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個人研究

2022

- Yang, C. M., Wu, A. Y., Yu, J. C Chu, P. Y., Hsieh, C. H., Wu, M. H.* (2022, Dec.) "Virtual Filter Membranes in a Microfluidic System for Sorting and Separating size-based Micro Polystyrene Beads by Illumination Intensity Design in Optically induced dielectrophoresis (ODEP)," Chemosensors, 10(12), 540. (SCI, IF: 4.229, 16/64: INSTRUMENTS & INSTRUMENTATION)
- Chen, C. Y., Yang, H. W., Hsieh, P. H., Hsieh, C. H., Wu, M. H.* (2022, Nov.) "Development of a Photothermal bead-based Nucleic Acid Amplification Test (pbbNAAT) Technique for a High-performance Loop-mediated Isothermal Amplification (LAMP)-based Point-of-care Test (POCT)," Biosensors & Bioelectronics, 215, 114574. (SCI, IF: 12.545, 3/87: CHEMISTRY, ANALYTICAL)
- Li, S. H., Wu, M. H., Wang, H. M., Hsu, P. C., Fang, Y. F., Wang, C. L., Chu, H. C., Lin, H. C., Lee, L. Y., Wu, C. Y., Yang, C. T., Chen, J. S., Hsieh, C. H.* (2022, Sep.) "Circulating EGFR Mutations in Patients with Lung Adenocarcinoma by Circulating Tumor Cell Isolation Systems: A Concordance and Clinical Significance Study," International Journal of Molecular Sciences, 23(18), 10661. (SCI, IF: 6.208, 50/179: CHEMISTRY, MULTIDISCIPLINARY)
- Yang, C. M., Yu, J. C Chu, P. Y., Hsieh, C. H., Wu, M. H.* (2022, Sep.) "The utilization of Tunable Transducer Elements formed by the Manipulation of Magnetic Beads with Different Sizes via Optically Induced Dielectrophoresis (ODEP) for High Signal-to-noise ratios (SNRs) and Multiplex Fluorescence-based Biosensing Applications," Biosensors, 12(9), 755. (SCI, IF: 5.743, 8/64: INSTRUMENTS & INSTRUMENTATION)
- Chang, P. H., Lee, C. H., Wu, M. H., Yeh, K. Y., Wang, H. M., Huang, W. K., Chan, S. C., Chou, W. C., Kuan, F. C., Kuo, H. C., Kuo, Y. C., Hu, C. C. Hsieh, C. H.* (2022. Jul.) "Association of Early Changes of Circulating Cancer Stem-like Cells

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- Tan, H., Wang, M., Zhang, Y., Huang, X., Chen, D., Li, Y., Wu, M. H., Wang, K., Wang, J.*, Chen, J.* (2022, Feb.) "Inherent Bioelectrical Parameters of Hundreds of Thousands of Single Leukocytes based on Impedance Flow Cytometry," Cytometry: Part A. (SCI, IF: 4.714, 21/79: BIOCHEMICAL RESEARCH METHODS)

2021

- Hsieh, C. H., Chiang, P. C., Hung, T. M., Chao, Y. K., Kuo, Y. C., Wen, C. T., Su, P. J., Peng, M. T., Chen, H. W., Liu, H. L., Chang, H. K.*, Wu, M. H.*, Wang, H. M.* (2021, Dec.) "Definitive Concurrent Chemoradiotherapy with Paclitaxel plus Carboplatin is Superior to Cisplatin plus 5-Fluorouracil in Patients with Inoperable Esophageal Squamous Cell Carcinoma using Retrospective, Real-World Evidence," Cancer Medicine, 10(23), 8300-8309. (SCI, IF: 4.711, 106/245: ONCOLOGY)
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 - Chu, P. Y., Hsieh, C. H., Chen, Y. C., Wu, M. H.* (2021, Nov.) "Improvement of Background Solution for Optically Induced Dielectrophoresis-based Cell Manipulation in a Microfluidic System" Frontiers in Bioengineering and Biotechnology, 9, 759205. (SCI, IF: 6.064, 16/73: MULTIDISCIPLINARY SCIENCES)
 - Chiu, Y. H., Hsieh, C. H., You, J. F., Chu, P. Y., Hung, H. Y., Chu, P. H., Wu, M. H.* (2021, May.) "Enhancing Prediction Performance by Add-On Combining Circulating Tumor Cell Count, CD45-neg EpCAM-neg Cell Count on Colorectal Cancer, Advance, and Metastasis," Cancers, 13(11), 2521. (SCI, IF: 6.575, 60/245: ONCOLOGY)
 - Peng, H. Y., Yang, C. M., Chen, Y. P., Liu, H. L., Chen, T. C., Pijanowska, D. G., Chug, P. Y., Hsieh, C. H., Wu, M. H.* (2021, Apr.) "An Integrated Actuating and Sensing System for Light-addressable Potentiometric Sensors (LAPS) and Light-actuated AC Electroosmosis (LACE) Operation," Biomicrofluidics, 15, 024109. (SCI, IF: 3.258, 12/34: PHYSICS, FLUIDS & PLASMAS)
 - Lin, C. R., Wang, H. Y., Lin, T. W., Lu, J. J., Hsieh, C. H., Wu, M. H.* (2021, Mar.) "Development of a Two-step Nucleic Acid Amplification Test for Accurate
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2020

