

基本情况

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| 姓名：高阳 | 性别：男 |  |
| 出生年月：1983年6月 | 籍贯：安徽 | |
| 民族：汉 | 政治面貌：群众 | |
| 学历：博士 | 毕业学校：美国内布拉斯加-林肯大学 | |
| 主要研究方向：激光微纳材料加工与制备及其在能源电子等方面的应用 | 联络地址：安徽省安庆市时代嘉苑3栋401室，邮编：246001. | |
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教育经历

- 2001年9月至2005年7月 华东师范大学 物理系理学学士
- 2005年9月至2008年7月 华东师范大学 物理系理学硕士
- 2008年8月至2013年5月 美国内布拉斯加州-林肯大学 电气工程系博士

工作经历

- 2013年5月至2014年10月 美国内布拉斯加州-林肯大学电气工程系，博士后研究员，
指导老师：陆永枫 教授
- 2015年10月至今 美国休斯顿大学机械系，博士后研究员，
指导老师：于存江 教授

奖励与证书

- 2012年 美国内布拉斯加大学纳米科学与艺术竞赛一等奖
- 2011年-2012年 美国内布拉斯加大学 Milton E. Mohr 奖学金
- 2011年 Nanotechnology 期刊封面
- 2010年 国际激光与光电子应用会议学生论文三等奖
- 2005年-2008年 研究生奖学金
- 2001年-2005年 华东师范大学专业奖学金

科研方向

- 激光微纳材料制备与激光探测技术：1) 激光合成纳米碳材料（直写石墨烯，定向生长碳纳米管，合成纳米碳洋葱）；2) 3D 微纳制造技术；3) 激光光谱探测。
- 柔性可穿戴电子器件：基于氧化物半导体的柔性晶体管，柔性电容和电池。
- 瞬态电子器件：应用于生物，环境保护，数据安全领域。
- 能源存储：一种基于纳米碳洋葱的超级电容器；一种基于石墨烯的透明柔性电容器；一种基于碳纳米管及二氧化锰的高容量超级电容器。
- 纳米环境保护材料与器件：基于纳米碳管的电容式净水系统；纳米碳洋葱海绵水油分离除污。

论文列表

➤ 期刊论文 (总引用次数: 678, H-index: 14)

