

黃志清

著作目錄

期刊論文

1. C. J. Yang, Anisha Anand, C. C. Huang* and J. Y. Lai* (2023, Dec). Unveiling the Power of Gabapentin-Loaded Nanoceria with Multiple Therapeutic Capabilities for the Treatment of Dry Eye Disease. *ACS Nano*, 17, 25118-25135. (SCIE, 12/178, CHEMISTRY, MULTIDISCIPLINARY). MOST 110-2314-B-182-008-MY3. 本人為通訊作者.
2. H.-J. Jian, A. Anand, J.-Y. Lai, C.-C. Huang, D. H.-K. Ma, C.-C. Lai* and H.-T. Chang* (2023, Dec). Ultrahigh-Efficacy VEGF Neutralization Using Carbonized Nanodonuts: Implications for Intraocular Anti-Angiogenic Therapy. *Advanced Healthcare Materials*, DOI: 10.1002/adhm.202302881. (SCIE, 8/96, ENGINEERING, BIOMEDICAL). MOST 110-2314-B-182-008-MY3.
3. A. Nain, Y.-T. Tseng, A. Gupta, Y.-F. Lin, S. Arumugam, Y.-F. Huang, C.-C. Huang* and H.-T. Chang* (2023, Sep). NIR-activated Quercetin-based Nanogels Embedded with CuS Nanoclusters for the Treatment of Drug-resistant Biofilms and Accelerated Chronic Wound Healing. *Nanoscale Horizons*, 8, 1652-1664. (SCIE, 49/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 110-2113-M-002-005-MY3. 本人為通訊作者.
4. Y.-C. Chen, Y.-F. Lin, C.-T. Liu, Y.-C. Liu, M.-H. Lin, G.-Y. Lan, Y.-S. Cheng, H.-L. Yu, C.-C. Huang, H.-T. Chang, N.-C. Cheng, Y.-S. Hsiao and J.-S. Yu* (2023, Jun). Facilitation of Osteogenic Differentiation of hASCs on PEDOT: PSS/MXene Composite Sponge with Electrical Stimulation. *ACS Applied Polymer Materials*, 5, 4753-4766. (SCIE, 16/86, POLYMER SCIENCE).
5. A. Wibrianto, G. Getachew, W.-B. Dirersa, A.-S. Rasal, C.-C. Huang, T.-C. Kan, J.-S. Chang and J.-Y. Chang* (2023, May). A Multifunctional Nanocatalyst Based on Ultra-Fluorescent Carbon Quantum Dots for Cascade Enzymatic Activity and Stimuli-responsive Chemotherapy of Cancer. *Carbon*, 208, 191-207. (SCIE, 39/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 111-2113-M-011-003.
6. H.-J. Jian, A. Anand, J.-Y. Lai*, B. Unnikrishnan, H.-T. Chang, S. Harroun and C.-C. Huang* (2023, May). In Situ Hybridization of Polymeric Curcumin to Arginine-Derived Carbon Quantum Dots for Synergistic Treatment of Bacterial Infections. *ACS Applied Materials & Interfaces*, 15(22), 26457–26471.. (SCIE,

- 55/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 110-2314-B-182-008-MY3. 本人為通訊作者。
7. H.-L. Huang, C.-C. Huang and C.-K. Su* (2023, May). Post-Administration Labeling with Palladium(II) Ions Enables ICP-MS-Based Determination of the Biodistribution of Carbonized Nanogels. *Analytica Chimica Acta*, 1256, 341155. (SCIE, 8/86, CHEMISTRY, ANALYTICAL). MOST 111-2113-M-005-018.
 8. B. Patrick, T. Akhtar, R. Kousar, C.-C. Huang and X.-G. Li* (2023, Apr). Carbon Nanomaterials: Emerging Roles in Immuno-Oncology. *International Journal of Molecular Sciences*, 27, 6600. (SCIE, 66/285, BIOCHEMISTRY & MOLECULAR BIOLOGY). MOST 110-2311-B-039-001.
 9. N. Ahmad, C.-F. Jeffrey Kuo*, M. Mustaqeem, A. Sangili, C.-C. Huang and H.-T. Chang (2023, Apr). Synthesis of Novel Type-II MnNb₂O₆/g-C₃N₄ Mott-Schottky Heterojunction Photocatalyst: Excellent Photocatalytic Performance and Degradation Mechanism of Fluoroquinolone-Based Antibiotics. *Chemosphere*, 321, 138027. (SCIE, 30/275, ENVIRONMENTAL SCIENCES). MOST 111-2622-E-011-005.
 10. C.-R. Yang, Y.-S. Lin, R.-S. Wu, Ch.-J. Lin, H.-W. Chu, C.-C. Huang*, A. Anand, B. Unnikrishnan and H.-T. Chang* (2023, Mar). Dual-emissive Carbonized Polymer Dots for the Ratiometric Fluorescence Imaging of Singlet Oxygen in Living Cells. *Journal of Colloid and Interface Science*, 634, 575-585. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 110-2113-M-002-005-MY3. 本人為通訊作者。
 11. G. Getachew, C.-H. Hsiao, A. Wibrianto, A. S. Rasal, W. Batu Dirersa, C.-C. Huang, N. V. Rao, J.-H. Chen and J.-Y. Chang* (2023, Mar). High Performance Carbon Dots Based Prodrug Platform: Image-Guided Photodynamic and Chemotherapy with On-Demand Drug Release upon Laser Irradiation. *Journal of Colloid and Interface Science*, 633, 396–410. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 111-2113-M-011-003.
 12. A. Anand, H.-J. Jian, H.-H. Huang, L.-E. Hean, Y.-J. Li, J.-Y. Lai*, H.-D. Chou, Y.-C. Kang, W.-C. Wu, C.-C. Lai*, C.-C. Huang and H.-T. Chang* (2023, Jan). Anti-angiogenic Carbon Nanovesicles Loaded with Bevacizumab for the Treatment of Age-related Macular Degeneration. *Carbon*, 201, 362–370. (SCIE, 39/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 110-2314-B-182-008-MY3.
 13. D. D. Nguyen, C.-H. Yao, S. J. Lue, C.-J. Yang, Y.-H. Su, C.-C. Huang* and J.-Y. Lai* (2023, Jan). Amination-mediated Nano Eye-drops with Enhanced Corneal Permeability and Effective Burst Release for Acute Glaucoma Treatment. *Chemical Engineering Journal*, 451, 138620. (SCIE, 5/142, ENGINEERING,