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 - Wang, H. Y., Lin, T. W., Huang, S. B., Hsieh, C. H., Chen, H. C., Lu, J. J., Wu, M. H.* (2020, Aug.) "Novel Toilet Paper-Based Point-Of-Care Test for the Rapid Detection of Fecal Occult Blood: Instrument Validation Study," Journal of Medical Internet Research, 22(8), e20261. (SCI, IF: 7.077, 10/109: HEALTH CARE SCIENCES & SERVICES)
 - Chu, P. Y., Hsieh, C. H., Lin, C. R., Wu, M. H.* (2020, Jun.) "The Effect of Optically Induced Dielectrophoresis (ODEP)-Based Cell Manipulation in a Microfluidic System on the Properties of Biological Cells," Biosensors, 10(6), 65. (SCI, IF: 5.743, 8/64: INSTRUMENTS & INSTRUMENTATION)
 - Wang, H. Y., Chen, C. H., Shi, S., Chung, C. R., Wen, Y. H., Wu, M. H., Lebowitz, M. S., Zhou, J.*, Lu, J. J.* (2020, Jun.) "Improving Multi-Tumor Biomarker Health Check-up Tests with Machine Learning Algorithms," Cancers, 12(6), 1442. (SCI, IF: 6.575, 60/245: ONCOLOGY)
 - Wang, H. Y., Chen, C. Y., Chu, P. Y., Zhu, Y. X., Hsieh, C. H., Lu, J. J.*, Wu, M. H.* (2020, Mar.) "Application of an Optically Induced Dielectrophoresis (ODEP)-based Microfluidic System for the Detection and Isolation of Bacteria with Heterogeneity of Antibiotic Susceptibility," Sensors and Actuators B: Chemical, 307, 127540. (SCI, IF: 9.221, 2/64: INSTRUMENTS & INSTRUMENTATION)
 - Wang, Y. C., Grewal, S. S., Goyal, A., Alvi, M. A., Worrell, G. A., Brinkmann, B., Wong-Kisiel, L., Britton, J., Marsh, W. R., Burkholder, D., Payne E., Shin, C., Cascino, G., Lundstrom, B. N., Wu, M. H., Van Gompelf, J. J.* (2020, Feb.) "Comparison of Narcotic Pain Control between Stereotactic Electrocohortography and Subdural Grid Implantation," Epilepsy & Behavior, 130(A), 106843. (SCI, IF: 3.337, 116/212: CLINICAL NEUROLOGY)
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Worrell, G. A.* (2020, Jan.) "Probing Circuit of Papez with Stimulation of Anterior Nucleus of the Thalamus and Hippocampal Evoked Potentials," *Epilepsy Research*, 159, 106248. (SCI, IF: 2.991, 134/212: CLINICAL NEUROLOGY)

