陕西师范大学 SHAANXI NORMAL UNIVERSITY

西安交通大学 XIAN JIAOTONG UNIVERSITY

2026年1月
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简报
Newsletter

新概念传感器与分子材料研究院
Institute of New Concept Sensors and Molecular Materials

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总策划：房喻教授
Producer & Editor-in-Chief: Prof. Fang Yu
责任编辑：刘凯强 冯伟
Executive Editors: Liu Kaiqiang, Feng Wei
翻译：冯伟
Translator: Feng Wei
校对：团队全体老师
Proofreading: Fang Group teachers

地址：陕西省西安市长安区西长安街 620 号
陕西师范大学长安校区
Chang'an Campus, Shaanxi Normal University,
620 West Chang'an Avenue,Chang'an District, Xi'an,
Shaanxi, P. R. China
网站 (Website)：https://incsmm.snnu.edu.cn
电子邮箱 (Email)：incsmm@snnu.edu.cn

房喻院士出席西安交通大学人才工作会议

Fang Yu attends Xi'an Jiaotong University Talent Work Meeting

2026 年 1 月 10 日，房喻院士出席西安交通大学召开人才工作会议。西安交通大学党委书记卢建军，校长、中国工程院院士张立群，两院院士侯洵、邱爱慈、郭烈锦、孙军、苏光辉，及西交大校领导出席会议。西交大各学院（部、中心）、书院、职能部门负责人，校企联合研究院负责人代表，离退休教师代表、人才代表和学生代表等参加会议。

On January 10, 2026, Prof. Fang Yu attended the Talent Work Meeting of Xi'an Jiaotong University. Xi'an Jiaotong University Party Committee secretary Lu Jianjun, president and academician of the Chinese Academy of Engineering Zhang Liqun, academicians Hou Xun, Qiu Aici, Guo Liejin, Sun Jun, and Su Guanghui of the Chinese Academy of Sciences and Chinese Academy of Engineering, as well as other XJTU leaders, joined heads of the university's colleges (departments, centers), academies, and departments, representatives from university-enterprise joint research institutes, representatives of retired faculty, talent representatives, and student representatives at the meeting.

房喻院士团队举行师生科研心得分享会

Fang Group Faculty and Students Research Experience Sharing Session held

2026 年 1 月 12 日下午，陕西师范大学新概念传感器和分子材料研究院举办了题为“科研路上的解忧杂货铺”的房喻院士团队师生科研经验分享会，由赵智豪老师、刘向泉博士和李晶博士分享了他们的科研经历与心得、思考，为同学们提供经验借鉴与精神激励。分享会由彭灵雅老师主持，房喻院士及其博士和硕士研究生出席。

赵智豪老师回顾了自己硕博连读到博士后的科研经历，以及其中的心路历程，强调了前期深度思考、研究方向聚焦以及成果连续积累的重要性，提出科研应避免盲目试错、及时分析数据调整方案并注重效率。随后，他还分享了论文投稿经历以及求职和生活中遇到的困难和转机、选择与思考，指出应不断提升自身能力，注重身心成长，进行自身纵向对比。

刘向泉博士以“科研之路，成长之思”为主题总结了自己的科研经历与体会。他认为科研应以问题驱动为核心，从实际应用与文献调研中寻找课题方向，从细微之处发现新机会；要学会时间管理，营造高效工作时段；面对困难与挫折，应保持心态，积极调整，并通过与导师、同学的沟通与合作予以化解。

李晶博士围绕“科研与成长”主题，结合自身从硕士阶段到博士阶段的科研经历与成长体会，分享了她在科研训练、博士申请及博士初期适应过程中的思考与收获。

最后，房喻院士进行了总结，他期望大家能够沉心做事、磨砺心性，涵养“皮实”的品格；珍惜当下、奋发有为，不负时代给予的成长条件，拼搏进取，持续向前。

On January 12, 2026, the Institute of New Concept Sensors and Molecular Materials at Shaanxi Normal University held a research experience sharing session titled "Troubleshooting Shop on the Path of Research", featuring faculty and students from Prof. Fang Yu's group.

Dr. Zhao Zhihao, Dr. Liu Xiangquan, and Dr. Li Jing shared their research journeys and insights, offering guidance and inspiration to the students.

The session was hosted by Dr. Peng Lingya, with Prof. Fang Yu and his doctoral and master's students in attendance.

Zhao Zhihao reflected on his research journey from a combined master's-to-doctoral program through to his postdoctoral work, sharing his personal insights along the way. He emphasized the importance of deep early-stage thinking, focusing research directions, and the continuous accumulation of results. He suggested that research should avoid blind trial-and-error approaches, instead prioritizing timely data analysis, plan adjustments, and efficiency. Subsequently, he shared experiences from his paper submission process, as well as the challenges and turning points encountered in job hunting and daily life, highlighting choices and reflections. He stressed the need to continuously enhance one's capabilities, prioritize physical and mental growth, and engage in self-assessment through longitudinal comparison.

Liu Xiangquan summarized his research journey and insights under the theme "The Path of Research, Reflections on Growth". He said that research should be problem-driven at its core, identifying research directions through practical applications and literature reviews while discovering new opportunities in subtle details. He stressed the importance of mastering time management to create highly productive work periods; and when facing difficulties and setbacks, maintaining a positive mindset, actively adjusting strategies, and resolving challenges through communication and collaboration with advisors and peers.

Li Jing, focusing on the theme of Research & Growth

and drawing from her own journey from master's to doctoral research, shared her reflections and insights on research training, PhD applications, and the early adaptation process during her doctoral studies.

Finally, Prof. Fang Yu in his concluding remarks urged everyone to focus wholeheartedly on their work, temper their character, and cultivate resilience. He encouraged them to cherish the present moment, strive for excellence, and make the most of the opportunities for growth afforded by this era, calling on them to persevere with determination and continue moving forward.

