Research output

1. **Lifetime-engineered ruby nanoparticles (Tau-Rubies) for multiplexed imaging of μ-opioid receptors.** / Yang, Xiaohong; Maleki, Alireza; Lipsey, Nikolay A.; Zheng, Xianlin; Santiago, Marina; Connor, Mark; Sreenivasan, Varun K. A.; Dawes, Judith M.; Lu, Yiqing; Zvyagin, Andrei V.

2. **Chemical compounds with a neuroprotective effect from the seeds of : Celosia argentea L.** / Guo, Jinggong; Shen, Shan; Zhang, Xiao; Wang, Guoying; Lu, Yiqing; Liu, Xiping; Wang, Shuyun; Li, Qin; Cong, Yue; Shi, Bingyang.

3. **Light-emitting diode excitation for upconversion microscopy: a quantitative assessment.** / Cao, Yueying; Zheng, Xianlin; De Camillis, Simone; Shi, Bingyang; Piper, James A.; Packer, Nicolle H.; Lu, Yiqing.

4. **The feasibility of Mituximab®-IRDye700DX-mediated photodynamic therapy of solid tumors.** / Polikarpov, Dmitry M.; Campbell, Douglas H.; Lund, Maria E.; Lu, Yanling; Lu, Yiqing; Wu, Jiehua; Walsh, Bradley J.; Zvyagin, Andrei V.; Gillatt, David A.

5. **Controlling the non-linear emission of upconversion nanoparticles to enhance super-resolution imaging performance.** / De Camillis, Simone; Ren, Peng; Cao, Yueying; Plöschner, Martin; Denkova, Denitza; Zheng, Xianlin; Lu, Yiqing; Piper, James A.

6. **A robust intrinsically green fluorescent poly(Amidoamine) dendrimer for imaging and traceable central nervous system delivery in zebrafish.** / Wang, Guoying; Zhao, Xiaowei; Wu, Haigang; Lovejoy, David B.; Zheng, Meng; Lee, Albert; Fu, Libing; Mao, Kating; An, Yi; Sayyadi, Nima; Ding, Kunjie; Chung, Roger S.; Lu, Yiqing; Li, Jia; Morsch, Marco; Shi, Bingyang.

7. **Simultaneous super-linear excitation-emission and emission depletion allows imaging of upconversion nanoparticles with higher sub-diffraction resolution.** / Wang, Yan; Sayyadi, Nima; Zheng, Xianlin; Woods, Travis A.; Leif, Robert C.; Shi, Bingyang; Graves, Steven W.; Piper, James A.; Lu, Yiqing.
   In: Optics Express, Vol. 28, No. 16, 03.08.2020, p. 24308-24326.

8. **Time-resolved microfluidic flow cytometer for decoding luminescence lifetimes in the microsecond region.** / Wang, Yan; Sayyadi, Nima; Zheng, Xianlin; Wang, Yu; Hu, Honghua; Vickery, Karen; Lu, Yiqing.

9. **Lifetime-multiplexed luminescence in situ hybridisation for bacteria detection.** / Jia, Jianguo; Sayyadi, Nima; Wang, Yan; Hu, Honghua; Vickery, Karen; Lu, Yiqing.

10. **Revisiting the effect of inert shell on luminescence enhancement of upconversion nanoparticles.** / Ren, Peng; Zheng, Xianlin; De Camillis, Simone; Piper, James A.; Lu, Yiqing.


12. **Efficient upconverting carbon nitride nanotubes for near-infrared-driven photocatalytic hydrogen production.** / Zhu, Yuxiang; Zheng, Xianlin; Lu, Yiqing; Yang, Xiaoxia; Kheradmand, Amanj; Jiang, Yijiao.
13. 3D sub-diffraction imaging in a conventional confocal configuration by exploiting super-linear emitters. / Denkova, Denitza; Ploschner, Martin; Das, Minakshi; Parker, Lindsay; Zheng, Xianlin; Lu, Yiqing; Orth, Antony; Packer, Nicolle; Piper, James. In: Nature Communications, Vol. 10, 3695, 16.08.2019, p. 1-12.

14. Label-free fluorescent poly(amidoamine) dendrimer for traceable and controlled drug delivery. / Wang, Guoying; Fu, Libing; Walker, Adam; Chen, Xianfeng; Lovejoy, David B.; Hao, Mingcong; Lee, Albert; Chung, Roger; Rizos, Helen; Irvine, Mal; Zheng, Meng; Liu, Xiuhua; Lu, Yiqing; Shi, Bingyang. In: Biomacromolecules, Vol. 20, No. 5, 13.05.2019, p. 2148-2158.

