Chia-Ming Yang received his BS degree in electric engineering from Chang Gung University, Tao-Yuan, Taiwan, in 1999; MS degree in electronic engineering from National Chiao Tung University, Hsin-Chu, Taiwan, in 2001; Ph.D degree in electronic engineering from Chang Gung University in 2006. He was a department manager in Inotera Technology Inc. for DRAM device and retention optimization from 2006 to 2012. He joined the Institute of Electro-Optical Engineering in Chang Gung University in 2012 as an assistant professor and is an associate professor since 2015. He became the institute director and a professor since Feb. and Aug. 2018. His research interests include DRAM retention and VRT, VLSI and MEMS technology, biomedical and chemical sensors, gas sensor and 2D material. He holds 3 U.S. and 21 Taiwan patents and is author of 71 SCI journal and 186 conference papers.

Awards:

- 2019-2022 outstanding young scholarship grant- Solid-state division of MOST
- 2021 Outstanding paper award of Association of Chemical Sensors in Taiwan (ACST)
- 2018 Outstanding paper award of Association of Chemical Sensors in Taiwan (ACST)
- 2017 Annual outstanding tutorship teacher of CGU

Service:

- Guest editor of SCI journals:
  - 2021 Chemosensors, 2022 Chemosensors
  - 2021 ECS Journal of Solid State Science and Technology
  - 2020 IEEE Transactions on Nanotechnology
  - 2017 International Journal of Nanotechnology
- International conference committee:
  - General Co-chair: IEDMS 2019, IEDSM 2020
  - TPC committee: ICSS 2021, IEDMS 2021
  - Organizer: ICSS 2018
- Reviewer of SCI journal paper: Biosensors & Bioelectronics, Sensors & Actuators: B-Chemical, Acta Biomaterialia, Analytical Chemistry, Bioelectrochemistry, Electronics, Coatings, Sensors, Nanomaterials, Chemosensors, Symmetry, IEEE Transactions on Nanotechnology, IEEE Transactions on Electron Devices, IEEE Electron Device Letters, IEEE Sensors Journal, Solid State Communications, Frontier in Chemistry, Materials Science in Semiconductor Processing, Thin Solid Films, Vacuum, ECS Journal of Solid State Science and Technology, Applied Physics A, Materials Research Bulletin.

