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## Education and Working Experiences

**2022–now**, ***Professor***, College of Electronic and Optical Engineering, College of Flexible Electronics (Future Technology), Nanjing University of Posts and Telecommunications.

**2018–2022**, ***Postdoctoral Fellow***, Department of Materials Science and Engineering, City University of Hong Kong.

**2017–2018**, ***Senior Research Associate***, Department of Materials Science and Engineering, City University of Hong Kong.

**Supervisor:** Prof. WANG Feng

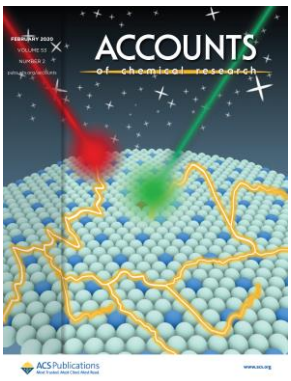
**2012–2017**, ***Ph. D.***, Materials Physics and Chemistry, **Zhejiang University**

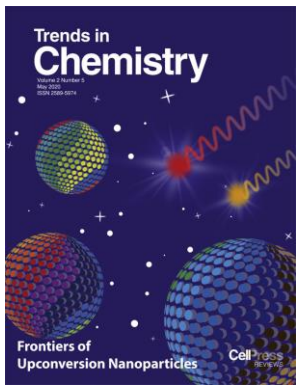
**Supervisor:** Prof. FAN Xianping

**2008–2012**, ***B. Eng***., Materials Science and Engineering, **Zhejiang University**

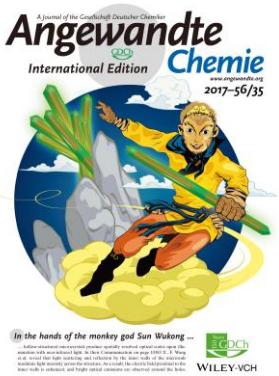
## Publications

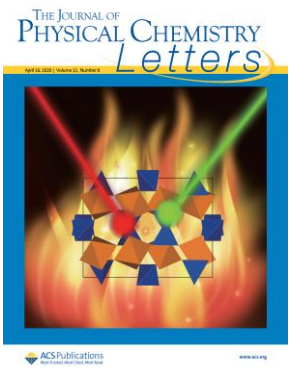
### Covers



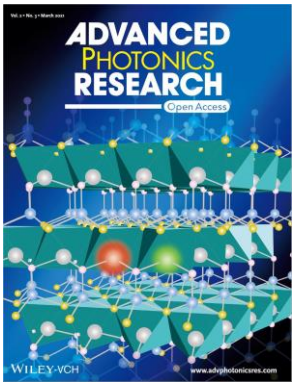



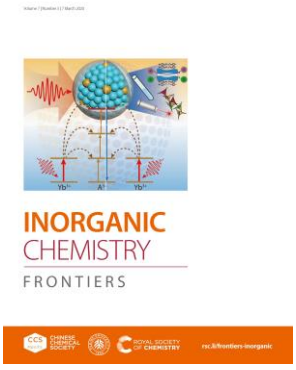






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2 **Bing Chen**, Jiaoran Wang, Linzhuang Peng, Qiang Wang, Yuan Wang,* and Xiuwen Xu*, Radiation-Responsive Metal-Organic Frameworks: Fundamentals and Applications. ***Advanced Functional Materials***, 2024, *in press*.

3 Xiuwen Xu, Quan Zhou, Yacong Wang, Yunjie He, Qiang Wang, Yuan Wang,* and **Bing Chen***, Expanding the toolbox of metal-free organic halide perovskite for X-ray detection. ***Chinese Chemical Letters***, 2024, *in press*.

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15 **Bing Chen**, Biyun Ren, Feng Wang*, $Cs^+$-Assisted Synthesis of $NaLaF_4$ Nanoparticles. ***Chemistry of Materials***, 2019, *31*, 9497–9503.

