

Donglei ''Emma'' Fan Associate Professor Materials Science and Engineering Progam Department of Mechanical Engineering

Dr. Donglei "Emma" Fan is an Associate Professor in the Department of Mechanical Engineering and the Graduate Advisor of the Materials Science and Engineering Program at The University of Texas at Austin. She holds the Robert & Jane Mitchell Endowed Faculty Fellowship in Engineering since 2017. Prof. Fan received her bachelor's degree in chemistry in the Department of Intensive Instruction (DII), an honor program for gifted undergraduate students, of Nanjing University (NJU) in 1999, master's (2003) and doctorate (2007) degrees in Materials Science and Engineering from the Johns Hopkins University (JHU). She also obtained another master's degree in Electrical Engineering from JHU in 2005. She joined the University of Texas at Austin in 2010 as an Assistant Professor and was promoted to Associate Professor in 2016. Her research focuses on exploiting the fundamental magnetic, optical, chemical, and mechanical properties of materials for innovative design, manufacturing, and applications of nanomaterials in nanorobotics, biochemical sensing, live cell stimulation, and flexible selfpowered devices. Prof. Fan's research has spurred a series of publications including Nature Nanotechnology, Nature Communications, Science Advances, the Proceedings of National Academy of Sciences, Physical Review Letters, Advanced Materials, and ACS Nano. She has five granted patents and a few pending patents. In 2012, Prof. Fan received the prestigious National Science Foundation CAREER Award. Her work on bottom-up assembling of inorganic nanomotors was selected as the #3 of "10 discoveries that will shape the future in 2014" by British Broadcasting Corporation (BBC) Focus magazine. She was featured by "Woman in Nanoscience," an NSF supported scientific blog highlighting achievements of woman scientists in US, and honored as a Recognized Mentor by the Siemens Foundation in 2012.