

Candidate application to the ISGS Board of Directors

Prof. Yajun Wang

Age: 45

Put here a recent picture please

Affiliation: Fudan University

Address: Room A5021, Chemistry Building,
Jiangwan Campus of Fudan University, 2025
Songhu Road, Yangpu District, Shanghai, P.R.
China, 200433



CV with main research interests

Prof./Dr. Yajun Wang received his BS (1996) and MS (1999) in Chemistry from Nankai University, China. He obtained his PhD in 2002 in Physical Chemistry from Fudan University, China. After that, he worked as a Research Fellow (2002-2012) with Professor Frank Caruso in the Department of Chemical and Biomolecular Engineering at The University of Melbourne. He was a recipient of the "Young 1000 talents program" of China (2012), and moved back to the Department of Chemistry at Fudan University in 2013. His main research interests include the sol-gel synthesis of nanostructured silica-based materials (e.g., zeolite, mesoporous silica, and chemically asymmetric silica nanoarchitectures) and application of these materials for drug delivery, (bio)catalysis, molecular separation and (bio)sensing. He has co-authored some 80 journal articles with total ISI citations over 5500 and an "h" index of 38.

5 representative publications

- (1) C. Deng, Q. Zhang, C. Fu, F. Z. Zhou, W. L. Yang, D. L. Yi, X. D. Wang, Y. Tang, F. Caruso, **Y. J. Wang***, Template-Free Synthesis of Chemically Asymmetric Silica Nanotubes for Selective Cargo Loading and Sustained Drug Release, *Chemistry of Materials*, 2019, 31, doi: 10.1021/acs.chemmater.9b01530.
- (2) D. L. Yi, Q. Zhang, Y. H. Liu, J. Y. Song, Y. Tang, F. Caruso, **Y. J. Wang***, Synthesis of Chemically Asymmetric Silica Nanobottles and Their Application for Cargo Loading and as Nanoreactors and Nanomotors, *Angewandte Chemie-International Edition*, 2016, 55, 14733-14737.
- (3) D. L. Yi, C. L. Xu, R. D. Tang, X. H. Zhang, F. Caruso, **Y. J. Wang***, Synthesis of Discrete

Alkyl-Silica Hybrid Nanowires and Their Assembly into Nanostructured Superhydrophobic Membranes, *Angewandte Chemie-International Edition*, 2016, 55, 8375-8380.

- (4) **Y. J. Wang**, Y. Yan, J. W. Cui, L. Hosta-Rigau, J. K. Heath, E. C. Nice, F. Caruso*, Encapsulation of Water-Insoluble Drugs in Polymer Capsules Prepared Using Mesoporous Silica Templates for Intracellular Drug Delivery, *Advanced Materials*, 2010, 22, 4293.
- (5) **Y. J. Wang**, Y. Tang,* A. G. Dong, X. D. Wang, N. Ren, W. Shan, Z. Gao, Self-supported Porous Zeolite Membranes with Sponge-like Architecture and Interconnected Microtubes, *Advanced Materials*, 2002,14, 994-997.

Statement of interest

As a scientist with active research in sol-gel chemistry for over two decades, I am very delighted to work together with the ISGS board members to serve the ever expanding ISGS community in an extraordinarily multidisciplinary area of research. I am particularly interested to associate with the ISGS community in research areas ranging from porous materials, self-assembly chemistry, (bio)sensing to drug delivery.