

Monodispersed Mesoporous SBA-15 with Novel Morphologies: Controllable Synthesis and Morphology Dependence of Humidity Sensing

Yongheng Zhu,^{a,c} Hui Li,^a Jiaqiang Xu,^{*a,b} Hao Yuan,^c Jingjie Wang,^a and Xinxin Li^b

^a.Department of Chemistry, College of Science, Shanghai University, Shanghai 200444, People's Republic of China

^b.State Key Laboratory of Transducer Technology, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences, Shanghai 200050, People's Republic of China

^c.Department of Physics, Shanghai University, Shanghai 200444, People's Republic of China

The data in Table S1 derived from Fig.6b was computed by linear regression algorithm. The linearity was defined as the square of correlation coefficient value (R^2) of linear fitting curve in the humidity range from 1% to 100% RH.

Sample	Fitting linear equation	Related coefficient	Standard deviation
S1	$y = -66.4x + 1985.4$	0.918	1320.12
S2	$y = -48.1x + 1416.7$	0.857	1289.52
S3	$y = -17.7x + 557.1$	0.943	274.96

Table.S1 The data computed by linear regression algorithm derived from Fig.6b.

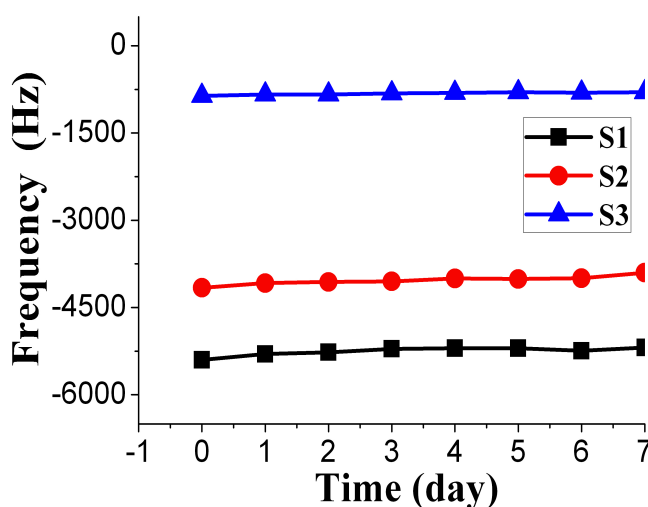


Fig.S1. The long-time frequency stability at 97.5%RH for the three sensors.

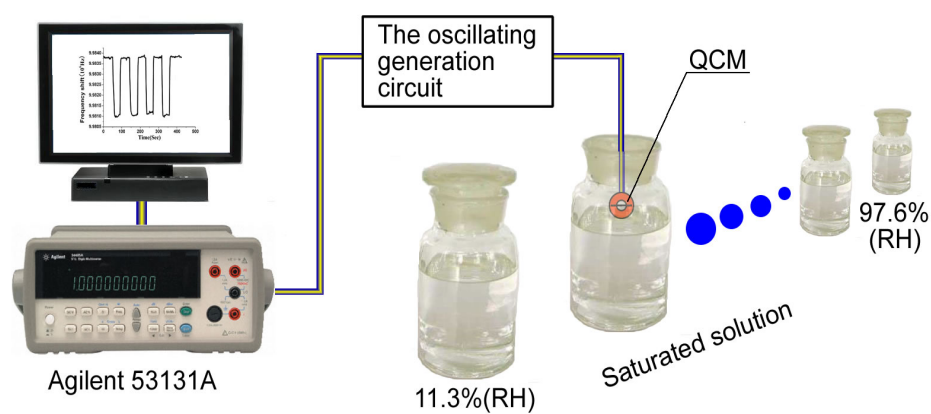


Fig.S2. The schematic diagram of the humidity testing setup for QCM.