1. **Y. Gao**, K. Sim, J. Jiang, J.W. Xie and C. Yu, "Self-destructive devices based on electrospun poly(ϵ -caprolactone) nanofibrous films" submitted.
2. **Y. Gao**, K. Sim, S. Sun, Z.Chen, J. Song and C. Yu, "Crack insensitive wearable electronics enabled through high strength Kevlar fabrics ", IEEE Transaction on Components, Packaging and Manufacturing Technology 5, 1230-1236 (2015) (Invited Paper) (SCI 收录, 影响因子: 1. 18, 被引次数: 0 次, 他引 0 次) .
3. **Y. Gao**, Y. S. Zhou, W. Xiong, M. Wang, L. Fan, H. Rabiee-Golgir, L. Jiang, W. Hou, X. Huang, L. Jiang and Y. F. Lu, "Highly efficient and recyclable onion-like carbon soot sponge for oil cleanup". ACS Applied Materials and Interfaces 6, 5924-5933 (2014) (SCI 收录, 影响因子: 6. 732, 被引次数: 14 次, 他引 14 次) .
4. **Y. Gao**, Y. S. Zhou, M. Qian, X. N. He, J. Redepenning, P. Goodman, H. M. Li, L. Jiang and Y. F. Lu, "Chemical activation of carbon nano-onions for high-rate supercapacitor electrodes", Carbon 51, 52-58 (2013) (SCI 收录, 影响因子: 6. 196, 被引次数: 42 次, 他引 39 次) .
5. **Y. Gao**, Y. S. Zhou, M. Qian, H. M. Li, J. Redepenning, L. S. Fan, X. N. He, W. Xiong, X. Huang, M. Mahjouri-Samani, L. Jiang and Y. F. Lu, "High-performance flexible solid-state supercapacitors based on MnO₂-decorated nanocarbon electrode" RSC Advances 3, 20613-20618 (2013) (SCI 收录, 影响因子: 3. 84, 被引次数: 11 次, 他引 11 次) .
6. **Y. Gao**, Y. S. Zhou, W. Xiong, L. J. Jiang, M. Mahjouri-Samani, P. Thirugnanam, X. Huang, M. Wang, L. Jiang and Y. F. Lu, "Transparent, flexible and solid-state supercapacitors based on graphene electrodes", APL Materials 1, 012101 (2013) (SCI 收录, 即时影响因子: 3. 88, 被引次数: 8 次, 他引 8 次) .
7. **Y. Gao**, Y. S. Zhou, M. Qian, Z. Q. Xie, W. Xiong, H. F. Luo, L. Jiang and Y. F. Lu, "Fast Growth of branched nickel monosilicide nanowires by laser-assisted chemical vapor deposition", Nanotechnology 22, 235602 (2011) (SCI 收录, 影响因子: 3. 821, 被引次数: 3 次, 他引 2 次) .
8. **Y. Gao**, Y. S. Zhou, J. B. Park, H. Wang, X. N. He, H. F. Luo, L. Jiang and Y. F. Lu, "Resonant excitation of precursor molecules in improving the particle crystallinity, growth rate and optical limiting performance of carbon nano-onions", Nanotechnology 22, 165604 (2011) (SCI 收录, 影响因子: 3. 821, 被引次数: 13 次, 他引 9 次) .
9. **Y. Gao**, Y. S. Zhou, W. Xiong, M. Mahjouri-Samani, M. Mitchell and Y. F. Lu, "Controlled growth of carbon nanotubes on electrodes under different bias polarity", Applied Physics Letters 95, 143117 (2009) (SCI 收录, 影响因子: 3. 302, 被引次数: 3 次, 他引 2 次) .
10. **Y. Gao**, L. K. Pan, H. B. Li, Y. P. Zhang, Z. J. Zhang, Y. W. Chen and Z. Sun, "Electrosorption behavior of cations with carbon nanotubes and carbon nanofibres composite film electrodes", Thin Solid Films 517, 1616-1619 (2009) (SCI 收录, 影响因子: 1. 759, 被引次数: 64 次, 他引 50 次) .
11. **Y. Gao**, L. K. Pan, Y. P. Zhang, Y. W. Chen and Z. Sun, "Electrosorption of FeCl₃ solution with carbon nanotubes and nanofibres film electrodes grown on graphite substrates", Surface Review Letters 14, 1033-1037 (2007) (SCI 收录, 影响因子: 0. 38, 被引次数: 14 次, 他引 10 次) .

