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当今世界正在进入科技创新密集和新兴产业发展的新时代。在此时代背景下，作为一门学科间高度融合、飞速发展的新兴交叉学科，先进材料与信息和能源科技并称为当今科学技术发展的三大支柱，而先进材料的产业化又对未来整个国民经济起着关键性的支撑作用。

正是由于先进材料领域具有的广阔经济前景与举足轻重的基础地位，世界各国尤其是发达国家都把先进材料的科学研究和产业开发放在十分重要而突出的战略位置，我国也已将其列为战略性新兴产业涉及的科技领域。为把握和引领科技革命和产业变革的新机遇，我们坚定自主创新，于2012年7月在南京工业大学组建先进材料研究院（Institute of Advanced Materials, IAM）。

先进材料研究院将面向南工建设“综合性、研究型、全球化”大学与“国家级江苏先进生物与化学制造协同创新中心”建设的发展战略，立足前沿、先而试行、进且益善，打造科学前沿创新的试验区、技术研发成果的孵化器、海外高端人才的缓冲带、新型人才培养的示范田、国际交流合作的桥头堡、学科产业发展的智囊库，从而带动我国在科技领域参与全球竞争、谋求跨越式发展，以创新驱动经济结构优化升级，促进科技与经济社会发展紧密结合，推动我国相关产业向全球价值链高端跃升。

研究院自成立以来，已吸引90余名海外高端人才与杰出青年学者，并获得国家、省部级110余项科研项目以及平台专项建设支持；获批建设江苏省柔性电子重点实验室；“钙钛矿型太阳能电池的基础研究”获得国家重大科学研究计划项目立项；成功自主设置“光电功能与信息材料”二级学科博士学位授权点，致力于具有IAM特色的研究生培养。感谢上级领导、有关部门和国内外同行对我们的关怀和帮助，欢迎各界同仁、学子加盟IAM。让我们以梦为马、携手并进，坚持IAM永恒的事业，趋向无比辉煌、无比光明的未来！



Professor Dr Wei HUANG  
Academician  
Chinese Academy of Sciences  
Director-General, Key Laboratory for  
Organic Electronics & Information  
Displays(KLOEID), and Institute of  
Advanced Materials (IAM), Nanjing  
Tech University  
(NanjingTech, 2011 University)

A handwritten signature in black ink, appearing to be the name 'Wei Huang' in a stylized cursive script.

# •Institute of Advanced Materials (IAM)

## •Foreword

Nowadays, the world is entering a new era of science and technology innovation and the development of new industries, advanced materials has become one of the pillars of sci-tech development. In the future, the industrialization and commercialization of advanced materials will play a crucial role in boosting the development of national economics, which is listed as a strategic emerging industry in China.

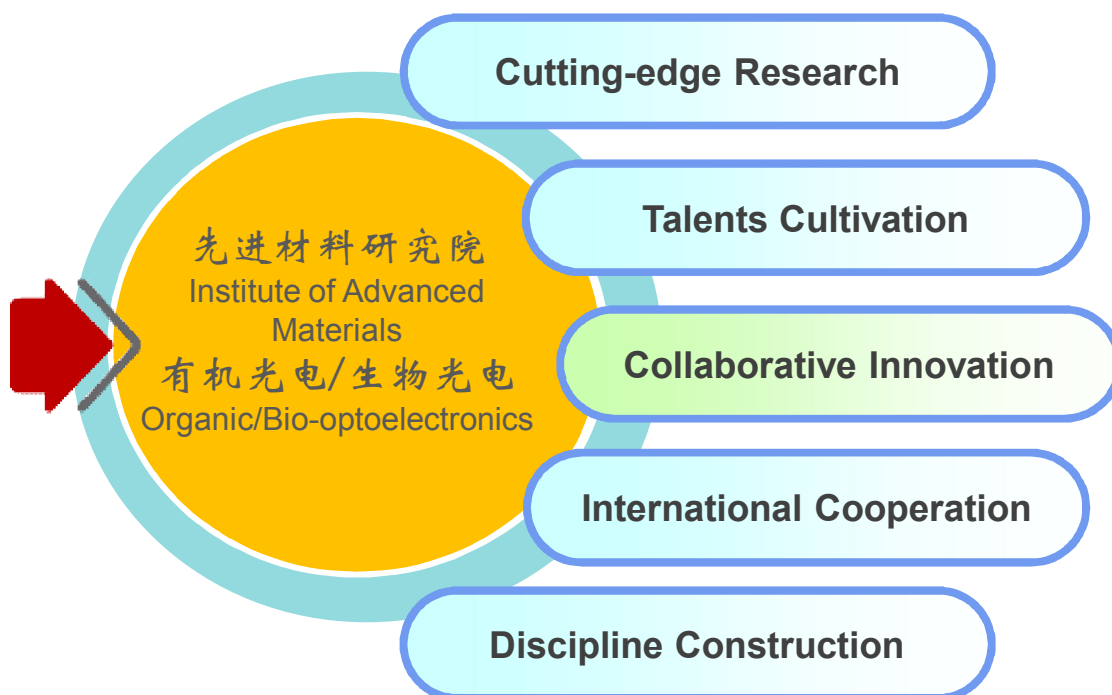
To take the leadership in sci-tech and industrial revolution, we are dedicated to independent innovation. Bearing this mission in mind, Institute of Advanced Materials (IAM) was established in NanjingTech, July, 2012.

In line with Nanjing Tech's strategies of "constructing a comprehensive, research-oriented and globalized university" and establishing a "collaborative innovation center for advanced biological and chemical manufacturing". IAM focuses on cutting-edge scientific research, aims to be a test zone for innovation trials, an incubator for sci-tech industrialization, a buffer zone for overseas experts, a platform for international cooperation, and a talent pool for personal training. IAM will seek opportunities to contribute to China's strength in global competition and leapfrog development and to optimize China's economic infrastructure.

IAM will bring Jiangsu province to be a national or even global base for research, development, industrialization and manufacture of organic optoelectronics, organic electroluminescence display and OLEDs.

Since being founded, IAM has brought in more than 90 overseas talents and set up a Key Laboratory for Flexible Electronics in Jiangsu Province. It has undertaken over 110 projects, including a National Key research project-Fundamental Studies of Perovskite Solar Cells.

We would like to take this opportunity to express our sincere appreciation to funders, partners, peer researchers for their help and concern! Welcome to join IAM as a faculty or a student. May us fulfill our dream, focus on our long term goal, progress step by step, and have a prosperous future!



# •Institute of Advanced Materials (IAM) •历史源流

**1996**

新加坡材料研究院有机电子与信息  
显示实验室

Laboratory of Organic Electronics and  
Information Display, IMRE



1

**2002**

复旦大学先进材料研究院

Institute of Advanced Materials (IAM), Fudan  
University



2



3

**2006**

南京邮电大学信息材料与纳米技术研究院  
Institute of Information Materials and  
Nanotechnology, Nanjing University of Posts and  
Telecommunications

**2012**

南京工业大学

海外人才缓冲基地（先进材料研究院）

Buffer Base for Overseas Talents (B<sup>2</sup>OT), Institute of  
Advanced Materials (IAM), Nanjing Tech

**2013**

国家级江苏先进生物与化学制造协同创新中心

Jiangsu National Synergetic Innovation Center for  
Advanced Materials (SICAM)

**2014**

江苏省柔性电子重点实验室

Key Laboratory of Flexible Electronics(KLOFE)

**2015**

国家级柔性电子材料与器件国际联合研究中心

International Research Center of Flexible Electronics  
(CoFE)

**2015**

国家级柔性电子国际合作联合实验室

Joint International Laboratory of Flexible Electronics  
(LoFE)



5



4

**2010**

有机电子与信息显示国家重点实验室培育基地  
Organic Electronics & Information Displays State Key  
Laboratory cultivation base

•Institute of Advanced Materials (IAM)  
•Milestones

2014年，团队创建的柔性电子重点实验室，获江苏省高校重点实验室项目立项支持，为团队跨越式发展提供重要支撑和推动力量。重点实验室将聚焦“柔性电子”，大力推动这一领域的人才培养、学科发展、科技创新。

In 2014, Key Laboratory for Flexible Electronic of Jiangsu Province was established. It focuses on seeking solutions for key research challenges in Flexible Electronics, boosting innovation, development of disciplines and personnel training.

团队支撑的柔性电子研究部，成为该校牵头建设的首批国家级协同创新中心----“国家级江苏先进生物与化学制造协同创新中心”的重要组成部分

The centre of Flexible Electronics, an important division of Jiangsu National Synergetic Innovation Center for Advanced Materials - the first batch of national collaborative innovation center.

国内首家在战略性新兴产业领域的国家重点实验室培育基地

The first state key laboratory cultivation base for China's strategic emerging industries.

# Institute of Advanced Materials (IAM) 学科建设 Discipline Construction

◆IAM团队已获得央地共建平台建设经费支持。

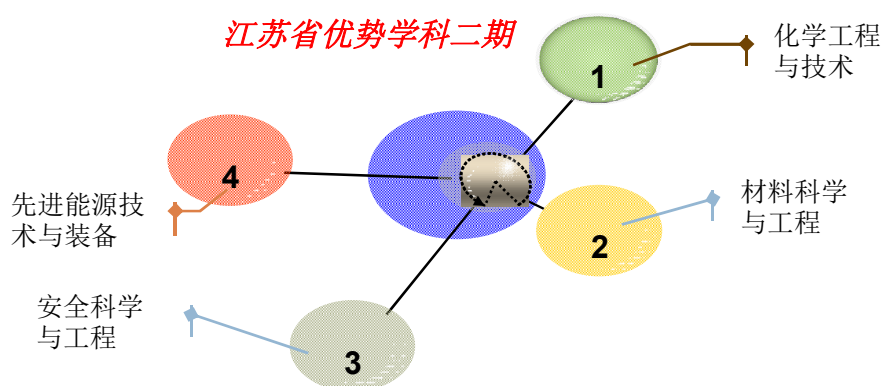
IAM has obtained funds from the platform of central and local governments.

◆获批自主设置“光电功能与信息材料”二级学科博士学位授权点。

IAM is authorized autonomously to set up Doctoral degree authorization centers on Optoelectronics and Information Materials.

◆联合相关学院申报的化学工程与技术、材料科学与工程、安全科学与工程、先进能源技术与装备，均获得江苏省优势学科建设工程项目二期的资助。

In cooperation with partners, IAM has gained support from Jiangsu Province for the development of Chemical Engineering and Technology, Material Science and Engineering, Safety Science and Engineering, Advanced Energy Technology and Devices.



获批自主设置“光电功能与信息材料”二级学科博士学位授权点





•Institute of Advanced Materials (IAM)  
•人才培养 Talent Cultivation

为研究院未来科学研究、技术创新、服务社会，储备有机光电子和生物光电子学科等领域的优秀人才。

IAM is developed as a talents pool in organic optoelectronics, bio-optoelectronics ,and other disciplines for advancing scientific research, technical innovation and social service.