- CHEMICAL). MOST 110-2221-E-182-023-MY3. 本人為通訊作者.
14. S. R. Barman, S.-W. Chan, F.-C. Kao, H.-Y. Ho, I. Khan, A. Pal, C.-C. Huang, Z.-H. Lin* (2023, Jan). A Self-powered Multifunctional Dressing for Active Infection Prevention and Accelerated Wound Healing. *Science Advances*, 9(4). (SCIE, 7/73, MULTIDISCIPLINARY SCIENCES). MOST 110-2636-E-007-019.
 15. S.-C. Wei, A. Nain, Y.-F. Lin, R.-S. Wu, P. Srivastava, L. Chang, Y.-F. Huang, H.-T. Chang*, K.-T. Chuang and C.-C. Huang* (2023, Jan). Light Triggered Programmable States of Carbon Dot Liposomes Accelerate Chronic Wound Healing via Photocatalytic Cascade Reaction. *Carbon*, 201, 952–961. (SCIE, 39/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 110-2113-M-002-005-MY3. 本人為通訊作者.
 16. A. Sangili, B. Unnikrishnan, A. Naina, Y.-J. Hsu, R.-S. Wu, C.-C. Huang* and H.-T. Chang* (2022, Dec). Stable Carbon Encapsulated Titanium Carbide MXene Aqueous Ink for Fabricating High-performance Supercapacitors. *Energy Storage Materials*, 53, 51–61. (SCIE, 15/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 110-2113-M-002-005-MY3. 本人為通訊作者.
 17. W.B. Dirersa, G. Getachew, C.-H. Hsiao, A. Wibrianto, A.S. Rasal, C.-C. Huang and J.-Y. Chang* (2022, Dec). Surface-engineered CuFeS₂/Camptothecin Nanoassembly with Enhanced Chemodynamic Therapy via GSH Depletion for Synergistic Photo/Chemotherapy of Cancer. *Materials Today Chemistry*, 26, 101158. (SCIE, 76/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 111-2113-M-011-003.
 18. Y.-F. Lin, Y.-S. Lin, T.-Y. Huang, S.-C. Wei, R.-S. Wu, C.-C. Huang, Y.-F. Huang* and H.-T. Chang* (2022, Dec). Photoswitchable Carbon-dot Liposomes Mediate Catalytic Cascade Reactions for Amplified Dynamic Treatment of Tumor Cells. *Journal of Colloid and Interface Science*, 628, 717–725. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 111-2221-E-182-023-MY3.
 19. H.-Y. Lin, Y.-T. Zeng, C.-J. Lin, S. G. Harroun, A. Anand, L. Chang, C.-J. Wu*, H.-J. Lin and C.-C. Huang* (2022, Sep). Partial Carbonization of Quercetin Boost the Antiviral Activity Against H1N1 Influenza A Virus. *Journal of Colloid and Interface Science*, 622, 481–493. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 110-2113-M-002-005-MY3. 本人為通訊作者.
 20. R.-S. Wu, Y.-S. Lin, A. Nain, B. Unnikrishnan, Y.-F. Lin, C.-R. Yang, T.-H. Chen, Y.-F. Huang*, C.-C. Huang and H.-T. Chang* (2022, Sep). Evaluation of Chemotherapeutic Response in Living Cells Using Subcellular Organelle–Selective Amphipathic Carbon Dots Biosensors and Bioelectronics. *Biosensors*

- and Bioelectronics*, 211, 114362. (SCIE, 2/70, BIOPHYSICS). MOST 110-2113-M-002-005-MY3.
21. A. B. Beyene, W.-N. Su*, H.-C. Tsai*, W. A. Tegegne, C.-H. Chen, C.-C. Huang, D. Mares, V. Prajzler, W.-H. Huang and B. J. Hwang* (2022, Aug). Cu/Ag Nanoparticle-Based Surface-Enhanced Raman Scattering Substrates for Label-Free Bacterial Detection. *ACS Applied Nano Materials*, 5, 11567–11576. (SCIE, 98/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 110-2639-E-011-001-ASP.
 22. B. Unnikrishnan, C.-W. Wu, A. Sangili, Y.-J. Hsu, Y.-T. Tseng, J. S. Pandeya, H.-T. Chang* and C.-C. Huang* (2022, Jul). Synthesis and In Situ Sulfidation of Molybdenum Carbide MXene Using Fluorine-Free Etchant for Electrocatalytic Hydrogen Evolution Reactions. *Journal of Colloid and Interface Science*, 15, 849–857. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 110-2113-M-002-005. 本人為通訊作者。
 23. H.-W. Chu, B. Unnikrishnan, A. Nain, S. G. Harroun, H.-T. Chang and C.-C. Huang* (2022, Jul). Pulsed Laser Irradiation Induces the Generation of Alloy Cluster Ions for the Screening of Protease Activity. *Biosensors and Bioelectronics*, 216, 114615. (SCIE, 2/70, BIOPHYSICS). MOST 110-2221-E-019-001. 本人為通訊作者。
 24. Y.-R. Chiou, C.-J. Lin, S. G. Harroun, Y.-R. Chen, L. Chang, A.-T. Wu*, F.-C. Chang, Y.-W. Lin*, H.-J. Lin, A. Anand, B. Unnikrishnan, A. Nain and C.-C. Huang* (2022, Jul). Aminoglycoside-Mimicking Carbonized Polymer Dots for Bacteremia Treatment. *Nanoscale*, 14, 11719–11730. (SCIE, 43/178, CHEMISTRY, MULTIDISCIPLINARY). MOST 110-2221-E-019-001. 本人為通訊作者。
 25. C.-J. Lin, B. Unnikrishnan, C. W. Lehman, P.-H. Wang, Y. J. Tseng, S. G. Harroun, S.-C. Lin* and C.-C. Huang* (2022, Jun). Exploring Molecular Moieties on Carbonized Polymer Dots from Flavonoid Glycosides with Activity Against Enterovirus A71. *Carbon*, 192, 285–294. (SCIE, 39/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 110-2113-M-019-005. 本人為通訊作者。
 26. H.-H. Chen, C.-J. Lin, A. Anand, H.-J. Lin, H.-Y. Lin, J.-Y. Mao, P.-H. Wang, Y. J. Tseng, W.-S. Tzou, C.-C. Huang* and R. Y. L. Wang* (2022, Jun). Development of Antiviral Carbon Quantum Dots that Target the Japanese Encephalitis Virus Envelope Protein. *Journal of Biological Chemistry*, 298, 101957. (SCIE, 88/285, BIOCHEMISTRY & MOLECULAR BIOLOGY). MOST 110-2221-E-019-001. 本人為通訊作者。
 27. Y.-J. Li, S.-C. Wei, H.-W. Chu, H.-J. Jian, A. Anand, A. Nain, Y.-F. Huang*, H.-