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17 **Bing Chen**, Feng Wang*, $NaYbF_4$@$CaF_2$ Core–Satellite Upconversion Nanoparticles: One-Pot Synthesis and Sensitive Detection of Glutathione. ***Nanoscale***, 2018, *10*, 19898–19905.

18 **Bing Chen**, Qianqian Su*, Wei Kong, Yuan Wang, Peng Shi, Feng Wang*, Energy Transfer-based Biodetection using Optical Nanomaterials. ***Journal of Materials Chemistry B***, 2018, *6*, 2924–2944.

**19** **Bing Chen**, Wei Kong, Yong Liu, Yunhao Lu, Mingyu Li, Xvsheng Qiao, Xianping Fan, Feng Wang*, Crystalline Hollow Microrods for Site-Selective Enhancement of Nonlinear Photoluminescence. ***Angewandte Chemie International Edition***, 2017, *56*, 10383–10387.

**20** **Bing Chen**, Yong Liu, Yao Xiao, Xian Chen, Yang Li, Mingyu Li, Xvsheng Qiao, Xianping Fan*, Feng Wang*, Amplifying Excitation-Power Sensitivity of Photon Upconversion in a $NaYbF_4$:Ho Nanostructure for Direct Visualization of Electromagnetic Hotspots. ***Journal of Physical Chemistry Letters***, 2016, *7*, 4916–4921.

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**27** Biyun Ren[+], **Bing Chen**[+], Jianxiong Zhao, Yang Guo, Xin Zhang, Xian Chen, Yangyang Du, Zhiqin Deng, Guangyu Zhu, Feng Wang*, Synthesis of Core–Shell $ScF_3$ Nanoparticles for Thermal Enhancement of Upconversion. ***Chemistry of Materials***, 2021, *33*, 158–163.

**28** Jianxiong Zhao[+], **Bing Chen**[+], Feng Wang*, Shedding Light on the Role of Misfit Strain in Controlling Core–Shell Nanocrystals. ***Advanced Materials***, 2020, *32*, 2004142.

**29** Hua Zou[+], Xueqing Yang[+], **Bing Chen**[+], Yangyang Du, Biyun Ren, Xinwen Sun, Xvsheng Qiao, Qiwei Zhang, Feng Wang*, Thermal Enhancement of Upconversion by Negative Lattice Expansion in Orthorhombic $Yb_2W_3O_{12}$. ***Angewandte Chemie International Edition,*** 2019, *58*, 17255–17259.

## Other Co-author Papers

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2 Xin Zhang, Hao Suo, Yanze Wang, **Bing Chen**, Weilin Zheng, Qiangke Wang, Yu Wang, Zixin Zeng, Sai-Wing Tsang, Dong Tu, Feng Wang*, Systematic Tuning of Persistent Luminescence in a Quaternary Wurtzite Crystal through Synergistic Defect Engineering. ***Laser & Photonics Reviews***, 2023, *17*, 2300132.

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4 Weilin Zheng, Xiucai Wang, Xin Zhang, **Bing Chen**, Hao Suo, Zhifeng Xing, Yanze Wang, Han‐Lin Wei, Jiangkun Chen, Yang Guo, Feng Wang*, Emerging Halide Perovskite Ferroelectrics. ***Advanced Materials*****,** 2023, *35*, 2205410.

5 Haixing Meng, **Bing Chen**, Wenjuan Zhu, Zijian Zhou, Tianxiang Jiang, Xiuwen Xu, Shujuan Liu, Qiang Zhao*, Stable Organic Antimony Halides with Near-Unity Photoluminescence Quantum Yield for X-Ray Imaging. ***Laser & Photonics Reviews***, 2023, *17*, 2201007.

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7 Yanze Wang, Hao Suo, Xin Zhang, Fengjun Chun, Junda Shen, **Bing Chen**, Weilin Zheng, Zhifeng Xing, Han-Lin Wei, Yang Yang Li, and Feng Wang*, Solid-state displacement synthesis of alkaline-earth selenide for white emission through alternating current electroluminescence. ***ACS Materials Letters****,* 2022, *4*, 2447–2453.

