


## 南京农业大学人工智能学院师资队伍（个人信息）

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学 位	博士	职 称	讲师	
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个人简介	<p>教育经历：2012.03-2015.12 东南大学，材料物理，博士；                  2009.09-2012.03 东南大学，材料物理，硕士；                  2004.09-2008.06 淮南师范学院，物理学，学士。</p> <p>工作经历：2015.12-至今，南京农业大学，讲师。</p>			
研究领域	主要从事重金属离子、药物残留等检测机理及应用研究。包括半导体材料光学性质的研究，重金属离子等与纳米材料作用机理的研究。			
教授课程	《模拟电子技术》、《电工电子学 I》、《光谱技术及应用》。			
承担项目	<p>迄今主持参与的部分项目如下：</p> <ol style="list-style-type: none"> <li>1. 国家自然科学基金青年基金：面向果蔬痕量 Hg<sup>2+</sup> 离子检测的增强荧光探针制备及其机理研究，11604154，（主持）；</li> <li>2. 中央高校基金，KJQN2017011（主持）；</li> <li>3. 南京农业大学自然科学科研启动基金（主持）。</li> <li>4. 国家自然科学基金，基于宽禁带半导体量子点的高效蓝紫光发光二极管的研制和性能研究，11274063（参与）；</li> <li>5. 国家自然科学基金，表面等离激元引起的碳化硅纳米晶及其核壳结构荧光增强效应的研究，11074037（参与）；</li> <li>6. 国家自然科学基金，单层石墨烯的制备与光学性能研究，11144001（参与）。</li> </ol>			
学术成果	<p>多次获得智能创新大赛优秀指导教师。在国际学术期刊 <i>Carbon</i>、<i>Nanoscale</i>、<i>Advanced Materials Interfaces</i>、<i>Nanotechnology</i>、<i>Applied Physics Letter</i>、<i>Applied Surface Science</i>、<i>Journal of Applied Physics</i>、<i>Critical Review in Food Science and Nutrition</i> 等杂志发表 SCI 论文近 20 篇，其中第一作者论文 8 篇（包括 Q1 区，7 篇），他引次数 290 余次。部分 SCI 论文列表如下：</p> <ol style="list-style-type: none"> <li>1. <b>Dejian Dai</b>, Yuanyuan Li, Jiyang Fan, Room-temperature synthesis of various allotropes of carbon nanostructures (graphene, graphene polyhedral, carbon nanotubes and nano-onions, n-diamond nanocrystals) with aid of ultrasonic shock using ethanol and potassium hydroxide, <i>Carbon</i>, 2021, 179, 133. (Q1, IF: 9.594, Cites: 0)</li> <li>2. <b>Dejian Dai</b>, Tao Jiang, Wei Lu, et al, Nondestructive detection for egg freshness based on hyperspectral scattering image combined with ensemble learning, <i>Sensors</i>, 2020, 20, 5484. (Q1, IF: 3.576, Cites: 1)</li> <li>3. <b>Dejian Dai</b>, Chengyu Zhang, Ling Wang, Yang Wang, Baohua Zhang, Kaiming Deng, Wei Lu and Jiyang Fan, Reversible/Irreversible photobleaching of Fluorescent surface defects of SiC Quantum dots: Mechanism and sensing of solar UV irradiation, <i>Advanced Materials Interfaces</i>, 2019, 1900272. (封面) (Q1, IF: 6.147, Cites: 0)</li> </ol>			

