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## **Prof. Hsing-Wen Sung**

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Hsing-Wen Sung holds the prestigious positions of National Chair Professor and Tsing Hua Distinguished Chair Professor in the Department of Chemical Engineering/Institute of Biomedical Engineering at National Tsing Hua University. He earned his Ph.D. from the Department of Chemical Engineering/Biomedical Engineering Program at the Georgia Institute of Technology in May 1988. Professor Sung's research focuses on biomaterials, tissue engineering, and drug/gene delivery. His outstanding contributions have garnered him several accolades, including being recognized as a Fellow of the National Academy of Inventors (NAI), Fellow of the American Institute for Medical and Biological Engineering (AIMBE), and Fellow of the International Union of Societies for Biomaterials Science and Engineering (IUSBSE). He is also an Academician of the Asia Pacific Academy of Materials (APAM). In addition to these distinctions, Professor Sung has received esteemed awards such as Elsevier 2015 Biomaterials Best Paper Award and the 2016 TERMIS-AP Outstanding Scientist Award. Professor Sung's significant contributions extend to his editorial roles, serving on the Editorial/Advisory Boards of prestigious journals like the Journal of Controlled Release, Advanced Healthcare Materials, and Advanced Materials. Furthermore, he has been a Handling Editor for Biomaterials. With a remarkable publication record, Professor Sung has authored 304 scientific papers and holds an impressive 136 international patents. His research has left a substantial impact, evident in over 33,033 citations and an h-index of approximately 98, as reported by Google Scholar.

### **Representative Publications:**

1. P.Y. Siboro<sup>+</sup>, A.K. Sharma<sup>+</sup>, P.J. Lai, J. Jayakumar, F.L. Mi, H.L. Chen, Y. Chang\*, and H.W. Sung\* "Harnessing HfO<sub>2</sub> Nanoparticles for Wearable Tumor Monitoring and Sonodynamic Therapy in Advancing Cancer Care," ACS Nano 18(3):2485–2499, 2024.
2. K.H. Chen, N. Nguyen, T.Y. Huang, Y.T. Yu, Y.J. Lin, H.L. Song, J.T. Wang, H.L. Chen, H.W. Sung\* "Macrophage-Hitchhiked Orally Administered  $\beta$ -Glucans-Functionalized Nanoparticles as "Precision-Guided Stealth Missiles" for Targeted Pancreatic Cancer Therapy," Advanced Materials, 2304735, 2023.
3. P.Y. Siboro, V.K.T. Nguyen, Y.B. Miao, A.K. Sharma, F.L. Mi, H.L. Chen, K.H., Chen, Y.T., Yu, Y. Chang\*, and H.W. Sung\* "Ultrasound-Activated, Tumor-Specific In Situ Synthesis of a Chemotherapeutic Agent Using ZIF-8 Nanoreactors for Precision Cancer Therapy," ACS Nano 16(8), 12403–12414, 2022.
4. Y.B. Miao, K.H. Chen, C.T. Chen, F.L. Mi, Y.J. Lin, Y. Chang, C.S. Chiang, J.T., Wang, K.J. Lin, H.W. Sung\* "A Noninvasive Gut-to-Brain Oral Drug Delivery System for Treating Brain Tumors," Advanced Materials, 2100701, 2021.
5. Y.B. Miao, Y.J., Lin, K.H. Chen, P.K. Luo, S.H. Chuang, Y.T. Yu, H.M. Tai, C.T., Chen, K.J., Lin, H.W. Sung\* "Engineering Nano- and Microparticles as Oral Delivery Vehicles to Promote Intestinal Lymphatic Drug Transport," Advanced Materials, 2104139, 2021.