房喻院士出席化学测量学“十五五”规划战略研讨会

Fang Yu attends Strategic Seminar on 15th Five-Year Plan for Chemometrics

2026 年 1 月 17 日，房喻院士在北京出席了由国家自然科学基金委员会化学科学部资助，清华大学、北京大学共同承办的化学测量学“十五五”规划战略研讨会。

此次研讨会在梳理并总结“十四五”期间我国化学测量学成就的基础上，聚焦“十五五”时期化学测量学的发展框架与重点攻关方向开展研讨。5 位中国科学院院士作大会报告，7 位专家作特邀报告，10 位专家作规划汇报，为科学、高质量地编制与实施化学测量学“十五五”规划提供了思想基础和行动指引。

清华大学及基金委化学部相关领导，11 位院士及 100 余位来自国内近 40 所高等院校和科研院所的专家学者出席会议。

On January 17, 2026, Prof. Fang Yu attended the Strategic Seminar on the 15th Five-Year Plan for Chemometrics in Beijing, which was funded by the Chemistry Division of the National Natural Science Foundation of China and jointly organized by Tsinghua University and Peking University.

This seminar, building upon a review and summary of China's achievements in Chemometrics during the 14th Five-Year Plan period, focused on discussing the development framework and key research directions for Chemometrics during the 15th Five-Year Plan period. Five academicians of the Chinese Academy of Sciences delivered plenary reports, seven experts presented invited reports, and ten experts provided planning briefings. These contributions laid the intellectual foundation and offered actionable guidance for the scientific and high-quality formulation and implementation of Chemometrics for the 15th Five-Year Plan period.

Officials from Tsinghua University and NSFC Chemistry Division, along with 11 academicians and over 100 experts and scholars from nearly 40 universities and research institutions in China, attended the meeting.

房喻院士出席西交大仪器学院第一届学术委员会与战略咨询委员会会议

Fang Yu attends first Academic Committee and Strategic Advisory Committee Meeting of XJTU School of Instrument

2026 年 1 月 18 日，房喻院士应邀出席西安交通大学仪器科学与技术学院第一届学术委员会第一次会议暨第一届发展战略咨询委员会（西安地区）委员会议，并获聘仪器学院学术委员会主任及发展战略咨询委员会委员。

房喻院士在交流讨论环节的总结中指出，西交大仪器学院成立以来，取得了突出发展成果，充分彰显了强劲的学科发展潜力和广阔发展空间。他强调，要高度重视高层次海外人才与专职科研人员对学科发展的支撑作用，要牢牢把握加强基础学科研究及学科交叉融合的发展趋势，不断健全成果转化机制，加强与行业企业的合

作联动，促进创新成果快速落地转化，打造西安交大仪器学科发展新引擎。

中国工程院院士、仪器学院学术委员会及发展战略咨询委员会名誉主任蒋庄德，仪器学院党委书记韦学勇教授、执行院长赵立波教授等班子成员，第一届学术委员会、发展战略咨询委员会委员及各系所教师代表 30 余人参加了会议。

On January 18, 2026, Prof. Fang Yu was invited to attend the first meeting of the First Academic Committee and the meeting of the First Development Strategy Advisory Committee (Xi'an Region) of the School of Instrument Science and Technology at Xi'an Jiaotong University, where he was appointed as Chair of the Academic Committee and a member of the Development Strategy Advisory Committee of the School of Instrument Science and Technology.

In his concluding remarks during the discussion session, Fang Yu noted that since its establishment, the School of Instrument at Xi'an Jiaotong University has achieved remarkable accomplishments, fully demonstrating robust disciplinary potential and vast growth prospects. He stressed the need to prioritize the supportive role of high-level overseas talent and full-time researchers in disciplinary advancement, the importance of firmly grasping the trend toward strengthening fundamental research and interdisciplinary integration, continuously improving mechanisms for transforming

research outcomes, enhancing collaborative efforts with industry and enterprises, accelerating the rapid implementation and commercialization of innovative achievements, and forging a new engine for the development of XJTU's instrumentation discipline.

Academician Jiang Zhuangde of the Chinese Academy of Engineering, honorary director of SIST Academic Committee and Strategic Development Advisory Committee, SIST Party Secretary Prof. Wei Xueyong, executive dean Prof. Zhao Libo, along with over 30 representatives including members of the first Academic Committee and Strategic Development Advisory Committee and faculty representatives from various departments and institutes, attended the meeting.

房喻院士在笃学学术论坛作报告

Fang Yu speaks at Duxue Academic Forum

2026 年 1 月 19 日，在陕西师范大学化学化工学院举办的 2025 年度笃学学术论坛上，房喻院士作大会报告，新概念传感器与分子材料研究院刘忠山副教授和苗荣副教授作分享汇报。

房喻院士以《传感驱动的分子材料创新——从荧光传感器到高增益透镜》为题，围绕分子材料创新的核心逻辑，阐述了传感技术在荧光传感器研发、高增益透镜制备中的核心原理、关键突破与应用前景。

在学术分享环节，刘忠山副教授和苗荣副教授分别以“多级孔材料的表界面化学”和“软界面限域荧光测量”为题，汇报了他们的代表性研究进展、

创新性研究成果及未来工作设想。

闭幕式上，房喻院士寄语青年教师，希望他们既要多动脑筋、多想办法、多借力，敢于打破思维定势，也要筑牢根基，多加努力，在专业领域不断深耕。

On January 19, 2026, at the 2025 Duxue Academic Forum hosted by the School of Chemistry and Chemical Engineering at Shaanxi Normal University, Prof. Fang Yu delivered a keynote report, and Associate Professors Liu Zhongshan and Miao Rong from the Institute of New Concept Sensors and Molecular Materials gave presentations.

In the report titled "Sensing-Driven Innovation in Molecular Materials: From Fluorescent Sensors to High-Gain Lenses", Fang Yu, starting from the core logic of molecular material innovation, elaborated on the fundamental principles, key breakthroughs, and application prospects of sensing technology in the development of fluorescent sensors and the fabrication of high-gain lenses.

During the academic sharing session, Liu Zhongshan and Miao Rong fpresented their representative research progress, innovative findings, and future work plans under the titles of "Surface and Interface Chemistry of Multiporous Materials" and "Fluorescence Measurement in Soft Interface Confinement," respectively.

At the closing ceremony, Fang Yu urged young faculty members to think creatively, explore innovative solutions, and leverage available resources while daring to challenge conventional thinking, also emphasizing the importance of building a solid foundation through diligent effort and continuous deepening of expertise within their respective fields.