2019

- Lee, C.H., Hsieh, C. H., Wu, M. H., Yeh, T. S., Wang, H. M., Lin, Y. C., Chen, J. S., Lee, C. L., Huang, W. K., Hung, T. M., Yen, T. T., Chan, S. C., Chou, W. C., Kuan, F. C., Hu, C. C., Chang, P. H.* (2019, Dec.) "Baseline circulating stem-like cells predict survival in patients with metastatic breast Cancer," *BMC Cancer*, 19, article number: 1167. (SCI, IF: 4.638, 109/245: ONCOLOGY)
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 - Hong, J. L., Yang, C. M., Chu, P. Y., Chou, W. P., Liao, C. J., Hsieh, C. H., Wu, M. H.* (Co-corresponding author), Chen, P. H.** (2019, Oct.) "The Effect of Operating Conditions on the Optically Induced Electrokinetic (OEK)-based Manipulation of Magnetic Microbeads in a Microfluidic System," *Sensors and Actuators B: Chemical*, 296, 126610. (SCI, IF: 9.221, 2/64: INSTRUMENTS & INSTRUMENTATION)
 - Hsieh, C. H.*, Wang, H. M., Wu, M. H., Chang, K. P., Chang, P. H., Lia, C. T., Liao, C. T. (2019, Oct.) "Review of Emerging Biomarkers in Head and Neck Squamous Cell Carcinoma in the Era of Immunotherapy and Targeted Therapy," *Head Neck-J Sci Spec.*, 41, 19-45. (SCI, IF: 3.821, 6/43: OTORHINOLARYNGOLOGY)
 - Wang, H. M., Wu, M. H. (Equal Contribution), Chang, P. H. (Equal Contribution), Lin, H. C., Liao, C. D., Wu, S. M. Hung, T. M., Lin, C. Y., Chang, T. C., Yen, T. T., Hsieh C. H.* (2019, Aug.) "The Change in Circulating Tumor Cells Before and During Concurrent Chemoradiotherapy is Associated with Survival in Patients with Locally Advanced Head and Neck Cancer," *Head Neck-J Sci Spec.*, 41, 2676-2687. (SCI, IF: 3.821, 6/43: OTORHINOLARYNGOLOGY)
 - Tseng, Y. J., Huang, C. E., Wen, C. N., Lai, P. Y., Wu, M. H., Sun, Y. C., Wang, H. Y.*, Lu, J. J.* (2019, Aug.) "Predicting Breast Cancer Metastasis by Using Serum Biomarkers and Clinicopathological Data with Machine Learning Technologies," *International Journal of Medical Informatics*, 128, 79-86. (SCI, IF: 4.73, 23/109: HEALTH CARE SCIENCES & SERVICES)
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2018

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- Chang, C. C., Wang, K., Zhang, Y., Chen, D., Fan, B., Hsieh, C. H., Wang, J., Wu, M. H.* (Co-corresponding author), Chen, J.* (2018, Jul.) "Mechanical Property Characterization of Hundreds of Single Nuclei Based on Microfluidic Constriction Channel," *Cytometry: Part A.*, 93A(8), 822–828. (SCI, IF: 4.714, 21/79: BIOCHEMICAL RESEARCH METHODS)
- Chou, P. S., Ho, B. L., Chan, Y. H., Wu, M. H., Hu, H. H., Chao, A. C.* (2018, Jun.) "Delayed Diagnosis of Atrial Fibrillation after First-ever Stroke Increases Recurrent Stroke Risk: A 5-year Nationwide Follow-up Study," *Internal Medicine Journal*, 48(6), 661–667. (SCI, IF: 2.611, 97/172: MEDICINE, GENERAL & INTERNAL)
- Chiu, T. K., Chao, A. C., Chou, W. P., Liao, C. J., Wang, H. M., Chang, J. H., Chen, P. H.*, Wu, M. H.** (2018, Apr.) "Optically-induced-dielectrophoresis (ODEP)-based Cell Manipulation in a Microfluidic System for High-purity Isolation of Integral Circulating Tumor Cell (CTC) Clusters based on their Size Characteristics," *Sensors and Actuators B: Chemical*, 258, 1161–1173. (SCI, IF: 9.221, 2/64: INSTRUMENTS & INSTRUMENTATION)
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2017

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 - Lee, M. T., Lee, I. C., Tsai, S. W., Chen, C. H., Wu, M. H.*, Juang, Y. J.* (2017, Jan.) "Spin Coating of Polymer Solution on Polydimethylsiloxane Mold for Fabrication of Microneedle Patch," Journal of the Taiwan Institute of Chemical Engineers, 70, 42-48. (SCI, IF: 5.477, 34/142: ENGINEERING CHEMICAL)
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 - Su, P. J., Wu, M. H. (Equal contribution), Wang, H. M., Lee, C. L., Huang, W. K., Wu, C. E., Chang, H. K., Chao, Y. K., Tseng, C. K., Chiu, T. K., Lin, M. J., Ye, S. R., Lee, Y. C., Hsieh, C. H.* (2016, Aug.) "Circulating Tumour Cells as an Independent Prognostic Factor in Patients with Advanced Oesophageal Squamous Cell Carcinoma Undergoing Chemoradiotherapy," Scientific Reports, 6, article number:31423. (SCI, IF: 4.996, 19/73: MULTIDISCIPLINARY SCIENCES)
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 - 2015
 - Huang, S. B., Chou, D., Chang, Y. H., Li, K. C., Chiu, T. K., Ventikos, Y., Wu, M. H.* (2015, Dec.) "Development of a Pneumatically Driven Active Cover Lid for Multi-well Microplates for Use in Perfusion Three-dimensional Cell Culture," Scientific Reports, 5, article number: 18352. (SCI, IF: 4.996, 19/73: MULTIDISCIPLINARY SCIENCES)
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 - Chen, J., Xue, C., Zhao, Y., Chen, D., Wu, M. H.*, Wang, J.* (2015, Apr.) "Microfluidic Impedance Flow Cytometry Enabling High-Throughput Single-Cell
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