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## ACADEMIC APPOINTMENTS

07/2021–Present	Professor, Department of Materials Science and Engineering, City University of Hong Kong, Hong Kong SAR, China
07/2017–06/2021	Associate Professor, Department of Materials Science and Engineering, City University of Hong Kong, Hong Kong SAR, China
09/2012–06/2017	Assistant Professor, Department of Physics and Materials Science, City University of Hong Kong, Hong Kong SAR, China
10/2011–09/2012	Research Scientist, Institute of Materials Research and Engineering, Singapore
07/2010–09/2011	Senior Research Fellow, with Professor Xiaogang Liu Department of Chemistry, National University of Singapore, Singapore
04/2007–06/2010	Research Fellow, with Professor Xiaogang Liu Department of Chemistry, National University of Singapore, Singapore

## EDUCATION

09/2001–12/2006	Ph.D. in <u>Materials Science and Engineering</u> With Professor Minquan Wang & Professor Xianping Fan Zhejiang University, Hangzhou, China
09/1997–06/2001	B.Eng. in <u>Inorganic-Nonmetallic Materials &amp; Engineering</u> Minor in <u>Computer Application</u> Zhejiang University, Hangzhou, China

## HONORS AND AWARDS

2020	Top 2% researcher in the world (Report by Stanford University)
2020	Research Grants Council Research Fellowship
2019	The President's Award by CityU
2019	Outstanding Supervisor Award by CityU
2019	Asian Rising Star Lectureship by the Federation of Asian Chemical Societies
2019	Outstanding Reviewer for Journal of Materials Chemistry C
2018	Highly Cited Researcher by Clarivate Analytics
2018	Outstanding Reviewer for Nanoscale
2017	Highly Cited Author by Royal Society of Chemistry
2010	Best Poster Presentation at the 1 <sup>st</sup> China-India-Singapore Symposium on Crystal Engineering
2007	Best Poster Presentation at the 5 <sup>th</sup> Singapore International Chemistry Conference
2005	Dow Chemical Fellowship for Excellent Graduate Student Guanghua Fellowship for Excellent Graduate Student
2001	Excellent Graduate of Zhejiang Provincial Institutions of Higher Learning Excellent Graduate of Zhejiang University

## RESEARCH INTERESTS

Nanomaterials Synthesis and Nanostructure, Photon Upconversion, Mechanoluminescence, Electroluminescence,

## PROFESSIONAL ACTIVITIES

Founding Member of the *Hong Kong Young Academy of Sciences*

Associate Editor for: *Journal of Luminescence, Frontiers in Chemistry*

Manuscript reviewer for: *Nature Publishing Group, American Chemical Society, Royal Chemical Society, Wiley Publishing Group, Elsevier Publishing Group, etc.*

## PEER-REVIEWED PAPERS

Based on the data from [Google Scholar](https://scholar.google.com/) on 16 August 2021, the total citation times are 19,523 and the h-index is 49. Among 110+ published papers, 10 papers were published in Nature/Science titled Journals including one in Nature.



116. Nan Song, Songbin Liu, Peng Zhang, Junshan He, Qinyuan Zhang, Feng Wang,\* Bo Zhou\*, Enhancing upconversion of Nd<sup>3+</sup> through Yb<sup>3+</sup>-mediated energy cycling towards temperature sensing, *J. Rare Earths* 2021, j.jre.2021.06.013.
115. Shuo Qi, Yachao Zhang, Gongyuan Liu, Jiangbo Chen, Xiaozhen Li, Qi Zhu, Yuqi Yang, Feng Wang, Jiahai Shi, Chun-Sing Lee, Guangyu Zhu, Puxiang Lai, Lidai Wang, Chihua Fang, Plasmonic-Doped Melanin-Mimic for CXCR4-Targeted NIR-II Photoacoustic Computed Tomography-Guided Photothermal Ablation of Orthotopic Hepatocellular Carcinoma, *Acta Biomaterialia* 2021, 129, 245.
114. Zhengxun Lai, You Meng, Qi Zhu, Fei Wang, Xiuming Bu, Fangzhou Li, Wei Wang, Chuntai Liu, Feng Wang, Johnny C. Ho, High-Performance Flexible Self-Powered Photodetectors Utilizing Spontaneous Electron and Hole Separation in Quasi-2D Halide Perovskites, *Small* 2021, 17, 2100442.
113. Bing Chen, Xin Zhang, Feng Wang\*, Expanding the Toolbox of Inorganic Mechanoluminescence Materials, *Acc. Mater. Res.* 2021, 2, 364.
112. Xin Zhang, Feng Wang\*, Recent advances in flexible alternating current electroluminescent devices, *APL Mater.* 2021, 9, 030701.