8 Han-Lin Wei, Weilin Zheng, Xin Zhang, Hao Suo, **Bing Chen**, Yanze Wang, and Feng Wang*, Tuning Near-Infrared-to-Ultraviolet Upconversion in Lanthanide-Doped Nanoparticles for Biomedical Applications. ***Advanced Optical Materials****,* 2023, *11*, 2201716.

9 Qi Zhu, Yang Guo, **Bing Chen**, Yanze Wang, Hao Suo, Xin Zhang, Jun Fan, Feng Wang*, Doping-Mediated Size and Structure Tailoring of CaS Nanocrystals. ***Chemistry of Materials****,* 2022, *15*, 34, 7799–7806.

10 Ronghua Ma, Chunfeng Wang, Wei Yan1, Mingzi Sun, Jianxiong Zhao, Yuantian Zheng, Xu Li, Longbiao Huang, **Bing Chen**, Feng Wang, Bolong Huang* and Dengfeng Peng*, Interface synergistic effects induced multi-mode luminescence. ***Nano Research****,* 2022, *15*, 4457–4465.

**11** Cheng Liu, Xianchuang Zheng, Tingting Dai, Huiliang Wang, Xian Chen, **Bing Chen**, Tianying Sun, Feng Wang, Steven Chu, Jianghong Rao*, Reversibly Photoswitching Upconversion Nanoparticles for Super-Sensitive Photoacoustic Molecular Imaging. ***Angewandte Chemie International Editio***n, 2022, *61*, e202116802.

**12** Yanze Wang, **Bing Chen**, Xin Zhang, Hao Suo, Weilin Zheng, Junda Shen, Yang Yang Li, Feng Wang*, Doubly Doped BaZnOS Microcrystals for Multicolor Luminescence Switching. ***Advanced Optical Materials*** 2022, *10*, 2102430.

**13** Bingzhu Zheng, Jingyue Fan, **Bing Chen**, Xian Qin, Juan Wang*, Feng Wang*, Renren Deng*, Xiaogang Liu*, Rare-Earth Doping in Nanostructured Inorganic Materials. ***Chemical Reviews*** 2022, *122*, 5519–5603.

**14** Xin Zhang, Qi Zhu, **Bing Chen**, Shixun Wang, Andrey L. Rogach, Feng Wang*, Sensitizing Full-spectrum Lanthanide Luminescence within a Semiconductor CaZnOS Host. ***Advanced Photonics Research***, 2021, *2*, 2000089.

**15** Dengfeng Peng*, Yue Jiang, Bolong Huang*, Yangyang Du, Jianxiong Zhao, Xin Zhang, Ronghua Ma, Sergii Golovynskyi, **Bing Chen**, Feng Wang*, A ZnS/CaZnOS Heterojunction for Efficient Mechanical-to-Optical Energy Conversion by Conduction Band Offset. ***Advanced Materials***, 2020, *32*, 1907747.

**16** Yuan Wang, Zixun Wang, Kai Xie, Xi Zhao, Xuezhen Jiang, **Bing Chen**, Ying Han, Yang Lu, Linfeng Huang, Wenjun Zhang, Yang Yang*, Peng Shi*, High-Efficiency Cellular Reprogramming by Nanoscale Puncturing. ***Nano Letters***, 2020, *20*, 5473–5481.

**17** Hua Zou, **Bing Chen**, Yifeng Hu, Qiwei Zhang, Xusheng Wang, Feng Wang*, Simultaneous Enhancement and Modulation of Upconversion by Thermal Stimulation in Sc2Mo3O12 Crystals. ***Journal of Physical Chemistry Letters***, 2020, *11*, 3020–3024.