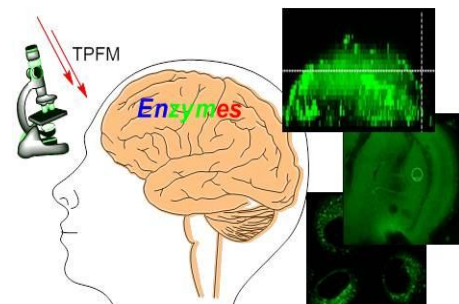
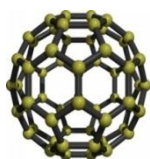
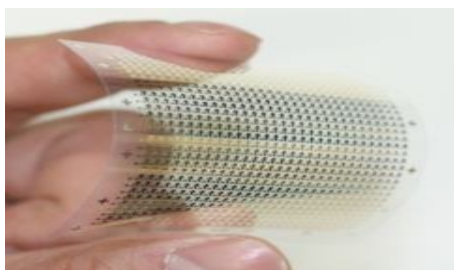
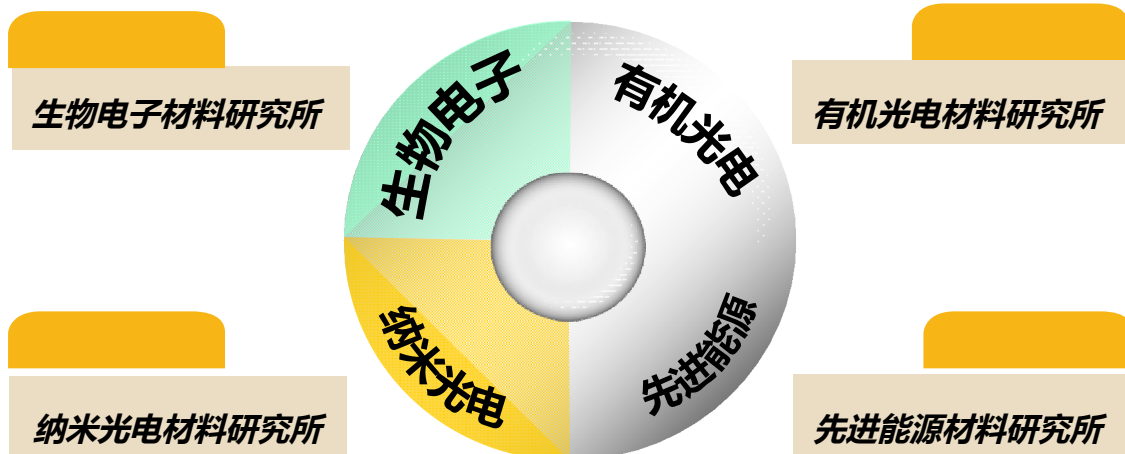


# Institute of Advanced Materials (IAM) 科学研究 Research and Development

IAM以有机光电材料、纳米光电材料、生物电子材料、先进能源材料等为方向，设立有机光电材料研究所、纳米光电材料研究所、生物电子材料研究所以及先进能源材料研究所，致力于以有机/生物光子学为中心、以先进材料为主线，涉及物理、化学、材料、生物、电子、能源等多学科领域的新兴交叉学科的科学研究所。

IAM has established four research-oriented institutes for Organic optoelectronics, Optoelectronic Nanomaterials, Bioelectronic Materials and Advanced Energy Materials. IAM does multidisciplinary research on advanced materials with a primary focus on organic and bio-optoelectronics, which underpins various disciplines, including physics, chemistry, materials, biology, electronics and energy.

## 先进材料研究院





# Institute of Advanced Materials (IAM)

## 科研项目 Research Projects

自创建以来，获得国家科技部、国家自然科学基金优秀青年科学基金、面上项目、中组部“青年千人计划”、教育部“长江学者奖励计划”、教育部“新世纪优秀人才支持计划”等52项国家级科研项目与人才计划；获得省自然科学基金资助、江苏省杰出青年基金、江苏省特聘教授、江苏省“双创计划”、江苏省“333”工程、江苏省高校自然科学研究面上项目等61项省级科研项目与人才计划。

IAM has undertaken 52 research projects supported by national foundation, and has run 61 research programs supported by provincial foundation.

国家级科研项目52项; 省级科研项目61项 (2012-2015年度)  
Provincial programs (2012-2015); National programs (52)  
supported by...

□中组部“青年千人计划”5项

Youth Thousand Talents Program, Communist Party Central Committee's Organization Department (5)

□中组部“千人计划”2项

Thousand Talents Program Distinguished Expert

□国家重大科学研究计划项目1项

National Key Research Project (1)

□教育部“长江学者奖励计划”1项

“Cheung Kong Scholars Program”, Ministry of Education (1)

□教育部新世纪优秀人才支持计划1项

New Century Excellent Talents Program, Ministry of Education (2)

□国家优秀青年科学基金项目1项

Winner of National Natural Science Foundation--Outstanding Youth Foundation (1)

□国家杰出青年科学基金项目2项

Winner of The National Science Fund for Distinguished Young Scholars(2)

□国家自然科学基金面上项目8+6=14项

National Natural Science Fund for General Program (14)

□国家自然科学基金青年科学基金项目8+18=26项

National Natural Science Fund for Young Scholars (26)

□国家自然科学基金海外及港澳学者合作研究基金1+1=2项

National Natural Science Fund for Overseas and Hong Kong, Macao Scholars (2)

□江苏省杰出青年基金3+1=4项

Natural Science Fund of Jiangsu Province for Distinguished Young Scholars (4)

□江苏省自然科学基金面上项目3+2=5项

Natural Science Fund of Jiangsu Province for General Program (5)

□江苏省自然科学基金青年基金项目13+6=19项

Natural Science Fund of Jiangsu Province for Young Scholars (19)

□江苏省高校自然科学研究面上项目9+6=15项

Natural Science Fund of Jiangsu Province for Higher Education Institutions (15)

□江苏特聘教授9+5=14项

Specially Appointed Professors of Jiangsu Province (14)

□江苏省“双创计划”4项

"Innovation & Entrepreneurship plan" of Jiangsu Province (4)

□江苏省“333”工程3项

"333" Program of Jiangsu Province (3)

□江苏省“六大人才高峰”2项

"High-level talents in six industries" of Jiangsu Province (2)

## 有机光电材料 Organic Optoelectronic Materials

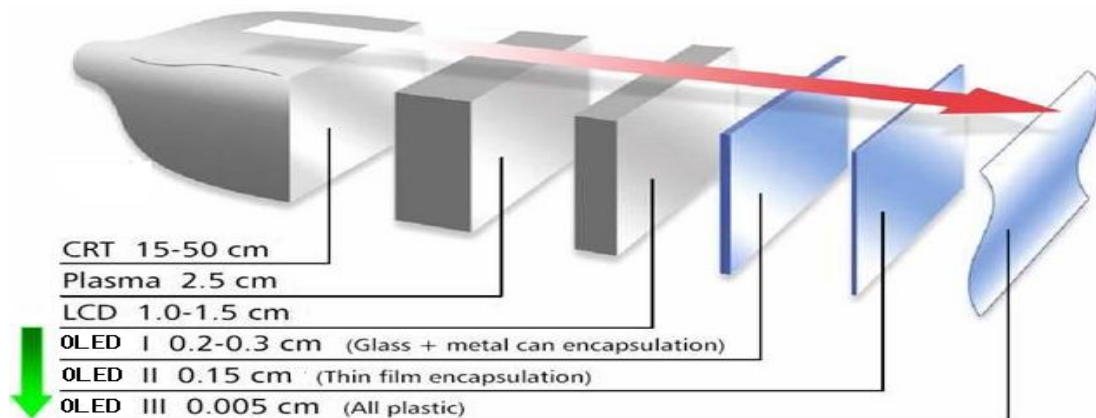
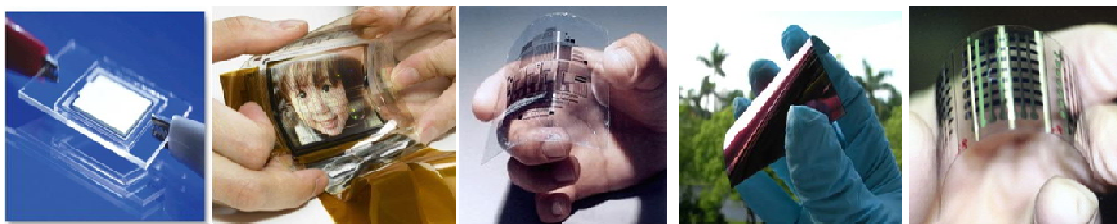
有机/聚合物半导体材料可实现硅等无机半导体所具备的信息传感、信息存储、光电转换、信息显示等功能，相关研究主要包括有机/聚合物发光二极管、电存储器、激光器、薄膜晶体管、光伏太阳能电池以及薄膜传感器等。

Organic/Polymer semiconductors are endowed with similar functionalities as silicon-based inorganic semiconductors, which can be used for information storage, photoelectron conversion and information display. Research focus: organic/polymer semiconductors and optoelectronic devices, such as polymer light-emitting diode, memory, laser, thin film transistor, and solar cells.

- 有机电致发光二极管 (OLED)
- 有机薄膜晶体管 (OTFT)
- 有机太阳能电池 (OPV)
- 电存储器件 (Electric Memory Devices)

### 优势 (Advantages)

- 可溶液加工 Solution Processable
- 简单低成本 Low-cost
- 大面积、超薄、柔性 Large-size, Ultra-thin, Flexible

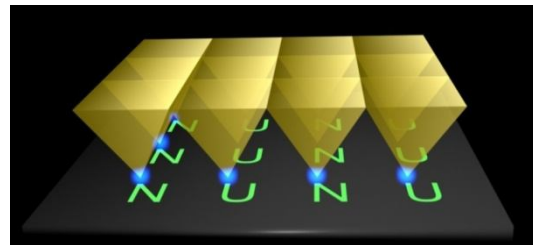


## 纳米光电材料 Nano Optoelectronic Materials

### •稀土纳米材料上转换发光:

研究其晶体结构与合成条件之间的关系，比较其发光性质与材料尺寸的关系，进而设计合成具有新颖光电性质的功能纳米材料。

**Rare Earth Upconversion Nanomaterials:** study the influence of synthesis condition on crystal structures, investigate the dependence of the emission behavior on the crystal size, and then obtain nanomaterials with novel functionalities.



### •纳米光笔印刷技术:

开发基于高分子针尖阵列和近场光学扫描方法光笔印刷技术，有望广泛应用于高效的微纳米器件制备、生物传感器、以及疾病诊断芯片等领域。

**Nanolithography:** arrays of polymeric nanotips and near field lithography, can be used for high-efficient manufacture of nanodevices, biosensors, and chips for disease diagnosis.

结合有机与无机纳米材料的优点，合成具有多功能的杂化材料，满足能源、航空航天、交通运输、建筑、食品、医疗等不同领域的需要。

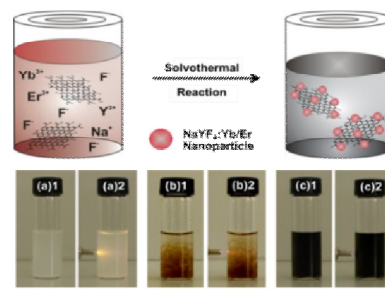
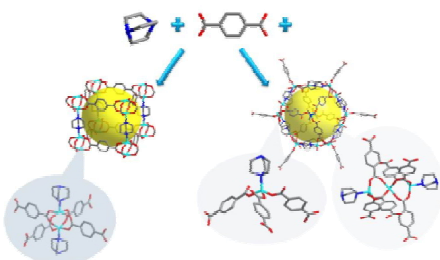
•将氧化石墨烯良好的光限幅行为与稀土上转换纳米材料良好的近红外吸收性能相结合，开发出可用于近红外激光防护的光限幅纳米杂化材料。

•设计、合成具有特殊结构与性能的新型多维金属有机框架多孔材料。应用于分离、气体存储及高效选择性催化等领域。

Integrating the advantages of organic and inorganic nanomaterials, multifunctional hybrid nanomaterials are synthesized for energy, aerospace, transportation, construction, food, and biomedical applications.