- T. Chang, C.-C. Huang and J.-Y. Lai* (2022, Jun). Poly-Quercetin-Based NanoVelcro as a Multifunctional Wound Dressing for Effective Treatment of Chronic Wound Infections. *Chemical Engineering Journal*, 437, 135315. (SCIE, 5/142, ENGINEERING, CHEMICAL). MOST 110-2314-B-182-008-MY3.
28. H.-Y. Lin, S.-C. Yen, C.-H. Kang, C.-Y. Chung, M.-C. Hsu, C.-Y. Wang, John H.-Y. Lin, C.-C. Huang* and H.-J. Lin* (2022, May). How to Evaluate the Potential Toxicity of Therapeutic Carbon Nanomaterials? A Comprehensive Study of Carbonized Nanogels with Multiple Animal Toxicity Test Models. *Journal of Hazardous Materials*, 429, 128337. (SCIE, 10/275, ENVIRONMENTAL SCIENCES). MOST 109-2313-B-019-005. 本人為通訊作者.
29. Y.-J. Hsu, A. Nain, Y.-F. Lin, Y.-T. Tseng, Y.-J. Li, A. Sangili, P. Srivastava, H.-L. Yu, Y.-F. Huang, C.-C. Huang* and H.-T. Chang* (2022, May). Self-Redox Reaction Driven In Situ Formation of Cu₂O/Ti₃C₂T_x Nanosheets Boost the Photocatalytic Eradication of Multi-Drug Resistant Bacteria from Infected Wound. *Journal of Nanobiotechnology*, 20, 235. (SCIE, 12/158, BIOTECHNOLOGY & APPLIED MICROBIOLOGY). MOST 110-2113-M-002-005-MY3. 本人為通訊作者.
30. A. Ananda, B. Unnikrishnan, J.-Y. Mao, C.-J. Lin, J.-Y. Lai* and C.-C. Huang* (2022, Apr). Carbon-Based Low-Pressure Filtration Membrane for the Dynamic Disruption of Bacteria from Contaminated. *Water Research*, 212, 118121. (SCI, 1/103, WATER RESOURCES). MOST 110-2221-E-019-001. 本人為通訊作者.
31. S.-R. Hu, C.-R. Yang, Y.-F. Huang, C.-C. Huang, Y.-L. Chen* and H.-T. Chang* (2022, Apr). Ratiometric Fluorescence Probe of Vesicle-like Carbon Dots and Gold Clusters for Quantitation of Cholesterol. *Chemosensors*, 10, 160. (SCIE, 23/86, CHEMISTRY, ANALYTICAL). MOST 110-2113-M-002-005-MY3.
32. P.-H. Lin, H.-J. Jian, Y.-J. Li, Y.-F. Huang*, A. Anand, C.-C. Huang, H.-J. Lin and J.-Y. Lai* (2022, Mar). Alleviation of Dry Eye Syndrome with one Dose of Antioxidant, Anti-Inflammatory, and Mucoadhesive Lysine-Carbonized Nanogels. *Acta Biomaterialia*, 141, 140–150. (SCIE, 9/96, ENGINEERING, BIOMEDICAL). MOST 110-2221-E-019-001.
33. S. V. Selvi, N. Nataraj, T.-W. Chen, S.-M. Chen*, S. Nagaraj and C.-S. Ko, T.-W. Tseng* and C.-C. Huang* (2022, Mar). In-situ Formation of 2H Phase MoS₂/Cerium-Zirconium Oxide Nanohybrid for Potential Electrochemical Detection of an Anti-Cancer Drug Flutamide. *Materials Today Chemistry*, 23, 100749. (SCIE, 76/344 MATERIALS SCIENCE, MULTIDISCIPLINARY). 本人為通訊作者.
34. J.-Y. Mao, D. Miscevic, B. Unnikrishnan, H.-W. Chu, C. P. Chou, L. Chang, H.-J. Lin and C.-C. Huang* (2022, Feb). Carbon Nanogels Exert Multipronged

