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[离子束与生物体相互作用](#)

黄青

[工业微生物](#)

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站点信息

黄青: 男, 汉族, 1968年出生, 博士, 研究员, 博士生导师。研究方向: 生物物理, 激光光谱、生物光谱和物理化学。1992年在中国科技大学获得理学学士学位; 1995年获得中科院大恒光学特等奖; 1996年考取德国大众奖学金出国留学, 2000年在德国哥廷根大学获得实验物理博士学位。2000-2008在美国Uni. Puerto Rico 和Drexel Uni. 从事物理化学及生物光谱学研究。在国外曾任中国留德物理学会理事及会刊责任编辑, 美国生物物理、化学学会、应用光谱学会和Sigma Xi会员。2008年应聘“海外杰出人才”岗位回国工作, 入选中科院“百人计划”并通过择优。目前在中科院合肥物质研究院的离子束生物工程重点实验室工作, 主持和承担国家自然科学基金项目、中科院知识创新工程重要方向项目、科技部973项目等, 研究课题包括辐射-生物物理及生物光谱、辐射-物理化学、离子束与生物体相互作用、环境污染物的痕量检测等。从事研究工作以来, 发表SCI文章40多篇, 其中发表在国际著名权威期刊包括《Adv. Mater.》、《J. Am. Chem. Soc.》、《Biophys. J.》、《J. Phys. Chem. A、B》、《Chem. Commun.》《Phys. Rev. B》、《Langmuir》、《Analyst》、《J. Raman Spectrosc.》、《Solid State Commun.》等。

现在正在主持和承担的项目及课题:

1. 中科院“百人计划”: 应用生物光谱研究离子辐射与生物体相互作用
2. 国家自然科学基金: 离子注入模式蛋白酶引起构象和功能改变的机理研究
3. 中国科学院知识创新工程重要方向项目, 子课题: 重离子与生物体作用的原初物理化学过程
4. 教育部留学回国人员启动基金: 应用生物光谱法研究离子束与生物体的相互作用
5. 国家科技部973重大项目: 面向持久性有毒污染物痕量检测与治理的纳米材料应用基础研究
6. 研究院院长基金项目: 基于光谱法监测米根霉诱变株代谢状态研究

主要代表性文章:

访问人数:

- 1.C. Zhu, G. Meng, Q. Huang, Z. Huang, Z. Chu. Au hierarchical micro/nano-tower arrays and their improved SERS effect by Ag nanoparticle decoration, *Crystal Growth & Design*. (Accepted)
- 2.B. Dang, W. Li, J. Liu, W. Zhao, Q. Huang, Investigation of fragment doses produced by heavy ions in tissue-like material, *Radiation Protection Dosimetry*. (In Press)
- 3.C. Zhu, G. Meng, Q. Huang, Z. Zhang, Q. Xu, G. Liu, Z. Huang and Z. Chu, Ag nanosheet-assembled micro-hemispheres as effective SERS substrates, *Chem. Commun.* (Accepted)
- 4.M. Wang, G. Meng, Q. Huang, M. Li, Z. Li, C. Tang. Fluorescence detection of trace PCB101 based on PITC immobilized on porous AAO membrane, *Analyst*. (accepted)
- 5.H. Zhang, Y. Tang, D. Cai, X. Liu, X. Wang, Q. Huang*, Z. Yu. Hexavalent chromium removal from aqueous solution by algal bloom residue derived activated carbon: Equilibrium and kinetic studies. *J. Hazard. Mater.* 2010, 181: 801-808.
- 6.Z. Huang, G. Meng, Q. Huang, Y. Yang, C. Zhu and C. Tang, Improved SERS performance from Au nanopillar arrays by abridging the pillar tip spacing by Ag sputtering, *Adv. Mater.* 2010, 22, 4136-4139.
- 7.M. Li, G. Meng, Q. Huang, Z. Yin, M. Wu, Z. Zhang, M. Kong. Prototype of a Porous ZnO SPV-Based Sensor for PCB Detection at Room Temperature under Visible Light Illumination. *Langmuir* 2010, 26(16), 13703 - 13706.
- 8.Z. Ke, Q. Huang*, B. Dang, Y. Lu, H. Yuan, S. Zhang, Z. Yu, A study of low-energy ion induced radiolysis of thiol-containing