• Hybrid nanomaterials were synthesized for optical limiting application, which combines the optical limiting performance of graphene oxide and NIR absorption of rare earth upconversion nanomaterials.

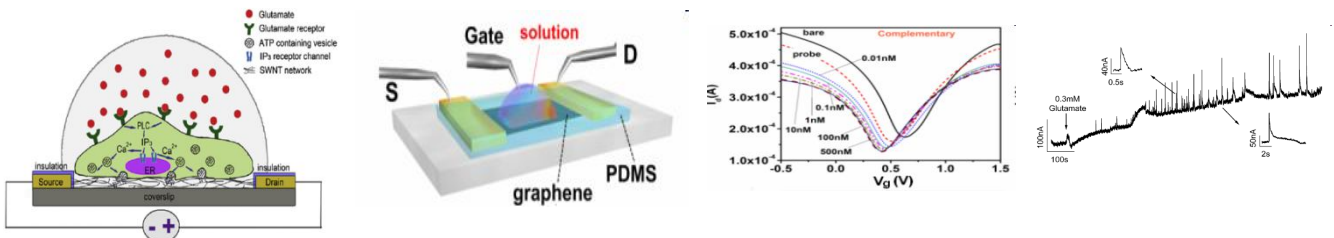
• Design and synthesize novel mesoporous metal-organic frameworks for separation, gas storage, and highly efficient catalysis.



## 生物电子材料 Bioelectronic Materials

以石墨烯、碳纳米管、有机半导体等构建高性能场效应晶体管，利用生物分子对器件电性能的影响研究其对生物分子的电子识别性能，实现对DNA、大肠杆菌、葡萄糖、细胞分泌物等具有高检测灵敏度的纳米电子生物传感器。

Fabricate high-efficient FETs using graphene, carbon nanotubes, organic semiconducting materials; develop highly-sensitive biosensors for DNA, E. coli, glucose, and cell secretion.

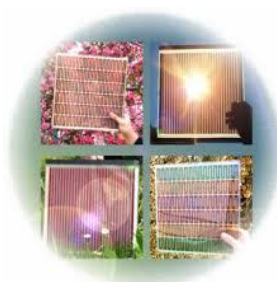
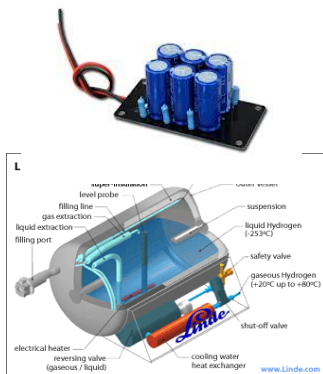


## 先进能源材料 Advanced Energy Materials

高效的能源获取和使用方式的开发是全球研究热点。超级电容器、高密度储氢、锂电池是最重要的能量存储手段。有机太阳能电池及染料敏化电池是最具潜力的绿色能源技术。

Super capacitors, high-density hydrogen storage, lithium battery are the most important energy storage devices while organic photovoltaics and dye-sensitized solar cells are the core technologies for green energy.

- 储氢材料 Materials for Hydrogen Storage
- 超级电容器 Super Capacitors
- 聚合物锂电池 Polymeric Lithium Battery
- 有机/聚合物太阳电池 Organic/Polymeric Photovoltaics
- 染料敏化太阳电池 Dye-Sensitized Solar Cells





•Institute of Advanced Materials (IAM)  
•创新成果 Research Achievements

IAM团队首次设计并开发了一类同时具有研磨、气致和电致磷光变色材料，并开发出一种全新的信息加解密技术，实现了以“光”作为信息载体，充分发掘运用磷光金属配合物的“特殊”性能，使得信息传输更为安全。该技术为国际首创，其研究成果刊登在国际顶级学术期刊《自然·通讯》上。

这一研究成果对深入了解分子的光电性能与外界环境之间的关系具有重要意义，同时也进一步拓展了光电功能材料在信息光电子器件领域的应用新方向。

IAM group synthesized luminophores based on cationic phosphorescence Ir(III) complexes which simultaneously exhibit mechanochromic, vapochromic and electrochromic luminescence. Based on these materials, a novel optical data encryption and decryption technology has been developed, which realizes not only light as information transmission carrier, but also makes the information transmission more safe *via* fully exploring and using the special optical properties of phosphorescence Ir(III) complexes. This is the first time the technology has been reported in the world, and the research results have been published on the top international academic journal **Nature Communications**.

This work is very significant for a deep understanding on the relationship between environment and molecular optoelectronic properties, and for expanding the application of novel optoelectronic materials for information storage and processing.

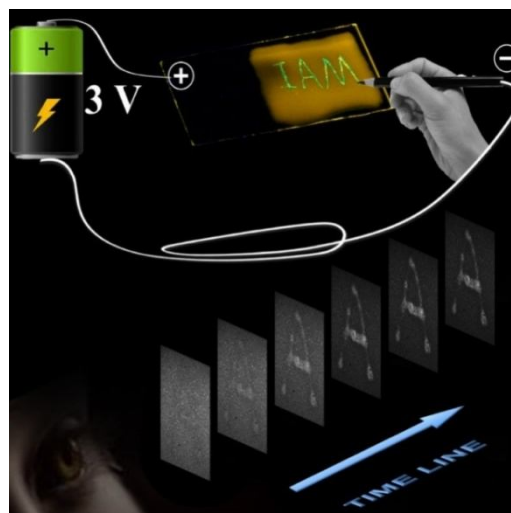
“This research works are very significant for both fundamental research and practical applications”

“This manuscript is of interest to those who are specialists in the field of sensor and phosphorescent optoelectronics. I enjoyed reading this work and it have enough quality to be published in high impact journal of Nature Communication”

**Referees of Nature Communication**

This work opens up a new research and application direction for organic optoelectronics. Such smart responsive phosphorescent materials could be widely used in the fields of intelligent optoelectronic devices and biological sensing.

**Prof. Wei Huang**



**Nature Communications**  
DOI: 10.1038/ncomms4601

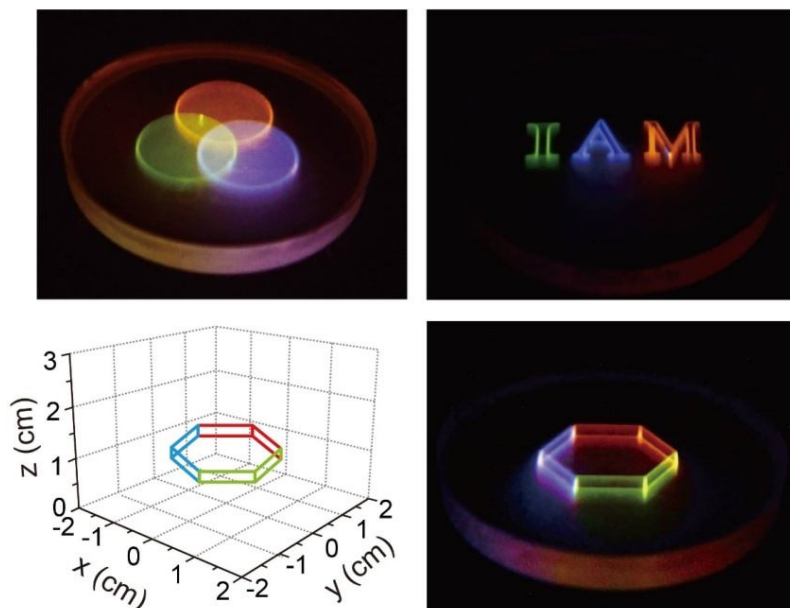
# ·Institute of Advanced Materials (IAM) ·创新成果 Research Achievements

IAM团队与新加坡国立大学研究团队协同创新，在“全色”发光纳米粒子开发与应用研究方面取得重大突破，在世界上首次设计并制备了一种可在不同脉冲光激发下具有全色域、不同颜色发光特性的上转换纳米粒子，并实现了在真实立体彩色显示领域的应用。这一原始性创新研究成果对深入了解稀土纳米材料的发光行为具有重要科学意义，同时也进一步拓展了光电功能材料在立体显示领域的应用新方向。

黄维院士介绍说，该成果实现了真正意义上的真实立体彩色显示，并在空间三个维度都达到纳米级的极限显示分辨率，这是传统显示方法所不能企及的，为立体显示技术提供了一条革命性的思路和途径。

A major breakthrough in the preparation of the full-color luminescence nanoparticles and the application in three-dimensional display was made by the team collaboration between IAM and National University of Singapore. A new class of upconversion nanocrystals with dynamically fine-tuning emission in the full color range by adjusting the pulse width of infrared laser beams was firstly synthesized in the world, and their application in full-color displays with high spatial resolution were realized. This original innovation research has great scientific significances not only for understanding the luminescent behavior of rare earth nanomaterials, but also for further expanding the application of optoelectronic materials in the field of stereoscopic display. The research results have been published on the top international academic journal **Nature Nanotechnology**.

“This result demonstrates a real sense of the three-dimensional full-color display, with display resolution reaching the limit of nanoscale in the three dimensions of space, which can not be surpassed by the traditional methods, and provides a revolutionary approach for the stereoscopic display technology”, said Professor Huang Wei, an academician.