12. K. Keramatnejad, Y.S. Zhou, **Y. Gao**, H. Rabiee Golgir, M. Wang, L. Jiang, J.-F. Silvain, Y.F. Lu, “Skin effect mitigation in laser processed multi-walled carbon nanotube/copper conductors” *Journal of Applied Physics* 118, 154311 (2015) (SCI 收录, 影响因子: 2.183, 被引次数: 0 次, 他引 0 次) .
13. K. Sim, S. Chen, Y. Li, M. Kammoun, Y. Peng, M. Xu, **Y. Gao**, J. Song, Y. Zhang, H. Ardebili and C. Yu “High fidelity tape transfer printing based on chemical induced adhesive strength modulation” *Scientific Reports* 5, 16133 (2015) (SCI 收录, 影响因子: 5.578, 被引次数: 0 次, 他引 0 次) .
14. Y. Lu, Y.S. Zhou, W. Qiu, X. Huang, **Y. Gao**, L. Liu, Y.T. Lei, T.C. Zhang, L. Jiang, J.F. Silvain, and Y.F. Lu, “Sensitivity and intensity enhancement in open air mass spectrometry assisted by a continuous wave infrared laser”, *Journal of Analytical Atomic Spectrometry*, 30, 1663-1667(2015) (SCI 收录, 影响因子: 3.466, 被引次数: 14 次, 他引 14 次) .
15. L. S. Fan, Y.S. Zhou, M.X. Wang, **Y. Gao**, W. Xiong, Y. Liu, Y. Lu, J.F. Silvain and Y. F. Lu, “Mass spectrometric investigation of the roles of several chemical intermediates in diamond synthesis”, *RSC Advances* 5, 4822-4830 (2015) (SCI 收录, 影响因子: 3.84, 被引次数: 0 次, 他引 0 次) .
16. H. R. Golgir, **Y. Gao**, Y. S. Zhou, L. Fan, P. Thirugnanam, K. Keramatnejad, L. Jiang, J.-F. Silvain and Y. F. Lu, “Low-temperature growth of crystalline gallium nitride films using vibrational excitation of ammonia molecules in laser-assisted metalorganic chemical vapor deposition” *Crystal Growth & Design* 14, 6248-6253 (2014) (SCI 收录, 影响因子: 4.891, 被引次数: 1 次, 他引 0 次)
17. L.J. Jiang, Y.S. Zhou, W. Xiong, **Y. Gao**, X. Huang, L. Jiang, T. Baldacchini, J.F. Silvain and Y. F. Lu, “Two-photon polymerization: investigation of chemical and mechanical properties of resins using Raman microspectroscopy”, *Optics Letters* 39, 3034-3037 (2014) (SCI 收录, 影响因子: 3.292, 被引次数: 3 次, 他引 3 次) .
18. W. Xiong, Y.S. Zhou, W.J. Hou, L.J. Jiang, **Y. Gao**, L.S. Fan, L. Jiang, J.F. Silvain and Y. F. Lu, “Direct writing of graphene patterns on insulating substrates under ambient conditions”, *Scientific Reports* 4 (2014) (SCI 收录, 影响因子: 5.578, 被引次数: 2 次, 他引 2 次) .
19. X. Huang, X. N. He, W. Xiong, **Y. Gao**, L. J. Jiang, L. Liu, Y. S. Zhou, L. Jiang, J. F. Silvain, Y. F. Lu, “Contrast enhancement using silica microspheres in coherent anti-Stokes Raman spectroscopic imaging”, *Optics Express* 22, 2889-2896 (2014) (SCI 收录, 影响因子: 3.488, 被引次数: 6 次, 他引 4 次) .
20. L. S. Fan, Y.S. Zhou, M.X. Wang, **Y. Gao**, L. Liu, J.F. Silvain, Y.F. Lu, “Resonant vibrational excitation of ethylene molecules in laser-assisted diamond deposition” *Laser Physics Letters* 11, 076002 (2014) (SCI 收录, 影响因子: 2.458, 被引次数: 2 次, 他引 0 次) .
21. P. A. Goodman, H. Li, **Y. Gao**, Y. F. Lu, J. D. Stenger-Smith, J. Redepenning, “Preparation and characterization of high surface area, high porosity carbon monoliths from pyrolyzed bovine bone and their performance as supercapacitor electrodes”, *Carbon* 55, 291-298 (2013) (SCI 收录, 影响因子: 6.196, 被引次数: 24 次, 他引 23 次) .
22. M. Mahjouri-Samani, Y. S. Zhou, L. Fan, **Y. Gao**, W. Xiong, K. L. More and Y. F. Lu, “Laser-assisted solid-state synthesis of carbon nanotube/silicon core/shell structures”, *Nanotechnology* 24 255604 (2013) (SCI 收录, 影响因子: 3.821, 被引次数: 2 次, 他引 2 次) .
23. W. Xiong, Y. S. Zhou, L. J. Jiang, A. Sarkar, M. Mahjouri-Samani, Z. Q. Xie, **Y. Gao**, N. J. Ianno, L. Jiang and Y. F. Lu, “Single-step formation of graphene on dielectric surfaces”, *Advanced Materials* 25, 630–634 (2013) (SCI 收录, 影响因子: 17.49, 被引次数: 14 次, 他引 10 次) .
24. M. Wang, Y. S. Zhou, Z. Q. Xie, **Y. Gao**, X. N. He, L. Jiang and Y. F. Lu, “Seed-free growth of diamond patterns on silicon predefined by femtosecond laser direct writing”, *Crystal Growth & Design* 13, 716–722 (2013) (SCI 收录, 影响因子: 4.891, 被引次数: 1 次, 他引 1 次) .