	<ol style="list-style-type: none"> <li>4. Wei Lu, Yangming Guo, <b>Dejian Dai</b>, Chengyu Zhang, Xinyu Wang, Rice germination rate detection based on fluorescent spectrometry and deep belief network, <i>Spectroscopy and Spectral Analysis</i>, 2018, 38, 1303. (Q4, IF: 0.589, Cites: 6)</li> <li>5. Baohua Zhang, <b>Dejian Dai</b>, Jichao Huang, Jun Zhou, Qifa Gui, and Fang Dai, Influence of physical and biological variability and solution methods in fruit and vegetable quality nondestructive inspection by using imaging and near-infrared spectroscopy techniques: A review, <i>Critical Reviews in Food Science and Nutrition</i>, 2017, DOI: 10.1080/10408398.2017.1300789. (Q1, IF: 11.176, Cites: 55)</li> <li>6. <b>Dejian Dai</b>, Nan Zhang, Wenxia Zhang, and Jiyang Fan, Highly bright tunable blue-violet photoluminescence in SiC nanocrystal sodium dodecyl sulfonate crosslinked network, <i>Nanoscale</i>, 2012, 4, 3044. (Q1, IF: 7.790, Cites: 16)</li> <li>7. <b>Dejian Dai</b>, Zhenggao. Dong, and Jiyang Fan, Giant photoluminescence enhancement in SiC nanocrystals by resonant semiconductor exciton metal surface plasmon coupling, <i>Nanotechnology</i>, 2013, 24, 025201. (Q1, IF: 3.874, Cites: 22)</li> <li>8. <b>Dejian Dai</b>, Xiaoxiao Guo, and Jiyang Fan, Identification of luminescent surface defect in SiC quantum dots, <i>Applied Physics Letters</i>, 2015, 106, 053115. (Q1, IF: 3.791, Cites: 29)</li> <li>9. <b>Dejian Dai</b>, Xiaoxiao Guo, and Jiyang Fan, Synthesis and photoluminescence of semiconductor quantum dots/Cetyltrimethyl ammonium bromide vesicle core/shell nanostructures, <i>Applied Surface Science</i>, 2013, 276, 359. (Q1, IF: 6.707, Cites: 3)</li> <li>10. <b>Dejian Dai</b>, Jiyang Fan, and N. Zhang, Synthesis and luminescence properties of silica-coated cubic silicon carbide nanocrystal composites, <i>Micro &amp; Nano Letters</i>, 2011, 6, 878. (Q3, IF: 1.102, Cites: 5)</li> <li>11. Xiaoxiao Guo, <b>Dejian Dai</b>, Baolu Fan, and Jiyang Fan, Experimental evidence of <math>\alpha \rightarrow \beta</math> phase transformation in SiC quantum dots and their size-dependent luminescence, <i>Applied Physics Letters</i>, 2014, 105, 193110. (Q1, IF: 3.791, Cites: 19)</li> <li>12. W. X. Zhang, <b>Dejian Dai</b>, Xifang Chen, Xiaoxiao Guo, and Jiyang Fan, Red shift in the photoluminescence of colloidal carbon quantum dots induced by photon reabsorption, <i>Applied Physics Letters</i>, 2014, 104, 091902. (Q1, IF: 3.791, Cites: 83)</li> <li>13. N. Zhang, <b>Dejian Dai</b>, Wenxia Zhang, and Jiyang Fan, Photoluminescence and light reabsorption in SiC quantum dots embedded in binary-polyelectrolyte solid matrix, <i>Journal of Applied Physics</i>, 2012, 112, 094315. (Q1, IF: 2.286, Cites: 11)</li> <li>14. Nan Zhang, <b>Dejian Dai</b>, and Jiyang Fan, Plasmon-assisted photoluminescence enhancement of SiC nanocrystals by proximal silver nanoparticles, <i>Applied Surface Science</i>, 2012, 258, 10140. (Q1, IF: 6.182, Cites: 3)</li> <li>15. Jiyang Fan, Hongxia Li, Q. J. Wang, <b>Dejian Dai</b>, and P. K. Chu, UV-blue photoluminescence from close-packed SiC nanocrystal film, <i>Applied Physics Letters</i>, 2011, 98, 081913. (Q1, IF: 3.791, Cites: 22)</li> <li>16. Jiyang Fan, Hongxia Li, W. N. Cui, <b>Dejian Dai</b>, and P. K. Chu, Excitation and recombination photodynamics in colloidal cubic SiC nanocrystals, <i>Applied Physics Letters</i>, 2010, 97, 191911. (Q1, IF: 3.791, Cites: 18)</li> </ol>
<p style="text-align: center;"><b>奖励荣誉</b></p>	<p>2019年“中联重科”杯第五届全国大学生智能农业装备创新大赛，优秀指导教师； 2018年全国大学生智能互联装备创新大赛，优秀指导教师。</p>