- Attack on Resistant Bacteria and Strongly Constrain Resistance Evolution. *Journal of Colloid and Interface Science*, 608, 1813–1826. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 110-2221-E-019-001. 本人為通訊作者.
35. L.-J. Luo, D. D. Nguyen, C.-C. Huang* and J.-Y. Lai* (2022, Feb). Therapeutic Hydrogel Sheets Programmed with Multistage Drug Delivery for Effective Treatment of Corneal Abrasion. *Chemical Engineering Journal*, 429, 132409. (SCIE, 5/142, ENGINEERING, ENVIRONMENTAL). MOST 109-2622-B-182-001-CC2. 本人為通訊作者.
36. Y.-S. Lin, L.-W. Chuang, Y.-F. Lin, S.-R. Hu, C.-C. Huang, Y.-F. Huang* and H.-T. Chang* (2022, Feb). Development of Fluorescent Carbon Nanoparticle-Based Probes for Intracellular pH and Hypochlorite Sensing. *Chemosensors*, 10, 64. (SCIE, 23/86, CHEMISTRY, ANALYTICAL). MOST 110-2113-M-002-005-MY3.
37. Y.-S. Lin, Z.-Y. Yang, A. Anand, C.-C. Huang* and H.-T. Chang* (2022, Jan). Carbon Dots with Polarity-Tunable Characteristics for the Selective Detection of Sodium Copper Chlorophyllin and Copper Ions. *Analytica Chimica Acta*, 1191, 339311. (SCIE, 8/86, CHEMISTRY, ANALYTICAL). MOST 110-2113-M-002-005-MY3. 本人為通訊作者.
38. S.-C. Yen, J.-Y. Mao, H.-Y. Lin, H.-T. Huang, S. G. Harroun, A. Nain, H.-T. Chang, H.-Y. Lin, L.-L. Chen, C.-C. Huang* and H.-J. Lin* (2021, Dec). Multifunctional Carbonized Nanogels to Treat Lethal Acute Hepatopancreatic Necrosis Disease. *Journal of Nanobiotechnology*, 19, 448. (SCIE, 12/158, BIOTECHNOLOGY & APPLIED MICROBIOLOGY). MOST 110-2221-E-019-001. 本人為通訊作者.
39. W.-J. Lin, Y.-S. Lin, H.-T. Chang*, B. Unnikrishnan and C.-C. Huang* (2021, Dec). Electrocatalytic CuBr@CuO Nanoparticles Based Salivary Glucose Probes. *Biosensors and Bioelectronics*, 15, 113610. (SCIE, 2/86, CHEMISTRY, ANALYTICAL). MOST 110-2113-M-002-005-MY3. 本人為通訊作者.
40. T.-N. Le, C.-J. Lin, Y. C. Shen, K.-Y. Lin, C.-K. Lee*, C.-C. Huang and N. V. Rao* (2021, Nov). Hyaluronic Acid Derived Hypoxia-Sensitive Nanocarrier for Tumor Targeted Drug Delivery. *ACS Applied Bio Materials*, 4, 8325–8332. (ESCI, 68/141, NANOSCIENCE & NANOTECHNOLOGY). MOST 109-2222-E-011-004.
41. A. Nain, H.-H. Huang, D. M. Chevrier, Y.-T. Tseng, A. Sangili, Y.-F. Lin, Y.-F. Huang, L. Chang*, F.-C. Chang, C.-C. Huang, F.-G. Tseng* and H.-T. Chang* (2021, Oct). Catalytic and Photoresponsive BiZ/CuxS Heterojunctions with Surface Vacancies for the Treatment of Multidrug-Resistant Clinical Biofilm-Associated. *Nanoscale*, 13, 18632–18646. (SCIE, 27/160, PHYSICS,

- APPLIED). MOST 110-2113-M-002-005-MY3.
42. B. Unnikrishnan, I. S. Gultom, Y.-T. Tseng, H.-T. Chang* and C.-C. Huang* (2021, Sep). Controlling Morphology Evolution of Titanium Oxide-gold Nanourchin for Photocatalytic Degradation of Dyes and Photoinactivation of Bacteria in the Infected Wounds. *Journal of Colloid and Interface Science*, 598, 260–273. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 107-2627-M-007-007-MY3. 本人為通訊作者.
 43. L.-J. Luo, H.-J. Jian, S. G. Harroun, J.-Y. Lai*, B. Unnikrishnan, and C.-C. Huang* (2021, Sep). Targeting Nanocomposites with Anti-Oxidative/Inflammatory/Angiogenic Activities for Synergistically Alleviating Macular Degeneration. *Applied Materials Today*, 24, 101156. (SCIE, 66/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 108-2811-B-182-510. 本人為通訊作者.
 44. S. V. Selvi, N. Nataraj, T.-W. Chen, W.-L. Wu, T.-W. Tseng* and C.-C. Huang* (2021, Jul). Engineering Layered Nanostructures of Two-Dimensional Transition Metal Dichalcogenides with CeO₂ for Nano-Level Detection of Promethazine Hydrochloride. *Journal of The Electrochemical Society*, 168, 077503. (SCIE, 7/21, MATERIALS SCIENCE, COATINGS & FILMS). 台北聯合大學系統: USTP- NTUT- NTOU-110–01. 本人為通訊作者.
 45. W.-J. Chiu, Y.-C. Chen, C.-C. Huang, L. Yang, J. Yu, S.-W. Huang and C.-H. Lin* (2021, Jul). Iron Hydroxide/Oxide-Reduced Graphene Oxide Nanocomposite for Dual-Modality Photodynamic and Photothermal Therapy In Vitro and In Vivo . *Nanomaterials*, 11, 1947. (SCI, 39/160, PHYSICS, APPLIED). MOST 106-2314-B-150-001.
 46. C.-Y. Chung, Y.-J. Chen, C.-H. Kang, H.-Y. Lin, C.-C. Huang, P.-H. Hsu* and H.-J. Lin* (2021, May). Toxic or Not Toxic, That Is the Carbon Quantum Dot's Question: A Comprehensive Evaluation with Zebrafish Embryo, Eleutheroembryo, and Adult Models. *Polymers*, 13, 1598. (SCIE, 16/86, POLYMER SCIENCE). MOST 109-2622-B-019-007.
 47. D.-L. Chou, J.-Y. Mao, A. Anand, H.-J. Lin, J. H.-Y. Lin*, C.-P. Tseng, C.-C. Huang and H.-Y. Wang* (2021, May). Carbonized Lysine-Nanogels Protect against Infectious Bronchitis Virus. *International Journal of Molecular Sciences*, 22, 5415. (SCIE, 66/285, BIOCHEMISTRY & MOLECULAR BIOLOGY). MOST 109-2313-B-020-005.
 48. H.-Y. Lin, S.-W. Wang, J.-Y. Mao, H.-T. Chang, S. G. Harroun, H.-J. Lin*, C.-C. Huang and J.-Y. Lai* (2021, May). Carbonized Nanogels for Simultaneous Antibacterial and Antioxidant Treatment of Bacterial Keratitis. *Chemical Engineering Journal*, 411, 128469. (SCIE, 5/142, ENGINEERING,

