五、著作目錄(建議呈現有利於計畫審查之著作目錄，頁數以 2 頁為限）：

2023-2025 Publications 通訊或第一作者共 25 篇 (JR: journal ranking, IF: impact factor)

1. Nikhil Prabhakar, M Lakshmi Narayanan, Haidee Mana-ay, N Ponpandian, C Viswanathan, Pin-Yi Chen*, Achieving high specific capacitance via cobalt doping over $Nb_4C_3T_x$ with boron nitride composite for supercapacitor application. **Fuel, 2025, JR=22/176=12.50 %, IF=7.5. (corresponding author)** https://doi.org/10.1016/j.fuel.2025.135489
2. T Keerthi Reddy, Umamaheswari Rajaji, Gaber E Eldesoky, Pin-Yi Chen*, Mani Govindasamy, Sonochemical synthesis of copper monosulfide Nanospheres decorated on carbon nanofibers: A viable non-enzymatic electrochemical sensor for the detection of homovanillic acid in biological fluids. **Microchemical Journal, 2025, JR=23/111=20.72 %, IF=5.1. (corresponding author)** https://doi.org/10.1016/j.microc.2025.115262
3. Harikrishnan Sathya, Amal A Abdel Hafez, Mani Govindasamy, Pin-Yi Chen*, Tweaking the electrocatalytic efficiency of sonochemically synthesized Bi_2S_3 nanorods through decoration with f-MWCNTs: A selective on-site detection of METOL in environmental samples. **Ultrasonics Sonochemistry, 2025, JR=1/41=2.44 %, IF=9.7. (corresponding author)** https://doi.org/10.1016/j.ultsonch.2025.107531
4. Gopika Meenakumari Gopakumar, Aiswarya Bindu, Beena Saraswathyamma, Amel Ayari-Akkari, Ali Akremi, Pin-Yi Chen*, Mani Govindasamy, Redefining the monitoring of antioxidants: Interfacial charge redistribution in $SrTiO_3$@ GCN nanocomposite for improved electrochemical detection of propyl gallate in food matrices. **Innovative Food Science & Emerging Technologies, 2025, JR=20/182=10.99 %, IF=6.8. (corresponding author)** https://doi.org/10.1016/j.ifset.2025.104195
5. Kalidoss Kannadasan, Saravanan Rajendran, Mani Govindasamy, Pin-Yi Chen*, Perumal Elumalai, Conversion/reconversion-driven heterostructure electrode for enhanced electrochemical performances in lithium-ion/sodium-ion batteries and supercapattery. **Journal of Colloid and Interface Science, 2025, JR=31/185=16.76 %, IF=9.7. (corresponding author)** https://doi.org/10.1016/j.jcis.2025.138518
6. Keerthana Dileep, Pamangadan C Sharafudeen, Mani Govindasamy, Pin-Yi Chen*, Perumal Elumalai, High-Energy Lithium-Ion Capacitors Using the NiS_2@MXene Electrode: Evidence of Dual Faradaic Reactions Driven by the Choice of Electrolytes. **ACS Applied Engineering Materials, 2025, JR=219/461=47.51 %, IF=3.5. (corresponding author)** https://doi.org/10.1021/acsaenm.5c00132?urlappend=%3Fref%3DPDF&jav=VoR&rel=cite-as
7. Nirmal Kumar Sakthivel, Mani Govindasamy, Pin-Yi Chen*, Sonochemical Synthesis of Perovskite Embedded with Carbon Nanofibers as an Electrode Material for Energy Storage Application. **Journal of The Electrochemical Society, 2025, JR=9/24=37.50 %, IF=3.3. (corresponding author)** https://iopscience.iop.org/article/10.1149/1945-7111/adc952
8. Guan-Yi Hung, Chi-Yun Wang, Kuei-Chih Feng, Chi-Shun Tu, I-Chien Cheng, Haidee Mana-Ay, Hui-Yi Hsiao, Po-Liang Lai, Pin-Yi Chen*, Manipulating Mg/Ca ratios in MgO-CaO-SiO_2 bioactive glass for achieving accelerated osteogenic differentiation of human adipose-derived stem cells. **Biomaterials Advances, 2025, JR=14/55=25.45 %, IF=6. (corresponding author)** https://doi.org/10.1016/j.bioadv.2025.214189