25. P. Thirugnanam, W. Xiong, M. Mahjouri-Samani, L. Fan, R. Raju, M Mitchell, Y. Gao, B. Krishnan, Y.S. Zhou, L. Jiang and Y. F. Lu, "Rapid Growth of m-plane Oriented Gallium Nitride Nanoplates on Silicon Substrate Using Laser-Assisted Metal Organic Chemical Vapor Deposition" *Crystal Growth & Design* 13, 3171-3176 (2013) (SCI 收录, 影响因子: 4.891, 被引次数: 0 次, 他引 0 次) .
26. X. N. He, **Y. Gao**, M. Mahjouri-Samani, P. N. Black, J. Allen, M. Mitchell, W. Xiong, Y. S. Zhou, L. Jiang and Y. F. Lu, "Surface-enhanced raman spectroscopy using gold-coated horizontally aligned carbon nanotubes", *Nanotechnology* 23, 205702 (2012) (SCI 收录, 影响因子: 3.821, 被引次数: 6 次, 他引 6 次) .
27. M. B. Seymour, C. Su, **Y. Gao**, Y. F. Lu and Y. S. Li, "Characterization of carbon nano-onions for heavy metal ion remediation", *Journal of Nanoparticle Research* 14, 1087 (2012) (SCI 收录, 影响因子: 2.184, 被引次数: 5 次, 他引 5 次) .
28. X. N. He, Z. Q. Xie, **Y. Gao**, W. Hu, L. B. Guo, L. Jiang and Y. F. Lu "Mass spectrometry of solid samples in open air using combined laser ionization and ambient metastable ionization" *Spectrochimica Acta Part B* 67, 64-73 (2012) (SCI 收录, 影响因子: 3.047, 被引次数: 5 次, 他引 3 次) .
29. T. Premkumar, Y.S. Zhou, **Y. Gao**, K. Baskar, L. Jiang and Y.F. Lu, "Morphological transition of ZnO nanostructures influenced by magnesium doping", *Applied Surface Science* 258, 2297- 2300 (2012) (SCI 收录, 影响因子: 2.711, 被引次数: 3 次, 他引 3 次) .
30. M. Qian, Y. S. Zhou, **Y. Gao**, J. B. Park, T Feng, S. M. Huang, Z. Sun, L. Jiang and Y. F. Lu, "Formation of freestanding two-dimensional carbon nanosheets from poly(phenylacetylene) through pulsed laser ablation", *Carbon* 49, 5117-5123 (2011) (SCI 收录, 影响因子: 6.196, 被引次数: 5 次, 他引 5 次) .
31. M. Qian, Y. S. Zhou, **Y. Gao**, T Feng, S. M. Huang, Z. Sun, L. Jiang and Y. F. Lu, "Production of few-layer graphene through liquid-phase pulsed laser exfoliation of highly ordered pyrolytic graphite", *Applied Surface Science* 258, 9092-9095 (2012) (SCI 收录, 影响因子: 2.711, 被引次数: 11 次, 他引 11 次) .
32. W. Xiong, Y. S. Zhou, X. N. He, **Y. Gao**, M. Mahjouri-Samani, L. Jiang, T. Baldacchini and Y. F. Lu, "Simultaneous additive and subtractive three-dimensional nanofabrication using integrated two-photon polymerization and multiphoton ablation", *Light: Science & Applications* 1 (2012) (SCI 收录, 影响因子: 14.603, 被引次数: 62 次, 他引 58 次) .
33. Y.S. Zhou, W. Xiong, J. Park, M. Qian, M. Mahjouri-Samani, **Y. Gao**, L. Jiang and Y. F. Lu, "Laser-assisted nanofabrication of carbon nanostructures", *Journal of Laser Applications* 24, 042007 (2012) (SCI 收录, 影响因子: 1.798, 被引次数: 4 次, 他引 4 次) .
34. J. B. Park, W. Xiong, **Y. Gao**, M. Qian, Z. Q. Xie, M. Mitchell, Y. S. Zhou, G. H. Han, L. Jiang and Y. F. Lu, "Fast growth of graphene patterns by laser direct writing", *Applied Physics Letters* 98, 123109 (2011) (SCI 收录, 影响因子: 3.302, 被引次数: 36 次, 他引 31 次) .
35. J. B. Park, W. Xiong, Z. Q. Xie, **Y. Gao**, M. Qian, M. Mitchell, M. Mahjouri-Samani, Y. S. Zhou, L. Jiang and Y. F. Lu, "Transparent interconnections formed by rapid single-step fabrication of graphene patterns", *Applied Physics Letters* 99, 053103 (2011) (SCI 收录, 影响因子: 3.302, 被引次数: 10 次, 他引 6 次) .
36. M. Qian, Y. S. Zhou, **Y. Gao**, J. B. Park, T Feng, S. M. Huang, Z. Sun, L. Jiang and Y. F. Lu, "Formation of graphene sheets through laser exfoliation of highly ordered pyrolytic graphite", *Applied Physics Letters* 98, 173108 (2011) (SCI 收录, 影响因子: 3.302, 被引次数: 24 次, 他引 23 次) .
37. Y. S. Zhou, W. Xiong, **Y. Gao**, M. Mahjouri-Samani, M. Mitchell, L. Jiang and Y. F. Lu, "Towards carbon-nanotube integrated devices: optically controlled parallel integration of single-walled carbon