15. Developing a pH-sensitive Al(OH)₃ layer-mediated UCNP@Al(OH)₃/Au nanohybrid for photothermal therapy and fluorescence imaging in vivo. / Chen, Jian; Zhang, Dongya; Zou, Yan; Wang, Zhongjie; Hao, Mingcong; Zheng, Meng; Xue, Xue; Pan, Xiaoxi; Lu, Yiqing; Wang, Jiefei; Shi, Bingyang. In: Journal of Materials Chemistry B, Vol. 6, No. 47, 11.2018, p. 7862-7870.


17. DNA nanoclew templated spherical nucleic acids for siRNA delivery. / Ruan, Weimin; Zheng, Meng; An, Yang; Liu, Yuanyuan; Lovejoy, David; Hao, Mingcong; Zou, Yan; Lee, Albert; Yang, Shu; Lu, Yiqing; Morsch, Marco; Chung, Roger; Shi, Bingyang. In: Chemical Communications, Vol. 54, 14.04.2018, p. 3609-3612.

18. A Versatile upconversion surface evaluation platform for bio-nano surface selection for the nervous system. / Fu, Libing; Morsch, Marco; Shi, Bingyang; Wang, Guoying; Lee, Albert; Radford, Rowan; Lu, Yiqing; Jin, Dayong; Chung, Roger. In: Nanoscale, Vol. 9, No. 36, 17.08.2017, p. 13683-13692.

19. Amplified stimulated emission in upconversion nanoparticles for super-resolution nanoscopy. / Liu, Yujia; Lu, Yiqing; Yang, Xusan; Zhang, Xianlin; Wen, Shihui; Wang, Fan; Vidal Asensio, Xavier; Zhao, Jiangbo; Liu, Deming; Zhou, Zhiguang; Ma, Chenshuo; Zhou, Jiajia; Piper, James A.; Xi, Peng; Jin, Dayong. In: Nature, Vol. 543, No. 7644, 09.03.2017, p. 229-233.


21. Stable upconversion nanohybrid particles for specific prostate cancer cell immunodetection. / Shi, Yu; Shi, Bingyang; Dass, Arun V Everest; Lu, Yiqing; Sayyadi, Nima; Kauto, Liisa; Willows, Robert D.; Chung, Roger; Piper, James; Nevalainen, Helena; Walsh, Bradley; Jin, Dayong; Packer, Nicolle H. In: Scientific Reports, Vol. 6, 37533, 22.11.2016, p. 1-11.


23. Facile assembly of functional upconversion nanoparticles for targeted cancer imaging and photodynamic therapy. / Liang, Liuen; Care, Andrew; Zhang, Run; Lu, Yiqing; Packer, Nicolle H.; Sunna, Anwar; Qian, Yi; Zvyagin, Andrei V. In: ACS Applied Materials and Interfaces, Vol. 8, No. 19, 18.05.2016, p. 11945-11953.


25. Phosphorylated Peptide Functionalization of Lanthanide Upconversion Nanoparticles for Tuning Nanomaterial-Cell Interactions. / Yao, Chi; Wei, Caiyi; Huang, Zhi; Lu, Yiqing; El-Toni, Ahmed Mohamed; Ju, Dianwen; Zhang, Xiangmin; Wang, Wenning; Zhang, Fan. In: ACS Applied Materials and Interfaces, Vol. 8, No. 11, 23.03.2016, p. 6935-6943.


27. One-step conjugation of glycyrrhetinic acid to cationic polymers for high-performance gene delivery to cultured liver cell. / Cong, Yue; Shi, Bingyang; Lu, Yiqing; Wen, Shihui; Chung, Roger; Jin, Dayong. In: Scientific Reports, Vol. 6, 21891, 22.06.2016, p. 1-11.

29. **High-Precision Pinpointing of Luminescent Targets in Encoder-Assisted Scanning Microscopy Allowing High-Speed Quantitative Analysis.** / Zheng, Xianlin; Lu, Yiqing; Zhao, Jiangbo; Zhang, Yuhai; Ren, Wei; Liu, Deming; Lu, Jie; Piper, James A.; Leif, Robert C.; Liu, Xiaogang; Jin, Dayong.