9. Yu-Jie Wu, Chi-Yun Wang, Haidee Mana-ay, Chi-Shun Tu, Po-Liang Lai, Pin-Yi Chen*, Achieving high surface bioactivity and adhesion in Ti-6Al-4V alloy via anodic oxidation and electrophoretic deposition. **Ceramics International, 2025, JR=3/34=8.82 %, IF=5.6. (corresponding author)** https://doi.org/10.1016/j.ceramint.2025.01.146
10. Shu-Yu Chen, Haidee Mana-ay, Kuei-Chih Feng, RR Chien, Cheng-Sao Chen, Chi-Shun Tu, Pin-Yi Chen*, High-performance electric energy storage in $BiFeO_3$–$Ba(Ti_{0.8}Zr_{0.2})O_3$ relaxor ferroelectric ceramics. **Ceramics International, 2024, JR=3/31=9.68 %, IF=5.1. (corresponding author)** https://www.sciencedirect.com/science/article/pii/S0272884224047837
11. Rhys Montecillo, Chun Yu Chen, Rhea Fe G Sinajon, Yi-Tsung Lee, RR Chien, Kuei-Chih Feng, Pin-Yi Chen*, Cheng-Sao Chen, Chi-Shun Tu, Optimizing energy storage under low electric field in A-site dysprosium modified $BiFeO_3$-$BaTiO_3$ ceramics. **Journal of Alloys and Compounds, 2024, JR=8/90=8.89 %, IF=5.8. (corresponding author)** https://www.sciencedirect.com/science/article/pii/S092583882400505X
12. Pin-Yi Chen*, T Keerthi Reddy, Umamaheswari Rajaji, Asma A Alothman, Mani Govindasamy, Optimization of Electrochemical Sensitivity in Anticancer Drug Quantification through ZnS@ CNS Nanosheets: Synthesis via Accelerated Sonochemical Methodology. **Ultrasonics Sonochemistry, 2024, JR=1/40=2.50 %, IF=8.7. (1st and corresponding authors)** https://www.sciencedirect.com/science/article/pii/S1350417724001068

13. Yan-Ting Chen, Hui-Yi Hsiao, Chi-Yun Wang, Chi-Shun Tu, Kuei-Chih Feng, Haidee Mana-ay, Shyang-Yih Kung, Pin-Yi Chen*, Po-Liang Lai, Improving bioactivity in 3D-printed Ti-6Al-4V alloy scaffold via CaO-MgO-SiO2 glass-ceramic coating. **Journal of Alloys and Compounds, 2024, JR=8/90=8.89 %, IF=5.8. (corresponding author)** https://www.sciencedirect.com/science/article/pii/S092583882304690X
14. Sripansuang Tangsuwanjinda, Rhys Montecillo, Kuei-Chih Feng, RR Chien, Cheng-Sao Chen, Chi-Shun Tu, Pin-Yi Chen*, Energy storage density of tailored relaxor-antiferroelectric state in Gd-doped Ag $(Nb_{0.8}Ta_{0.2})O_3$ ceramics. **Ceramics International, 2024, JR=3/31=9.68 %, IF=5.1. (corresponding author)** https://doi.org/10.1016/j.ceramint.2023.12.123
15. Haidee Mana-ay, Cheng-Sao Chen, RR Chien, Chi-Shun Tu, Pin-Yi Chen*, Achieving high microscale photoconductivity in Gd-modified bismuth ferrite via modulating ferroelectric polarization. **Journal of Materials Chemistry C, 2024, JR=34/179=18.99 %, IF=5.7. (corresponding author)** https://pubs.rsc.org/en/content/articlelanding/2024/tc/d4tc01066c/unauth
16. Guan-Yi Hung, Chi-Yun Wang, Hui-Yi Hsiao, Chi-Shun Tu, Haidee Mana-Ay, Ching-Ting Chen, Po-Liang Lai, Kuei-Chih Feng, Pin-Yi Chen*, Composite bone graft of CaO–MgO–SiO_2 glass–ceramics and $CaSO_4$ ceramics for boosting bone formation rate. **Journal of Materials Chemistry B, 2024, JR=11/53=20.75 %, IF=6.1. (corresponding author)** https://pubs.rsc.org/en/content/articlelanding/2024/tb/d4tb00262h/unauth