- nanotubes”, *Nanotechnology* 21, 315601 (2010) (SCI 收录, 影响因子: 3.821, 被引次数: 6 次, 他引 5 次) .
38. M. Mahjouri-Samani, Y. S. Zhou, W. Xiong, **Y. Gao**, M. Mitchell, L. Jiang and Y. F. Lu, “Diameter modulation by fast temperature control in laser-assisted chemical vapor deposition of single-walled carbon nanotubes”, *Nanotechnology* 21, 395601 (2010) (SCI 收录, 影响因子: 3.821, 被引次数: 11 次, 他引 9 次) .
 39. Z. Xie, Y. Zhou, X. He, **Y. Gao**, J. Park, H. Ling, L. Jiang and Y. F. Lu “Fast growth of diamond crystals in open air by combustion synthesis with resonant laser energy coupling” *Crystal Growth & Design* 10, 1762-1766 (2010) (SCI 收录, 影响因子: 4.891, 被引次数: 18 次, 他引 6 次) .
 40. H. Ling, Z.Q. Xie, **Y. Gao**, T. Gebre, X. K. Shen and Y. F. Lu, “Enhanced chemical vapor deposition of diamond by wavelength-matched vibrational excitations of ethylene molecules using tunable CO₂ laser”, *Journal of Applied Physics* 105, 064901 (2009) (SCI 收录, 影响因子: 2.183, 被引次数: 10 次, 他引 3 次) .
 41. M. Mahjouri-Samani, Y.S. Zhou, W. Xiong, **Y. Gao**, M. Mitchell and Y. F. Lu “Laser induced selective removal of metallic carbon nanotubes” *Nanotechnology* 20, 495202 (2009) (SCI 收录, 影响因子: 3.821, 被引次数: 20 次, 他引 15 次) .
 42. L. Pan, X. Wang, **Y. Gao**, Y. Zhang, Y. Chen and Z. Sun, “Electrosorption of anions with carbon nanotube and nanofibre composite film electrodes” *Desalination* 244, 139-143(2009) (SCI 收录, 影响因子: 3.756, 被引次数: 63 次, 他引 51 次) .
 43. X.K. Shen, H. Wang, Z.Q. Xie, **Y. Gao**, H. Ling and Y.F. Lu, “Detection of trace phosphorus in steel using laser-induced breakdown spectroscopy combined with laser-induced fluorescence” *Applied optics* 48, 2551-2558 (2009) (SCI 收录, 影响因子: 1.784, 被引次数: 22 次, 他引 16 次) .
 44. H. B. Li, **Y. Gao**, L. K. Pan, Y. P. Zhang, Y. W. Chen and Z. Sun, “Electrosorptive desalination by carbon nanotubes and nanofibres electrodes and ion-exchange membranes”, *Water Research* 42, 4923-4928 (2008) (SCI 收录, 影响因子: 5.323, 被引次数: 116 次, 他引 88 次) .
 45. Y. Zhang, L. Pan, **Y. Gao**, Z. Zhang, Z. Sun, “Electric double layer capacitors with carbon nanotubes electrodes and gel polymer/polyacid electrolytes”, *Surface Review and Letters* 15, 245-248 (2008) (SCI 收录, 影响因子: 0.38, 被引次数: 4 次, 他引 2 次) .
 46. 高阳, 张燕萍, 王莉莉, 张哲娟, 潘立坤, 陈奕卫, 孙卓, 杨介信, “浸泡 Ni(NO₃)₂ 溶液的石墨在不同温度下生长的碳纳米管及其场发射性能” *液晶与显示* 6, 687-693 (2007).
 47. 张燕萍, 高阳, 张哲娟, 潘丽坤, 王莉莉, 孙卓, 黄士勇, “硝酸铁浓度对石墨片上生长的碳纳米管场发射性能的影响”. *液晶与显示*, 4, 366-371, (2007).
 48. 王莉莉, 陈奕卫, 陈婷, 孙卓, 冯涛, 张燕萍, 高阳, 阙文修, “电泳法制备场发射阴极的性能优化研究” *液晶与显示* 6, 687-693(2007).
 49. 张哲娟, 张燕萍, 高阳, 褚家宝, 孙卓, 冯涛, 陈奕卫, “CuCr 合金催化剂制备条件对大电流 CNTs 阴极的影响” *液晶与显示* 6, 7-8-713(2007).
- 国际会议论文
1. **Y. Gao**, Y. S. Zhou, W. Xiong, H. Li, J. G. Redepenning, M. M. Wang, and Y. F. Lu, “Manganese Oxide/Single-Walled Carbon Nanotube/Carbon Nanooxide Based Flexible Solid-State Supercapacitors”, MRS 2012, Boston, MA, USA.

