

Department: School of Chemistry and Molecular Engineering

Professional field: Applied Chemistry, Dyes, Supramolecular Chemistry

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Profile

Xiang MA received his B.S. degree in Chemical Engineering and Technology from Tianjin University (Tianjin, China) in 2003. He received his Ph. D. degree in Applied Chemistry from East China University of Science & Technology (ECUST) (Shanghai, China) in 2008 under the direction of Prof. He TIAN (member of the Chinese Academy of Science) at the Institute of Fine Chemicals at ECUST. Dr. Ma worked as a Research Associate on hybrid gold nanomaterials at Liquid Crystal Institute at Kent State University (Ohio, US) from Jan. 2011 to Jul. 2012 and as a Visiting Professor at UC Berkeley from Jan. 2017 to Mar. 2017. He is the Fellow of Royal Society of Chemistry (FRSC). He became a full professor at ECUST in 2016. His current research interests mainly focus on functional supramolecular machines, switches, stimuli-responsive supramolecular polymers and organic photo-electro material based on dyes. Dr. Ma has published 110 papers in international journals with citation over 4900 and an H-index of 35. Prof. Ma won the National Science Fund for Excellent Youth Scholars of China in 2017 and Shanghai Young scientific and technological talents in 2018. Now he serves as Supramolecular Chemistry Committee Member of Chinese Chemical Society, Executive Editor of Dyes and Pigments (IF 4.6), Editor Board Member of Chinese Chemical Letters (SCI, IF 4.6), Young-Editor Board Member of Science China Chemistry (SCI, IF 6.3) etc.

Research Field

Functional supramolecular machines, switches, stimuli-responsive supramolecular polymers and organic photo-electro material based on dyes.

Research results and selected published papers

1. Ting Zhang, Xiang Ma*, Hongwei Wu, Liangliang Zhu, Yanli Zhao and He Tian*. Molecular engineering for metal-free amorphous room-temperature phosphorescent materials. *Angew. Chem. Int. Ed.*, 2020, DOI: 10.1002/anie.201915433.
2. Jie Wang, Zizhao Huang, Xiang Ma* and He Tian. Visible - Light - Excited Room - Temperature Phosphorescence in Water by Cucurbit[8]uril - Mediated Supramolecular Assembly. *Angew. Chem. Int. Ed.*, 2020, DOI: 10.1002/anie.201914513.
3. Xiang Ma*, Jie Wang and He Tian*. Assembling-Induced Emission: An Efficient Approach for Amorphous Metal-Free Organic Emitting Materials with Room-Temperature Phosphorescence. *Acc. Chem. Res.*, 2019, 52, 738-748.
4. Dengfeng Li, Feifei Lu, Jie Wang, Wende Hu, Xiao-Ming Cao, Xiang Ma* and He Tian. Amorphous Metal-Free Room-Temperature Phosphorescent Small Molecules with Multicolor Photoluminescence via a Host-Guest and Dual-Emission Strategy. *J. Am. Chem. Soc.*, 2018, 140, 1916-1923.
5. Xiang Ma*, Chao Xu, Jie Wang and He Tian*. Heavy-Atom-Free Amorphous Pure Organic Polymers with Efficient Room-Temperature Phosphorescence Emission. *Angew. Chem. Int. Ed.*, 2018, 57, 10854-10858.
6. Qi-Wei Zhang, Dengfeng Li, Xin Li, Paul White, Jasmin Mecinovic, Xiang Ma*, Hans Ågren, Roeland Nolte, He Tian*. Multicolor Photoluminescence Including White-Light Emission by a Single Host-Guest Complex. *J. Am. Chem. Soc.*, 2016, 138 (41), 13541-13550.
7. Hui Chen, Xiang Ma*, Shuaifan Wu and He Tian*. A rapid self-healing supramolecular polymer hydrogel with photo-stimulating room temperature phosphorescence (RTP) responsiveness. *Angew. Chem. Int. Ed.*, 2014, 53, 14149-14152.
8. Zhiyi Yuan, Jie Wang, Lu Chen, Lei Zou, Xueqing Gong, Xiang Ma*. Methanol Dynamically Activated Room-Temperature Phosphorescence from a Twisted 4-Bromobiphenyl System. *CCS Chem.*, 2020, 2, 1-11.