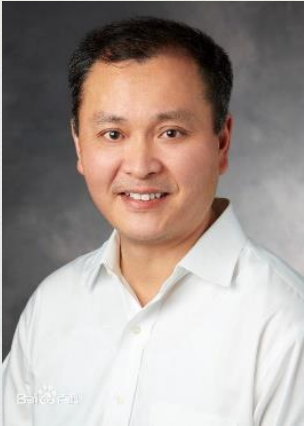




## 学术报告



### Nanoscience, Biological Imaging and Renewable Energy

时间：2019.12.25（周三）上午 9:00

地点：研究生楼 513 会议室

戴宏杰，纳米材料学家，斯坦福大学终身教授，中国科学院外籍院士，美国艺术与科学学院院士、美国国家科学院院士、美国国家医学院院士。

戴宏杰长期从事碳纳米材料的生长合成、物理性质研究、纳米电子器件研发，以及纳米生物学以及能源材料等方面的研究。目前已在 *Nature, Science, Nat. Biotechnol., Nat. Commun., Nat. Methods, J. Am. Chem. Soc., Angew. Chem. Int. Ed., Adv. Mater.* 等国际顶尖 SCI 期刊发表论文 300 多篇，H-index=150，总引用约 120,000 次，Thomson Reuters 全球化学家中排名第七位。

### Nanoscience, Biological Imaging and Renewable Energy

Hongjie Dai, Stanford University

This talk present our recent work in several areas of nanosciences. I will first briefly review our earlier work of carbon based nanomaterials, and then focus on fluorescence biological imaging in the newly coined 1000-1700 nm NIR-II window to benefit from suppressed light scattering at long wavelengths. I will show in vivo NIR- II imaging with millimeter tissue depth, single-cell spatial resolution, and real-time temporal resolution using a wide range of fluorescent/luminescent probes emitting > 1000 nm including carbon nanotubes, quantum dots, rare-earth down-conversion nanoparticles, and donor-acceptor organic molecules. Our latest work on NIR-II light sheet microscopy (LSM), voltage-sensitive dyes for neuroscience, and rare-earth probes for cancer immuno-therapy will be presented. If time permits, I will briefly show our recent work on rechargeable Al ion battery and solar driven seawater splitting.

欢迎感兴趣老师和同学们参加！

海南医学院急救与创伤研究教育部重点实验室

海南医学院急诊创伤学院功能材料与分子影像研究团队

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