2. **Y. Gao**, Y. S. Zhou, M. Qian, W. Xiong, J. B. Park, P. Goodman, J. G. Redepenning, and Y. F. Lu, “Capacitive properties of carbon nano-onions synthesized by laser resonant excitation of ethylene molecules in open air”, MRS 2011, Boston, MA, USA.
3. **Y. Gao**, J. B. Park, Y. S. Zhou, Z. Q. Xie, X. N. He, T. Guillemet, and Y. F. Lu, “Growth of carbon nano-onions in the open air by laser resonant excitation of ethylene molecules”, Proceedings of ICALEO N305 (2010).
4. **Y. Gao**, Y. S. Zhou, W. Xiong, M. Mahjouri-Samani, M. Mitchell, and Y. F. Lu, “Polarity determined growth of carbon nanotubes of different alignments”, Proceedings of SPIE 7585-8 (2010).
5. F. Parigi, **Y. Gao**, T. Gachovska, J. L. Hudgins, D. Patterson, and Y. F. Lu, “Impedance-based simulation model of carbon nano-onions ultracapacitors for e-bike with compact energy storage system” IEEE VPCC 2012, Seoul, Korea.
6. F. Parigi, **Y. Gao**, M. Casares, T. Gachovska, Y. S. Zhou, Y. F. Lu, D. Patterson and J. L. Hudgins, “Investigations on the aging effect of supercapacitors”, MRS 2011, San Francisco, CA, USA.
7. W. Xiong, **Y. Gao**, M. Mahjouri-Samani, Y. S. Zhou, M. Mitchell, J. B. Park, and Y. F. Lu, “Laser assisted fabrication for controlled single-walled carbon nanotube synthesis and processing (Invited paper)” [J]. Chinese J. Lasers, 2009, 36(12): 3125-3132.
8. M. Mahjouri-Samani, Y. S. Zhou, W. Xiong, **Y. Gao**, M. Mitchell, and Y. F. Lu, “Diameter modulation of carbon nanotubes by rapid temperature modulation in laser-assisted chemical vapor deposition” Photonics West 2011, San Francisco, CA, USA.
9. Z. Q. Xie, J. B. Park, X. N. He, **Y. Gao**, Y. S. Zhou, and Y. F. Lu, “Resonant excitation of ethylene molecules in the combustion flame CVD of diamond using a wavelength tunable CO₂ laser”, Proceedings of SPIE 7585-8 (2010).
10. M. Mahjouri-Samani, Y. S. Zhou, W. Xiong, **Y. Gao**, M. Mitchell, and Y. F. Lu, “Growth of diameter-modulated single-walled carbon nanotubes through instant temperature modulation in laser-assisted chemical vapor deposition” MRS 2010, Boston, MA, USA.
11. M. Mahjouri-Samani, Y. S. Zhou, W. Xiong, **Y. Gao**, M. Mitchell, and Y. F. Lu, “Laser-assisted selective removal of metallic carbon nanotubes” ICALEO 2009, Orlando, FL, USA.

