

CV Form

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個人簡歷 (No more than an A4 size paper)

Education/Training:

國立成功大學環境醫學研究所/博士
國立成功大學環境醫學研究所/碩士
中山醫學大學職業安全與衛生學系/學士

Professional and Research Experience:

現職：國立陽明交通大學環境與職業衛生研究所/副教授

經歷

中國醫藥大學藥用化妝品學系/副教授
中國醫藥大學藥用化妝品學系/助理教授
國立成功大學食品安全衛生暨風險管理研究所/專案助理教授

Awards and Honors:

1. Best Poster Award. The 34th Joint of Annual Conference of Biomedical Science, Taipei, Taiwan. 23-24 Mar, 2019.
2. 2019 台灣大學生物技術研究中心第35屆生物夏令營-榮獲優秀學員
3. 2021 年度科技部研究獎勵 (獎勵特殊優秀人才) - 彈性薪資獎勵 MOST Research Grants (Rewarding Outstanding Talent)
4. Best Poster Award. The 37th Joint of Annual Conference of Biomedical Science, Taipei, Taiwan. 18-19 Mar, 2023.
5. 2023 中國毒理學會第九屆全國青年科技大會暨第二屆生物技術藥物毒理與安全評價委員會學術會議—優秀論文獎
6. 2024 年度國科會研究獎勵 (獎勵特殊優秀人才) - 彈性薪資獎勵 NSTC Research Grants (Rewarding Outstanding Talent)
7. 2025 年華仁青年講座教授獎勵 Hwa Ren Youth Chair Professor Award

Selected Publications:

- (1) R-Y Su, H-C Chuang, C-M Zheng, L-J Ho, Y-J Chen, **Y-H Lee*** and H-W Chiu*. Urban particulate matter induces NLRP3/NLRP6 inflammasomes, autophagy, senescence and fibrotic responses by increasing CSF2 signaling in kidney cells. *Free Radical Biology & Medicine* 249, 1-13 (2026) (IF: **8.2**. Subject Category: 14/191=7.3% in Endocrinology & Metabolism, JCR 2024) (**Corresponding author**)
- (2) C-C Chang, S-C Fan, Y-J Wang, J-W Ping, Y-H Su, J-C YANG, Y-X Chan, Y-X YANG, **Y-H Lee**, C-C Chang, C-H Lin, T-Y Juang *Hyperbranched Polymer Dots Enhance Hair Follicle Regeneration via Wnt/ β -Catenin Activation: A Drug-Free Nanozyme-Based Approach to Hair Growth Therapy. *Biomedicine & Pharmacotherapy* 188, 118196 (2025) (S.C.I. Impact factor: **7.5**. Subject Category: 19/352=5.4% in Pharmacology & Pharmacy, JCR 2024)
- (3) **Y-H Lee**, C-M Zheng, Y-J Wang, Y-L Wang and H-W Chiu*. Effects of microplastics and nanoplastics on the kidney and cardiovascular system. *Nature Reviews Nephrology* 21, 585–596 (2025) (S.C.I. Impact factor: **39.8**, 2/133=1.5% in Urology & Nephrology, JCR 2024) (**First author**)
- (4) Y-L Wang[#], Y-C Lin[#], W-C Liu, **Y-H Lee*** and H-W Chiu*. Air pollution and its impacts on health: Focus on microplastics and nanoplastics. *Ecotoxicology and Environmental Safety* 299, 118402 (2025) (S.C.I. Impact factor: **6.1**. Subject Category: 10/106=9.4% in Toxicology, JCR 2024) (**Corresponding author**)
- (5) C-C Chang, H-M Lao, S-C Fan, Y-H Tu, J-C Siew, K-C Ma, **Y-H Lee**, H-M Chiang, C-C Chang, T-Y Juang *. Bioactive hyperbranched polymer dot combined laser-induced optical breakdown for accelerating wound repair and regeneration in a nude mice mode. *Materials Advances* 6(10):3185-3202 (2025) (S.C.I. Impact factor: **4.7**. Subject Category: 207/462=44.8% in MATERIALS SCIENCE, MULTIDISCIPLINARY, JCR 2024)
- (6) H-W Chiu, C-W Chu, C-Ca Huan, Z-C Chia, Y-L Wang, **Y-H Lee***. Polystyrene microplastics induce hepatic lipid metabolism and energy disorder by upregulating the NR4A1-AMPK signaling pathway. *Environmental Pollution* 369, 125850 (2025). (S.C.I. Impact factor: **7.3**. Subject Category: 46/374=12.3% in Environmental Sciences, JCR 2024) (**Corresponding author**)
- (7) Y-H Cheng, H-I. Wu, Y-Y Chen, **Y-H Lee**, B-J Wang* and Y-J Wang*. Adverse outcome pathway-based approach to reveal the mechanisms of skin sensitization and long-term aging effects of chlorothalonil. *Journal of Hazardous Materials* 476, 135176 (2024). (S.C.I. Impact factor: **11.3**. Subject Category: 19/374=5.1% in Environmental Sciences, JCR 2024)
- (8) B-J Wang, Y-Y Chen, H-H Chang, R-J Chen, Y-J Wang* and **Y-H Lee***. Zinc oxide nanoparticles exacerbate skin epithelial cell damage by upregulating pro-inflammatory cytokines and exosome secretion in M1 macrophages following UVB irradiation-induced skin injury. *Particle and Fibre Toxicology*. 21, 9 (2024). (S.C.I. Impact factor: **8.2**. Subject Category: 5/106=4.7% in Toxicology, JCR 2024) (**Corresponding author**)
- (9) Y-L Wang, **Y-H Lee**, C-L Chou, Y-S Chang, W-C Liu and H-W Chiu*. Oxidative stress and potential effects of metal nanoparticles: a review of biocompatibility and toxicity concerns. *Environmental Pollution* 346, 123617 (2024) (S.C.I. Impact factor: **7.3**. Subject Category: 46/374=12.3% in Environmental Sciences, JCR 2024)
- (10) Y-L Wang[#], C C-Y Huang, C-M Zheng, W-C Liu, **Y-H Lee**[#] and H-W Chiu*. Polystyrene microplastic-induced extracellular vesicles cause kidney-related effects in the crosstalk between tubular cells and fibroblasts. *Ecotoxicology and Environmental Safety* 273, 116098 (2024) (S.C.I. Impact factor: **6.1**. Subject Category: 10/106=9.4% in Toxicology, JCR 2024) (**co-First author**)