17. Rhys Montecillo, Cheng-Sao Chen, Kuei-Chih Feng, RR Chien, Pin-Yi Chen*, Chi-Shun Tu, Configuration-entropy effects on $BiFeO_3$–$BaTiO_3$ relaxor ferroelectric ceramics for high-density energy storage. **Journal of Materials Chemistry A, 2024, JR=16/171=9.36 %, IF=10.8. (corresponding author)** https://pubs.rsc.org/en/content/articlelanding/2024/ta/d4ta00921e
18. Sripansuang Tangsuwanjinda, Rhys Montecillo, Kuei-Chih Feng, RR Chien, Cheng-Sao Chen, Chi-Shun Tu, Pin-Yi Chen*, Energy storage density of tailored relaxor-antiferroelectric state in Gd-doped $Ag(Nb_{0.8}Ta_{0.2})O_3$ ceramics. **Ceramics International**, **2023, JR=3/29=10.35 %, IF=5.2. (corresponding author)** https://doi.org/10.1016/j.ceramint.2023.12.123
19. Shu-Yu Chen, Rhys Montecillo, Kuei-Chih Feng, RR Chien, Pin-Yi Chen*, Cheng-Sao Chen, and Chi-Shun Tu, High-efficiency energy storage in Nd-doped (1-x) $BiFeO_3$–$xBaTiO_3$ relaxor ferroelectric ceramics. **Ceramics International**, **2023, JR=3/29=10.35 %, IF=5.2. (corresponding author)** https://doi.org/10.1016/j.ceramint.2023.05.197
20. Haidee Mana-ay, Shao-Yu Zhang, Cheng-Sao Chen, Chi-Shun Tu, and Pin-Yi Chen*, Modulating self-biased near-UV photodetection of Gd-doped bismuth ferrite ceramics by introducing zinc oxide as electron transport layer. **Ceramics International**, **2023,** 49(2): p. 1646-1656, **JR=3/29=10.35 %, IF=5.2. (corresponding author)** https://doi.org/10.1016/j.ceramint.2022.09.127
21. Rhys Montecillo, Cheng-Sao Chen, Kuei-Chih Feng, RR Chien, Shu-Chih Haw, Pin-Yi Chen*, and Chi-Shun Tu, Achieving superb electric energy storage in relaxor ferroelectric $BiFeO_3$-$BaTiO_3$-$NaNbO_3$ ceramics via O_2 atmosphere. **Journal of the European Ceramic Society**, **2023**, 43(16): p. 7446-7454, **JR=2/29=6.90 %, IF=5.7**. **(corresponding author)** https://doi.org/10.1016/j.jeurceramsoc.2023.07.081.
22. Rhys Montecillo, Cheng-Sao Chen, Yi-Tsung Lee, Pin-Yi Chen*, and Chi-Shun Tu, Optimized electric-energy storage in $BiFeO_3$–$BaTiO_3$ ceramics via tailoring microstructure and nanocluster. **Journal of the European Ceramic Society**, **2023**. 43(5): p. 1941-1951, **JR=2/29=6.90 %, IF=5.7. (corresponding author)** https://doi.org/10.1016/j.jeurceramsoc.2022.12.064
23. Rhys Montecillo, Jian-Cheng Lin, Cheng-Sao Chen, Pin-Yi Chen*, and Chi-Shun Tu, Tailoring energy storage in Nb_2O_5-added 0.7 $BiFeO_3$–0.3 $BaTiO_3$ ceramics via A-site Gd^{3+} substitution. **Journal of Alloys and Compounds**, **2023**. 963: p. 171144, **JR=8/79=10.12 %; IF=6.2. (corresponding author)** https://doi.org/10.1016/j.jallcom.2023.171144
24. Xin Hao Wang, Shu-Yu Chen, Cheng-Sao Chen, Pin-Yi Chen*, and Chi-Shun Tu, Highly responsive photodetection based on bismuth ferrite ceramics: The roles of depolarization field and domain network. **Materials Research Bulletin**, **2023**. 158: p. 112075, **JR=108/344=31.40 %; IF=5.4. (corresponding author)** https://doi.org/10.1016/j.materresbull.2022.112075
25. Yu-Jie Wu, Chi-Yun Wang, Kuei-Chih Feng, RR Chien, Haidee Mana-ay, Shyang-Yih Kung, Kuang-Hua Hou, Chi-Shun Tu, **Pin-Yi Chen***, and Po-Liang Lai, Ti-6Al-4V intervertebral fusion cage with compatible stiffness, enhanced fatigue life, and osteogenic differentiation. **Journal of Alloys and Compounds**, **2023**. 957: p. 170450, **JR=8/79=10.12 %; IF=6.2. (corresponding author)** https://doi.org/10.1016/j.jallcom.2023.170450