代表性论文著作

近五年在国际学术刊物上发表SCI论文32篇（他引329次），其中以第一作者在ACS AMI., Carbon, RSC Advances, Nanotechnology, APL Materials等期刊发表论文7篇（IF>6: 2篇；IF>3: 4篇，邀稿1篇），他引83余次，具体如下：

博士期间发表论文：

1. **Y. Gao**, Y. S. Zhou, M. Qian, X. N. He, J. Redepenning, P. Goodman, H. M. Li, L. Jiang and Y. F. Lu, “Chemical activation of carbon nano-onions for high-rate supercapacitor electrodes”, Carbon 51, 52-58 (2013) (SCI 收录, 影响因子: 6.196, 被引次数: 42 次, 他引 39 次) .
2. **Y. Gao**, Y. S. Zhou, M. Qian, H. M. Li, J. Redepenning, L. S. Fan, X. N. He, W. Xiong, X. Huang, M. Mahjouri-Samani, L. Jiang and Y. F. Lu, “High-performance flexible solid-state supercapacitors based on MnO₂-decorated nanocarbon electrode” RSC Advances 3, 20613-20618 (2013) (SCI 收录, 影响因子: 3.84, 被引次数: 11 次, 他引 11 次) .
3. **Y. Gao**, Y. S. Zhou, W. Xiong, L. J. Jiang, M. Mahjouri-Samani, P. Thirugnanam, X. Huang, M. Wang, L. Jiang and Y. F. Lu, “Transparent, flexible and solid-state supercapacitors based on graphene

electrodes”, APL Materials 1, 012101 (2013) (SCI 收录, 即时影响因子: 3.88, 被引次数: 8 次, 他引 8 次) .