- ENVIRONMENTAL). MOST 109-2313-B-019-005.
49. H.-H. Huang, A. Anand, C.-J. Lin, H.-Ji. Lin, Y.-W. Lin, S. G. Harroun and C.-C. Huang* (2021, Apr). LED Irradiation of Halogen/Nitrogen-Doped Polymeric Graphene Quantum Dots Triggers the Photodynamic Inactivation of Bacteria in Infected Wounds. *Carbon*, 174,710–722. (SCI, 39/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 107-2622-B-182-001-CC2. 本人為通訊作者.
 50. J.-Y. Mao, B. Unnikrishnan, H.-W. Chu, S. G. Harroun, Y.-R. Chen, A.-T. Wu, C.-T. Chang, H.-J. Lin* and C.-C. Huang* (2021, Apr). Thermally Driven Formation of Polyphenolic Carbonized Nanogels with High Anticoagulant Activity from Polysaccharides. *Biomaterials Science*, 9, 4679–4690. (SCIE, 12/45, MATERIALS SCIENCE, BIOMATERIALS). MOST 107-2113-M-019-004-MY3. 本人為通訊作者.
 51. A. Nain, S.-C. Wei, Y.-F. Lin, Y.-T. Tseng, R. P. Mandal, Y.-F. Huang, C.-C. Huang*, F.-G. Tseng* and H.-T. Chang* (2021, Feb). Copper Sulfide Nanoassemblies for Catalytic and Photoresponsive Eradication of Bacteria from Infected Wounds. *ACS Applied Materials & Interfaces*, 13, 7865–7878. (SCIE, 55/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 107-2113-M-002-015-MY3. 本人為通訊作者.
 52. B. Unnikrishnan, C.-W. Lien, H.-W. Chu and C.-C. Huang* (2021, Jan). A Review on Metal Nanozyme-Based Sensing of Heavy Metal Ions: Challenges and Future Perspectives. *Journal of Hazardous Materials*, 401, 123397. (SCIE, 10/275 ENVIRONMENTAL SCIENCES). MOST 107-2622-B-182-001-CC2. 本人為通訊作者.
 53. T.-N. Le, C.-J. Lin, Y. C. Shen, K.-Y. Lin, C.-K. Lee*, C.-C. Huang and N. V. Rao* (2021). Hyaluronic Acid Derived Hypoxia-Sensitive Nanocarrier for Tumor Targeted Drug Delivery. *ACS Applied Bio Materials*, 4, 8325–8332. (ESCI, 68/141, NANOSCIENCE & NANOTECHNOLOGY). MOST 109-2222-E-011-004.
 54. H.-W. Chu, B. Unnikrishnan, A. Anand, Y.-W. Lin and C.-C. Huang* (2020, Dec). Carbon Quantum Dots for the Detection of Antibiotics and Pesticides. *Journal of Food and Drug Analysis*, 28, 539–557. (SCIE, 56/142, FOOD SCIENCE & TECHNOLOGY). MOST 107-2622-B-182-001-CC2. 本人為通訊作者.
 55. J.-Y. Lin, P.-X. Lai, Y.-C. Sun, C.-C. Huang and C.-K. Su* (2020, Aug). Biodistribution of Graphene Oxide Determined Through Post-Administration Labeling with DNA-Conjugated Gold Nanoparticles and ICPMS. *Analytical Chemistry*, 92, 13997–14005. (SCI, 7/86, CHEMISTRY, ANALYTICAL). MOST 108-2113-M-019-004.

56. A. Nain, Y.-T. Tseng, Y.-S. Lin, S.-C. Wei, R. P. Mandal, B. Unnikrishnan, C.-C. Huang*, F.-G. Tseng* and H.-T. Chang* (2020, Jul). Tuning the Photoluminescence of Metal Nanoclusters for Selective Detection of Multiple Heavy Metal Ions. *Sensors and Actuators B: Chemical*, 321, 128539. (SCIE, 1/63, INSTRUMENTS & INSTRUMENTATION). MOST 107-2113-M-002-015-MY3. 本人為通訊作者.
57. C.-W. Wu, B. Unnikrishnan, A. P. Periasamy, I-W. P. Chen, Y.-T. Tseng, Y.-Y. Yang, W.-J. Lin, C.-C. Huang* and H.-T. Chang* (2020, Jun). Importance of Cobalt-Doping for Preparation of Hollow CuBr/Co@CuO Nanocorals on Copper Foils with Enhanced Electrocatalytic Activity and Stability for Oxygen Evolution Reaction. *ACS Sustainable Chemistry & Engineering*, 8, 9794–9802. (SCIE, 13/142, ENGINEERING, CHEMICAL). MOST 107-2113-M-002-015-MY3. 本人為通訊作者.
58. B. Unnikrishnan, R.-S. Wu, S.-C. Wei, C.-C. Huang* and H.-T. Chang* (2020, May). Fluorescent Carbon Dots for Selective Labeling of Subcellular Organelles. *ACS Omega*, 5, 11248–11261. (SCIE, 69/178, CHEMISTRY, MULTIDISCIPLINARY). MOST 107-2113-M-002-015-MY3. 本人為通訊作者.
59. P.-C. Yang, P.-H. Lin, C.-C. Huang, T. Wu* and Y.-W. Lin* (2020, May). Determination of Hg(II) Based on the Inhibited Catalytic Growth of Surface-Enhanced Raman Scattering-Active Gold Nanoparticles on a Patterned Hydrophobic Paper Substrate. *Microchemical Journal*, 157, 104983. (SCIE, 17/86, CHEMISTRY, ANALYTICAL). MOST 108-2331-M-018-003.
60. Y.-D. Dai, R.-J. Lyu, T. Wu, C.-C. Huang* and Y.-W. Lin* (2020, May). Influences of Silver Halides AgX (X= Cl, Br, and I) on Magnesium Bismuth Oxide Photocatalyst in Methylene Blue Degradation under Visible Light Irradiation. *Journal of Photochemistry and Photobiology A: Chemistry*, 397, 112585. (SCIE, 68/161, CHEMISTRY, PHYSICAL). MOST 108-2113-M-018-003. 本人為通訊作者.
61. A. Nain, Y.-T. Tseng, S.-C. Wei, A. P. Periasamy, C.-C. Huang*, F.-G. Tseng* and H.-T. Chang* (2020, Apr). Capping 1,3-Propanedithiol to Boost the Antibacterial Activity of Protein-Templated Copper Nanoclusters. *Journal of Hazardous Materials*, 389, 121821. (SCIE, 10/275, ENVIRONMENTAL SCIENCES). MOST 107-2113-M-002-015-MY3. 本人為通訊作者.
62. D. Miscevic, J.-Y. Mao, T. Kefale, D. Abedi, C.-C. Huang, M. Moo-Young and C. P. Chou* (2020, Apr). Integrated Strain Engineering and Bioprocessing Strategies for High-Level Bio-Based Production of 3-Hydroxyvalerate in *Escherichia Coli*. *Applied Microbiology and Biotechnology*, 104, 5259–5272.