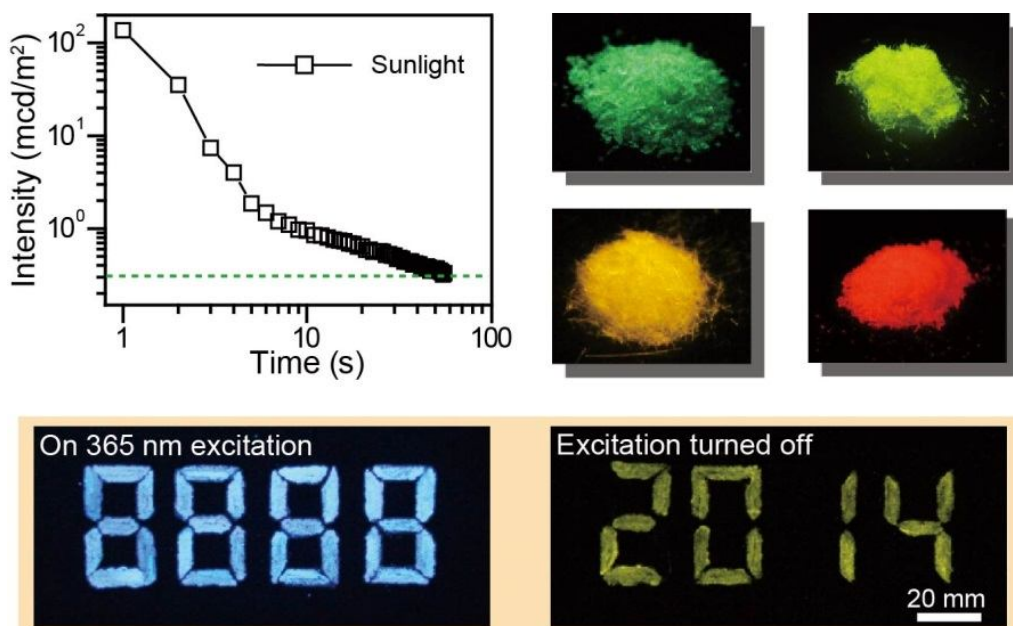


•Institute of Advanced Materials (IAM)  
•创新成果 Research Achievements

IAM团队在有机长寿命发光材料的开发与应用研究方面取得重大突破，团队在世界上首次设计并制备了多个系列的室温单组份有机长寿命磷光材料，并由此开创了一种新型的数据加密方法，该加密方法无需借助精密仪器，通过肉眼观察即可实现。相关成果发表在国际顶级学术期刊《自然·材料》（*Nature Materials*）上。这一原创性研究成果对深入了解有机光电材料的发光行为具有重要的科学意义，同时拓展了有机光电材料在数据加密方面的新应用，促进了信息安全领域的技术发展。

IAM group demonstrated a design principle that can be referred to tune the emission lifetime of a wide range of luminescent organic molecules, based on effective stabilization of triplet excited states through strong coupling in H-aggregated molecules. Their experimental data revealed that luminescence lifetimes up to 1.35 s, which are several orders of magnitude longer than those of conventional organic fluorophores, can be realized under ambient conditions. These results outline a fundamental principle to design organic molecules with extended lifetimes of excited states, providing a major step forward in expanding the scope of organic phosphorescence applications. The research results have been published on *Nature Materials*.

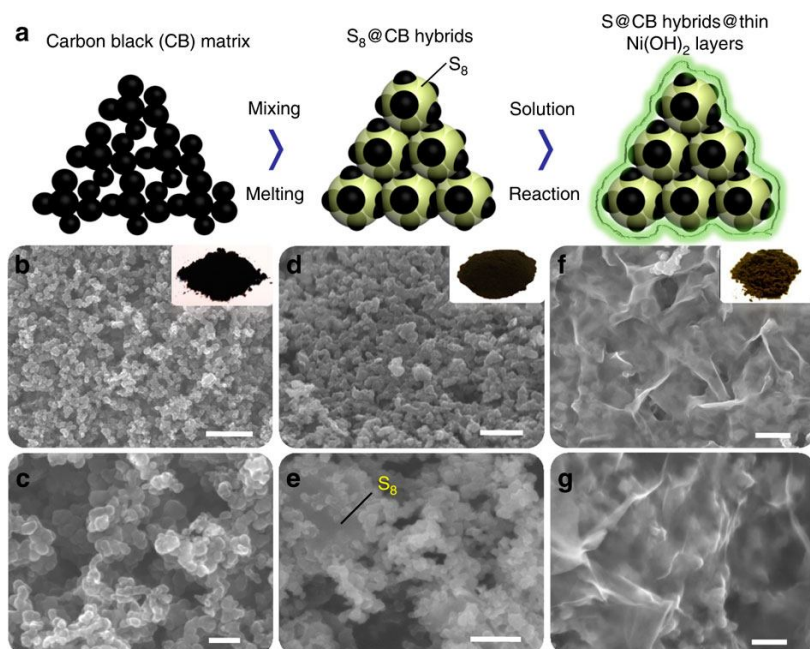
The understanding gained from our experimental and theoretical investigations allows for the design of next-generation organic phosphors that may revolutionize the fields of organic optoelectronics, molecular imaging, storage encryption and data security.



IAM团队与新加坡南洋理工大学于霆教授合作，在锂硫电池正极材料的研发、设计，及其电化学性能改良方面取得了重大突破：在世界上首次采用超薄过渡金属氢氧化物材料（单层厚度约7纳米）对硫-碳黑复合物纳米单元进行微包覆处理，设计并制备了具有长寿命、高库伦效率的正极材料。该超薄过渡金属氢氧化物纳米材料可与锂离子发生不可逆反应，生成的惰性物可起到电极保护层的作用，巧妙地克服了传统锂硫电池电极因多硫化物溶解所造成的低充放电效率、短循环周期、低倍率特性等诸多问题。

这一原创性研究成果对深入了解并改良锂硫电池的电极性能及未来产业化具有重要的科学指导意义，同时拓展了氢氧化物纳米材料在电极保护方面的新应用，潜在地促进了储能电池技术的发展。相关成果发表在国际顶级学术期刊《自然·通讯》上。

A major breakthrough in Elemental sulfur cathodes for lithium/sulfur cells was made by a collaboration between IAM and Nanyang Technological University. They reported an applicable way, by using thin-layered nickel-based hydroxide as a feasible and effective encapsulation material. In addition to being a durable physical barrier, such hydroxide thin films can irreversibly react with lithium to generate protective layers that combine good ionic permeability and abundant functional polar/hydrophilic groups, leading to drastic improvements in cell behaviours (almost 100% coulombic efficiency and negligible capacity decay within total 500 cycles). Their present encapsulation strategy and understanding of hydroxide working mechanisms may advance progress on the development of lithium/sulfur cells for practical use. The research results have been published on **Nature Communications**.



·Institute of Advanced Materials (IAM)  
·创新成果 Research Achievements



◆ 技术成果 Technological outcome

围绕OLED产业技术开展工作，以第一发明人授权和公开的包括美国、新加坡和中国等国的发明专利200余件。  
we have published more than 200 patents in many countries on OLED technology.

◆ 产业促进 Industrial Promotion

通过专利转让或自开发，多项专利成功转化，促进我国有机电子产业的形成。  
Through knowledge transfer program, several patents have been industrialized, which have driven the development of Organic Electronics industry.

◆ 创新奖项 Innovation Awards

- 江苏科技奖, 2009-2012  
Jiangsu Science Award, 2009-2012
- 国家科技奖, 2013  
National Science Award, 2013
- 何梁何利基金科学与技术进步奖, 2014  
Ho Leung Ho Lee Foundation for Scientific and Technological Progress Award, 2014
- 香港理工大学“杰出中国访问学人”成就表彰, 2014  
Hong Kong Polytech University "Distinguished Visiting Chinese Scholar", 2014

◆ 著作 Books

- 有机电子学, 2010  
Organic Electronics, 2010
- 纳米生物医学光电子学前沿, 2013  
Nanobiomedicine and Optoelectronics frontier, 2013
- 生物光电子学, 2014  
Bio-Optoelectronics, 2014
- Graphene Science Handbook-Graphene Biodevices, 2014



## Institute of Advanced Materials (IAM)

### 学术团队

IAM围绕“全球化”战略定位，在治学育人理念、管理体制机制、文化建设发展等方面下大气力、用足功夫，按照全球化的服务标准、打造国际一流的“海外人才缓冲带”。目前研究院已引进90余名海外高端人才与杰出青年学者。

Aiming towards the strategy of globalization, IAM builds first-class international overseas talents buffer base in accordance with global standards; makes great efforts on talents cultivation and personal training and refines management and academic culture. So far more than 90 overseas high-level talents and young scholars have been recruited by the institute.

主管部门 <i>Competent Authorities</i>	高层次人才 <i>Top Talents</i>	人数 <i>Number</i>
中国科学院 <i>Chinese Academy of Science</i>	院士 <i>Academician</i>	1
中央组织部 <i>Organisation Department of the CPC Central Committee</i>	千人计划（溯及既往）国家特聘专家 <i>Thousand Talents Program Distinguished Expert</i>	1
	千人计划（创新人才长期项目） <i>Thousand Talents Program</i>	2
	青年千人计划 <i>Thousand Youth Talents Program</i>	9
教育部 <i>Ministry of Education</i>	“长江学者奖励计划”特聘教授、讲座教授 <i>“Yangtze River” scholar Professor</i>	2
国家自然科学基金委员会 <i>National Natural Science Foundation</i>	杰出青年科学基金 <i>National Science Fund for Distinguished Young Scholars</i>	2
国家自然科学基金委员会 <i>National Natural Science Foundation</i>	优秀青年科学基金 <i>National Fund for Outstanding Young Scientists</i>	1
教育部 <i>Ministry of Education</i>	“新世纪优秀人才” <i>New Century Excellent Talents</i>	1
江苏省委组织部 <i>Jiangsu Provincial Organization Department</i>	江苏省“333”工程 <i>the “333” program of Jiangsu</i>	3
江苏省委组织部 <i>Jiangsu Provincial Organization Department</i>	江苏省高层次创新创业人才引进计划 <i>“Innovation &amp; Entrepreneurship plan” of Jiangsu Province</i>	4
江苏省委组织部 <i>Jiangsu Provincial Organization Department</i>	江苏省六大人才高峰 <i>“High-level talents in six industries ” of Jiangsu Province</i>	2
江苏省科技厅 <i>Department of Science &amp; Technology of Jiangsu</i>	江苏省杰出青年基金 <i>Natural Science Fund of Jiangsu Province for Distinguished Young Scholars</i>	3
江苏省教育厅 <i>Department of Education of Jiangsu</i>	江苏特聘教授 <i>Specially Appointed Professors of Jiangsu Province</i>	14



## 学科带头人：黄维 院士

### 有机光电材料

黄维/院士/校长	安众福/教授/新加坡
陈飞/教授/英国	陈志宽/教授/新加坡
付振乾/教授/新加坡	高德青/教授/德国
杭晓春/教授/美国	陶友田/教授/英国
王建浦/教授/英国	肖德宝/教授/法国
永井优/外籍教授	张仕明/教授/沙特
李仁志/副教授/德国	孙正义/副教授/瑞典
史慧芳/副教授/新加坡	孙会彬/副教授/美国
赵剑锋/副教授/新加坡	李欢欢/讲师/博士
李杰伟/讲师/新加坡	林进义/讲师/英国
林宗琼/讲师/新加坡	王娜娜/讲师/美国
姚伟/讲师/博士	殷成蓉/讲师/新加坡

### 纳米光电材料

房贞兰/教授/德国	黄岭/教授/新加坡
霍峰蔚/教授/新加坡	李海/教授/新加坡
刘举庆/教授/新加坡	谢小吉/教授/新加坡
张伟娜/教授/新加坡	
赵永刚/教授/美国	
孙庚志/副教授/新加坡	
熊伟伟/副教授/新加坡	
任娜/讲师/博士	
於若珉/讲师/博士	
郑冰/讲师/新加坡	