4. **Y. Gao**, Y. S. Zhou, M. Qian, Z. Q. Xie, W. Xiong, H. F. Luo, L. Jiang and Y. F. Lu, “Fast Growth of branched nickel monosilicide nanowires by laser-assisted chemical vapor deposition”, Nanotechnology 22, 235602 (2011) (SCI 收录, 影响因子: 3.821, 被引次数: 3 次, 他引 2 次) .
5. **Y. Gao**, Y. S. Zhou, J. B. Park, H. Wang, X. N. He, H. F. Luo, L. Jiang and Y. F. Lu, “Resonant excitation of precursor molecules in improving the particle crystallinity, growth rate and optical limiting performance of carbon nano-onions”, Nanotechnology 22, 165604 (2011) (SCI 收录, 影响因子: 3.821, 被引次数: 13 次, 他引 9 次) .

博后期间发表论文:

1. **Y. Gao**, K. Sim, S. Sun, Z.Chen, J. Song and C. Yu, “Crack insensitive wearable electronics enabled through high strength Kevlar fabrics”, IEEE Transaction on Components, Packaging and Manufacturing Technology 5, 1230-1236 (2015) (Invited Paper) (邀稿, SCI 收录, 影响因子: 1.18, 被引次数: 0 次, 他引 0 次) .
2. **Y. Gao**, Y. S. Zhou, W. Xiong, M. Wang, L. Fan, H. Rabiee-Golgir, L. Jiang, W. Hou, X. Huang, L. Jiang and Y. F. Lu, “Highly efficient and recyclable onion-like carbon soot sponge for oil cleanup”. ACS Applied Materials and Interfaces 6, 5924-5933 (2014) (SCI 收录, 影响因子: 6.732, 被引次数: 14 次, 他引 14 次) .

主持与主要参与的项目

以博士与博士后骨干身份参与了以下 5 个主要项目

1. 2015 年-2019 年 一种便携式光纤激光处理系统, 消除敏化铝合金表面的裂纹, 美国海军实验室, 1425000 美金。
2. 2014 年-2016 年 激光冲击强化预防石油管线腐蚀和故障, 美国交通部, 石油管线和危险物品安全管理局, 100000 美金。
3. 2013 年-2016 年 制备一种碳纳米管包裹的铜导线用于高频器件, 美国自然科学基金, 184781 美金。
4. 2011 年 一种新的基于纳米结构的超级电容器, 内布拉斯加能源科学研究中心, 175000 美金。
5. 2005 年-2014 年 发展一种基于前驱体激发的, 光分解的, 多激光束的大气表面镀膜技术, 美国海军实验室, 4999995 美金。

专利

1. 孙卓教授, 潘丽坤教授, 高阳, 李海波, 一种高效率节能型隔膜电容去离子装置, 专利号: CN101337717 B

学术兼职与国际交流活动

在国内外重要学术会议口头报告 2 次, 海报 3 次。担任 SCI 期刊审稿人。

- 2012 年 11 月 美国材料学会春季会议, 波士顿, 会议海报
- 2011 年 11 月 美国材料学会春季会议, 波士顿, 会议海报
- 2010 年 10 月 国际激光与光电子应用会议, 美国洛杉矶, 会议口头报告
- 2010 年 1 月 国际光学工程学会, 美国旧金山, 会议口头报告
- 2007 年 3 月 AD07 亚洲显示国际学术会议, 上海, 会议海报作

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- 期刊审稿人: Journal of laser application, RSC Advances, Journal of Physics and Chemistry of Solids, Materials Science and Engineering B, Microfluidics and Nanofluidics, Physics E, Water research, Acta biomaterials, Material letters, Applied Surface Science, Journal of Laser Micro/Nanoengineering 等