- (SCIE, 36/158, BIOTECHNOLOGY & APPLIED MICROBIOLOGY).
63. H.-J. Jian, J. Yu, Y.-J. Li, B. Unnikrishnan, Y.-F. Huang, L.-J. Luo, D. H.-K. Ma, S. G. Harroun, H.-T. Chang, H.-J. Lin, J.-Y. Lai* and C.-C. Huang* (2020, Apr). Highly Adhesive Carbon Quantum Dots from Biogenic Amines for Prevention of Biofilm Formation. *Chemical Engineering Journal*, 386, 123913. (SCIE, 5/142, ENGINEERING, ENVIRONMENTAL). MOST 107-2221-E-182-058-MY3. 本人為通訊作者.
 64. H.-T. Huang, H.-J. Lin, H.-J. Huang, C.-C. Huang, J. H.-Y. Lin* and L.-L. Chen* (2020, Apr). Synthesis and Evaluation of Polyamine Carbon Quantum Dots (CQDs) in *Litopenaeus Vannamei* as a Therapeutic Agent Against WSSV. *Scientific Reports*, 10, 7343. (SCIE, 22/73, MULTIDISCIPLINARY SCIENCES). MOST 107-2321-B-019-002.
 65. C.-W. Wu, B. Unnikrishnan, I.-W. P. Chen, S. G. Harroun, H.-T. Chang* and C.-C. Huang* (2020, Mar). Excellent Oxidation Resistant MXene Aqueous Ink for Micro-Supercapacitor Application. *Energy Storage Materials*, 25, 563–571. (SCIE, 15/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 107-2113-M-002-015-MY3. 本人為通訊作者.
 66. T.-T. Wei, S.-A. Chang, R.-J. Lyu, C.-C. Huang, T. Wu and Y.-W. Lin* (2020, Jan). Synthesis of Molybdenum–Silver Orthophosphate Composites for the Visible-Light Photocatalytic Degradation of Various Dye and Phenol. *Journal of Materials Science: Materials in Electronics*, 31, 2177–2189. (SCIE, 31/76, PHYSICS, CONDENSED MATTER). MOST 108-2113-M-018-003.
 67. A. Anand, G. Manavalan, R. P. Mandal, H.-T. Chang, Y.-R. Chiou and C.-C. Huang* (2019, Dec). Carbon Dots for Bacterial Detection and Antibacterial Applications-A Minireview. *Current Pharmaceutical Design*, 25, 4848–4860. (SCIE, 234/366, PHARMACOLOGY & PHARMACY). 本人為通訊作者.
 68. H.-W. Li, J.-Y. Mao, C.-W. Lien, C.-K. Wang, J.-Y. Lai*, R. P. Mandal, H.-T. Chang, L. C., H.-K. Ma and C.-C. Huang* (2019, Dec). Platinum Ions Mediate the Interaction between DNA and Carbon Quantum Dots: Diagnosis of MRSA Infections. *Journal of Materials Chemistry B*, 8, 3506–3512. (SCIE, 10/45, MATERIALS SCIENCE, BIOMATERIALS). MOST 107-2113-M-019-004-MY3. 本人為通訊作者.
 69. R. Sakthivel, S. Kubendhiran, S.-M. Chen, T.-W. Chen, N. Al-Zaqri, F. A. Alharthi, M. M. A. Khanjer, T.-W. Tseng* and C.-C. Huang* (2019, Dec). Exploring the Promising Potential of MoS₂–RuS₂ Binary Metal Sulphide towards the Electrocatalysis of Antibiotic Drug Sulphadiazine. *Analytica Chimica Acta*, 1086, 55–65. (SCIE, 8/86, CHEMISTRY, ANALYTICAL). MOST 107-2113-M-027-005-MY3. 本人為通訊作者.