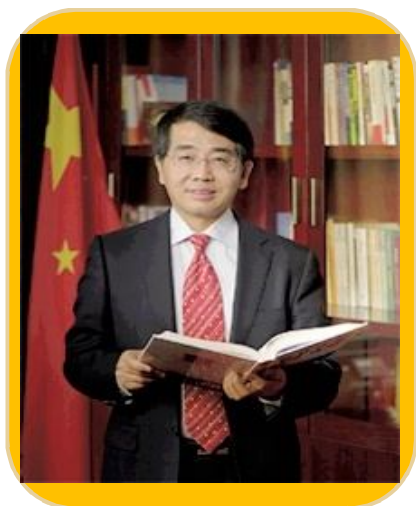
### 生物电子材料

董晓臣/教授/新加坡	黄晓/教授/新加坡
李林/教授/新加坡	刘倩/教授/美国
鞠强/副教授/加拿大	
卢晓梅/副教授/新加坡	
杨昕/副教授/英国	
张聪/副教授/德国	
司伟丽/讲师/日本	
石伟/讲师/新加坡	
翁洁娜/讲师/新加坡	
吴琼/讲师/韩国	

### 先进能源材料

黄程/教授/美国  
刘祥/教授/日本  
孟鸿/教授/美国  
邢贵川/教授/新加坡  
高勇谦/副教授/美国  
罗文俊/副教授/日本  
赵保敏/副教授/新加坡  
赵新彦/副教授/美国  
修飞/讲师/香港特别行政区

## Institute of Advanced Materials (IAM) 学科带头人



### 黄维 ( 1965.5 - )

中国科学院院士，南京工业大学校长、教授，有机光电子学家。教育部“长江学者”特聘教授，国家杰出青年科学基金获得者，中组部“千人计划”国家特聘专家，科技部“973”项目首席科学家。英国谢菲尔德大学名誉博士，英国皇家化学会会士，国家自然科学奖二等奖“有机半导体的设计原理、高效制备与光电器件”第一完成人，何梁何利基金科学与技术进步奖。

#### 科学研究:

黄维院士是国际上最早从事聚合物发光二极管显示研究并长期活跃在有机光电子学的知名学者之一。从九十年代初开始致力于跨物理、化学、材料、电子和信息等多个学科、交叉融合发展起来的有机光电子学这一国际前沿学科的研究，在构建有机光电子学科的理论体系框架、实现有机半导体的高性能化与多功能化、推进科技成果转化与产业化方面做了大量富有开拓性、创新性和系统性的研究工作，是中国有机光电子学科的奠基人与开拓者。在有机光电子学、柔性电子学等领域取得了大量系统性、创新性的研究成果，以第一或通讯作者身份在*Nature Materials*, *Nature Nanotechnology*, *Nature Communications*, *Advanced Materials*等SCI学术期刊发表研究论文500余篇，h因子为77。在ISI公布的论文被引用数排名中位于材料、信息学科世界1‰顶尖科学家之列。获授权或公开美国、新加坡和中国等国发明专利200余项，出版了《有机电子学》、《生物光电子学》等学术专著。

#### 学术、社会兼职:

中国科学院信息技术科学部常委、国家杰出青年科学基金评审委员会委员、国家自然科学基金委员会信息科学部专家评审组成员、国家自然科学基金委员会化学科学部专家咨询委员会委员、国务院学位委员会第七届学科评议组成员、陈嘉庚信息技术科学奖第六届评奖委员会委员、中国化学会第29届理事会副理事长、中国化学会第29届理事会高分子学科委员会副主任、江苏省科学技术协会副主席和江苏省化学化工学会第十一届理事会理事长等社会职务以及*Advanced Materials*, *Advanced Electronic Materials*, *Progress in Polymer Science*等国际权威学术杂志（顾问）编委。新加坡国立大学、南洋理工大学、北京大学、华东理工大学、中国科学院化学研究所、香港浸会大学等高等学校科研院所名誉、客座或兼职教授。



# Institute of Advanced Materials (IAM)

## Academic leader

**Prof. Huang Wei**, an academican of Chinese Academy of Sciences, is a leading expert in organic optoelectronics. He is a chair professor of "Thousand Talents Program" and "Cheung Kong Scholars Program", winner of "National Outstanding Youth Fund", chief scientist of "National 973 Programs", visiting professor of National University of Singapore, honorary professor and part-time professor of Peking University and the Chemistry Institute of Chinese Academy of Sciences and other research institutes.

### PROFESSIONAL HIGHLIGHT

- Academican, Division of Information Technology and Science, The Chinese Academy of Sciences (CAS)
- President of Nanjing Tech University (NanjingTech)
- Director-General of Key Laboratory of Flexible Electronics (KLOFE), Institute of Advanced Materials (IAM) at Nanjing Tech University (NanjingTech)
- Director-General of Key Laboratory for Organic Electronics & Information Displays (KLOEID), Institute of Advanced Materials (IAM) at Nanjing University of Posts & Telecommunications (NUPT)
- Director-General of Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM)

### RESEARCH AREAS AND INTERESTS

His current research interests include organic/plastic/flexible electronics, bioelectronics, nanomaterials, nanoelectronics, and polymer chemistry. Prof. Huang Wei is one of the earliest and most renowned scholars in the field of organic optoelectronics and has earned him great reputation in international communities. Wei's contributions to this field have led to wide-ranging publications that address both fundamental and applicable topics, and that place him amongst the 1‰ highly cited material scientists in the world (ISI Highly Cited Scientist). He has an h-index of 77, having thus far published 500 SCI listed publications (ISI Web of Knowledge). He is an editorial board member of top international journals such as *Advanced Materials*, *Advanced Electronic Materials* and *Progress in Polymer Science*, and also an invited reviewer for more than 40 well-known international academic journals and research foundations.

### AWARDS AND HONORS

- Young Outstanding Scholarship, National Natural Science Foundation of China, 2003
- Dawn Scholarship, Shanghai Commission of Education, China, 2003
- DuPont Young Professorship, DuPont Co., USA, 2003
- Excellent Academic Leader, Shanghai Commission of Science & Technology, China, 2004
- Cheung Kong Scholars Program, Ministry of Education (MOE), China, 2004
- China Science & Technology Talents Innovation Prize, Overseas Chinese Federation, 2007
- The Young Science & Technology Leading Talent, Jiangsu, 2007
- First winner, 2nd Award Science and Technology Progress, Jiangsu Province, 2008 and 2009
- Scientist in chief, National Basic Research Program of China (973 Program), 2008
- 1st Award Science and Technology, Jiangsu Province, 2010
- The Youth Chief Scientist in the "333 High-level Training Project", Jiangsu Province, 2011
- First winner, 2nd Award for Science and Technology, Jiangsu Province, 2012
- Award for Promotion of Industry-University-Research Collaboration, China Industry-University-Research Institute Collaboration Association, China, 2012
- 1st Prize of Outstanding Achievements of Philosophical and Social Science, Jiangsu Province, 2012
- Cooperative Innovation Research and Promotion Award of China, 2012
- First Winner, Science and Technology Award, Jiangsu Province, 2012 (Efficient Preparation of High-performance Organic Semiconductor and Optoelectronic Devices)
- Member of the Editorial Advisory Board, *Advanced Materials*, 2013.
- Vice- Director of National Teaching Guidance Sub-committee in Specialty of Materials Physics and Chemistry of China, Ministry of Education (MOE), China, 2013
- Member of National Teaching Guidance Committee in Specialty of Materials of China, Ministry of Education (MOE), China, 2013
- "May 1st" Labor Medal winner, Jiangsu Provincial Federation of Trade Unions, 2013
- Winner of the 2nd Prize of State Science and Technology Awards, 2013
- The Winner of the Progress Award of Science and Technology (Information Science) of the Ho Leung Ho Lee Foundation, 2014

## Organic Optoelectronic Materials



### Prof. Zhongfu An (安众福)

Prof. Zhongfu An received his PhD degree from Nanjing University of Posts and Telecommunications. Then he has worked as post-doctoral research fellow at NTU in Singapore. His current research interests are organic electronics, including organic optoelectronic materials preparation and device fabrication, organic afterglow materials, organic light-emitting materials, advanced energy materials and smart response materials.

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### Prof. Fei Chen (陈飞)

Fei studied her MA at the Chinese University of Hong Kong and her PhD in laser physics at Université d'Angers, France. She has been a research fellow in Organic semiconductor centre, at St Andrews University before joining in IAM in 2015. Her current interests are focused on plastic photonics, photophysics of organic semiconductors, polymer laser for chemical sensing and spectroscopy, and organic nanophotonics.

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### Prof. Zhikuan Chen (陈志宽)

Prof. Zhikuan Chen graduated from Beijing University in 1995. He had been working at IMRE, NUS, NTU in Singapore for 18 years in the fields of OLED, OPV and OTFT. He is working on organic electronic materials and devices.

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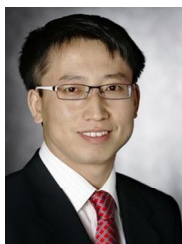


### Prof. Zhenqian Fu (付振乾)

Prof. Zhenqian Fu received his PhD degree from Northeast Normal University. He worked as post-doctoral research fellow at Nanyang Technological University in Singapore for five years. His current research interests are synthetic methodology and organic electronics materials.

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•Institute of Advanced Materials (IAM)  
•Team Members



**Prof. Deqing Gao** (高德青)

Prof. Deqing Gao got his PhD degree in Peking University in 2002. He worked in Hongkong in 2003, and subsequently in Germany for ten years. In June 2013 he started working in Nanjing Tech University. His research area lies in organic optoelectronic materials. He has published 30 papers and granted 5 patents .

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**Prof. Xiaochun Hang** (杭晓春)

Prof. Xiaochun Hang received his PhD degree at Shanghai Institute of Organic Chemistry, Chinese Academy of Science. Then he worked for industry about 3 years as well as a period of scholarship research in Flexible Display Center(FDC), Arizona State University (ASU) for 2 year and 6 month. He is interested in the developing blue phosphorescent materials for lighting and display panels, and joint IAM, Nanjing Tech University in 2015.

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**Prof. Youtian Tao** (陶友田)

Prof. Youtian Tao earned her PhD degree in Materials Physics and Chemistry, Wuhan University in 2009. She has worked as a post-doctoral researcher at University of Cambridge for two years. Her research focuses on Organic electronics, including OLED, OFET, OPV and organic up-conversion materials.

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**Prof. Jianpu Wang** (王建浦)

Prof. Jianpu Wang has been a professor IAM, Nanjing Tech University since 2013. He finished his PhD study on organic semiconductors in Cavendish Laboratory, University of Cambridge in 2009. His research interests are organic/solution processable semiconductor devices and device physics.

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•Institute of Advanced Materials (IAM)  
•Team Members



**Prof. Debao Xiao (肖德宝)**

Prof. Debao Xiao received his PhD degree from Institute of Chemistry, CAS in 2004. He worked for Yanshan University as a chemistry professor after postdoctoral studies on chiral photoisomerization at Osaka University-JST, and organic superconductors at University of Angers-CNRS, respectively. Debao Xiao joined IAM, Nanjing Tech University in August, 2015 and started his research work on organic spintronics.

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**Prof. Masaru NAGAI (永井优)**

Prof. Masaru Nagai graduated from Kyoto University, Japan in 2010. He joined IAM at Nanjing Tech in 2013. He is working on OPV, OLED and Polymer Solutions.

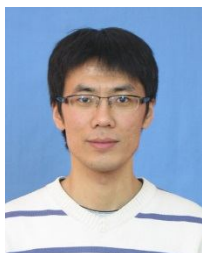
E-mail: iammasaru@njtech.edu.cn



**Prof. Shiming Zhang (张仕明)**

Prof. Shiming Zhang graduated from Institute of Chemistry, Chinese Academy of Sciences in 2009. He has been working at Northwestern University (US), KAUST (Saudi Arabia), Siecs International and WinTech Nano in Singapore for 7 years in the fields of OPV, OFET, electronics packaging and failure analysis. He is now working on organic electronic materials and devices.

