

Electronic Supplementary Material

Microstructuring of carbon/tin quantum dots via a novel photolithography and pyrolysis-reduction process

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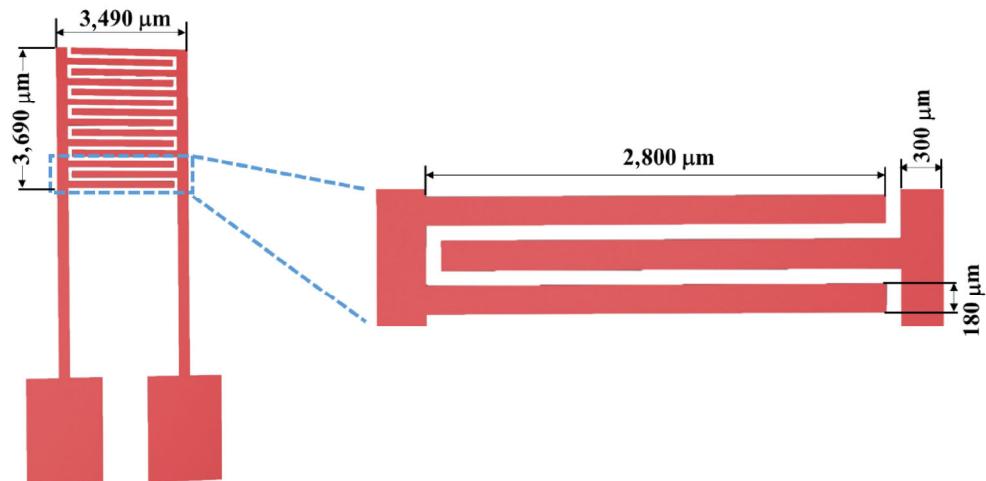


Figure S1 The design and dimension of the interdigital microelectrodes based MSC, the area of the interdigital microelectrodes is 0.0927 cm^2 .

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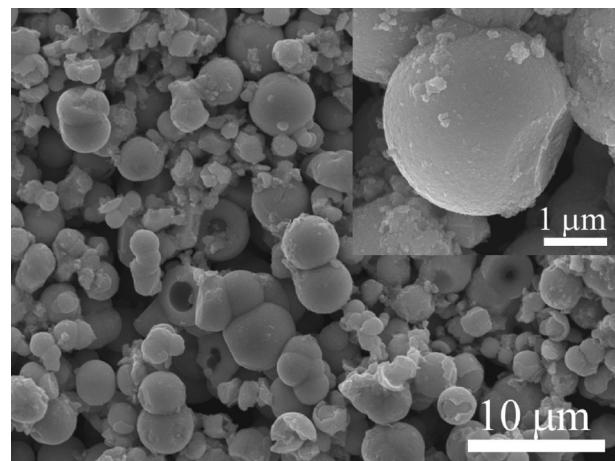


Figure S2 SEM images of SnO₂ microspheres. The inset shows the corresponding high-magnification SEM image.

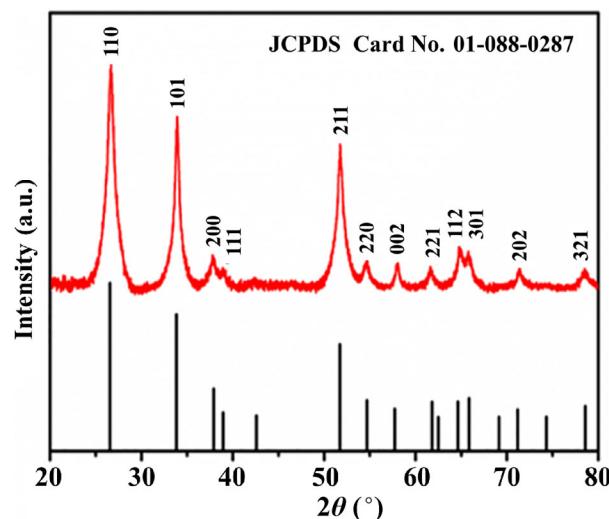


Figure S3 Experimental and theoretical XRD patterns of the synthesized SnO₂ microspheres.