70. C.-W. Lien, P.-H. Yu, H.-T. Chang, P.-H. Hsu, T.-H. Wu, Y.-W. Lin*, C.-C. Huang and J.-Y. Lai* (2019, Nov). DNA Engineered Copper Oxide-Based Nanocomposites with Multiple Enzyme-Like Activities for Specific Detection of Mercury Species in Environmental and Biological Samples. *Analytica Chimica Acta*, 1084, 106–115. (SCI, 8/99, CHEMISTRY, ANALYTICAL). MOST 107-2622-B-182-001-CC2.
71. J.-S. Lin, Y.-W. Tsai, K. Dehvari, C.-C. Huang and J.-Y. Chang* (2019, Oct). A Carbon Dots Based Theranostic Platform for Dual-Modal Imaging and Free Radical Scavenging. *Nanoscale*, 11, 20917–20931. (SCIE, 27/160, PHYSICS, APPLIED).
72. J.-Y. Mao, F.-Y. Lin, H.-W. Chu, S. G. Harroun, J.-Y. Lai, H.-J. Lin* and C.-C. Huang* (2019, Sep). In Situ Synthesis of Core-Shell Carbon Nanowires as a Potent Targeted Anticoagulant. *Journal of Colloid and Interface Science*, 552, 583–596. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 106-2627-M-019-001-MY3. 本人為通訊作者.
73. S.-C. Wei, L.-C. Chang, C.-C. Huang* and H.-T. Chang* (2019, Sep). Dual-Functional Gold Nanoparticles with Antimicrobial and Proangiogenic Activities Improve the Healing of Multidrug-Resistant Bacteria-Infected Wounds in Diabetic Mice. *Biomaterials Science*, 7, 4482–4490. (SCIE, 12/45, MATERIALS SCIENCE, BIOMATERIALS). MOST 107-2113-M-019-004-MY3. 本人為通訊作者.
74. C.-J. Lin, L. Chang, H.-W. Chu, H.-J. Lin, P.-C. Chang, R. Y. L. Wang*, B. Unnikrishnan, J.-Y. Mao, S.-Y. Chen* and C.-C. Huang* (2019, Aug). High Amplification of the Antiviral Activity of Curcumin through Transformation into Carbon Quantum Dots. *Small*, 15(41), 1902641. (SCIE, 11/160, PHYSICS, APPLIED). MOST 107-2622-M-019-001-CC2. 本人為通訊作者.
75. R. Rajakumaran, S. Ramki, S.-M. Chen*, T.-W. Chen, S. Veerasankar, T.-W. Tseng* and C.-C. Huang* (2019, Jun). Rose-Petal-Like Morphology of Yttrium Molybdate Nanosheets (YMoO₄) Anchored on Functionalized Carbon Nanofibers: An Efficient Electrocatalyst for the Electrochemical Sensing of bisphenol-A. *International Journal of Electrochemical Science*, 14, 6571–6585. (SCIE, 28/30, ELECTROCHEMISTRY). 本人為通訊作者.
76. H.-W. Chu, C.-S. Lai, J.-Y. Ko, S. G. Harroun, C.-I. Chuang, R. Y. L. Wang*, B. Unnikrishnan and C.-C. Huang* (2019, May). Nanoparticle-Based LDI-MS Immunoassay for the Multiple Diagnosis of Viral Infections. *ACS Sensors*, 4, 1543–1551. (SCIE, 4/86, CHEMISTRY, ANALYTICAL). MOST 106-2627-M-019-001-MY3. 本人為通訊作者.
77. M. Kutty, R. Settu, S.-M. Chen*, T.-W. Chen, T.-W. Tseng*, A. A. Hatamleh, J.

- Yu, R. Yu and C.-C. Huang* (2019, May). An Electrochemical Detection of Vanillin Based on Carbon Black Nanoparticles Modified Screen Printed Carbon Electrode. *International Journal of Electrochemical Science*, 14, 5972–5983. (SCIE, 28/30, ELECTROCHEMISTRY). 本人為通訊作者.
78. T.-X. Lin, P.-X. Lai, J.-Y. Mao, H.-W. Chu, B. Unnikrishnan, A. Anand and C.-C. Huang* (2019, May). Supramolecular Aptamers on Graphene Oxide for Efficient Inhibition of Thrombin Activity. *Frontiers in Chemistry*, 7, 280. (SCIE, 55/178, CHEMISTRY, MULTIDISCIPLINARY). MOST 107-2622-M-019-001-CC2. 本人為通訊作者.
79. C.-W. Wu, B. Unnikrishnan, Y.-T. Tseng, S.-C. Wei, H.-T. Chang* and C.-C. Huang* (2019, Apr). Mesoporous Manganese Oxide/Manganese Ferrite Nanopopcorns with Dual Enzyme Mimic Activities: A Cascade Reaction for Selective Detection of Ketoses. *Journal of Colloid and Interface Science*, 541, 75–85. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 107-2113-M-002-015-MY3. 本人為通訊作者.
80. Y.-J. Li, L.-J. Luo, S. G. Harroun, S.-C. Wei, B. Unnikrishnan, H.-T. Chang, Y.-F. Huang, J.-Y. Lai* and C.-C. Huang* (2019, Mar). Synergistically Dual-Functional Nano Eye-Drops for Simultaneous Anti-Inflammatory and Anti-Oxidative Treatment of Dry Eye Disease. *Nanoscale*, 11, 5580–5594. (SCIE, 27/160, PHYSICS, APPLIED). MOST 105-2627-M-019-001-MY3. 本人為通訊作者.
81. L.-J. Luo, T.-Y. Lin, C.-H. Yao, P.-Y. Kuo, M. Matsusaki, S. G. Harroun, C.-C. Huang* and J.-Y. Lai* (2019, Feb). Dual-Functional Gelatin-Capped Silver Nanoparticles for Antibacterial and Antiangiogenic Treatment of Bacterial Keratitis. *Journal of Colloid and Interface Science*, 536, 112–126. (SCIE, 29/161, CHEMISTRY, PHYSICAL). MOST 107-2314-B-182-016-MY3. 本人為通訊作者.
82. A. Anand, B. Unnikrishnan, S.-C. Wei, C. P. Chou*, L.-Z. Zhang and C.-C. Huang* (2019, Jan). Graphene Oxide and Carbon Dots as Broad-Spectrum Antimicrobial Agents – A Minireview. *Nanoscale Horizons*, 4, 117–137. (SCIE, 49/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 107-2113-M-019-004-MY3. 本人為通訊作者.
83. K. He, S. Chen, C.-C. Huang and L.-Z. Zhang* (2018, Dec). Fluid Flow and Mass Transfer in an Industrial-Scale Hollow Fiber Membrane Contactor Scaled up with Small Elements. *International Journal of Heat and Mass Transfer*, 127, 289–301. (SCIE, 17/137, MECHANICS).
84. J. Yan, S. Hou, Y. Yu, Y. Qiao, T. Xiao, Y. Mei, Z. Zhang, B. Wang, C.-C. Huang, C.-H. Lin* and G. Suo* (2018, Nov). The Effect of Surface Charge on the

