

# High-Performance Methylsilsesquioxane Aerogels: Hydrolysis Mechanisms and Maximizing Compression Properties

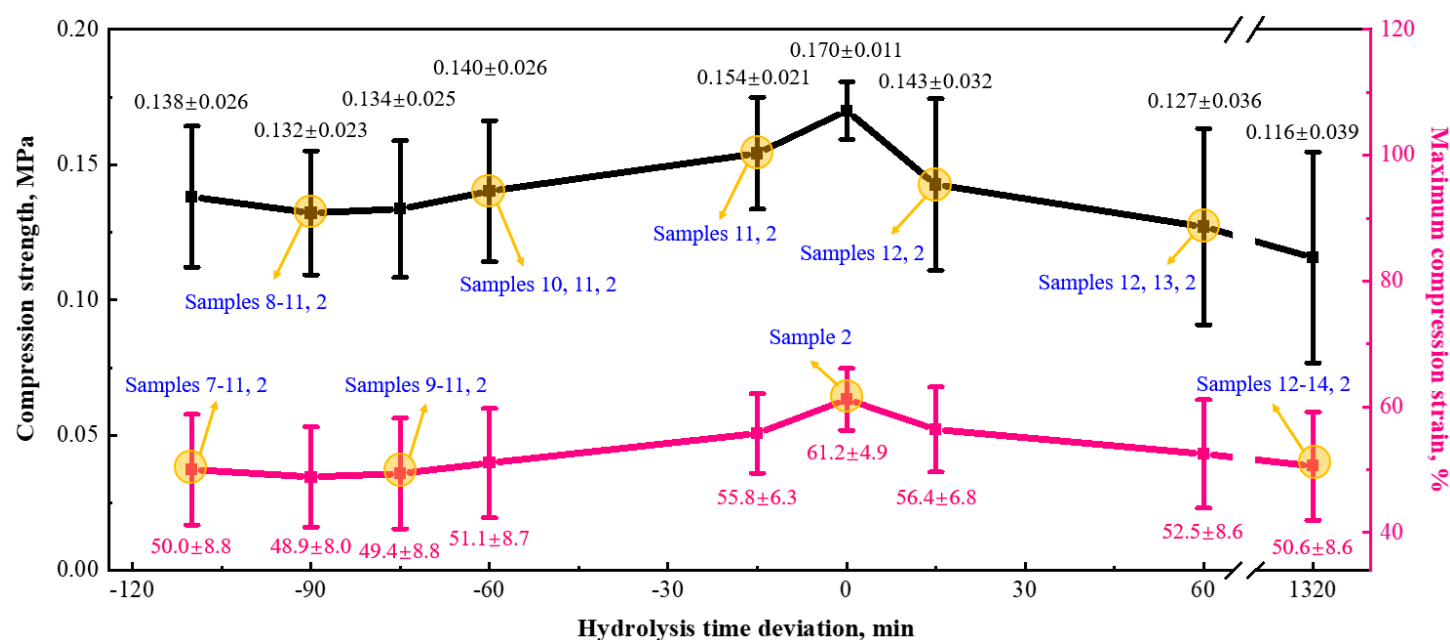
Guihua Zhang <sup>1,2</sup>, Chengdong Li <sup>1,2,\*</sup>, Yuxiang Wang <sup>1,2</sup>, Liangliang Lin <sup>1,2</sup> and Kostya (Ken) Ostrikov <sup>3</sup>

<sup>1</sup> Key Laboratory of Synthetic and Biological Colloids, Ministry of Education, School of Chemical and Material Engineering, Jiangnan University, Wuxi 214122, China;

<sup>2</sup> International Joint Research Center for Photoresponsive Molecules and Materials, School of Chemical and Material Engineering, Jiangnan University, Wuxi 214122, China;

<sup>3</sup> School of Chemistry and Physics and QUT Centre for Materials Science, Queensland University of Technology (QUT), Brisbane, QLD 4000, Australia.

\* Correspondence: li690612564@126.com



**Figure S1.** Effect of hydrolysis time ( $t_h$ ) deviation on the compression strength and maximum compression strain of the as-synthesized MSQ aerogels. Notes: the  $t_h$  deviation referred to the maximum difference between the actual  $t_h$  and the optimum  $t_h$  of 120 min. For instance, if the deviation of  $t_h$  was -15 min,  $t_h$  of all aerogel samples could be 120 min and 105 min. If the deviation of  $t_h$  was 60 min,  $t_h$  of aerogel samples could be 120, 135, and 180 min.