List of Publications (2021)

Experiments Performed at NSRRC Beamlines

主導性 之 SCIE 論文

1. L. Bai, C.-S. Hsu, D. T. L. Alexander, H. M. Chen*(陳浩銘), and X. Hu*, "*Double-atom Catalysts as a Molecular Platform for Heterogeneous Oxygen Evolution Electrocatalysis*", Nat. Energy **6** , 1054 (2021). (I.F.=60.858)★

2. K. N. Shitaw, S.-C. Yang, S.-K. Jiang, C.-J. Huang, N. A. Sahalie, Y. Nikodimos, H. H. Weldeyohannes, C.-H. Wang(王嘉興), S.-H. Wu*(吳溪煌), W.-N. Su*(蘇威年), and B. J. Hwang*(黃炳照), "*Decoupling Interfacial Reactions at Anode and Cathode by Combining Online Electrochemical Mass Spectroscopy with Anode-free Li-metal Battery*", Adv. Funct. Mater. **31** , 2006951 (2021). (I.F.=18.808)★

3. S. H. Su, P.-Y. Chuang(莊霈于), H.-Y. Chen, S.-C. Weng(翁世璋), W.-C. Chen, K.-D. Tsuei(崔古鼎), C.-K. Lee, S.-H. Yu, M. M.-C. Chou, L.-W. Tu, H.-T. Jeng, C.-M. Tu, C.-W. Luo, C.-M. Cheng*(鄭澄懋), T.-R. Chang*(張泰榕), and J.-C. A. Huang*(黃榮俊), "*Topological Proximity-induced Dirac Fermion in Two-dimensional Antimonene*", ACS Nano **15** , 15085 (2021). (I.F.=15.881)★

4. H. Y. Huang(黃筱妤), A. Singh(辛艾蒙), C. Y. Mou, S. Johnston, A. F. Kemper, J. van den Brink, P. J. Chen, T. K. Lee, J. Okamoto(岡本淳), Y. Y. Chu(朱晏誼), J. H. Li, S. Komiya, A. C. Komarek, A. Fujimori, C. T. Chen(陳建德), and D. J. Huang*(黃迪靖), "*Quantum Fluctuations of Charge Order Induce Phonon Softening in a Superconducting Cuprate*", Phys. Rev. X **11** , 041038 (2021). (I.F.=15.762)★

5. S. I. Chan*(陳長謙), P. Chuankhayan, P. K. R. Nareddy, I.-K. Tsai, Y.-F. Tsai, K. H.-C. Chen, S. S.-F. Yu*(俞聖法), and C.-J. Chen*(陳俊榮), "*Mechanism of Pyrroloquinoline Quinone-dependent Hydride Transfer Chemistry from Spectroscopic and High-resolution X-ray Structural Studies of the Methanol Dehydrogenase from Methylococcus capsulatus (Bath)*", J. Am. Chem. Soc. **143** , 3359 (2021). (I.F.=15.419)★

6. C.-J. Huang, B. Thirumalraj, H.-C. Tao, K. N. Shitaw, H. Sutiono, T. T. Hagos, T. T. Beyene, L.-M. Kuo, C.-C. Wang(王俊杰), S.-H. Wu, W.-N. Su, and B. J. Hwang*(黃炳照), "*Decoupling the Origins of Irreversible Coulombic Efficiency in Anode-free Lithium Metal Batteries*", Nat. Commun. **12** , 1452 (2021). (I.F.=14.919)★

7. R.-H.o Guo(郭榮豪), C.-M. Chou(周哲民), C.-C. Wang(王俊杰), M.-J. Deng*(鄧名傑), J.-M. Lin(林智敏), C.-Y. Chen(陳軍佑), Y.-C. Lee(李耀昌), Y.-W. Chiang, and W.-T. Chuang*(莊偉綜), "*Biomimetic Strategies for 4.0 V All-solid-state Flexible Supercapacitor: Moving Toward Eco-friendly, Safe, Aesthetic, and High-performance Devices*", Chem. Eng. J. **414** , 128842 (2021). (I.F.=13.273)★

8. H.-W. Hsieh, C.-H. Wang, A.-F. Huang, W.-N. Su*(蘇威年), and B. J. Hwang*(黃炳照), "*Green Chemical Delithiation of Lithium Iron Phosphate for Energy Storage Application*", Chem. Eng. J. **418** , 129191 (2021). (I.F.=13.273)★

9. Y. Yang, Y. Xie, Z. Yu, S. Guo, M. Yuan, H. Yao*(姚惠琴), Z. Liang*(梁足培), Y. R. Lu, T.-S. Chan*(詹丁山), C. Li*(李誠), H. Dong, S. Ma*(馬淑蘭), "*Self-supported NiFe-LDH@CoS_x Nanosheet Arrays Grown on Nickel Foam as Efficient Bifunctional Electrocatalysts for Overall Water Splitting*", Chem. Eng. J. **419** , 129512 (2021). (I.F.=13.273) ★

10. Y. Lin, K. Liu, K. Chen, Y. Xu, H. Li, J. Hu, Y.-R. Lu(盧英睿), T.-S. Chan*(詹丁山), X. Qiu, J. Fu, and M. Liu*(劉敏), "*Tuning Charge Distribution of FeN_4 via External N for Enhanced Oxygen Reduction Reaction*", ACS Catalysis **11** , 6304 (2021). (I.F.=13.084)★