新概念研究院教师参加第八届胶体与界面化学青年学者论坛

INCSMM faculty participate in 8th Young Scholars Forum on Colloid and Interface Chemistry

2026年1月23日至25日，第八届胶体与界面化学青年学者论坛在西安市临潼区召开，陕西师范大学新概念传感器与分子材料研究院房喻院士、丁立平教授、刘静教授、刘凯强教授、边红涛教授、彭军霞教授、刘太宏教授、彭浩南教授、苗荣副教授、刘小燕副教授、刘忠山副教授和赵智豪老师参会。

房喻院士在大会开幕式上为获得"RSC Applied Interfaces青年科学家奖"荣誉称号的青年学者颁发了证书。边红涛教授、苗荣副教授分别作了题为

“离子界面吸附与选择性识别的超快光谱研究”和“软界面荧光探针”的学术报告。

闭幕式上，房喻院士在总结致辞中对办好下届会议提出建议，并对胶体与界面化学领域的青年人才提出了期望。

此次论坛由中国化学会胶体与界面化学专业委员会主办，西安交通大学前沿科学技术研究院、应用表面与胶体化学教育部重点实验室、陕西省新概念传感器及分子材料重点实验室、陕师大和西交大新概念传感器与分子材料研究院共同承办。

From January 23 to 25, 2026, faculty of the Institute of New Concept Sensors and Molecular Materials at Shaanxi Normal University including Prof. Fang Yu, Prof. Ding Liping, Prof. Liu Jing, Prof. Liu Kaiqiang, Prof. Bian Hongtao, Prof. Peng Junxia, Prof. Liu Taihong, Prof. Peng Haonan, Assoc. Prof. Miao Rong, Assoc. Prof. Liu Xiaoyan, Assoc. Prof. Liu Zhongshan, and Lecturer Zhao Zhihao, participated in the 8th Young Scholars Forum on Colloid and Interface Chemistry held in Lintong District, Xi’an.

Fang Yu presented certificates to young scholars honored with the “RSC Applied Interfaces Young Scientist Award” at the opening ceremony. Bian Hongtao and Miao Rong presented reports titled “Ultrafast Spectroscopic Studies on Ion Interface Adsorption and Selective Recognition” and “Fluorescent Probes for Soft Interfaces”, respectively.

At the closing ceremony, Fang Yu offered suggestions for organizing the next conference and expressed his expectations for young talents in the field of colloid and interface chemistry in his concluding remarks.

This forum is hosted by the Colloid and Interface Chemistry Committee of the Chinese Chemical Society, and co-organized by Xi’an Jiaotong University Frontier Institute of Science and Technology, Key Laboratory of Applied Surface and Colloid Chemistry (Ministry of Education), Shaanxi Provincial Key Laboratory of New Concept Sensors and Molecular Materials, and the SNNU and XJTU Institute of New Concept Sensors and Molecular Materials.

陕师大新概念研究院举行 2025 年度总结暨表彰会

SNNU INCSMM 2025 Summary and Commendation Meeting held

2026 年 1 月 28 日下午，陕西师范大学新概念传感器与分子材料研究院在报告厅举行 2025 年度总结暨表彰会，研究院科研团队教师、专职科研人员、行政人员及博士后 30 余人参加表彰会，物理学与信息技术学院辛云宏教授、人工智能与计算机学院马苗教授、国际商学院毕超副教授出席会议。会议由副院长杨小刚主持。

首先，副院长丁立平教授代表研究院作 2025 年度工作总结，从科学研究、队伍建设、人才培养、交流与合作、

学术声誉与社会服务、保密资质与成果转化和总结与展望等七个方面梳理总结了研究院过去一年的工作。

接下来，行政人员 2 人、专职科研人员 5 人、科研团队教师 14 人分别作 2025 年度个人工作汇报。

随后，丁立平副院长宣读了 2025 年度表彰名单，薛东旭、苗荣、刘忠山获“标志性论文奖”，罗艳彦、刘小燕获“人才培养突出贡献奖”，彭浩南、边红涛、苗荣获“教学突出贡献奖”，杨小刚、彭军霞、王佩、何怡楠、毕超获“科技成果转移转化奖”，刘太宏、薄鑫、赵智豪获“省级人才项目获得奖”，刘凯强获“对外合作突出贡献奖”，丁立平、刘太宏获“国家级项目获得奖”。房喻院士为获奖老师颁发荣誉证书并与获奖者合影留念。

最后，房喻院士发表总结讲话，回顾了研究院过去四年的发展，总结分析了 2025 年取得的进步与不足，并对大家提出期望，希望研究院在马年能有新的格局、新的气象，年轻一代能有新的发展，并祝大家新年快乐。

On January 28, 2026, the Institute of New Concept Sensors and Molecular Materials at Shaanxi Normal University held the 2025 Summary and Commendation Meeting in the lecture hall. About 30 research faculty members, R&D engineers, administrative staff members and postdoc researchers of the institute, and Prof. Xin Yunhong from School of Physics and Information Technology, Prof. Ma Miao from School of Artificial Intelligence and Computer Science, and Assoc. Prof. Bi Chao from International Business School attended the meeting, which was chaired by vice dean Mr. Yang


2026
2025年度工作汇报
汇报人：左振男
汇报时间：2026年1月28日


4、微波技术与天线
5、HFSS 电磁仿真设计
6、CST 仿真与设计理论与实践
仿真与计算
1、龙伯透镜天线
2、龙伯透镜反射器
3、微带天线
4、多波束龙伯透镜天线
5、馈源天线


