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导师简介-文晓刚

招生专业/方向:

博士: 纳米材料与技术; 纳米器件的形成, 测定与应用;

硕士: 纳米材料制备技术,

欢迎 化学, 材料, 物理专业有兴趣的同学报考!!!

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文晓刚, 男, 博士, 教授, 博士生导师。

1994年毕业于西南师范大学化学系, 获理学学士学位, 1997中国科学院成都有机所物理化学硕士研究生毕业, 获理学硕士学位, 2005在香港科技大学化学系获哲学博士学位。1997-2000年, 在中国科学院成都有机所从事研究工作。2006年作为四川大学985工程引进人才进入材料科学与工程学院, 高分子与特种功能材料科技创新平台, 从事纳米材料与技术, 纳米器件的研究。

研究兴趣: 纳米材料与技术, 纳米材料的应用(能量转换, 光电磁效应, 生物传感等领域)研究; 新材料开发。

研究方向:

1. 纳米材料的可控合成，表征，性质与应用研究，
2. 纳米器件的形成与测定；
3. 纳米生物，气体传感器的设计与研究。

近期主要研究内容：

主要进行纳米材料的合成，表征，以及性能研究。发展新的具有普适性的零维，一维纳米材料的可控制备技术。包括各种功能性金属，金属氧化物，氢氧化物，硫化物等一维及零维纳米结构，并测定其气，湿，及生物传感性能。同时进行纳米线/带基场效应晶体管等纳米器件的形成和测定,光电化学和太阳能转化等测定。在国内国际著名期刊包括Angew Chem. Int. Ed., Nano. Lett., Adv. Mater., Small, J. Phys. Chem. B, Appl. Phys. Lett., Langmuir等上发表论文30余篇（SCI收录31篇）。论文SCI引用300多次。

参加国际会议：

Aug. 2003. the 39th IUPAC (International Union of Pure and Applied Chemistry) Congress and 86th Conference of the Canadian Society for Chemistry. (Ottawa, Canada;) "Solution Phase Synthesis of Cu-Based Inorganic nanowire arrays" (口头报告)

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35. Fang, Y. P., Wen, X. G., Yang, S.H. "Hollow and tin-filled nanotubes of single-crystalline In(OH)(3) grown by a solution-liquid-solid-solid route", Angew Chem. Int. Ed. 2006, 45, 4655-4658
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27. Fan, Z. Y., Wen X. G., Yang, S. H., Lu, J. G. "Controlled p- and n-type doping of Fe₂O₃ nanobelt field effect transistors" *Appl. Phys. Lett.* 2005, 87, 013113.
26. Chen, J., Huang, N. Y., Deng, S. Z., She, J. C., Xu, N. S., Zhang, W. X., Wen, X. G., Yang, S. H. "Effects of light illumination on field emission from CuO nanobelt arrays" *Appl. Phys. Lett.* 2005, 86, 151107.
25. Wen, X. G., Fang, Y. P., Yang, S. H. "Ultrathin zinc nanowires and nanotubes grown by vapor transport" *Angew Chem. Int. Ed.* 2005, 44, 3562-3565.
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