

Author Profile







S. Ma

The author presented on this page has published his **10.** *article* in Angewandte Chemie in the last 10 years. This work was featured on the inside back cover of Angewandte Chemie: "A Metal-Organic Framework Based Methane Nanotrap for the Capture of Coal-Mine Methane": Z. Niu, X. Cui, T. Pham, P. C. Lan, H. Xing, K. A. Forrest, L. Wojtas, B. Space, S. Ma, Angew. Chem. Int. Ed. 2019, 58, 10138; Angew. Chem. 2019, 131, 10244.



Shengqian Ma March 19, 1981 Professor of Chemistry, University of South Florida (USA) sqma@usf.edu

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ORCID:	0000-0002-1897-7069
Education:	2003 BS, Jilin University (China)
	2008 PhD with Prof. Hong-Cai Zhou, Miami University (Ohio; USA)
	2008–2010 Postdoctoral Fellow with Dr. Dijia Liu, Argonne National Laboratory (USA)
Awards:	2008 Young Investigator Award, ACS Division of Inorganic Chemistry; 2009 IUPAC Prize for
	Young Chemists, International Union of Pure and Applied Chemistry; 2014 NSF CAREER
	Award
Research:	Nanospace engineering of advanced porous materials including metal-organic framework
	(MOF), covalent organic framework (COF), and porous organic polymer (POP) for
	applications in gas storage/separation, catalysis, environmental remediation, and biomedicine
Hobbies:	Traveling, stamp collecting, fishing

My biggest motivation is to make something that can be utilized in people's daily life or industry. My worst nightmare is having to go back to high school and take the National College Entrance Examination again.

The best advice I have ever been given is actions speak louder than words.

I celebrate success by enjoying a nice meal with my family.

My top three films of all time are Farewell My Concubine (霸王别姬), Forrest Gump, and Titanic. My favorite motto is "No matter what happens, keep on working hard; trust yourself, and never give up".

The most significant scientific advance of the last 100 years has been molecular biology.

What I look for first in a publication is the significance of the work in the field.

My favorite piece of research is the immobilization of enzyme/protein molecules into MOF/COF.

The most important thing I learned from my parents is integrity and to be modest.

My favorite place on earth is Hawaii.

If I were not a scientist, I would be a historian or a geographer.

My most exciting discovery to date has been the porous organic polymer-based nanotraps for water purification.

My 5 top papers:

Date of birth:

Position: E-mail:

- 1. "Immobilization of MP-11 into a Mesoporous Metal-Organic Framework, MP-11@mesoMOF: A New Platform for Enzymatic Catalysis": V. Lykourinou, Y. Chen, X.-S. Wang, L. Meng, T. Hoang, L.-J. Ming, R. L. Musselman, S. Ma, J. Am. Chem. Soc. 2011, 133, 10382. (The first successful immobilization of an enzyme molecule into a MOF.)
- 2. "Mercury nano-trap for effective and efficient removal of mercury(II) from aqueous solution": B. Li, Y. Zhang, D. Ma, Z. Shi, S. Ma, Nat. Commun. 2014, 5, 5537. (A new benchmark for mercury removal and a foundation for developing porous organic polymerbased nanotraps for applications in wastewater treatment and environmental cleanups.)
- 3. "Inserting CO2 into Aryl C-H Bond of Metal-Organic Framework: CO2 Utilization for Direct Heterogeneous C-H Activation": W.-Y. Gao, H. Wu, K. Leng, Y. Sun, S. Ma, Angew. Chem. Int. Ed. 2016, 55,

5472; Angew. Chem. 2016, 128, 5562. (The first example of utilizing CO₂ for heterogeneous C-H activation and carboxylation reactions on MOFs.)

- "Flexibility Matters: Cooperative Active Sites in Covalent Organic Framework and Threaded Ionic Polymer": Q. Sun, B. Aguila, J. Perman, N. Nguyen, S. Ma, J. Am. Chem. Soc. 2016, 138, 15790. (A new strategy for designing bifunctional catalysts with double-activation behavior and an avenue to multicapable systems that mimic biocatalysis.)
- "Metal-Organic Framework Anchored with a Lewis Pair as a New Paradigm for Catalysis": Z. Niu, W. D. C. B. Gunatilleke, Q. Sun, P. C. Lan, J. Perman, J.-G. Ma, Y. Cheng, B. Aguila, S. Ma, Chem 2018, 4, 2587. (MOF chemistry was melded with main-group catalysis, offering enormous potential for applications in catalysis and beyond.)

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