2025年年终


年终总结汇报
（2025年）
汇报人：文瑞娟
2026年1月28日

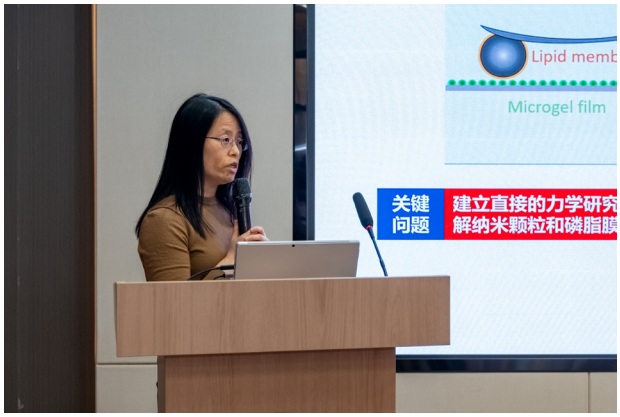

2025


2025年度工作
赵智豪
2026年1月28日


2025年终
彭灵雅
2026年1月2


2025工作总结
2025 Annul Review
汇报人：薄鑫 副研究员
Institute of New Concept Sensors and Molecular Materials
School of Chemistry and Chemical Engineering
Shaanxi Normal University


2025年终汇报
刘忠山
新概念传感器与分子材料研究院
2026年1月28日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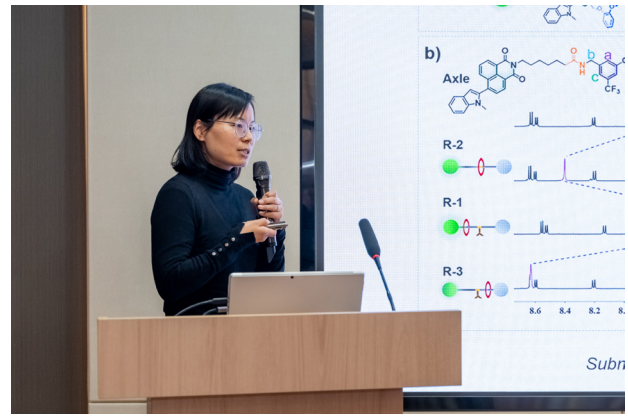
Microgel film
关键问题
建立直接的力学研究
解纳米颗粒和磷脂膜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Axle
R-2
R-1
R-3


分MOF：多基元
UMCM-1
Zn BDC BTB
Diversified Edge Length Strategy
MUF-7a
Zn BDC BTB BPDC


C1:
C2
Carbe


2025年终工作总
汇报人
彭浩南
新概念传感器与分子材料研
陕西师范大学化学化工学
2026年1月28日


2025年度工
liuth121@snnu.edu.cn
2026年01月28日


2025年度工作汇报
边红涛
光子鼻与分子材料研究团队
陕西师范大学化学化工学院
2026-01-28


2025年——年终
报告人：彭军霞


——2025年终汇报
刘 凯 强
陕西师范大学化学化工学
kaiqiangliu@snnu.edu
2026年1月28日


2025年工作汇报
刘 静


2025年度工作总结暨表彰会
第二项
颁奖仪式


新概念传感器与分子材料研究院
2025年度工作总结暨表彰会
第二项


新概念传感器与分子材料研究院
2025年度工作总结暨表彰会
第二项


新概念传感器与分子材料研究院
2025年度工作总结暨表彰会
第二项

Xiaogang.

First, Ding Liping presented the 2025 Annual Work Summary on behalf of the institute. In which she outlined the institute's accomplishments over the past year across seven key areas: scientific research, team development, talent cultivation, exchange and collaboration, academic reputation and social service, confidentiality certification and achievement transformation, and concluding reflections and future outlook.

Next, two administrative staff members, five R&D engineers, and fourteen faculty members each presented their 2025 annual individual work reports.

Subsequently, Ding Liping announced the List of Honorees for 2025. Xue Dongxu, Miao Rong, and Liu Zhongshan received the "Landmark Paper Award"; Luo Yanyan and Liu Xiaoyan received the "Outstanding Talent Development Contribution Award"; Peng Haonan, Bian Hongtao, and Miao Rong received the "Outstanding Teaching Contribution Award"; Yang Xiaogang, Peng Junxia, Wang Pei, He Yinan, and Bi Chao received the "S&T Achievement Transfer Award"; Liu Taihong, Bo Xin, and Zhao Zhihao received the "Provincial Talent Project Award"; Liu Kaiqiang received the "Outstanding External Cooperation Contribution Award"; and Ding Liping and Liu Taihong received the "National Project Award". Prof. Fang Yu presented honorary certificates to the award recipients and took commemorative

photos with them.

Finally, Fang Yu delivered a concluding address, reviewing the institute's development over the past four years and summarizing the progress and shortcomings achieved in 2025. He expressed his hopes for the institute to embrace new horizons and a fresh outlook in the Year of the Horse, for the younger generation to achieve new growth, and extended his New Year's greetings to all.

边红涛教授参加谱学动力学前沿研讨会并作报告

Bian Hongtao presents at Frontier Symposium on Spectral Dynamics

2026 年 1 月 29 日至 30 日，陕西师范大学新概念传感器与分子材料研究院边红涛教授在上海参加了由复旦大学主办的谱学动力学前沿研讨会，并作题为“离子界面吸附与选择性识别的非线性光谱研究”的邀请报告。

本次会议是献礼复旦大学化学系百年系庆的系列活动之一，聚焦谱学技术及相关理论的最新发展与突破，围绕复杂化学反应动态过程追踪、分子激发态动力学表征、微观作用机理阐释等核心议题展开讨论。

On January 29-30, 2026, Prof. Bian Hongtao from the Institute of New Concept Sensors and Molecular Materials at Shaanxi Normal University attended the Frontier Symposium on Spectral Dynamics hosted by Fudan University in Shanghai, where he presented an invited report titled “Nonlinear Spectroscopic Studies on Ion Interface Adsorption and Selective Recognition”.

This conference is part of a series of events celebrating the centennial anniversary of Fudan University's Department of Chemistry. It focuses on the latest developments and breakthroughs in spectroscopic techniques and related theories, with discussions centered on core topics such as tracking the dynamic processes of complex chemical reactions, characterizing the dynamics of molecular excited states, and elucidating microscopic mechanisms of action.