- (11) H-J Huang[#], **Y-H Lee**, L-C Sung, Y-J Chen, Y-J Chiu, H-W Chiu[#] and C-M Zheng*. Drug repurposing screens to identify potential drugs for chronic kidney disease by targeting prostaglandin E2 receptor. *Computational and Structural Biotechnology Journal* 21, 3490–3502 (2023) (S.C.I. Impact factor: **4.1**. Subject Category: 104/319=32.6% in Biochemistry & Molecular Biology, JCR 2024)
- (12) W-C Liu, H-W Chiu, C-L Chou, Y-J Chiu and **Y-H Lee***. Lactoferrin attenuated urban particulate matter-induced nephrotoxicity by regulating the CSF2/CENPE axis. *Environmental Pollution* 318, 120871 (2023). (S.C.I. Impact factor: **7.3**. Subject Category: 46/374=12.3% in Environmental Sciences, JCR 2024) (**Corresponding author**)
- (13) C-M Zheng, K-C Lu, Y-J Chen, C-Y Li, **Y-H Lee*** and H-W Chiu*. Matrix metalloproteinase-7 promotes chronic kidney disease progression via the induction of inflammasomes and the suppression of autophagy. *Biomedicine & Pharmacotherapy* 154, 113565 (2022). (S.C.I. Impact factor: **7.5**. Subject Category: 19/352=5.4% in Pharmacology & Pharmacy, JCR 2024)(**Corresponding author**)
- (14) Z-Y Chen, Y-C Yang, B-J Wang, F-Y Cheng, Y-L Lee, **Y-H Lee*** and Y-J Wang*. Comparing different surface modifications of zinc oxide nanoparticles in the developmental toxicity of zebrafish embryos and larvae. *Ecotoxicology and Environmental Safety* 243, 113967 (2022). (S.C.I. Impact factor: **6.1**. Subject Category: 10/106=9.4% in Toxicology, JCR 2024)(**Corresponding author**)
- (15) H-J Huang, **Y-H Lee**, C-L Chou, C-M Zheng* and H-W Chiu*. Investigation of potential descriptors of chemical compounds on prevention of nephrotoxicity via QSAR approach. *Computational and Structural Biotechnology Journal* 20, 1876-1884 (2022). (S.C.I. Impact factor: **4.1**. Subject Category: 104/319=32.6% in Biochemistry & Molecular Biology, JCR 2024).
- (16) B-H Mao[#], Y-K Luo, B-J Wang, C-W Chen, F-Y Cheng, **Y-H Lee**[#], S-J Yan*, Y-J Wang*. Use of an In silico Knowledge Discovery Approach to Determine Mechanistic Studies of Silver Nanoparticles-induced Toxicity from In vitro to In vivo. *Particle and Fibre Toxicology*. 19, 6 (2022). (S.C.I. Impact factor: **8.2**. Subject Category: 5/106=4.7% in Toxicology, JCR 2024)(**co-First author**)
- (17) Y-Y Chen[#], **Y-H Lee**[#], B-J Wang, R-J Chen, Y-J Wang. Skin Damage Induced by Zinc Oxide Nanoparticles Combined with UVB is Mediated by Activating Cell Pyroptosis via the NLRP3 Inflammasome-Autophagy-Exosomal Pathway. *Particle and Fibre Toxicology*. 19, 2 (2022).(S.C.I. Impact factor: **8.2**. Subject Category: 5/106=4.7% in Toxicology, JCR 2024)(**co-First author**)
- (18) Y-L Wang[#], **Y-H Lee**, Y-H Hsu, I-J Chiu, C C-Y Huang, C-C Huang, Z-C Chia, C-P Lee, Y-F Lin[#] and H-W Chiu*. The kidney-related effects of polystyrene microplastics on human kidney proximal tubular epithelial cells HK-2 and male C57BL/6 mice. *Environmental Health Perspectives* 129(5), 57003 (2021).(S.C.I. Impact factor: 9.8. Subject Category: 3/106=2.8% in Toxicology, JCR 2024)
- (19) Y-L Wang, C-M Zheng, **Y-H Lee**, Y-Y Cheng, Y-F Lin and H-W Chiu*. Micro- and nanosized substances cause different autophagy-related responses. *International Journal of Molecular Sciences* 22, 4787 (2021). (S.C.I. Impact factor: **4.9**. Subject Category: 72/319=22.6% in Biochemistry & Molecular Biology, JCR 2024)
- (20) H-J Huang, **Y-H Lee**, Y-H Hsu, C-T Liao, Y-F Lin* and H-W Chiu*. Current strategies in assessment of nanotoxicity: Alternatives to *in vivo* animal testing. *International Journal of Molecular Sciences* 22, 4216 (2021). (S.C.I. Impact factor: **4.9**. Subject Category: 72/319=22.6% in Biochemistry & Molecular Biology, JCR 2024)