## Supporting information

## Self-assembled tubular nanotructures of tris(8quinolinolato)gallium(III)

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Supplemental figures:



Fig. S1 TEM image of  $\mathsf{Gaq}_3$  sub-microtubes.

с М	Element	Wt%	At%
	С	46.92	57.78
	0	10.19	9.42
	Ν	28.09	29.66
	Ga	14.81	3.14
VVh	~ <b>^</b> ₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	Ga Ga	
2	4 6	8 10	12 14
			keV

**Fig. S2** The energy-dispersive spectroscopy (EDS) analysis of Gaq<sub>3</sub> tubes, and the inset table is the element contents of Gaq<sub>3</sub> sub-microtubes.



**Fig. S3** (A) Fourier transform infrared spectroscopy (FTIR) spectrum and (B) powder X-ray diffraction (XRD) pattern of Gaq<sub>3</sub> sub-microtubes.



Fig. S4 Schematic representation for the formation growth process of the Gaq<sub>3</sub> sub-microtubes.



Fig. S5 The SEM image of Gaq<sub>3</sub> irregular solid structures fabricated at 328K.



Fig S6 The SEM image of grown Gaq<sub>3</sub> structures when the concentration of Gaq<sub>3</sub> solution is 45

mg/ml.



Fig. S7 The SEM image of grown  $Gaq_3$  structures when the concentration of  $Gaq_3$  solution is 10 mg/ml.



**Fig. S8** The SEM image of grown Gaq<sub>3</sub> rods rather than tubes are made in the absence of ethanol when the concentration of Gaq<sub>3</sub> solution is 36 mg/ml.