- Cytotoxicity and Uptake of Carbon Quantum Dots in Human Umbilical Cord Derived Mesenchymal Stem Cells. *Colloids and Surfaces B: Biointerfaces*, 171, 241–249. (THCI Core, 9/70, BIOPHYSICS).
85. H.-W. Chu, B. Unnikrishnan, A. Anand, J.-Y. Mao and C.-C. Huang* (2018, Oct). Nanoparticle-Based Laser Desorption/Ionization Mass Spectrometric Analysis of Drugs and Metabolites. *Journal of Food and Drug Analysis*, 26, 1215–1228. (SCIE, 56/142, FOOD SCIENCE & TECHNOLOGY). MOST 104-2628-M-019-001-MY3. 本人為通訊作者.
 86. L.-J. Luo, C.-C. Huang, H.-C. Chen, J.-Y. Lai* and M. Matsusaki* (2018, Oct). Effect of Deacetylation Degree on Controlled Pilocarpine Release from Injectable Chitosan-g-Poly(N-Isopropylacrylamide) Carriers. *Carbohydrate Polymers*, 197, 375–384. (SCIE, 2/52, CHEMISTRY, ORGANIC).
 87. P.-C. Kuo, C.-W. Lien, J.-Y. Mao, B. Unnikrishnan, H.-T. Chang, H.-J. Lin* and C.-C. Huang* (2018, Jun). Detection of Urinary Spermine by Using Silver-Gold/Silver Chloride Nanozymes. *Analytica Chimica Acta*, 1009, 89-97. (SCIE, 8/86, CHEMISTRY, ANALYTICAL). MOST 105-2627-M-019-001-MY3. 本人為通訊作者.
 88. C.-L. Hsu, Y.-J. Li, H.-J. Jian, S. G. Harroun, S.-C. Wei, R. Ravindranath, J.-Y. Lai*, C.-C. Huang and H.-T. Chang* (2018, May). Green Synthesis of Catalytic Gold/Bismuth Oxyiodide Nanocomposites with Oxygen Vacancies for Treatment of Bacterial Infections. *Nanoscale*, 10, 11808–11819. (SCIE, 27/160, PHYSICS, APPLIED). MOST 104-2113-M-002-008-MY3.
 89. P.-X. Lai, J.-Y. Mao, B. Unnikrishnan, H.-W. Chu, C.-W. Wu, H.-T. Chang and C.-C. Huang* (2018, May). Self-Assembled, Bivalent Aptamers on Graphene Oxide as an Efficient Anticoagulant. *Biomaterials Science*, 6, 1882–1891. (SCIE, 12/45, MATERIALS SCIENCE, BIOMATERIALS). MOST 104-2628-M-019-001-MY3. 本人為通訊作者.
 90. Y.-T. Tseng, H.-Y. Chang, S. G. Harroun, C.-W. Wu, S.-C. Wei, Z. Yuan, H.-L. Chou*, C.-H. Chen, C.-C. Huang* and H.-T. Chang* (2018, May). Self-Assembled Chiral Gold Supramolecules with Efficient Laser Absorption for Enantiospecific Recognition of Carnitine. *Analytical Chemistry*, 90, 7283–7291. (SCIE, 7/86, CHEMISTRY, ANALYTICAL). MOST 106-2811-M-002-172. 本人為通訊作者.
 91. C.-W. Lien, B. Unnikrishnan, S. G. Harroun, C.-M. Wang, J.-Y. Chang, H.-T. Chang* and C.-C. Huang* (2018, Apr). Visual Detection of Cyanide Ions by Membrane-Based Nanozyme Assay. *Biosensors and Bioelectronics*, 102, 510–517. (SCIE, 2/86, CHEMISTRY, ANALYTICAL). MOST 104-2113-M-002-008-MY3. 本人為通訊作者.

92. A. Anand, B. Unnikrishnan, J.-Y. Mao, H.-J. Lin* and C.-C. Huang* (2018, Mar). Graphene-Based Nanofiltration Membranes for Improving Salt Rejection, Water Flux and Antifouling—A Review. *Desalination*, 429, 119–133. (SCIE, 3/103, WATER RESOURCES). MOST 105-2627-M-019-001-MY3. 本人為通訊作者.
93. S.-C. Wei, S. Fan, C.-W. Lien, B. Unnikrishnan, Y.-S. Wang, H.-W. Chu, C.-C. Huang, P.-H. Hsu* and H.-T. Chang* (2018, Mar). Graphene Oxide Membrane as an Efficient Extraction and Ionization Substrate for Spray-Mass Spectrometric Analysis of Malachite Green and Its Metabolite in Fish Samples. *Analytica Chimica Acta*, 1003, 42–48. (SCIE, 8/86, CHEMISTRY, ANALYTICAL). MOST 104-2113-M-002-008-MY3. 本人為通訊作者.
94. W. M. Girma, S.-H. Tzing, P.-J. Tseng, C.-C. Huang, Y.-C. Ling and J.-Y. Chang* (2018, Jan). Synthesis of Cisplatin(IV) Prodrug-Tethered CuFeS₂ Nanoparticles in Tumor-Targeted Chemotherapy and Photothermal Therapy. *ACS Applied Materials & Interfaces*, 10, 4590–4602. (SCIE, 55/344, MATERIALS SCIENCE, MULTIDISCIPLINARY). MOST 106-2113-M-011-002.