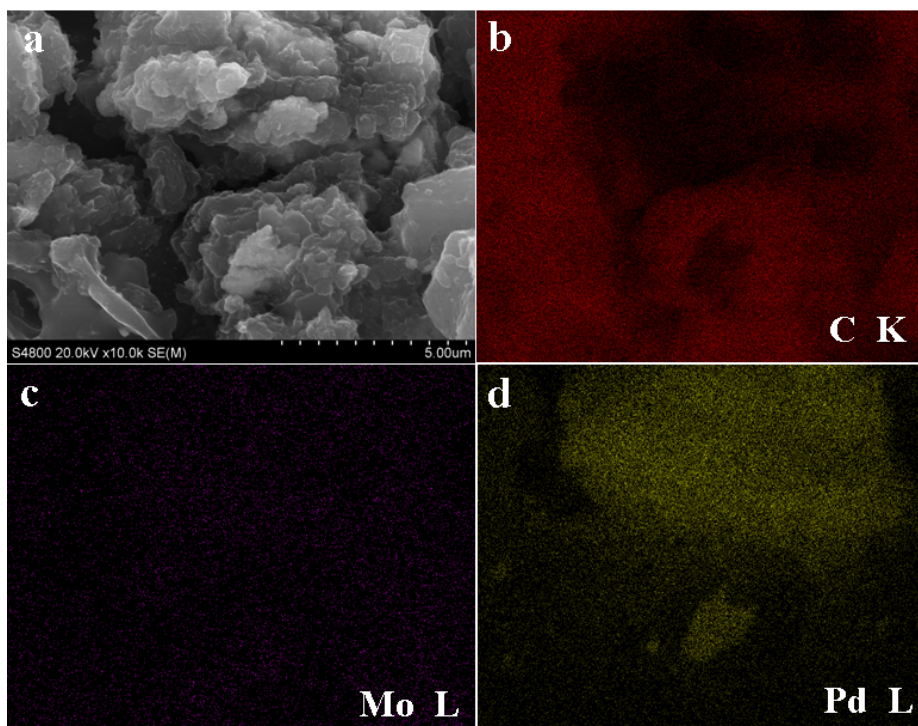


Fig. S6 (a) SEM image of Pd-Mo₂C/GC, (b) SEM-EDS mapping analysis of C-element, (c) Mo-element and (d) Pd-element in Pd-Mo₂C/GC