111. Yangyang Du, Xiangze Ai, Ziyu Li, Tianying Sun, Yang Huang, Xierong Zeng, Xian Chen,\* Feng Rao,\* Feng Wang\*, Visible-to-Ultraviolet Light Conversion: Materials and Applications, *Adv. Photonics Res.* 2021, 2, adpr.202000213.
110. Yanze Wang, Bing Chen, Feng Wang\*, Overcoming thermal quenching of upconversion nanoparticles, *Nanoscale* 2021, 13, 3454.
109. Yuanyuan Zhang, Guangming Zhu, Biqin Dong, Feng Wang, Jiaoning Tang, Florian J. Stadler, Guanghui Yang, Shuxian Hong, and Feng Xing, Interfacial jamming reinforced Pickering emulgel for arbitrary architected nanocomposite with connected nanomaterial matrix, *Nat. Commun.* 2021, 12, 111.
108. Bing Chen<sup>+</sup>, Yuan Wang<sup>+</sup>, Yang Guo, Peng Shi,\* and Feng Wang\*, NaYbF<sub>4</sub>@NaYF<sub>4</sub> Nanoparticles: Controlled Shell Growth and Shape-Dependent Cellular Uptake, *ACS Appl. Mater. Interfaces* 2021, 13, 2327.
107. 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<sub>3</sub> Nanoparticles for Thermal Enhancement of Upconversion, *Chem. Mater.* 2021, 33, 158.
106. Xian Chen, Ziyu Li, Tianying Sun,\* Dengfeng Peng,\* Feng Wang\*, Continuous-wave lasing from quasi-2D perovskites, *Sci. Bull.* 2021, 66, 521.
105. Guanghui Yang, Guangming Zhu, Biqin Dong, Jiaoning Tang, Yuanyuan Zhang, Shuxian Hong, Feng Wang, Feng Xing, Acid/Alkali-Resistant, Stimuli-Responsive, and Shape-Remodeled Emulsion Droplet Assemblies with Ag Nanocrystals as Binding Agents, *Chem. Eng. J.* 2020, 407, 127092.
104. Xin Zhang, Qi Zhu, Bing Chen, Shixun Wang, Andrey L. Rogach, Feng Wang\*, Sensitizing full-spectrum lanthanide luminescence within a semiconductor CaZnOS host, *Adv. Photonics Res.* 2021, 2, 2000089.
103. Yingying Zhang<sup>+</sup>, Xin Zhang<sup>+</sup>, Hanjie Wang,\* Yu Tian, Huizhuo Pan, Lili Zhang, Feng Wang,\* and Jin Chang\*, Remote Regulation of Optogenetic Proteins by a Magneto-Luminescence Microdevice, *Adv. Funct. Mater.* 2020, 30, 2006357.
102. Jianxiong Zhao<sup>+</sup>, Bing Chen<sup>+</sup>, and Feng Wang\*, Shedding Light on the Role of Misfit Strain in Controlling Core–Shell Nanocrystals, *Adv. Mater.* 2020, 32, 2004142.
101. Zhengxun Lai, Ruoting Dong, Qi Zhu, You Meng, Fei Wang, Fangzhou Li, Xiuming Bu, Xiaolin Kang, Heng Zhang, Quan Quan, Wei Wang, Feng Wang, SenPo Yip, and Johnny C. Ho, Bication Mediated Quasi-2D Halide Perovskites for High-Performance Flexible Photodetectors: From Ruddlesden-Popper Type to Dion-Jacobson Type, *ACS Appl. Mater. Interfaces* 2020, 12, 39567.
100. Bing Chen, Dongyu Li, and Feng Wang\*, InP Quantum Dots: Synthesis and Lighting Applications, *Small* 2020, 16, 2002454.
99. Jianxiong Zhao, Bing Chen, Xian Chen, Xin Zhang, Tianying Sun, Dong Su, and Feng Wang\*, Tuning epitaxial growth on NaYbF<sub>4</sub> upconversion nanoparticles by strain management, *Nanoscale* 2020, 12, 13973.
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97. Muhammad Naeem, Haiyan He, Fan Zhang, Hailong Huang, Stefanus Harjo, Takuro Kawasaki, Bing Wang, Si Lan, Zhenduo Wu, Feng Wang, Yuan Wu, Zhaoping Lu, Zhongwu Zhang, Chain Tsuan Liu, Xun-Li Wang\*, Cooperative deformation in high-entropy alloys at ultralow temperatures, *Sci. Adv.* 2020, 6, eaax4002.
96. Hua Zou,\* Bing Chen, Yifeng Hu, Qiwei Zhang, Xusheng Wang, and Feng Wang\*, Simultaneous Enhancement and Modulation of Upconversion by Thermal Stimulation in Sc<sub>2</sub>Mo<sub>3</sub>O<sub>12</sub> Crystals, *J. Phys. Chem. Lett.* 2020, 11, 3020.