RESPONSIVE MATERIALS
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Recent advances in fluorescent materials innovation and film-based sensing application

Xinyu Gou, Junxia Peng, Yu Fang

荧光敏感材料的创新设计及其薄膜传感应用进展

Xinyu Gou, Junxia Peng*, Yu Fang*. Responsive Mater., 2026, e70041, DOI: https://doi.org/10.1002/rpm2.70041

薄膜基荧光传感器（FFSs）近年来因其高灵敏度、快速响应、非接触检测和易于集成等优势，在公共安全、环境监测和疾病诊断等领域展现出重要应用潜力，并被列为 IUPAC 2022 年化学十大新兴技术之一。FFSs 的核心在于荧光敏感薄膜，其内部结构决定其灵敏度、选择性、响应速度和可逆性等关键指标。为突破传统荧光敏感薄膜中分子扩散缓慢、信噪比低等瓶颈，提出了通过构建“分子通道”提升整体性能的设计思想。

围绕这一目标，本综述系统总结了四类高性能荧光敏感薄膜的构筑策略：其一是设计非平面荧光分子，通过空间位阻抑制 π－π 堆积，在薄膜中形成内在孔隙结构，从而兼顾高量子产率与快速传质；其二是利用小分子凝胶剂的自组装行为构建三维多孔凝胶网络，干燥后保留连续孔道，实现良好的光稳定性和响应可逆性；其三是引入 MOF、COF 和 CMP 等框架材料，获得具有规则拓扑结构和永久孔隙的化学薄膜，从分子层面精确调控孔径与活性位点分布；其四是采用界面限域聚合，在气－液或液－液界面原位生成自支撑纳米薄膜，实现高比表面积、可控厚度及优异的荧光单元利用效率。

在应用层面，文章详细梳理了 FFSs 在多类目标物检测中的代表性成果，包括毒品、化学战剂、VOCs、食品化学残留以及温度、湿度、紫外光和压力等物理刺激。通过合理的分子设计与薄膜结构工程，多个体系已实现 ppb 甚至更低检测限，同时具备秒

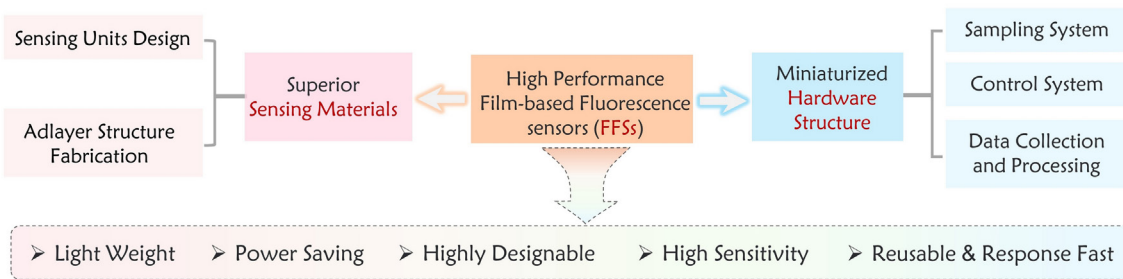

图 1. 薄膜基荧光传感器的核心组成
Figure 1. Schematic illustration for the innovative development of FFSs

级响应和良好循环稳定性。最后提出结合分子工程、器件集成与数据驱动方法将是推动 FFSs 实际应用与智能化发展的核心路径。

第一作者：陕西师范大学博士研究生苟欣瑜
通讯作者：陕西师范大学房喻院士、彭军霞教授

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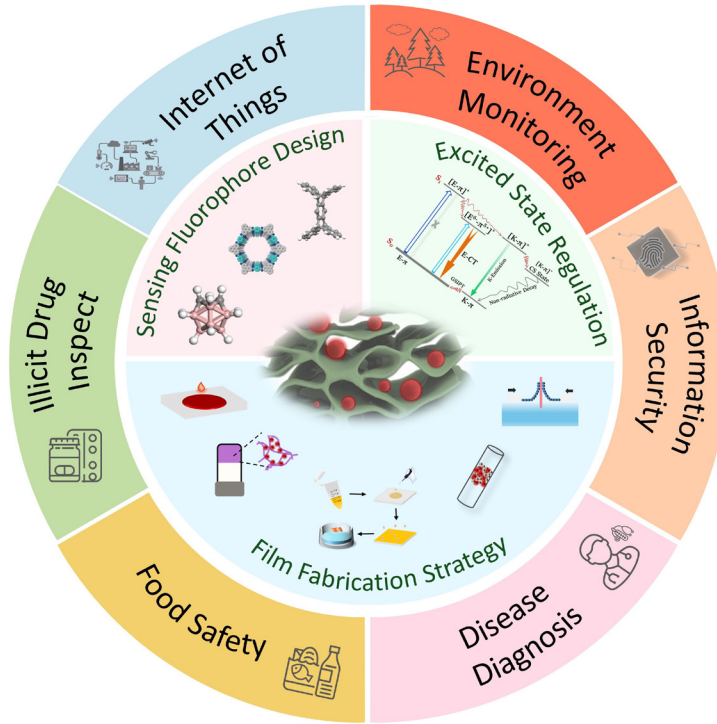

图 2. 具有“分子通道”的荧光传感薄膜的制备策略功能应用
Figure 2. The preparation strategy and functional application of fluorescent sensing films with “molecular channels”

Film-based fluorescent sensors (FFSs), an “IUPAC Top Ten Emerging Technology in Chemistry 2022”, are attracting growing interest for applications in public safety, environmental monitoring, and disease diagnosis, driven by their high sensitivity, rapid response, and facile integration. The core of FFSs lies in their engineered sensing films, where efficient molecular channels within the film's architecture dictate key performance metrics like response/recovery speed and signal-to-noise ratio. To break through the bottlenecks in traditional fluorescent sensitive films such as slow molecular diffusion and low signal-to-noise ratio, rational design and precise fabrication of sensing films with integrated molecular channels are proposed.