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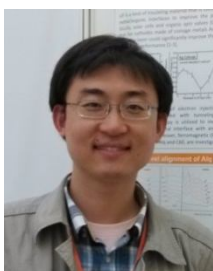


**Associate Prof. Renzhi Li (李仁志)**

Assoc. Prof. Renzhi Li received his PhD degree from Changchun Institute of Applied Chemistry (CIAC), Chinese Academy of Sciences (CAS). He then worked as both Research Assistant and Research Associate at CIAC for four years. His current research interests are organic photovoltaic devices and device physics.

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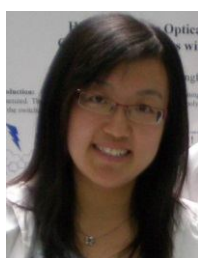
•Institute of Advanced Materials (IAM)  
•Team Members



**Associate Prof. Zhengyi Sun (孙正义)**

Assoc. Prof. Zhengyi Sun got his PhD degree from Department of Physics, Fudan University. Then he worked as a post-doctoral research fellow at Linkoping University in Sweden for three years. His research is now focused on the experimental study of the surface and interface phenomena in the hybrid organic systems with surface science techniques.

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**Associate Prof. Huifang Shi (史慧芳)**

Assoc. Prof. Huifang Shi received her PhD degree from Nanjing University of Posts and Tele communications. Then she worked as a post-doctoral research fellow at NTU in Singapore for two years. Her current research interests are phosphorescent functional materials and theirs applications in organoelectronics and bioelectronics

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**Associate Prof. Huibin Sun (孙会彬)**

Dr. Huibin Sun received his PhD degree in 2013 under supervision of Prof. Wei Huang (Nanjing University of Posts and Telecommunications). He is interested with design of novel metal organic complexes and polymer optoelectronic materials and their applications in optoelectronic devices, chemosensors and bioimaging.

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**Associate Prof. Jianfeng Zhao (赵剑锋)**

Dr. Jianfeng Zhao graduated from Nanjing University of Posts and Telecommunications in 2011. He has published 20 papers and 3 patents. He had been working at NTU in Singapore for 2 years. His research interests are organic optoelectronic materials.

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•Institute of Advanced Materials (IAM)  
•Team Members



**Assistant Prof. Huanhuan Li (李欢欢)**

Dr. Huanhuan Li received her PhD degree from Institute of Advanced Materials (IAM) under supervision of Professor Wei Huang and Professor Runfeng Chen, Nanjing University of Posts and Telecommunications (NUPT). She joined Nanjing Tech University (NanjingTech) and worked as a post-doctoral researcher in 2015. Her current research interest is the development of optoelectronic materials and devices.

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**Assistant Prof. Jiewei Li (李杰伟)**

Assist. Prof. Jiewei Li received his PhD degree from Institute of Advanced Materials (IAM), Nanjing University of Posts and Telecommunications (NUPT). Now he works as a research fellow at IAM in Nanjing Tech University (NTU). His current research interests are focused on weak interactions in organic optoelectronic materials and organic/inorganic hybrid materials.

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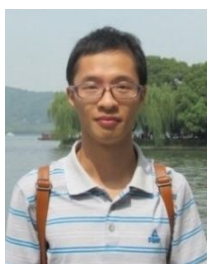
**Assistant Prof. Jinyi Lin (林进义)**

Dr Jinyi LIN received his PhD degree from Nanjing University of Posts and Telecommunications (NUPT) in 2014. He worked at the Singapore University of Technology and Design (SUTD) as a assistant researcher. In 2014, he started to work in Nanjing Tech University. His current research interests are polymeric semiconductors and devices.

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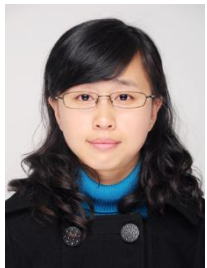
## Institute of Advanced Materials (IAM) Team Members



### **Assistant Prof. Zongqiong Lin (林宗琼)**

Assist. Prof. Zongqiong LIN received his PhD degree from Institute of Advanced Materials (IAM), Nanjing University of Posts and Telecommunications (NUPT) in 2015. During period, he visited School of Materials Science and Engineering (MSE), Nanyang Technological University (NTU), Singapore. His primary research interest is the self-assembly of organic semiconductors and opto-electronic properties of 2D materials.

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### **Assistant Prof. Nana Wang (王娜娜)**

Dr. Nana Wang received her PhD degree from University of Electronic Science and Technology of China (UESTC) in 2013. During her PhD, she has visited University of Michigan for two years. Then she worked as a post-doctoral research fellow at Nanjing Tech University for two years. Her current research interests are optoelectronic devices.

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### **Assistant Prof. Wei Yao (姚伟)**

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•Team Members

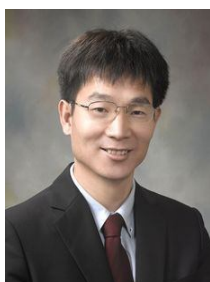
**Nano Photoelectric Materials**



**Prof. Zhenlan Fang (房贞兰)**

Dr. Zhenlan Fang received her PhD (2010) in Physical Chemistry from Chinese Academy of Sciences (CAS), she worked as a postdoc in Ruhr University Bochum, Germany (2012-2014). In July 2014, she joined Institute of advanced Materials, Nanjing Tech University. Her research focuses on MOF and nanoscale MOF (NMOFs) materials with multifunction, such as luminescence, gas storage/separation, semiconductor.

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**Prof. Ling Huang (黄岭)**

Prof. Ling Huang graduate from Nanjing University in 2001. He moved to Nanjing Tech University in 2012 from Nanyang Technological University. Working areas: 1) Controlled synthesis of lanthanide-doped nanocrystals, fine-adjustment of the luminescence, and applications; 2) Dip-pen nanolithography.

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**Prof. Fengwei Huo (霍峰蔚)**

Prof. Fengwei Huo received his PhD degree from Northwestern University in 2009. He had been working at NTU in Singapore for 3 years joining IAM in 2013. His research interest focuses on Metal organic frameworks hybrid materials and massively parallel nanolithography.

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**Prof. Hai Li (李海)**

Prof. Hai Li received his PhD from the Chinese Academy of Sciences in 2007. After working as a senior research fellow in Professor Hua Zhang's group at NTU (2009-2014), Singapore, he joined IAM in 2014. His research interest focuses on the synthesis and applications of 2D nanomaterials, scanning probe microscopy, micro- & nano-patterning, self-assembled monolayers etc.

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## Institute of Advanced Materials (IAM) Team Members



### **Prof. Juqing Liu (刘举庆)**

Dr. Juqing Liu has been working at NTU in Singapore for 3 years. He joined IAM in 2013. His research includes synthesis of low-dimensional carbon materials and their applications in memory devices, transistors, photovoltaic cells and light emitting devices.

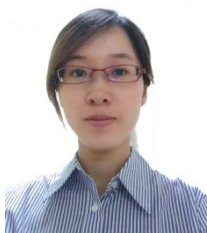
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### **Prof. Xiaoji Xie (谢小吉)**

Dr. Xiaoji Xie earned his PhD at National University of Singapore with Professor Xiaogang Liu. His current research interests include upconversion nanoparticles, nanoparticle based biological sensing, and microbial fuel cell.

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### **Prof. Weina Zhang (张伟娜)**

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### **Prof. Yonggang Zhao (赵永刚)**

Dr. Yonggang Zhao received his PhD degree from Nanjing University. After five years of postdoctoral work with Prof. Chunying Duan at DLUT and Prof. Jing Li at Rutgers, he joined IAM at Nanjing Tech in 2013. His research is mainly on the development of inorganic-organic hybrid materials that are both fundamentally important and potentially useful for clean/renewable energy applications.

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## Institute of Advanced Materials (IAM) Team Members



### **Assoc. Prof. Gengzhi Sun (孙庚志)**

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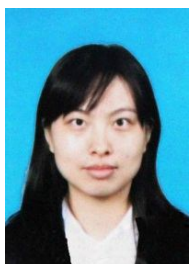
**E-mail: iamgzsun@njtech.edu.cn**



### **Associate Prof. Weiwei Xiong (熊伟伟)**

Assoc. Prof. Weiwei Xiong received his PhD degree from Fujian Institute of Research on the Structure of Matter (FIRSM), Chinese Academy of Sciences (CAS). Then he has worked as a post-doctoral research fellow at NTU in Singapore for two years. His current research interests are synthetic methodology and property exploration of organic-inorganic hybrid materials.

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### **Assistant Prof. Dangmin Yu (於蓉珉)**

Dr. Dangmin Yu received her PhD degree from Peking University. Her current research interests are carbon-based nano electronic and optoelectronic devices.

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### **Assistant Prof. Bing Zheng (郑冰)**

Dr. Bing Zheng received her PhD degree in State Key Laboratory of Inorganic Synthesis & Preparative Chemistry, Jilin University in 2012. Since then she had worked as a post-doctoral researcher at NTU in Singapore for two years. Her research interest is focused on the synthesis and characterization of new functional nanomaterials for applications in catalysis, energy conversion and storage and sensing.

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•Institute of Advanced Materials (IAM)  
•Team Members

**Bioelectronic Materials**



**Prof. Xiaochen Dong (董晓臣)**

Prof. Xiaochen Dong graduated from Zhejiang University in 2003. He has been working at NTU in Singapore for 6 years. Now, he is working in the field of Carbon based nanoelectronic biosensor.

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**Prof. Xiao Huang (黄晓)**

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**Prof. Lin Li (李林)**

Prof. Lin Li graduated from Anhui University in 2009. He has been working at Department of Chemistry in NUS (Singapore) for 5 years in the field of Chemical Biology. Now, he is working on Two-photon Small Molecule Enzymatic Probes (TSMEP).

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**Prof. Qian Liu (刘倩)**

Dr. Qian Liu obtained her PhD from department of chemistry, Fudan University, China in 2013. Since then She has worked as a post-doctoral researcher at Harvard Medical School, Boston, USA. Her research focuses on the design and synthesis of inorganic upconversion nanomaterials and their application for bioimaging, including cell label and small animal imaging in vivo.

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## Institute of Advanced Materials (IAM) Team Members



### Associate Prof. Qiang Ju (鞠强)

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### Associate Prof. Xin Yang (杨昕)

Dr. Xin Yang achieved her PhD from Imperial College London. Then she Worked in a number of start-up companies in the UK. Her main research interest lies in Bio Analytical Microfluidic Devices for IVD applications.

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•Institute of Advanced Materials (IAM)  
•Team Members



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**Assistant Prof. Qiong Wu (吴琼)**

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## Institute of Advanced Materials (IAM) Team Members

### Advanced Energy Materials



#### **Prof. Cheng Huang (黄程)**

Prof. Cheng Huang graduated from Penn State University with PhD degree in 2004. His research interests include Electroactive Materials Sciences (TEAMSIE): synthesis, processing, molecular thin-film membranes, interface engineering and applications.