95. Dengfeng Peng,\* Yue Jiang, Bolong Huang,\* Yangyang Du, Jianxiong Zhao, Xin Zhang, Ronghua Ma, Sergii Golovynskyi, Bing Chen, and Feng Wang\*, A ZnS/CaZnOS Heterojunction for Efficient Mechanical-to-Optical Energy Conversion by Conduction Band Offset, *Adv. Mater.* 2020, 32, 1907747.
94. Bing Chen, Feng Wang\*, Emerging Frontiers of Upconversion Nanoparticles, *Trends in Chem.* 2020, 2, 427.
93. Bing Chen, Feng Wang\*, Recent Advances in the Synthesis and Application of Yb-Based Fluoride Upconversion Nanoparticles, *Inorg. Chem. Front.* 2020, 7, 1067.
92. Ying Wang, Kai Xie, Haibing Yue, Xian Chen, Xuan Luo, Qinghai Liao, Ming Liu, Feng Wang,\* Peng Shi\*, Flexible and Fully Implantable Upconversion Device for Wireless Optogenetic Stimulation of Spinal Cord in Behaving Animals, *Nanoscale* 2020, 12, 2406.
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89. Qi Zhu, Tianying Sun, Feng Wang\*, Optical tuning in lanthanide-based nanostructures, *J. Phys. D: Appl. Phys.* 2020, 53, 053002.
88. Yongbiao Zhai, Ye Zhou, Xueqing Yang, Feng Wang,\* Wenbin Ye, Xiaojian Zhu, Donghong She, Wei D. Lu,\* Su-Ting Han\*, Near infrared neuromorphic computing via upconversion-mediated optogenetics, *Nano Energy* 2020, 67, 104262.
87. Yangyang Du, Yunfeng Wang, Zhiqin Deng, Xian Chen, Xueqing Yang, Tianying Sun, Xin Zhang, Guangyu Zhu, Siu Fung Yu,\* Feng Wang\*, Blue-Pumped Deep Ultraviolet Lasing from Lanthanide-Doped Lu<sub>6</sub>O<sub>5</sub>F<sub>8</sub> Upconversion Nanocrystals, *Adv. Opt. Mater.* 2020, 8, 1900968.
86. Bing Chen, Biyun Ren, Feng Wang\*, Cs<sup>+</sup>-Assisted Synthesis of NaLaF<sub>4</sub> Nanoparticles, *Chem. Mater.* 2019, 31, 9497.
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75. Xueqing Yang, Wei Chen, Haidong Bian, Tianying Sun, Yangyang Du, Zhenyu Zhang, Wenjun Zhang, Yangyang Li, Xianfeng Chen, Feng Wang\*, Synthesis of Mesoporous ZIF-8 Nanoribbons and Their Conversion into Carbon Nanoribbons for High-Performance Supercapacitors, *Chem. Eur. J.* 2018, 24, 11185.
74. Bing Chen, Qianqian Su,\* Wei Kong, Yuan Wang, Peng Shi, Feng Wang\*, Energy transfer-based biodetection using optical nanomaterials, *J. Mater. Chem. B* 2018, 6, 2924.
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66. Xudong Lin, Ying Wang, Xian Chen, Runhuai Yang, Zixun Wang, Jingyu Feng, Haitao Wang, King W. C. Lai, Jufang He, Feng Wang,\* Peng Shi\*, Multiplexed Optogenetic Stimulation of Neurons with Spectrum-Selective Upconversion Nanoparticles, *Adv. Healthcare Mater.* 2017, 6, 1700446.
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63. Wei Kong, Chau Fan Lam, Feng Wang\*, An All-Nanocrystal Biosensing System for In Vitro Detection of STAT3 Oligonucleotides, *Molecules* 2017, 22, 1085. Special Issue: Nanocrystals: Synthesis, Characterization and Applications.
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61. Ming-Hsien Chan, Yu-Ting Pan, I-Jung Lee, Chieh-Wei Chen, Yung-Chieh Chan, Michael Hsiao, Feng Wang, Lingdong Sun, Xueyuan Chen, Ru-Shi Liu, Minimizing the Heat Effect of Photodynamic Therapy Based on Inorganic Nanocomposites Mediated by 808 nm Near-Infrared Light, *Small* 2017, 13, 1700038.
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59. Yi Tan, Ling Zhang, Ka Ho Man, Raoul Peltier, Ganchao Chen, Huatang Zhang, Liyi Zhou, Feng Wang, Derek Ho, Shao Q Yao, Yi Hu, Hongyan Sun, A Reaction-based OFF-ON Near-infrared Fluorescent Probe for Imaging Alkaline Phosphatase Activity in Living Cells and Mice, *ACS Appl. Mater. Interfaces* 2017, 9, 6796.
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