This review presents a critical overview of recent advances in constructing fluorescent sensing films with abundant molecular channels, and focuses on exploring strategies to enhance molecular transport and sensing efficiency: (1) Introducing nonplanar geometries into fluorophores and depositing them onto a proper substrate by spin-coating, drop-casting, Langmuir-Blodgett/Schaeffer (LB/LS) technique. These nonplanar molecular structures hinder dense molecular packing during film formation, promoting the formation of molecular-level porous structures; (2) Fabricating fluorescent LMWGs and forming molecular-gel-based films with continuous 3D networks through the supramolecular assembly of gelators. Subsequent solvent removal produces abundant porous structures, which is beneficial to enhance the response speed and reversibility of the sensing film while offering excellent photostability and processability; (3) Integrating framework materials with ordered topological structures—such as metal-organic frameworks (MOFs), covalent organic frameworks (COFs), and conjugated microporous polymers (CMPs) into fluorescent film fabrication. These materials provide permanent porosity, well-defined pore sizes, and uniform distribution of sensing sites, all of which facilitate analyte diffusion and binding; (4) Employing interfacial confined polymerization to incubate self-standing nanofilms in situ with high specific surface areas. These films provide both physical isolation of fluorophores and optimized mass transport pathways, contributing to improving photostability and signal reproducibility under practical applications.

The emerging applications of FFSs in detecting various targets, including illicit drugs, chemical warfare agents, volatile organic compounds (VOCs), foodborne chemical residues, humidity, temperature, ultraviolet (UV) light, and pressure are also summarized. By synergizing rational molecular design with thin-film engineering, multiple systems have achieved ppb or even lower detection limits, while featuring second-level response and good cycling stability. Finally, it is proposed that integrating molecular engineering, device integration, and data-driven methods will be the core path for promoting the practical application and intelligent development of FFSs.

First Author: Gou Xinyu, doctoral candidate, Shaanxi Normal University
Correspondence Authors: Prof. Peng Junxia, Prof. Fang Yu, Shaanxi Normal University
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中国工程院战略咨询中心一行来访

Visitors from CAE Strategic Consulting Center received

2026 年 1 月 13 日上午，中国工程院战略咨询中心马守磊副主任一行在陕西省政协委员张国宁陪同下到访陕西师范大学新概念传感器与分子材料研究院，并与房喻院士围绕颠覆性技术、前沿技术促进未来产业的路径与机制等主题进行了座谈交流。

座谈结束后，彭军霞教授带领来宾参观了综合展厅，介绍了研究院的基本情况、发展理念、科研方向、技术优势、研究成果等。

中国工程院战略咨询中心齐鸣高级工程师、郑州大学信息管理学院院长杨瑞仙教授、曹玲静讲师及中国工程物理研究院博士后淮琳崴等陪同来访。

On January 13, 2026, Mr. Ma Shoulei, deputy director of the Strategic Consulting Center of the Chinese Academy of Engineering, accompanied by Zhang Guoning, a member of the Shaanxi Provincial Committee of the Chinese People's Political Consultative Conference, visited the Institute of New Concept Sensors and Molecular Materials at Shaanxi Normal University.

They held discussions with Prof. Fang Yu on topics including pathways and mechanisms for disruptive technologies, and cutting-edge technologies to promote future industries.

Following the meeting, Prof. Peng Junxia led the guests on a tour of the exhibition room, introducing the institute's basic profile, development philosophy, research directions, technological strengths, and research achievements.

Accompanying the visit were Senior Engineer Qi Ming from CAE Strategic Consulting Center, Prof. Yang Ruixian, dean of School of Information Management and Lecturer Cao Lingjing from Zhengzhou University, and Dr. Huai Linwei, a postdoctoral researcher at the China Academy of Engineering Physics.

在生命的求索中活成真心快乐的人

刘凯强

1997 年考学来到陕西师范大学已经快 30 个年头了，当时的我是班里看上去长得最着急的那个，也是班里年纪最长的那个。在过去的岁月里，11 年在读书，18 年在工作，如今的我已经变成了最不愿被沧桑定义的人。与学生时代不同，特别喜欢把胡子剃得精光，因为我不愿面对镜子里的自己被岁月留下太过明显的痕迹。当然这只是一个自嘲而已。其实，最为重要的是，我逐渐领悟到了苏东坡“也无风雨也无晴”、阳明先生“心即理、知行合一、致良知”以及乔布斯“Stay hungry, Stay foolish”的思想精髓。有时候有人会追问我人活在世上的意义，你我的想法又有什么价值，我常沉默不语，因为我不敢妄言，我想快乐地活着本身就是一种意义。如果你有不同见解，也不妨私信告知。

六十年一个甲子，似乎是一个轮回，很快就到丙午年了，你的祝福如约而至。这是你的挂念，也是你的情谊，真实延续了你我之间的关系，让我感到十分幸福。在此，我深表感谢。你若再次追问我活着的意义，请践行“五个保持”（保持健康、保持快乐、保持进步、保持联系、保持距离），以此作为 2026 年给你的新年礼物，也作为我活着意义或价值的一小部分。

健康为土，载生命之基。古人云：“身体发肤，受之父母，不敢毁伤，孝之始也”，保持健康这是一个老生常谈的问题，道理似乎谁都懂。真正能保持健康，其实不仅仅是对身体的呵护，更是对生命的敬畏与尊重，爱护自己也等于善待家人，回馈社会。当我们感知到身体的每一个预警信号时，就学着“乌龟”爬行放慢自己的节奏，杜绝 overloading，比如控制饮食，修正作息，让自己身体舒展、内心平和、情绪稳定。保持健康，是不是才有可能比肩杨振宁、Goodenough 等长寿达人，看山河壮美，迎时代更承？保持健康，是不是才有可能像许多伟人创造更多人类奇迹，登天入地，环游四海？保持健康，是不是才有可能实现大隐于市，通透智慧，知足幸福，理随心至，行之所想？保持健康，是我们肉体与精神层面的一种追求目标。保持健康，我们每天能一起看日出日落，听晨钟暮鼓，你带上你的实验记录本与小提琴，我带上我的《软物质》与《东坡文集》。

快乐似火，燃生命之光。“和光同尘舞”是我怀念母亲词作中的最后一句，其源于道家哲学，反映的是顺应自然的哲学观点。“和光同尘”的重点最终应该落在“舞”字上，摈弃那种勉为其难的世俗迎合，而在于真正的自由舞、开心笑，感染着身边的一草一木，感动着行走的牛、游动的鱼、飞翔的鸟。放下吧，这似乎是一句最为揪心或最不负责任的话！怎能放下？一个名利双收的追求如何轻易放下？数十年苦苦追求的爱情怎么可能轻松放下？那份背信弃义的仇恨与求而不得的伤害如何放下？那份刻骨铭心的遭遇又能如何放下？然而，仔细想来，不放下又能怎样？其实这根本改变不了已经发生或正要发生的事情，徒增烦恼罢了。其实，和光同尘本质上强调的是思想层次上的顺应自然，并非消极遁世，包含有放下执念的意思，舞则是永不放弃的自在与从容，也是保持快乐的根本。所以，只有保持快乐，才能让我们能够保持更为长久健康地活着。