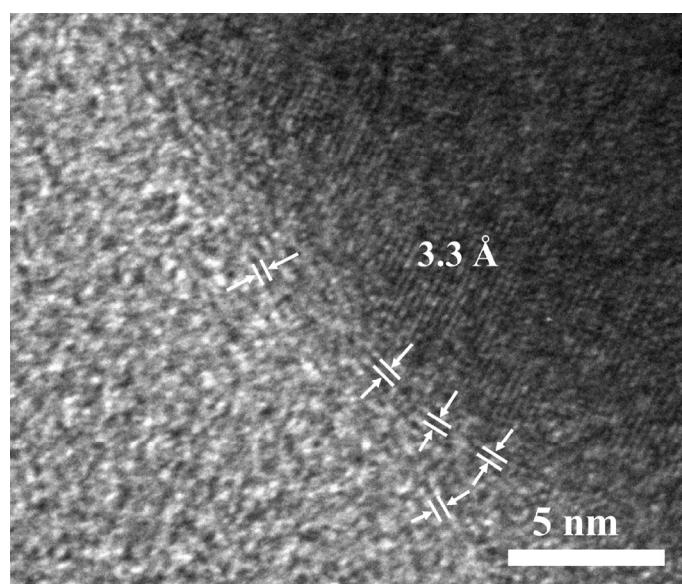


Figure S4 HRTEM image of carbon/Sn QDs microelectrode.

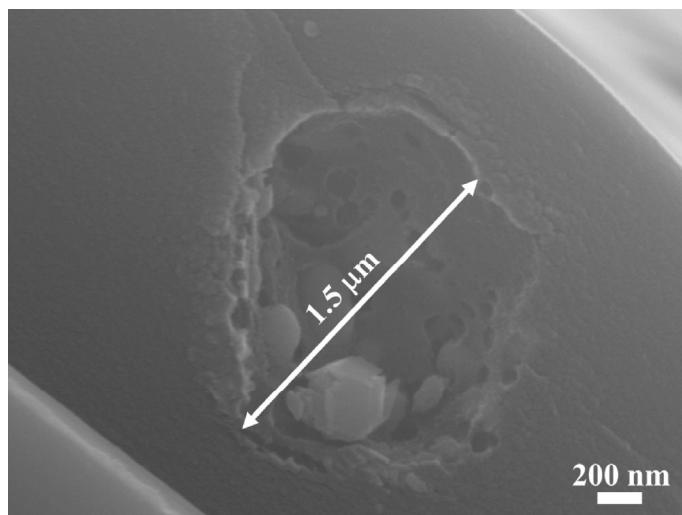


Figure S5 SEM cross-section image of carbon/Sn QDs microelectrode.

Table S1 The electrochemical performance of other nanocarbon-based MSCs

Precursor	Atmosphere	Electrolyte	Specific capacitance	Refs.
SPR-220 photoresist	H ₂ /Ar (10%/90%)	Ionogel	0.6 mF·cm ⁻² at 0.01 V·s ⁻¹	[S1]
SPR-220-7 photoresist	H ₂ /Ar (10%/90%)	3.5 M KCl aqueous	3.5 mF·cm ⁻² at 0.01 V·s ⁻¹	[S2]
TiC	Cl ₂	1 M NEt ₄ BF ₄	1.5 mF·cm ⁻² at 0.1 V·s ⁻¹	[S3]
Activated carbon/PTFE	—	1 M Et ₄ BF ₄	2.1 mF·cm ⁻² at 0.001 V·s ⁻¹	[S4]
CNTs	—	Ionogel	0.43 mF·cm ⁻² at 0.1 V·s ⁻¹	[S5]
Polyimide	—	PVA-H ₃ PO ₄	0.8 mF·cm ⁻² at 0.01 V·s ⁻¹	[S6]

References

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