11. M. Peng, Y.-R. Lu(盧英睿), Y. Jiang, J. Lan, Y. Zhang, T.-S. Chan*(詹丁山), and Y. Tan*(譚勇文), "*Revealing the Asymmetric Redox Dynamics of Porous Bismuth Anode in Efficient Ni//Bi Battery*", J. Mater. Chem. A **9** , 22269 (2021). (I.F.=12.732)★

12. P. Zeng, C. Liu, C. Cheng, C. Yuan, K. Dai, J. Mao, L. Zheng, J. Zhang, L.-Y. Chang(張羅嶽), S.-C. Haw(何樹智), T.-S. Chan*(詹丁山), H. Lin, and L. Zhang*(張亮), "*Propelling Polysulfide Redox Conversion by d-band Modulation for High Sulfur Loading and Low Temperature Lithium-sulfur Batteries*", J. Mater. Chem. A **9** , 18526 (2021). (I.F.=12.732) ★

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Components or Additives for High-efficiency Organic Solar Cells", ACS Appl. Mater. Interfaces **13** , 61473 (2021). (I.F.=9.229)★

14. P.-A. Hsieh, P.-J. Chen, L.-M. Lyu, S.-Y. Chen, M.-C. Tseng, M.-Y. Chung, W.-H. Chiang, J.-L. Chen*(陳政龍), and C.-H. Kuo*(郭俊宏), "*Enhanced Production of Formic Acid in Electrochemical CO_2 Reduction over Pd-doped BiOCl Nanosheets*", ACS Appl. Mater. Interfaces **13** , 58799 (2021). (I.F.=9.229)★

15. J.-X. Lin, J. Thaomonpun, V. Thongpool, W.-J. Chen, C.-H. Huang, S.-J. Sun, Z. Remes, Y.-T. Tseng, Y.-F. Liao*(廖彥發), and H.-S. Hsu*(許華書), "*Enhanced Photodegradation in Metal Oxide Nanowires with Co-doped Surfaces Under a Low Magnetic Field*", ACS Appl. Mater. Interfaces **13** , 23173 (2021). (I.F.=9.229)★

16. T. M. Hagos, H. K. Bezabh, H. G. Redda, E. A. Moges, W.-H. Huang, C.-J. Huang, W.-N. Su*(蘇威年), H. Dai*, and B. J. Hwang*(黃炳照), "*Exploring the Performance of Carbonate and Ether-based Electrolytes for Anode-free Lithium Metal Batteries Operating Under Various Conditions*", J. Power Sources **512** , 230388 (2021). (I.F.=9.127)★

17. Y.-Q. Yeh(葉奕琪), C.-J. Su(蘇群仁), C.-A. Wang(王振安), Y.-C. Lai, C.-Y. Tang, Z. Di, H. Frielinghaus, A.-C. Su, U.-S. Jeng*(鄭有舜), and C.-Y. Mou*(牟中原), "*Diatom-inspired Self-assembly for Silica Thin Sheets of Perpendicular Nanochannels*", J. Colloid Interf. Sci. **584** , 647 (2021). (I.F.=8.128)★

18. H.-H. Guan(管泓翔), Y.-H. Huang, E.-S. Lin, C.-J. Chen*(陳俊榮), and C.-Y. Huang*(黃晟洋), "*Complexed Crystal Structure of Saccharomyces Cerevisiae Dihydroorotase with Inhibitor 5-fluoroorotate Reveals a New Binding Mode*", Bioinorg. Chem. Appl. **2021** , 2572844 (2021). (I.F.=7.778)★

19. C.-J. Chang*(張棋榕), Y.-G. Lin*(林彥谷), J. Chen, C.-Y. Huang, S.-C. Hsieh, and S.-Y. Wu, "*Ionic liquid/Surfactant-hydrothermal Synthesis of Dendritic PbS@CuS Core-shell Photocatalysts with Improved Photocatalytic Performance*", Appl. Surf. Sci. **546** , 149106 (2021). (I.F.=6.707)★

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22. S. Kang, D. Won, H. Yang, C.-H. Lin(林家賢), C.-S. Ku(古慶順), C. Y. Chiang*(蔣慶有), S. Kim*, and S. Cho*, "*Phase-controllable Laser Thinning in $MoTe_2$*", Appl. Surf. Sci. **563** , 150282 (2021). (I.F.=6.707)★

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26. B.-K. Su, Y.-C. Wei, W.-T. Chuang*(莊偉綜), S.-C. Weng, S.-F. Wang, D.-G. Chen, Z.-X. Huang, Y. Chi*(季昀), and P.-T. Chou*(周必泰), "*The Observation of Interchain Motion in Self-assembled Crystalline Platinum(II) Complexes: An Exquisite Case but By No Means the Only One in Molecular Solids*", J. Phys. Chem. Lett. **12** , 7482 (2021). (I.F.=6.475)★

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31. Y. Lu*(陸陽), C.-Y. Chiang*(蔣慶有), Y. Li, C.-S. Ku, H. Yan*(晏浩), E. Huang, B. Chen, and N. Tamura, "*Twinning-mediated Anomalous Alignment of Rutile Films Revealed by Synchrotron X-ray Nanodiffraction*", iScience **24** , 102278 (2021). (I.F.=5.458)★

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43. Y.-Y. Chang*(張櫻議), Y.-W. Tsai(蔡一葦), S.-C. Weng(翁世璋), S.-L. Chen, and S.-L. Chang(張石麟), "*Integrated Optical Chip for a High-resolution, Single-resonance-mode X-ray Monochromator System*", Opt. Lett. **46** , 416 (2021). (I.F.=3.776)★

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Neutron Project

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