进步若水，润才智之根。“放下执念、毅然前行”，这是我曾经在研究院研究生论坛里讲过的话，也是自己一直信守的人生信条，这便是“保持进步”最为简单的阐释。《大学》有云“知止而后有定，定而后能静，静而后能安”，保持进步不仅仅是外在的改变，更是内心的沉淀与提升。无论是职业、学业、事业上的成就，涵盖了我们的个人品格、道德修养、心智成长等诸多方面，这岂与年龄、身份、地位有关？总之，保持进步始终应该是我们每一天必备的重要任务。如果不保持进步，我们如何能为急需答疑解惑的学生精准指点迷津？如果不保持进步，我们如何回报世人特别是亲人朋友对我们的厚望？如果不保持进步，我们如何能在优秀的群体中幸福地生活？如果不保持进步，我们如何能把中华民族乃至世界最优秀的精神与智慧传承下去？如果不保持进步，我们如何能在一起继续快乐地享受日出日落的浪漫？你如松挺拔，我似竹从容，若我不保持进步，恐难与你并肩共赏繁花似锦、人间烟火。

联系如木，聚知音之林。其实，兜兜转转，我的所得，其实就是你所给。我唱歌，有你在听；我吟诗，有你在品；我所去之处，便与你相识；我在归途，有你同行。其实，所有的一切都存在于你我他共同构建的并不完美的关系纽带中，是缘分，也是因果。你离开我三年，我不怨不恨；我离开你五年，你念念不忘；你真心待我，我温暖回响；你倾囊相授，我感恩传承；我力不能及，你施以援手；我欲弃甲，你推我前行……这种种互动其本质上的互相促进与同频共振，也是保持联系的精髓所在。换句话讲，保持联系，能够让我们拓展交往的视野与品位，促进我们能在互相学习中逐渐成长。我看不到的，你帮我看到了；你找不到的，我帮你找到了；你有好事想着我，我有好酒念着你……保持联系，方能让我们一起分享共同进步的喜悦，这其实也是保持健康、快乐与进步的另一

重要途径。如果你在工作之余真想遛弯看风景，记得喊上我，估计我一定会有空。

距离类金，砺初心之锋。古人观山水“远观其势，近取其质”的智慧，恰是教我们与生活相处的密码，于人于己留一分余地、保持一分距离，于世俗存三分清醒，让生命在“不即不离”中自在舒展。回味王维“明月松间照，清泉石上流”，那空山月夜的静谧，非因山远，而是心远离了尘嚣，方见松影泉声的本真；柳宗元“孤舟蓑笠翁，独钓寒江雪”的孤高，非因江寂，而是魂守住了孤傲，方在寒雪中照见自己的方向。凡人如你我，行于世间难。戒除陋习以护体魄根基，知止过度贪欲以品味知足之乐，在喧嚣中守心以明志，御浮华风气以修通透自在。无法回避的世间事，无法绕开的人间路，只需“不即不离”，保持距离，如观山水，远望其势不慌张，近察其质有分寸。既知“独行易迷途”，不妨结伴同行。不为“留痕”争虚名，只求看到眼前景。

行文至此，赠你我一言结之：健康如土载万物，快乐似火暖平生，进步若水润才智，联系若木聚知音，距离类金砺初心。让五者环环相生，织就真心快乐的锦缎。丙午马年将至，愿你我并肩躬行—看日出不必争先后，赏晚霞何须论高低？唯守住这份自在，方不负岁月馈赠，亦不负快乐活着的初心。

Living as a Truly Happy Person in the Quest of Life

Liu Kaiqiang

It has been nearly 30 years since I entered Shaanxi Normal University in 1997. Back then, I was the oldest and the most anxious student in my class. After spending 11 years studying and 18 years working, I've become the person who is least willing to be defined by the vicissitudes of time. Unlike my student days, I particularly enjoy shaving my beard clean off, for I refuse to confront the mirror and see the all-too-obvious marks time has left on my face. But this is just self-deprecating humour. In truth, what matters most is that I have gradually come to grasp the essence of Su Dongpo's "Neither rain nor sunshine matters," Wang Yangming's "The mind is the principle, knowledge and action are one, and the realization of innate knowledge", and Steve Jobs' "Stay hungry, stay foolish." Sometimes people press me about the meaning of life — what value our thoughts hold. I often fall silent, for I dare not speak lightly. I believe living joyfully is meaning in itself. If you have a different perspective, feel free to message me privately.

Sixty years mark a full cycle, and soon the Year of the Fire Horse (Bingwu) will arrive. Your blessings have come as promised. This is your care and your friendship, truly sustaining our bond and bringing me great happiness. Here, I express my deepest gratitude. Should you ever again inquire about the meaning of my existence, I ask that you practice the "Five Stays" (Stay healthy, Stay happy, Stay motivated, Stay connected, and Stay off), which I offer as my New Year's gift to you in 2026 — and as a small part of the meaning or value of my life.

Health is the foundation that sustains life. As the ancients said, "Our bodies and hair are gifts from our parents; we dare not harm them, for this is the beginning of filial piety". Maintaining health is a well-worn topic, a principle seemingly understood by all. Yet true health preservation is not merely about caring for the body — it is a profound reverence and respect for life itself. Cherishing oneself is synonymous with kindness toward family and a contribution to society. When we sense every warning signal from our bodies, we should learn to slow down like a turtle, avoiding overloading — for instance, by controlling our diet, adjusting our schedules, and allowing our bodies to relax, our minds to find peace, and our emotions to stabilize. Only by maintaining health can we hope to match the longevity of masters like Yang Chen-ning and Goodenough, witnessing the majestic beauty of mountains and rivers while embracing the era and carrying forward its legacy. Only by staying healthy can one hope to emulate the great figures of history, creating more miracles for humanity — scaling the heavens, exploring the depths, and journeying across the seas. Only by staying healthy can one aspire to live a life of profound seclusion amidst the bustle of the city, attain penetrating wisdom, find contentment in happiness, let reason follow the heart, and walk the path of one's true desires. Maintaining health is a pursuit we strive for both physically and mentally. By staying healthy, we can witness sunrises and sunsets together each day, listen to the morning bells and evening drums. You bring your lab notebook and violin, while I carry my Soft Matter and Su Dongpo's Collected Works.