**18** Jianxiong Zhao, **Bing Chen**, Xian Chen, Xin Zhang, Tianying Sun, Dong Su, Feng Wang*, Tuning Epitaxial Growth on $NaYbF_4$ Upconversion Nanoparticles by Strain Management. ***Nanoscale***, 2020, *12*, 13973–13979.

**19** Xin Zhang, Jianxiong Zhao, **Bing Chen**, Tianying Sun, Ronghua Ma, Yu Wang, Haomiao Zhu, Dengfeng Peng, Feng Wang*, Tuning Multimode Luminescence in Lanthanide(III) and Manganese(II) Co-Doped CaZnOS Crystals. ***Advanced Optical Materials,*** 2020, *8*, 2000274.

**20** Jianxiong Zhao, Xian Chen, **Bing Chen**, Xue Luo, Tianying Sun, Weiwei Zhang, Changjian Wang, Jun Lin, Dong Su*, Xvsheng Qiao*, Feng Wang*, Accurate Control of Core–Shell Upconversion Nanoparticles through Anisotropic Strain Engineering. ***Advanced Functional Materials***, 2019, *29*, 1903295.

**21** Xinwen Sun, Xinwei Wang, **Bing Chen**, Feiyu Zhao, Xiuxia Xu, Kai Ren, Yunhao Lu, Xvsheng Qiao, Guodong Qian, Xianping Fan*, Phase and Morphology Evolution of Luminescent $NaLnF_4$

(Ln = La to Yb) Micro-crystals: Understanding the Ionic Radii and Surface Energy-Dependent Solution Growth Mechanism. ***CrystEngComm***, 2019, *21*, 6652–6658.

**22** Yuting Zhang, Xvsheng Qiao, Jun Wan, Li-ang Wu, **Bing Chen**, Xianping Fan*, Facile Synthesis of Monodisperse YAG:$Ce^{3+}$ Microspheres with High Quantum Yield via an Epoxide-driven Sol–gel Route. ***Journal of Materials Chemistry C***, 2017, *5*, 8952–8957.

**23** Chundong Wang, Ai-Wu Wang*, Jianrui Feng, Zhe Li, **Bing Chen**, Qi-Hui Wu, Jianjun Jiang, Jian Lu, Yang Yang Li, Hydrothermal Preparation of Hierarchical $MoS_2$-Reduced Graphene Oxide Nanocomposites towards Remarkable Enhanced Visible-light Photocatalytic Activity. ***Ceramic International***, 2017, *43*, 2384–2388.

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**25** Tianying Sun, Xian Chen, Limin Jin, Ho-Wa Li, **Bing Chen**, Bo Fan, Bernard Moine, Xvsheng Qiao, Xianping Fan, Sai-Wing Tsang, Siu Fung Yu, Feng Wang*, Broadband Ce(III)-Sensitized Quantum Cutting in Core-Shell Nanoparticles: Mechanistic Investigation and Photovoltaic Application. ***Journal of Physical Chemistry Letters***, 2017, *8*, 5099–5104.

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**27** Dengfeng Peng, Qiang Ju, Xian Chen, Ronghua Ma, **Bing Chen**, Gongxun Bai, Jianhua Hao, Xvsheng Qiao, Xianping Fan, Feng Wang*, Lanthanide-doped Energy Cascade Nanoparticles: Full Spectrum Emission by Single Wavelength Excitation. ***Chemistry of Materials***, 2015, *27*, 3115–3120.

**28** Dengfeng Peng, **Bing Chen**, Feng Wang*, Recent Advances in Doped Mechanoluminescent Phosphors. ***ChemPlusChem***, 2015, *80*, 1209–1215.

**29** Chunyan Song, **Bing Chen**, Yunchao Chen, Yimin Wu, Zhengjie Zhuang, Xuhui Lu, Xvsheng Qiao, Xianping Fan*, Microstructures and Luminescence Behaviors of $Mn^{2+}$ Doped ZnS Nanoparticle Clusters with Different Core/Shell Assembled Orders. ***Journal of Alloy and Compounds,*** 2014, *590*, 546–552.