

List of Publications

Publications (including conference proceedings) listed here are based on the results obtained from facilities associated with the NSRRC

Notes:

1. Asterisks (*) indicate corresponding authors. Their Chinese names are shown in parentheses if applicable.
2. Publications are sorted by endstation and listed in alphabetic order according to the last name of the first author.
3. Publications using more than one beamline are listed in corresponding beamline sections.
4. Publications marked ○ are selected to report in the sections of Research Highlights.

Experiments Performed at NSRRC Beamlines

TPS 05A Protein Microcrystallography

- C.-W. M. Chang, S.-C. Wang, C.-H. Wang, A. H. Pang, C.-H. Yang, Y.-K. Chang, W.-J. Wu, and M.-D. Tsai*(蔡明道), "A Unified View on Enzyme Catalysis by Cryo-EM Study of a DNA Topoisomerase", *Commun. Chem.* **7**, 45 (2024).
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- C.-C. Chen*(陳純琪), X. Li, J. Min, Z. Zeng, Z. Ning, H. He, X. Long, D. Niu, R. Peng, X. Liu, Y. Yang, J.-W. Huang, and R.-T. Guo*(郭瑞庭), "Complete Decomposition of Poly(Ethylene Terephthalate) by Crude PET Hydrolytic Enzyme Produced in *Pichia Pastoris*", *Chem. Eng. J.* **481**, 148418 (2024).
- C.-C. Chen, H. Li, J.-W. Huang, and R.-T. Guo*(郭瑞庭), "Structural and Molecular Insights of Two Unique Enzymes Involved in the Biosynthesis of a Natural Halogenated Nitrile", *FEBS J.* **291**, 5123 (2024).
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- W. T. Chiang, Y.-K. Chang, W.-H. Hui, S.-W. Chang, C.-Y. Liao, Y.-C. Chang, C.-J. Chen, W.-C. Wang, C.-C. Lai, C.-H. Wang, S.-Y. Luo, Y.-P. Huang, S.-H. Chou, T.-L. Horng, M.-H. Hou, S. P. Muench, R.-S. Chen, M.-D. Tsai*(蔡明道), and N.-J. Hu*(胡念仁), "Structural Basis and Synergism of ATP and Na⁺ Activation in Bacterial K⁺ Uptake System KtrAB", *Nat. Commun.* **15**, 3850 (2024).
- C.-C. Cho, C.-Y. Fei, B.-C. Jiang, W.-Z. Yang, and H. S. Yuan*(袁小玲), "Molecular Mechanisms for DNA Methylation Defects Induced by ICF Syndrome-linked Mutations in DNMT3B", *Protein Sci.* **33**, e5131 (2024).
- C.-H. Chu, C.-T. Wu, M.-G. Lin, C.-Y. Yen, Y.-Z. Wu, C.-D. Hsiao*(蕭偉鏗), and Y.-J. Sun*(孫玉珠), "Insights into the Molecular Mechanism of ParABS System in Chromosome Partition by HpParA and HpParB", *Nucleic Acids Res.* **52**, 7321 (2024).
- C. Cui, L.-J. Yang, Z.-W. Liu, X. Shu, W.-W. Zhang, Y. Gao, Y.-X. Wang, T. Wang, C.-C. Chen, R.-T. Guo*(郭瑞庭), and S.-S. Gao*(高書山), "Substrate Specificity of a Branch of Aromatic Dioxygenases Determined by Three Distinct Motifs", *Nat. Commun.* **15**, 7682 (2024).
- L. Dai, H. Li, S. Dai, Q. Zhang, H. Zheng, Y. Hu, R.-T. Guo*(郭瑞庭), and C.-C. Chen*(陳純琪), "Structural and Functional Insights into the Self-sufficient Flavin-dependent Halogenase", *Int. J. Biol. Macromol.* **260**, 129312 (2024).
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- S.-M. Lin, H.-T. Huang, P.-J. Fang, C.-F. Chang, R. Satange, C.-K. Chang, S.-H. Chou, S. Neidle*, and M.-H. Hou*(侯明宏), "Structural Basis of Water-mediated cis Watson-cric k/Hoogsteen Base-pair Formation in Non-CpG Methylation", *Nucleic Acids Res.* **52**, 8566 (2024).
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- R. Yekta, X. Xiong, J. Li, B. S. Heater, M. M. Lee, and M. K. Chan*(陳文博), "Mechanoresponsive Protein Crystals for NADH Recycling in Multicycle Enzyme Reactions", *J. Am. Chem. Soc.* **146**, 18817 (2024).

TPS 07A Micro-focus Protein Crystallography

- C.-C. Chao*(趙啟超), S.-R. Tzeng, M.-C. Chiang, H.-W. Hsueh, W.-J. Hsieh, Y.-C. Chao, M.-F. Cheng, Y.-H. Lin, M.-Y. Su, C.-H. Huang, Y.-S. Wang, M.-F. Hsieh, P.-H. Tseng, and S.-T. Hsieh*(謝松蒼), "Diflunilal Versus Tafamidis on Neuropathy and Cardiomyopathy in Hereditary Transthyretin Amyloidosis", *Ann. Clin. Transl. Neurol.* **11**, 2426 (2024).
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TPS 09A Temporally Coherent X-ray Diffraction

- S. Abbas, B. Jarwal, T.-T. Ho, S. M. Valiyaveetil, C.-R. Hsing, T.-L. Chou, C.-M. Wei, L.-C. Chen*(林麗瓊), and K.-H. Chen*(陳貴賢), "Synergistic Effect of Indium Doping on Thermoelectric Performance of Cubic GeTe-based Thin Films", *Mater. Today Phys.* **49**, 101581 (2024).
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(林碧軒), "Structural and Optical Properties of Eu-doped ZnO Epitaxial Thin Films Grown by Pulsed-laser Deposition", *APL Mater.* **12**, 111112 (2024).

TPS 13A Biological Small-angle X-ray Scattering

- C.-Y. Chang, G.-M. Manesi, W.-E. Wang, Y.-C. Hung, A. Avgeropoulos, and R.-M. Ho* (何榮銘), "Frank-Kasper-like Network Phase from Self-assembly of High- χ star-block Copolymers", *Sci. Adv.* **10**, ead04786 (2024).
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