个人简历

基本信息

周冬伶 Zhou Dongling

出生年月：1993-1　　联系电话：(+852) 59346905
民族：汉　　邮箱：dlzhou@connect.hku.hk

教育背景与工作经历

2020.7至今
博士后，香港大学，化学系，师从支志明院士（邮箱：cmche@hku.hk）

2020.6–2020.7
研究助理，香港大学，化学系，师从支志明院士（邮箱：cmche@hku.hk）

2015.9–2020.6
博士，香港大学，化学系，师从支志明院士（邮箱：cmche@hku.hk）

2011.9–2015.6
本科，汕头大学，化学系（应用化学专业）

研究方向

发光材料的设计及其在有机发光二极体器件（OLED）的应用，热致延迟荧光(TADF)材料的研究，金属有机化学，超分子化学，瞬时光谱

已发表的论文与专利

- **以第一作者身份发表的论文(6):** Advanced Materials (2022; IF: 32), Angewandte Chemie International Edition (2020; IF: 17), Advanced Science (2019; IF: 17), Journal of Materials Chemistry C (2022, 2023; IF: 8), Chemistry – A European Journal (2020; IF: 5)

1. **D. Zhou,** G. Cheng, W. Liu, S. Wu, C.-M. Che, Solution-Processed Single-Emissive-Layer WOLEDs with High Efficiency and Ultra-High Color Rendering Index Beyond 90. J. Mater. Chem. C. 2023, DOI: 10.1039/D2TC05257A. (selected as *Hot Papers*)
2. **D. Zhou**, G. S. M. Tong, G. Cheng, Y.-K. Tang, W. Liu, D. Ma, L. Du, J.-R. Chen, C.-M. Che, Stable Tetradentate Gold(III)-TADF Emitters with Close to Unity Quantum Yield and Radiative Decay Rate Constant of up to 2×10^6 s^{-1}: High-Efficiency Green OLEDs with Operational Lifetime (LT_{90}) Longer than 1800 h at 1000 cd m^{-2}. Adv. Mater. 2022, 2206598.
3. **D. Zhou**, S. Wu, G. Cheng, C.-M. Che, A Gold(III)–TADF Emitter as a Sensitizer for High-Color-Purity and Efficient Deep-Blue Solution-Processed OLEDs. J. Mater. Chem. C. 2022, 10, 4590.

4. **D. Zhou**, W.-P. To, G. S. M. Tong, G. Cheng, L. Du, D. L. Phillips, C.-M. Che, Tetradentate Gold(III) Complexes as Thermally Activated Delayed Fluorescence (TADF) Emitters: Microwave-Assisted Synthesis and High-Performance OLEDs with Long Operational Lifetime. Angew. Chem. Int. Ed. 2020, 59, 6375. (selected as *Hot Papers*; *Citation: 55*)
5. **D. Zhou**, G. Cheng, G. S. M. Tong, C.-M. Che, High Efficiency Sky-Blue Gold(III)-TADF Emitters. Chem. Eur. J. 2020, 26, 15718.
6. **D. Zhou**, W.-P. To, Y. Kwak, Y. Cho, G. Cheng, G. S. M. Tong, C.-M. Che, Thermally Stable Donor–Acceptor Type (Alkynyl)Gold(III) TADF Emitters Achieved EQEs and Luminance of up to 23.4% and 70 300 cd m^{-2} in Vacuum-Deposited OLEDs. Adv. Sci. 2019, 6, 1802297. (*Citation: 45*)

- **以共同作者身份发表的论文(5)**:

7. W.-P. To, **D. Zhou**, G. S. M. Tong, G. Cheng, C.-M. Che, Highly Luminescent Pincer Gold(III) Aryl Emitters: Thermally Activated Delayed Fluorescence and Solution-Processed OLED. Angew. Chem. Int. Ed. 2017, 56, 14036.
8. G. Cheng, **D. Zhou**, U. Monkowius, H. Yersin, Fabrication of a Solution-Processed White Light Emitting Diode Containing a Single Dimeric Copper(I) Emitter Featuring Combined TADF and Phosphorescence. Micromachines 2021, 12, 1500.
9. V. K.-Y. Lo, Y.-M. Chan, **D. Zhou**, P. H. Toy, C.-M. Che, Highly Enantioselective Synthesis Using Prolinol as a Chiral Auxiliary: Silver-Mediated Synthesis of Axially Chiral Vinylallenes and Subsequent (Hetero)-Diels–Alder Reactions. Org. Lett. 2019, 21, 7717.
10. W.-P. To, G. Cheng, G. S. M. Tong, **D. Zhou**, C.-M. Che, Recent advances in metal-TADF emitters and their application in organic light-emitting diodes. Front. Chem. 2020, 8, 653.
11. W.-P. To, G. S. M. Tong, C.-W. Cheung, C. Yang, **D. Zhou**, C.-M. Che, Luminescent Cyclometalated Gold(III) Alkyl Complexes: Photophysical and Photochemical Properties. Inorg. Chem. 2017, 56, 5046.

- **专利 (2)**:

12. Alkynyl Au(III) Complex and Light-Emitting Device. 美国专利 US20220085304A1
13. 四齿配体, 金（III）配合物及其制备方法和应用. 中国专利申请号201910789219.7

曾获奖项

2015–2019　香港博士研究生奖学金，香港大学
2018–2019　本科生课程优秀助教奖，香港大学化学系
2016　Certificate of Teaching and Learning in Higher Education，香港大学
2011–2015　建设银行教育奖学金；森德利化工奖学金；汕头大学化学系校友奖学金；二等学业奖学金；优秀本科生论文奖，汕头大学

助教经历

2015–2019　实验助教员，本科生无机化学实验课，香港大学
2015–2019　实验助教员，本科生刑事技术实验课，香港大学

会议经历

2018 Poster Presentation: Manchester–Shanghai–Hong Kong Trilateral Symposium on Chemistry Frontiers, Hong Kong, China

2017 Poster Presentation: Challenges in Inorganic Chemistry, Manchester, United Kingdom

具备技能

- Be proficient in advanced synthetic and analytical chemical techniques (column chromatography, glove box techniques, Schlenk line techniques, NMR, TGA, IR, ESI/EI/FAB-Mass, GC-Mass, elemental analysis, etc.).

- Be experienced with the use and analysis of SEM, cyclic voltammetry, nanoparticle tracking analysis, steady-state photophysical measurements (UV and PL), and time-resolved spectroscopy (ns(fs)-TA/ns(fs)-TRE).

- Be proficient in academic English writing and fluent in spoken English.

- Be experienced in supervising research students.

2023-2-22