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#### **Prof. Xiang Liu (刘祥)**

Prof. Xiang Liu obtained his PhD from Material Science and Engineering at University of Fukui, Japan in 1995. Prof. Liu Xiang mainly engaged in research and development of functional polymer particles and organic-inorganic microparticle emulsion polymerization.

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#### **Prof. Hong Meng (孟鸿)**

Prof. Hong Meng, PhD 2002, University of California Los Angeles (UCLA). Prof. Meng has more than 20 years' experience in organic materials science and engineering, with specialized expertise in the field of organic electronics.

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#### **Prof. Guichuan Xing (邢贵川)**

Prof. Guichuan Xing received his PhD from National University of Singapore. He has contributed to understanding of the working principles of low-temperature solution-processed organic-inorganic trihalide perovskite solar cells. Currently, he is still working on probing the individual charge carrier dynamical processes in light harvesting cells with ultrafast spectroscopy method.

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•Institute of Advanced Materials (IAM)  
•Team Members



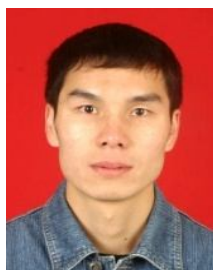
**Associate Prof. Yongqian Gao (高勇谦)**

Assoc. Prof. Yongqian Gao received his PhD degree from Department of Chemistry & Chemical biology, University of New Mexico. He has worked as a post-doctoral research fellow at Los Alamos National Lab in United States for three years. His current research interests include understanding the fundamental optical/electronic physics processes (energy/charge transfer) in organic/inorganic semiconducting materials using various optical probes. **E-mail: iamyqgao@njtech.edu.cn**



**Associate Prof. Wenjun Luo (罗文俊)**

Dr. Wenjun Luo received his PhD degree from Nanjing University in 2008 and then became an associate research scientist at the Department of Physics in 2011. In 2014, he joined Institute of Advanced Materials of Nanjing Tech University as an associate professor. His research interest is focused on semiconductor photoelectrochemistry for solar water splitting. **E-mail: iamwjluo@njtech.edu.cn**



**Associate Prof. Baomin Zhao (赵保敏)**

Dr. Baomin Zhao is a lecturer in Institute of Advanced Materials at Nanjing Tech University. His current research involves the development of organic electronic materials including semiconducting small molecules and polymer semiconductors and conducting nanomaterials for thin film transistors/solar cells. **E-mail: iambmzhao@njtech.edu.cn**



**Associate Prof. Xinyan Zhao (赵新彦)**

Associate Prof. Xinyan Zhao received her PhD degree from Nanjing University of Posts and Telecommunications (NJUPT). She worked at IMRE in Singapore as a research assistant in 2012. Her research interests are physics and fabrication of organic/ organic-inorganic hybrid photovoltaic devices. **E-mail: iamxyzhao@njtech.edu.cn**

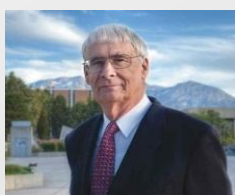


**Assistant Prof. Fei Xiu (修飞)**

Dr. Fei Xiu obtained her PhD degree in materials science from the City University of Hong Kong in 2014 and then joined IAM as an assistant professor. Her research focuses on the design of nano-materials and nano-fabrication for various technological applications, e.g. energy-harvesting devices. **E-mail: iamfxiu@njtech.edu.cn**

## Institute of Advanced Materials (IAM) Honorary Professor

**Prof. Peter J. Stang**



- Renowned Chemist in Organic, Fonder of Supramolecular Chemistry
- Academician of American Academy of Arts and Sciences
- Academician of NAS
- Member of American Association for the Advancement of Science
- Winner of National Medal of Science Award

**Prof. Jean Marie Basset**



- Director of Catalysis Research Center at King Abdullah University of Science and Technology
- Distinguished Professor in Chemical Science Physical Science and Engineering

**Prof. Jean-Lou Chameau**



- President of King Abdullah University of Science and Technology
- Chevalier of the Legion of honour
- Member of both the U.S. National Academy of Engineering and the French Académie des Technologies

• **Institute of Advanced Materials (IAM)**  
• **Honorary Professor**

**Prof. Donal Bradley**



- Renowned Specialist in Plastic Electronics
- Vice-president of Oxford University
- The Academician of The Royal Society
- Winner of British Empire Knight Medal
- Winner of IET Faraday Medal, British Royal CBE Medal of Honor

**Prof. Chad Mirkin**



- Director of the International Institute for Nanotechnology and Center for Nanofabrication and Molecular Self-Assembly at Northwestern University.
- Member of the President's Council of Advisors on Science & Technology

**Prof. Freddy Boey**



- Renowned Scientists in Biological Materials
- Vice President and Provost of Nanyang Technological University
- Winner of Singapore Public Administration Medal (Silver)



## Institute of Advanced Materials (IAM) Honorary Professor

### Prof. Jiang Lei



- Academician of Chinese Academy of Sciences
- Academician of Third World Academy of Sciences

### Prof. Fang Dai-Ning



- Academician of Chinese Academy of Sciences
- State-Council Allowance Obtained Expert
- Vice president of Peking University

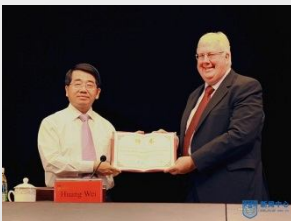
### Prof. Zhang Xiang



- Ernest S. Kuh Endowed Chair
- Professor of Mechanical Engineering  
Director of LBNL Materials Sciences Division

• **Institute of Advanced Materials (IAM)**  
• **Honorary Professor**

**Prof. Peter Gregory**



- Editor in Chief of Advanced Materials and Advanced Functional Materials
- The Director of Publishing at the Royal Society of Chemistry
- Publishing Director for Wiley's global materials and physics programs

**Prof. Yang Pei-Dong**



- Professor in the Department of Chemistry, Materials Science and Engineering
- Senior faculty scientist at the Lawrence Berkeley National Laboratory
- Member of American Academy of Arts and Sciences

**Prof. Harald Fuchs**



- Member of the Senate, University of Münster
- Federal Cross of Merit  
1st class of the order of Merit of the Federal Republic of Germany
- Elected associate member of 'The World Academy of Sciences (TWAS)'

# Institute of Advanced Materials (IAM) Visiting Professor

1

## Prof. Fred Wudl

美国加州大学圣芭芭拉分校 (UCSB) 化学系教授，美国艺术和科学院院士，美国科学促进会会士。

Professor of Chemistry at University of California, Santa Barbara (UCSB), Member of American Academy of Arts and Sciences, Fellow of American Association for the Advancement of Science



2

## Prof. Derek Woollins

英国圣安德鲁斯大学副校长

Vice Principal of University of St Andrews



3

## Prof. Ifor Samuel

英国圣安德鲁斯大学有机半导体中心主任、教授

Professor of Physics and Director of Organic Semiconductor Centre, University of St Andrews



4

## Prof. Neil C. Greenham

剑桥大学克莱尔学院首席物理教授

Chief Professor of Physics at Studies at Clare College, University of Cambridge



## Institute of Advanced Materials (IAM) Visiting Professor

5

### Prof. Hua Zhang (张华)

新加坡南洋理工大学材料科学系教授、系主任。

Professor and Head of Department of Materials Science,  
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6

### Prof. Qibing Pei (裴启兵)

美国加州大学洛杉矶分校材料科学与工程系教授、副系主任。

Professor and Associate Head of Materials Science and  
Engineering Department, University of California, Los Angeles



7

### Prof. Xiaogang Liu (刘小钢)

新加坡国立大学化学系终身副教授，化学系副主任及新加坡材料研究院高级研究员。

Associate Professor and Assistant Head of Department of  
Chemistry, National University of Singapore, Senior Scientist  
at IMRE, Singapore



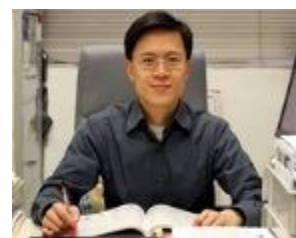
8

### Prof. Wai-Yeung Wong (黄维扬)

香港浸会大学化学系讲座教授。获得英国皇家化学会“过渡金属化学奖”（首位华人）、亚洲化学会联合会杰出年轻化学家奖（首位香港学者）。

Chair Professor of School of Chemical Sciences, Hong Kong  
Baptist University

The First Chinese who was awarded with “Transition Metal  
Prize in Chemistry” by Royal Society of Chemistry



## Institute of Advanced Materials (IAM) Visiting Professor

9

### Prof. Yi Cui (崔屹)

美国斯坦福大学材料科学与工程系副教授。

Associate Professor in the Department of Materials Science and Engineering, Leland Stanford Junior University



10

### Prof. Xixiang Zhang (张西祥)

沙特阿拉伯阿卜杜拉国王科技大学教授。

Professor at King Abdullah University of Science and Technology



11

### Prof. Oliveira (José Oliveira)

纳米与微技术期刊Small的主编。

Editor-in-Chief of Small



12

### Prof. Hung-Jue Sue (苏皇宇)

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## Institute of Advanced Materials (IAM) Visiting Professor

13

### Prof. Mark E. Thompson

南加利福尼亚大学教授。  
Professor at University of Southern California



14

### Prof. Eiichi Nakamura

日本东京大学化学系教授，JACS的副主编。  
Professor in the Department of Chemistry, University of Tokyo  
Associate Editor of JACS



15

### Prof. Jiang Hua-Bei

美国佛罗里达大学，生物医学工程系，终身讲席教授。  
J. Crayton Pruitt Family Professor/Endowed Chair



# Institute of Advanced Materials (IAM) Adjunct Professor

**Prof. Zhen Cheng (程震)**  
美国斯坦福大学  
Stanford University



**Prof. David Lou (楼雄文)**  
新加坡南洋理工大学  
Nanyang Technological University



**Prof. Hongyu Chen (陈虹宇)**  
新加坡南洋理工大学  
Nanyang Technological University



**Prof. Xiaodong Chen (陈晓东)**  
新加坡南洋理工大学  
Nanyang Technological University



**Prof. Junling Wang (王峻岭)**  
新加坡南洋理工大学  
Nanyang Technological University



**Prof. Minghui Hong (洪明辉)**  
新加坡国立大学  
National University of Singapore



**Prof. Huanting Wang (王焕庭)**  
澳大利亚莫纳什大学化学工程系教授  
Monash University, Australia



## Institute of Advanced Materials (IAM) Adjunct Professor

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Harvard NeuroDiscovery  
Center, Harvard Medical School



**Prof. Dongsheng Xu (徐东升)**  
北京大学  
Peking University



**Prof. Wenping Hu (胡文平)**  
中国科学院化学研究所  
Institute of Chemistry Chinese  
Academy of Sciences



**Prof. Junwang Tang (唐军旺)**  
伦敦大学  
University of London



**Prof. Zhiyong Tang (唐智勇)**  
国家纳米科学中心  
National Center for Nanoscience  
and Technology



**Prof. Dan Wang (王丹)**  
中国科学院过程工程研究所  
Institute of Process Engineering,  
Chinese Academy of Sciences



**Prof. Jin Zhang (张锦)**  
北京大学  
Peking University



**Prof. Wenlong Cheng (程文龙)**  
澳大利亚莫纳什大学化学工程系教授  
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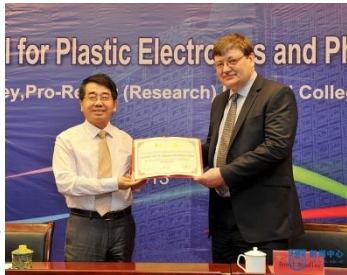


•Institute of Advanced Materials (IAM)  
•International Cooperation

America

Europe

Asia



- University of Cambridge (Cantab)
- University of Oxford (Oxon)
- Imperial College (IC)
- The University of St Andrews (St Andrews)
- Center for Nanoscience and Technology, Italia (CNST)
- Moscow State University, Russia (MSU)
- .....