- amino acid cysteine in the solid and aqueous solution states,
Nucl. Instr. and Meth. B (2010), 268: 2729 - 2734.
9. Z. Ke, Q. Huang*, X. Su, J. Jiang, X. Wang, Z. Yu, A paradigm study for assessment of phenylalanine' s damage under arc-discharge irradiation, Nucl. Instr. and Meth. B 2010, 268: 1618 - 1625.
10. Q. Huang*, Z. Ke, X. Su, H. Yuan, S. Zhang, Z. Yu, Quantitative assessment of amino acid damage upon keV ion beam irradiation through FTIR spectroscopy, Plasma Sci. Technol. 2010, 12(3): 378-384.
11. X. Zhao, G. Meng, Q. Xu, F. Han and Q. Huang, Color fine-tuning of CNTs@AAO composite thin films via isotropically etching porous AAO before CNTs growth and color modification by water infusion, Adv. Mater, 2010, 22, 2637 - 2641.
12. Q. Huang, C. Medforth and R. Schweitzer-Stenner, Nonplanar Deformations and Excited State Displacements in Nickel Porphyrins Detected by Raman Spectroscopy at Soret Excitation, J. Phys. Chem. A. 2005, 109: 10493-10502.
13. Q. Huang and R. Schweitzer-Stenner. Nonplanar Heme Deformations and Excited State Displacements in Horseradish Peroxidase Detected by Raman Spectroscopy at Soret Excitation. J. Raman Spectrosc 2005, 36:363-375.
14. Q. Huang, Qingguo Huang, Roger Pinto, Kai Griebenow, R. Schweitzer-Stenner and W.J. Weber.Jr. Inactivation of Horseradish Peroxidase by Phenoxy Radical Attack. J. Am. Chem. Soc. 2005, 127:1431-1437.

15. Q. Huang and R. Schweitzer-Stenner. Conformational Analysis of Tetrapeptides By Exploiting The Excitonic Coupling Between Amide I Modes. *J. Raman Spectrosc.* 2004; 35. 586-591.
16. Q. Huang, M. Laberge, K. Szigeri, J. Fidy, R. Schweitzer-Stenner. Change of the Iron Spin State in Horseradish Peroxidase C Induced by the Removal of Ca²⁺ Probed by Resonance Raman Spectroscopy. *Biopolymers (Biospectroscopy)* 2003; 72, 1-8.
17. Q. Huang, W. Al-Azzam, K. Griebenow, R. Schweitzer-Stenner. Heme Structural Perturbation of PEG-Modified Horseradish Peroxidase C in Aromatic Organic Solvents Probed by Optical Absorption and Resonance Raman Dispersion Spectroscopy. *Biophys. J.* 2003; 84, 3285-3298.
18. Q. Huang, K. Szigeti, J. Fidy, R. Schweitzer-Stenner. Structural disorder of native horseradish peroxidase C probed by resonance Raman and low temperature optical absorption spectroscopy. *J. Phys. Chem. B.* 2003; 107, 2822-2830.
19. M. Laberge, Q. Huang, R. Schweitzer-Stenner, J. Fidy. The Endogenous Calcium Ions of Horseradish Peroxidase C are Required to Maintain the Functional Nonplanarity of the Heme. *Biophys. J.* 2003; 84, 2542-2552.
20. R. Schweitzer-Stenner, F. Eker, Q. Huang, K. Griebenow. Dihedral Angles of Trialanine in D₂O Determined by Combining FTIR and Polarized Visible Raman Spectroscopy. *J. Am. Chem. Soc.* 2001; 123: 9628-9633.

地址：中国安徽合肥蜀山湖路350号 邮编：230031
联系电话：(0551)5592189 传真：(0551)5591310
[备案序号:皖ICP备06000774号](#)