The group led by Prof. **Yongmin Liu** is dedicated to interdisciplinary research that bridges engineering, optics, applied physics and nanoscience. Our research is a synergetic integration of fundamental science, nano material/structure design, and prototype device development. The specific research areas include metamaterials, plasmonics, nano optomechanics, transformation optics, quantum optics and nonlinear optics. We are developing novel nano optical materials and devices for various applications including next-generation optical information processing, super-resolution imaging, efficient light harvesting and ultrasensitive biomedical detection.

Prof. Liu joined Northeastern University as an Assistant Professor in 2012, with a joint appointment in the Departments of Mechanical & Industrial Engineering and Electrical & Computer Engineering. He received his Ph.D. degree in Applied Science and Technology from the University of California at Berkeley in 2009, and both his M.S. and B.S. degree in Physics from Nanjing University (Nanjing, China) in 2003 and 2000, respectively. Prof. Liu has authored and co-authored over 30 journal papers including Science, Nature, Nature Nanotechnology, Nature Communications, Physical Review Letters and Nano Letters, with an H-index of 20 and total citations over 1300. ** y.liu@neu.edu