

Supporting information

Novel dual-layered cathode-supported hollow fibers for light weight micro-tubular solid oxide fuel cells with active cathode functional layer

Xiuxia Meng^a, Naitao Yang^{a,*}, Xun Gong^a, Yimei Yin^b, Zi-Feng Ma^{b*}, Xiaoyao Tan^c,

Zongping Shao^d, Shaomin Liu^{d*}

^a School of Chemical Engineering, Shandong University of Technology, Zibo 255049, China

^b Institute of Electrochemical and Energy Technology, Department of Chemical Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

^c Department of Chemical Engineering, Tianjin Polytechnic University, Tianjin300387, China

^d Department of Chemical Engineering, Curtin University, Perth, WA 6845, Australia

* Corresponding author

Email address: naitaoyang@126.com; zfma@sjtu.edu.cn; shaomin.Liu@curtin.edu.au

Tel: +86-533-2786292; +61-08-92669056; Fax: +86-533-2786292; +61-08-92662681

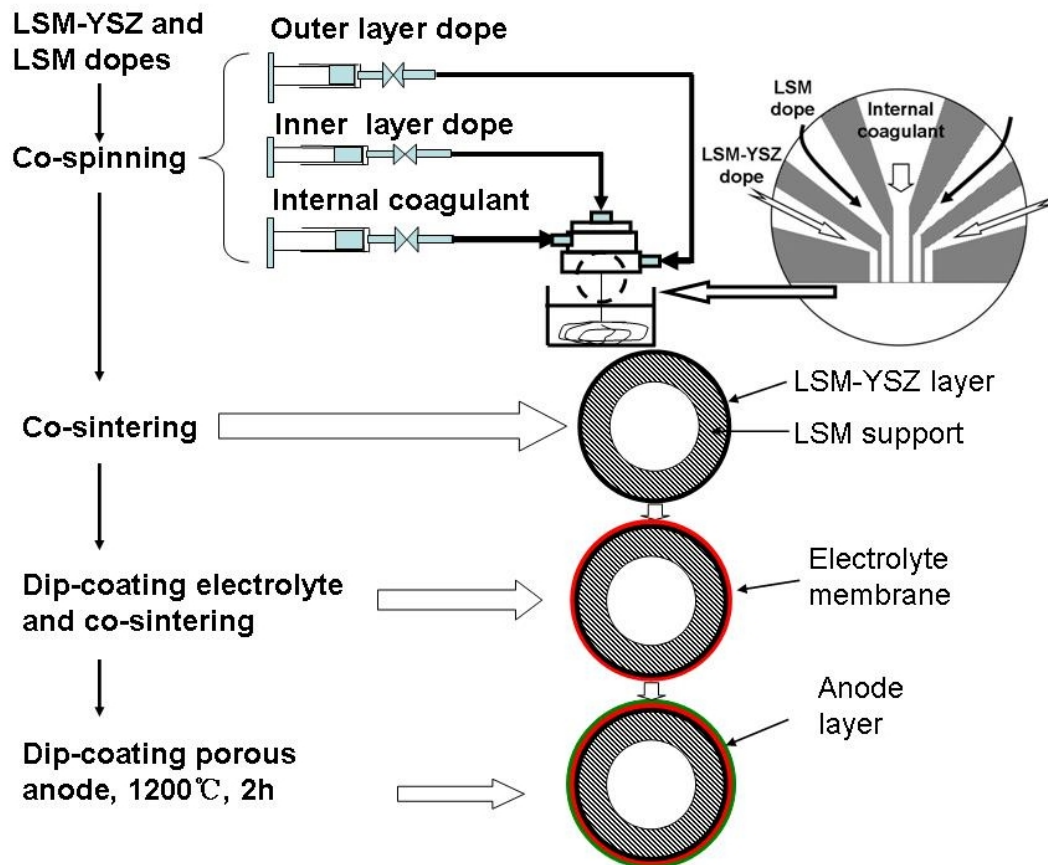


Figure S1 A flowchart illustrating the processing procedures to prepare the dual-layer LSM-YSZ/LSM hollow fiber and the supported MT-SOFC.

Table S1 Spinning parameters for dual-layer LSM-YSZ/LSM hollow fibers

Layers		LSM (inner)	LSM-YSZ (outer)
	LSM	48.6	31.32
	YSZ	0	20.88
Mass ratio (wt.%)	PESf	9.5	8.7
	NMP	33.3	39.1
	Ball graphite	8.6	0
Viscosity (mPa·s)		45800	4100
Spinning rate (mL min ⁻¹)		10	1
Internal coagulant (mL min ⁻¹)			14
Air-gap(cm)			10