SCI Journal Papers

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2. Chun-Hui Chen, Neelanjan Akuli, Yu-Jen Lu, and Chia-Ming Yang*, "Laser Illumination Adjustments for Signal-to-Noise Ratio and Spatial Resolution Enhancement in Static 2D Chemical Images of NbOx/IGZO/ITO/Glass Light-Addressable Potentiometric Sensors" Chemosensors 9 (2021) 313 (EI/SCI, eISSN: 2227-9040, IF=3.398, Ranking=18/64=28.1%, INSTRUMENTS & INSTRUMENTATION) https://doi.org/10.3390/chemosensors9110313
3. **Chia-Ming Yang**, Tzung-Hai Yen, Hui-Ling Liu, Yu-Jing Lin, Po-Yen Lin, Leung Sze Tsui, Chun-Hui Chen, Yu-Ping Chen, Yu-Chigh Hsu, Chih-Hong Lo, Tsung-Ru Wu, Hsin-Chih Lai, Wei-Chun Chin, Dorota G. Pijanowska, Tsann-Long Hwang and Chao-Sung Lai "A real-time Mirror-LAPS mini system for dynamic chemical imaging and cell acidification monitoring", Sensors and Actuators B: Chemical 341 (2021) 130003 (EI/SCI, ISSN: 0925-4005, IF=7.46, Ranking=3/64=4.7%, INSTRUMENTS & INSTRUMENTATION) DOI: 10.1016/j.snb.2021.130003
4. Hsin-Yin Peng, **Chia-Ming Yang***, Yu-Ping Chen, Hui-Ling Liu, Tsung-Cheng Chen, Dorota G. Pijanowska, Po-Yu Chu and Min-Hsien Wu "An integrated actuating and sensing system for light-addressable potentiometric sensors (LAPSs) and light-actuated AC electroosmosis (LACE) operation" Biomicrofluidics 15 (2021) 024109 (EI/SCI, eISSN: 1932-1058, IF=2.8, Ranking=10/34=29.4%, PHYSICS, FLUIDS & PLASMA) DOI: 10.1063/5.0040910
5. Agnes Purwidyantri, Ya-Chung Tian, Gardin Muhammad Andika Saputra, Briliant Adhi Prabowo, Hui-Ling Liu, **Chia-Ming Yang*** and Chao-Sung Lai, "Gold Nanoframe Array Electrode for Straightforward Detection of Hydrogen Peroxide", Chemosensors 9 (2021) 37, (EI/SCI, eISSN: 2227-9040, IF=3.398, Ranking=18/64=28.1%, INSTRUMENTS & INSTRUMENTATION) DOI:10.3390/chemosensors9020037
6. **Chia-Ming Yang**, Chun-Hui Chen, Neelanjan Akuli, Tzung-Hai Yen, Chao Sung Lai, "A revised manuscript submitted to sensors and actuators B: Chemical illumination modification from an LED to a laser to improve the spatial resolution of IGZO thin film light-addressable potentiometric sensors", Sensors and Actuators B: Chemical, 329 (2021) 128953 (EI/SCI, ISSN: 0925-4005, IF=7.46, Ranking=3/64=4.7%, INSTRUMENTS & INSTRUMENTATION) DOI:10.1016/j.snb.2020.128953
7. De-Fen Shih, Jyh-Liang Wang, Sou-Chih Chao, Yin-Fa Chen, Kuo-Sheng Liu, Yi-Shan Chiang, Chi Wang, Min-Yu Chang, Shu-Ling Yeh, Pao-Hsien Chu, Chao-Sung Lai, Der-Chi Shye and Lun-Hui Ho and **Chia-Ming Yang**, "Flexible textile-based pressure sensing system applied in the operating room for pressure injury monitoring of cardiac operation patients", Sensors 20 (2020) 4619 (EI/SCI, ISSN: 1424-8220, IF=3.275, Ranking= 15/64=23.4%, INSTRUMENTS & INSTRUMENTATION) DOI:10.3390/s20164619
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13. Jia-Long Hong, **Chia-Ming Yang**, **(Co-1st author)** Po-Yu Chu, Wen-Pin Chou, Chia-Jung Liao, Chia-Hsun Hsieh, Min-Hsien Wu*, and Ping-Hei Chen, "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 (2019) 126610 (EI/SCI, ISSN: 0925-4005, IF=6.393, Ranking=2/61=3.3%, INSTRUMENTS & INSTRUMENTATION) DOI: 10.1016/j.snb.2019.05.087
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21. **Chia-Ming Yang**, Tsung-Cheng Chen, Yu-Cheng Yang, **M. Meyyappan**, Chao-Sung Lai, "Enhanced acetone sensing properties of monolayer graphene at room temperature by electrode spacing effect and UV illumination", Sensors and Actuators B: Chemical 253 (2017) 77-84 (EI/SCI, ISSN: 0925-4005, IF=5.667, Ranking=2/61=3.3%, INSTRUMENTS & INSTRUMENTATION) DOI: 10.1016/j.snb.2017.06.116
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24. Chia-**Ming Yang***, Chen-Kang Wei, Yu Jing Chang, Tieh-Chiang Wu, Hsiu-Pin Chen, Chao-Sung Lai, "Suppression of Row Hammer Effect by Doping Profile Modification in Saddle-Fin Array Devices for sub-30-nm DRAM Technology", IEEE Transactions on Device and Materials Reliability 16 (4) (2016) 685-687. (SCI/EI, ISSN:1530-4388, IF=1.437, Ranking= 113/257=44%, ENGINEERING, ELECTRICAL & ELECTRONIC), DOI: 0.1109/TDMR.2016.2607174
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26. **Chia-Ming Yang**, Yuan-Hui Liao, Chun-Hui Chen, Tsung-Cheng Chen, Chao-Sung Lai, and Dorota G. Pijanowska, "P-I-N amorphous silicon for thin-film light-addressable potentiometric sensors**",** Sensors and Actuators B: Chemical 236, 2016, 1005-1010 (EI/SCI, ISSN: 0925-4005, IF=4.758, Ranking=2/56=3.6%, INSTRUMENTS & INSTRUMENTATION), DOI: 10.1016/j.snb.2016.04.092
27. Y.-T. Lin, A. Purwidyantri, J.-D. Luo, C.-C. Chiou, **Chia-Ming Yang***, C.-H. Lo, T.-L. Hwang, T.-H. Yen, C.-S. Lai, "Programming a Nonvolatile Memory-like Sensor for KRAS Gene Sensing and Signal Enhancement", Biosensors and Bioelectronics 79, 2016, 63-70, (EI/SCI, ISSN:0956-5663, IF=7.476, Ranking=1/28=4%, ELECTROCHEMISTRY), DOI: 10.1016/j.bios.2015.11.080
28. Chang Ren, **Chia-Ming Yang***, **(Co-1st author)** Chengang Lyu, Chin-Yuan Hsu, Tsung-Cheng Chen, Hau-Cheng Wang, Hao Yang, Wei-Tse Lin, Pi-Chun Juan, Chi-Hsien Huang, Dorota G. Pijanowska, Jer-Chyi Wang, and Jung-Ruey Tsai, "Nitrogen ratio and RTA optimization on sputtered TiN/SiO_2/Si electrolyte-insulator-semiconductor structure for pH sensing characteristics", Vacuum 118 (2015) 113-117 (EI/SCI, ISSN: 0042-207X, IF=1.858, Ranking=98/260=37.3%, MATERIALS SCIENCE, MULTIDISCIPLINARY) , DOI: 10.1016/j.vacuum.2015.02.025
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