

Support Information for

Compositing Fullerene-Derived Porous Carbon Fibers with Reduced Graphene Oxide for Enhanced ORR Catalytic Performance

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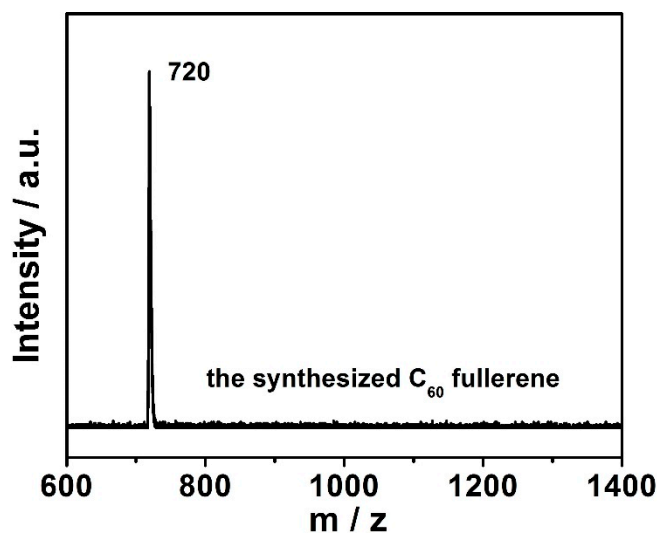


Figure S1 LDI-TOF mass spectrum of the synthesized C₆₀ fullerene.

Table S1 Surface compositions of the as-prepared samples from XPS tests.

Samples	C (at.%)	O (at.%)
GO	74.74	25.26
FCFs	97.41	2.59
FCFs@GO	93.06	6.94
rGO	96.94	3.06
FPCFs	97.23	2.77
FPCFs@rGO	96.81	3.19

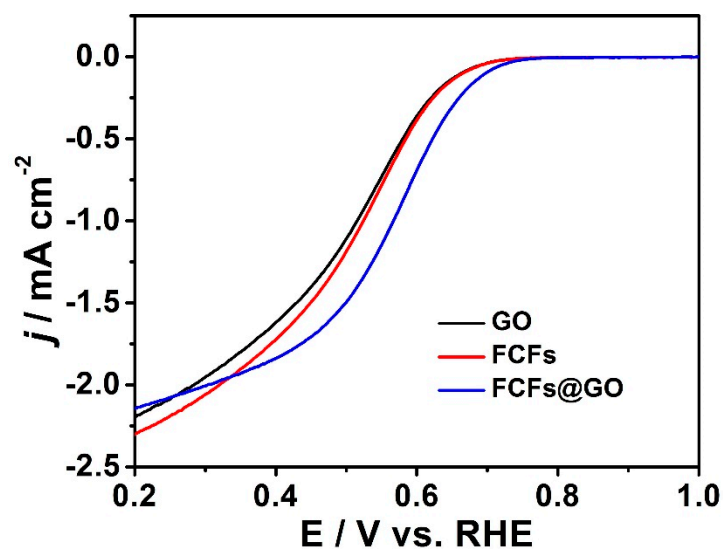


Figure S2 LSV curves of GO, FCFs and FCFs@GO with an rotation speed of 1600 rpm at 10 mV s⁻¹.

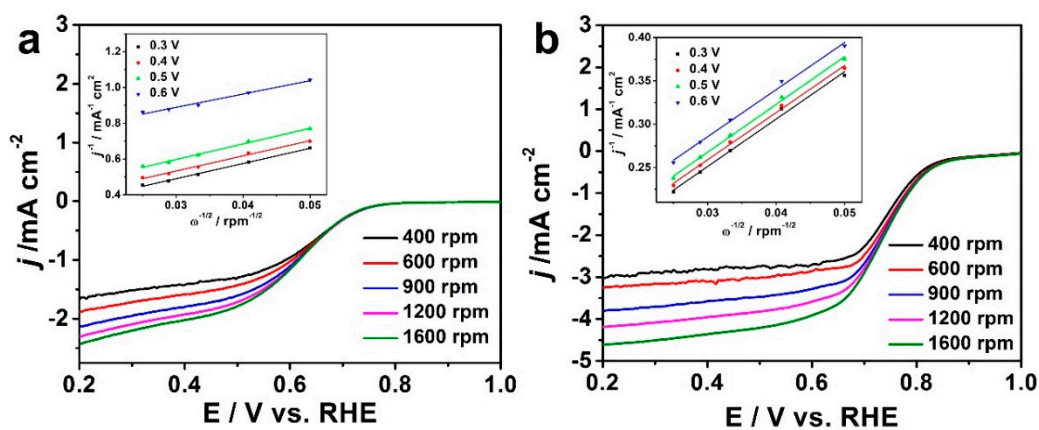


Figure S3 LSV curves at 10 mV s⁻¹ and different rotation rates from 400 to 1600 rpm, and the corresponding K-L plots at different potentials of rGO (a) and FPCFs (b).

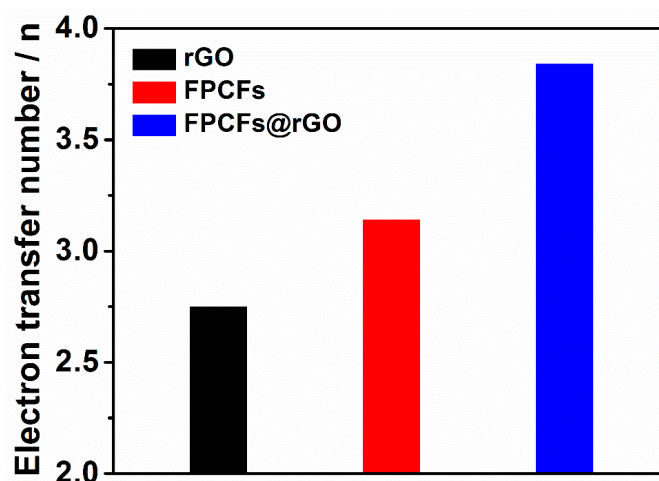


Figure S4 Average electron transfer number of rGO, FPCFs and FPCFs@rGO.

Table S2 Comparison of the ORR performance of FPCFs@rGO with recently reported metal-free catalysts in 0.1 M KOH solution.

Catalyst	E ₀ (V)	E _{1/2} (V)	Reference
FPCFs@rGO	0.895	0.762	This work
NOPHC ₁₀ -900	0.90	0.77	Appl. Catal. B Environ. 2019, 248, 239
MFC ₇₀ -150	0.814	0.704	Adv. Funct. Mater. 2018, 28, 1803701
MFC ₆₀ -130	0.82	0.76	Angew. Chem. Int. Ed. 2018, 57, 569
NCN-1000-5	0.95	0.82	Energy Environ. Sci. 2019,12, 322
NKCNPs-900	0.92	0.79	ACS Appl. Mater. Interfaces 2018, 10, 29448
DN-UGNR	0.957	0.808	Adv. Sci., 2018, 5, 1801375
D/G-CTs-1000	-	0.841	Nano Res. 2020, 13, 401
HHPC	0.90	0.78	Appl.Catal. B Environ., 2020, 265, 118603
PD/N-C	0.911	0.833	Angew. Chem. Int. Ed. 2019, 58, 3859