Jiangsu-Singapore joint research center on organic/bio electronics & information displays



- University of California, Los Angeles (UCLA)
- Stanford University (SU)
- .....



- Nanyang Technological University (NTU)
- National University of Singapore (NUS)
- .....

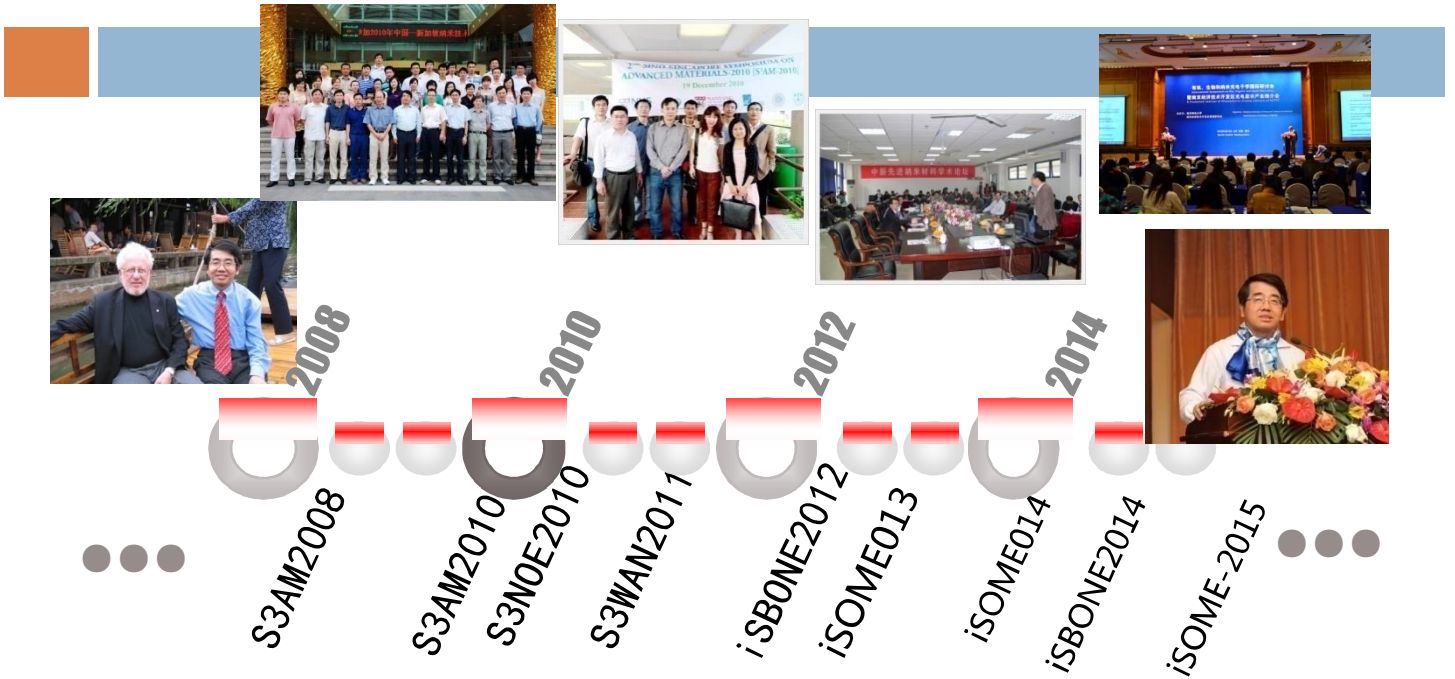


研究院推行全球化战略，注重国际学术交流与合作，先后邀请美国加州大学洛杉矶分校裴启兵教授、英国皇家科学院院士/帝国理工学院副校长Donal Bradley教授、新加坡南洋理工大学常务副校长Freddy Boey教授、新加坡国立大学常务副校长兼教务长Tan Eng Chye教授等知名教育家、科学家、专家学者来访，并对剑桥大学、牛津大学、帝国理工学院、圣安德鲁斯大学、莫斯科国立大学、意大利纳米科学技术研究中心、澳大利亚悉尼大学、澳大利亚莫纳什大学等10余所世界知名高校进行了访问。聘任30余位海内外知名学者为名誉教授、客座教授或兼职教授，与美国斯坦福大学、美国加州大学洛杉矶分校、英国帝国理工学院、新加坡国立大学、新加坡南洋理工大学等建立了合作关系。

IAM implements the globalization strategy, and thinks highly of international exchange & cooperation. Overseas experts who have visited Nanjing Tech includes Prof. Pei Qibing (UCLA), Prof. Donal Bradley (Fellow of Royal Society / vice-Provost of IC), Prof. Freddy Boey (Deputy President and Provost of NTU), Prof. Tan Eng Chye (Deputy President and Provost of NUS), while IAM's leaders have also paid exchange visit to overseas universities and institutes, including Cantab, Oxon, IC, St. Andrews, MSU, CNST, etc. 30+ renowned scientists have been appointed as honorary professors, visiting professors or adjunct professors in NanjingTech, and academic cooperation have been well established with overseas universities, e.g. SU, UCLA, IC, NUS, NTU.



•Institute of Advanced Materials (IAM)  
•International Cooperation



◆Platform Established for Cooperation

IAM has established Jiangsu-Singapore joint lab on organic/bio electronics & information displays, and Jiangsu-Singapore joint research center for organic/bio electronics & information displays.

◆Academic Cooperation

IAM has appointed 20+ visiting/adjunct professors, published 40+ SCI research papers and carried out programs funded by National Natural Science Foundation of China for International Cooperation and Exchange (1), the Joint Research Fund for Overseas Scholars (1), Funds from Jiangsu Province for International Cooperation and Exchange (3), Fund for bilateral cooperation between China and Romania (1).

◆Academic Exchange

IAM has paid exchange visits (50+) to overseas partners, and organized international symposiums/conferences, e.g. S3AM2008, S3AM2010, S3NOE2010, S3WAN2011, ISBONE2012, ISOME2013, ISOME2014, ISBONE2014.

◆Joint Program for Talent Cultivation

IAM has admitted 20+ graduates during this program.

◆Collaborative Innovation

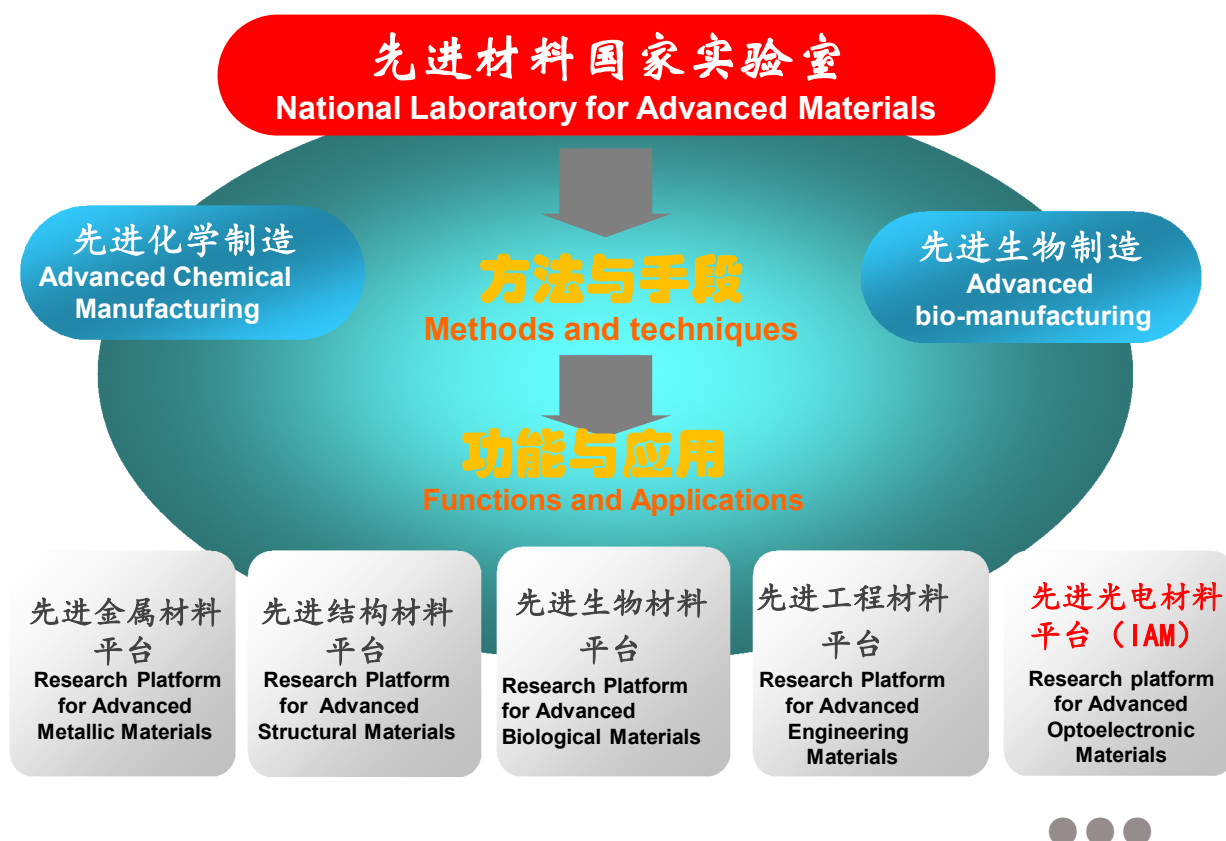
IAM is building collaborative innovation center for advanced biological and chemical manufacturing.



# •Institute of Advanced Materials (IAM) •发展规划

IAM在江苏先进生物与化学制造协同创新中心的战略框架下，旨在打造“先进材料国家实验室”先进光电材料平台，在有机光电子学科、新一代信息显示技术等领域引领先进潮流。

Under the strategic framework of Jiangsu Collaborative Innovation Center for Advanced Materials, IAM aims to construct the "National Laboratory for Advanced Materials" as a research platform for advanced optoelectronic materials and to lead the development of organic optoelectronics, novel information materials technologies.



基于前沿学科发展的新特点、江苏协同创新体系建设的新布局，IAM团队致力于以有机/生物光子学为中心、涉及物理科学、生命科学、信息科学等多学科的新兴交叉学科的科学研究所、学科建设与人才培养。

Based on novel features of the frontier disciplines and in line with new layouts of Jiangsu collaborative innovation center, IAM concentrates on scientific research and personnel training centered on organic/Bio optoelectronic as well as other interdisciplinary subjects comprising of physics, life science, and information.