30. **Systematic assessment of blood circulation time of functionalized upconversion nanoparticles in the chick embryo.** / Nadot, Annemarie; Liang, Luen; Grebenik, Ekaterina; Guller, Anna; Lu, Yiqing; Qian, Yi; Goldys, Ewa; Zvyagin, Andrei.


31. **One-Step Protein Conjugation to Upconversion Nanoparticles.** / Lu, Jie; Chen, Yinghui; Liu, Deming; Ren, Wei; Lu, Yiqing; Shi, Yu; Piper, James; Paulsen, Ian; Jin, Dayong.


32. **Practical implementation, characterization and applications of a multi-colour time-gated luminescence microscope.** / Zhang, Lixin; Zheng, Xianlin; Deng, Wei; Lu, Yiqing; Lechevallier, Severine; Ye, Zhiqiang; Goldys, Ewa M.; Dawes, Judith M.; Piper, James A.; Yuan, Jingli; Verelst, Marc; Jin, Dayong.


33. **On-the-fly decoding luminescence lifetimes in the microsecond region for lanthanide-encoded suspension arrays.** / Lu, Yiqing; Lu, Jie; Zhao, Jiangbo; Cusido, Janet; Raymo, Françoise M.; Yuan, Jingli; Yang, Sean; Leif, Robert C.; Huo, Yujing; Piper, James A.; Paul Robinson, J.; Goldys, Ewa M.; Jin, Dayong.


34. **Tunable lifetime multiplexing using luminescent nanocrystals.** / Lu, Yiqing; Zhao, Jiangbo; Zhang, Run; Liu, Yujia; Lu, Deming; Goldys, Ewa M.; Yang, Xusan; Xi, Peng; Sunna, Anwar; Lu, Jie; Shi, Yu; Leif, Robert C.; Huo, Yujing; Shen, Jian; Piper, James A.; Robinson, J. Paul; Jin, Dayong.


35. **Single-nanocrystal sensitivity achieved by enhanced upconversion luminescence.** / Zhao, Jiangbo; Jin, Dayong; Schartner, Erik P.; Lu, Yiqing; Liu, Yujia; Zvyagin, Andrei V.; Zhang, Lixin; Dawes, Judith M.; Xi, Peng; Piper, James A.; Goldys, Ewa M.; Monro, Tanya M.


36. **Observation of mesenteric microcirculatory disturbance in rat by laser oblique scanning optical microscopy.** / Ding, Yichen; Zhang, Yu; Peng, Tong; Lu, Yiqing; Jin, Dayong; Ren, Qiushi; Liu, Yuying; Han, Jingyan; Xi, Peng.


37. **Resolving low-expression cell surface antigens by time-gated orthogonal scanning automated microscopy.** / Lu, Yiqing; Martin, Jody; Lu, Yiqing; Zhao, Jiangbo; Yuan, Jingli; Ostrowski, Martin; Paulsen, Ian; Piper, James A.; Jin, Dayong.


38. **Laser oblique scanning optical microscopy (LOSOM) for phase relief imaging.** / Ding, Yichen; Xie, Hao; Peng, Tong; Lu, Yiqing; Jin, Dayong; Teng, Junlin; Ren, Qiushi; Lu, Yiqing; Jin, Dayong.


39. **A cost-effective analog method to produce time-gated luminescence images.** / Leif, Robert C.; Yang, Sean; Lu, Yiqing; Jin, Dayong; Chambers, Stephen.


40. **LOSOM : phase relief imaging can be achieved with confocal system.** / Peng, Tong; Xie, Hao; Ding, Yichen; Lu, Yiqing; Jin, Dayong; Xi, Peng.


41. **Time-gated orthogonal scanning automated microscopy (OSAM) for high-speed cell detection and analysis.** / Lu, Yiqing; Xi, Peng; Piper, James A.; Huo, Yujing; Jin, Dayong.


42. **Automated detection of rare-event pathogens through time-gated luminescence scanning microscopy.** / Lu, Yiqing; Jin, Dayong; Leif, Robert C.; Deng, Wei; Piper, James A.; Yuan, Jingli; Duan, Yusheng; Huo, Yujing.


43. **Advances in lanthanide bioprobes and high-throughput background-free biophotonics sensing.** / Jin, Dayong; Lu, Yiqing; Zhao, Jiangbo; Deng, Wei; Lu, Jie; Piper, James A.


44. **Cytometric investigation of rare-events featuring time-gated detection and high-speed stage scanning.** / Lu, Yiqing; Piper, James A.; Huo, Yujing; Jin, Dayong.