Joy burns like fire, igniting the light of life. "Dance with the light amidst the dust" — the final line in my tribute to my mother — draws from Daoist philosophy, embodying the philosophy of harmony with nature. The essence of "Dancing with the light amidst the dust" ultimately lies in the word "dance." It means abandoning forced conformity to worldly expectations, embracing true freedom to dance and laugh joyfully, thereby touching every blade of grass and tree around you, moving the walking oxen, swimming fish, and soaring birds. "Let it go" — these words seem to be the most heart-wrenching or the most irresponsible! How can one let go? How can one easily abandon the pursuit of

fame and fortune? How can one lightly discard decades of painstakingly pursued love? How can one release the hatred born of betrayal and the pain of unfulfilled longing? How can one ever let go of that searing, unforgettable experience? But upon reflection, what good does holding on do? It doesn't change what has happened or what is about to happen — it only adds to one's troubles. In essence, "Dance with the light amidst the dust" emphasizes aligning with nature on a mental level — not passive withdrawal from the world — and involves letting go of attachments. Dance, meanwhile, embodies an unwavering sense of ease and composure, serving as the very foundation of joy. Only by maintaining joy can we sustain a longer, healthier life.

Progress flows like water, nourishing the roots of wisdom. "Let go of attachments and move forward resolutely" — these words I once shared at the graduate forum of the institute have become my steadfast life creed. This is the simplest interpretation of "maintaining progress". The Great Learning states: "Knowing where to stop leads to stability; stability leads to tranquility; tranquility leads to peace". Sustained progress is not merely about external transformation, but also about inner refinement and elevation. Achievements in career, academics, or professional pursuits encompass numerous aspects of our personal character, moral cultivation, and intellectual growth— how could these be tied to age, identity, or status? In short, making progress should always be an essential task we undertake every single day. If we fail to keep advancing, how can we offer precise guidance to students who urgently need answers to their questions? If we fail to keep advancing, how can we repay the high expectations placed upon us by the world, especially our loved ones and friends? If we fail to keep advancing, how can we live happily among outstanding individuals? If we fail to keep advancing, how can we pass on the finest spirit and wisdom of the Chinese nation — indeed, of the world? If we fail to keep advancing, how can we continue to joyfully savor the romance of sunrise and sunset together? You stand tall like a pine, I remain composed like a bamboo. Should I fail to keep advancing, I fear I'll be unable to stand shoulder to shoulder with you, admiring the blossoms in full bloom and the earthly delights of life.

Connect like wood, gather in a forest of kindred spirits. Truth be told, after all the twists and turns, what I've gained is really what you've given. When I sing, you listen; When I recite poetry, you savor it; Wherever I go, I meet you; On my way home, you walk beside me. Truthfully, everything exists within the imperfect bonds we weave together— a karmic connection, a cycle of cause and effect. Three years apart, I bore no resentment; Five years apart, you never ceased to think of me. When you treated me with sincerity, I responded with warmth; When you shared all you knew, I cherished and carried on your legacy. When I fell short, you lent a helping hand; When I wanted to give up, you pushed me forward ... The mutual reinforcement and resonance inherent in these interactions are the very essence of maintaining connections. In other words, staying connected allows us to broaden our horizons and refine our tastes in relationships, fostering growth through mutual learning. What I cannot see, you help me see; What you cannot find, I help you find; When good things happen to you, you think of me; When I have fine wine, I think of you ... Staying connected allows us to share the joy of mutual growth — it's also another vital path to health, happiness, and progress. If you ever feel like taking a stroll to enjoy the scenery after work, just give me a call — I'm sure I'll be free.

Distance refines character, sharpening the edge of our original aspirations. The ancient wisdom of observing landscapes — "viewing their grandeur from afar, appreciating their substance up close" — reveals the very code for navigating life. It teaches us to leave room for others and ourselves, maintain a measured distance, and preserve a clear-eyed perspective on the mundane. Thus, life unfolds freely in that state of neither closeness nor detachment. Recalling Wang Wei's verse, "Bright moon shines through pine trees, clear spring flows over stones," the stillness of that moonlit night in the empty mountains stems not from the mountains' remoteness, but from the mind's detachment from worldly clamor—only then does the true essence of pine shadows and spring sounds reveal itself. Liu Zongyuan's solitary grandeur in "A lone fisherman in straw hat and cloak, fishing alone in the cold river under snow" stems not from the river's stillness, but from his soul guarding its proud solitude — thus finding his path amidst the icy snow. For mortals like you and me, navigating this world is no easy feat. Renounce bad habits to safeguard your physical foundation; Know when to stop excessive greed to savor the joy of contentment; Guard your heart amidst the clamor to clarify your purpose; Resist the allure of superficial trends to cultivate clarity and freedom. The affairs of this world cannot be avoided, the paths of life cannot be bypassed. Maintain a distance, neither too close nor too far — Like observing mountains and rivers: From afar, take in their grandeur without haste; Up close, examine their essence with discernment. Knowing that "traveling alone invites confusion", why not journey together? Seek not to leave a mark for empty fame, but simply to behold the scenery before your eyes.

At this point, let me offer a parting thought: Health is like soil nurturing all things, joy like fire warming life's journey, progress like water nourishing wisdom, connection like wood gathering kindred spirits, and distance like gold tempering our original resolve. Let these five elements intertwine, weaving a tapestry of genuine joy. As the Year of the Fire Horse approaches, may we walk side by side — watching the sunrise without vying for first place, admiring the sunset without measuring heights. Only by holding onto this freedom can we honor the gifts of time and remain true to the heart's original joy of living.