

Curriculum Vitae
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EDUCATION

Ph.D. Mechanical Engineering, University of California, Riverside, USA Sep 2001-Dec 2004
M.S. Power Mechanical Engineering, Shanghai Jiaotong University, China Sep 1998-Mar 2001
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WORK EXPERIENCE

11/2023-current **Director**, Joint Research Center of Biosensing and Precision Theranostics, the
Hong Kong Polytechnic University
04/2023-current **Associate Director**, University Research Facility in Life Sciences, the Hong
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07/2018-current **Professor and Associate Head**, Department of Biomedical Engineering,
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10/2017-06/2018 **Associate Professor**, Department of Biomedical Engineering, Faculty of
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7/2012-10/2017 **Associate Professor**, Interdisciplinary Division of Biomedical Engineering,
Faculty of Engineering, the Hong Kong Polytechnic University
4/2012-7/2012 **Assistant Professor**, Interdisciplinary Division of Biomedical Engineering,
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10/2005-4/2012 **Assistant Professor**, Biomedical Engineering Programme, Department of
Health Technology and Informatics, the Hong Kong Polytechnic
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01/2005-10/2005 **Postdoctoral Research Associate**, Boston University, MA, United States
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1. FULL LIST OF JOURNAL PAPERS (* represents the corresponding author)

1. X.Y. Lao, Y.L. Liu, L.H. Li, M.L. Song, Y.J. Ma, **M. Yang**, G.Y. Chen, J.H. Hao
Plasmon-enhanced FRET biosensor based on Tm^{3+}/Er^{3+} co-doped core-shell upconversion
nanoparticles for ultrasensitive virus detection, *Aggregate* (In press).
2. G. Oudeng, J.G. Ni, H. Wu, H.L. Wu, **M. Yang**, C.Y., Y.W. Wang, H. Tan, Amplified detection
of SARS-COV-2 B.1.1.529 (Omicron) gene oligonucleotides based on exonuclease III-aided
 MoS_2/AIE nanoprobes, *Luminescence* (In Press)
3. D.G. Zhang, H.L. Wu, T.C. Wang, Y.T. Wang, S.X. Liu, F.Q. Wen,* G. Oudeng*, **M. Yang***,
Self-driven immune checkpoint blockade and spatiotemporal-sensitive immune response
monitoring in acute myeloid leukemia using all-in-one turn-on bionanoprobe, *Journal of
Materials Chemistry B* (In Press) (IF=7, 10/45 in the category of Biomaterials, Material
Science, Q1)
4. J.Y. Shi, Y. Zhang, Y.D. Fan, Y. Liu, **M. Yang***, Recent advances in droplet-based
microfluidics in liquid biopsy for cancer diagnosis, *Droplet*, e92, 2024.

5. J.R. Chen, W.K.H.H. Ho, B.H. Yin, Q. Zhang, C.Q. Li, J.X. Yan, Y.Y. Huang, J.H. Hao, C.Q. Yi, Y. Zhang, S.H.D. Wong,* **M. Yang*** Magnetic-responsive upconversion luminescence resonance energy transfer (LRET) biosensor for ultrasensitive detection of SARS-CoV-2 spike protein, *Biosensors & Bioelectronics*, 2024, 248, 115969.
6. Y.L. Ma, M.L. Song, L.H. Li, X.Y. Lao, Y. Liu, M.C. Wong, **M. Yang**, H.L. Chen, J.H. Hao, Attomolar-level detection of respiratory virus long-chain oligonucleotides based on FRET biosensor with upconversion nanoparticles and Au–Au dimer, *Biosensors & Bioelectronics*, 2024, 243, 115778.
7. B Yin, WK Wong, YM Ng, **M. Yang**, FKC Leung, DSH Wong, Smart Design of Nanostructures for Boosting Tumor Immunogenicity in Cancer Immunotherapy, *Pharmaceutics*, 2023, 15 (5), 1427.
8. B.H. Yin, Q. Zhang, J.X. Yan, Y.Y. Huang, C.Q. Li, J.R. Chen, C.Y. Wen, S.H.D. Wong*, **M. Yang***, Nanomanipulation of ligand nanogeometry modulates integrin/clathrin-mediated adhesion and endocytosis of stem cells, *Nano Letters*, 2023, 23, 19, 9160–9169. (IF=10.8, 17/159 in the category of Applied Physics, Q1)
9. Z.J. Huang, G.C.P. Tsui, K.W. Yeung, C. Li, C.Y. Tang, **M. Yang**, M. Zhang, W.Y. Wong 4D direct laser writing of photo-triggered liquid crystal elastomer microactuators with large actuation strain, *Materials & Design*, 2023, 232, 112101.
10. J.H. Wang, Y.T. Gu, Y.D. Fan, **M. Yang***, Copper-Doped Platinum/Metal-Organic Framework Nanostructures for Imaging Guided Photothermal and H₂O₂ Self-Supplying Photodynamic/Photothermal/Chemodynamic Therapy, *ACS Applied Nano Materials* 2023, 6, 14, 13561–13569 (IF=5.9, 97/342 in the category of Multidisciplinary Materials Science, Q2)
11. T.P. Xu, Y.H. Yang, E.H.L. Yeung, Q.C. Chen, H.P. Bei, Q. Yang, **M. Yang**, Y.F. Hao, B. Li, X. Zhao, Injectable, self-contained, subaqueously cross-linking laminous adhesives for biophysical-chemical modulation of osteochondral microenvironment, *Advanced Functional Materials*, 2023, 33(23), 2213428. (IF=19, 8/178 in the category of Multidisciplinary Chemistry, Q1)
12. Q. Zhang, B.H. Yin, Y.Y. Huang, Y.T. Gu, J.X. Yan, J.R. Chen, C.Q. Li, Y. Zhang, S.H.D. Wong*, **M. Yang***, A dual “turn-on” biosensor based on AIE effect and FRET for in situ detection of miR-125b biomarker in early Alzheimer's disease, *Biosensors & Bioelectronics*, 2023, 230, 115270. (IF=12.6, 2/86 in the category of Analytical Chemistry, Q1)
13. J.Y. Shi, Y. Zhang, **M. Yang***, Recent development of microfluidics-based platforms for respiratory virus detection, *Biomicrofluidics*, 2023, 17(2), 024104. (IF=3.2, 29/70 in the category of biophysics, Q2)
14. C. Cai, F. Tian, J.P. Ma, Z.P. Yu, **M. Yang**, C.Q. Yi, BSA-templated synthesis of Ir/Gd bimetallic oxide nanotheranostics for MR/CT imaging-guided photothermal and photodynamic synergistic therapy, *Nanoscale*, 2023,15, 4457-4468. (IF=6.7, 83/242 in the category of Multidisciplinary Materials Science, Q1)
15. B.H. Yin, W.K.H. Ho, X.Y. Xia, C.K.W. Chan, Q. Zhang, Y. M. Ng, J.C.W. Cheung, J.F. Wang, **M. Yang***, S.H.D. Wong*, A multilayered mesoporous gold nanoarchitecture for ultraeffective near-infrared light-controlled chemo/photothermal therapy for cancer guided by SERS imaging, *Small* 2023, 19(6) 2206762 (IF=13.3, 11/159 in the category of Applied Physics, Q1)
16. Q. Zhang, B.H. Yin, J.H. Hao, L.J. Ma, Y.Y. Huang, X.Y. Shao, C.Q. Li, Z.Q. Chu, C.Q. Yi, S.H.D. Wong*, **M. Yang***, An AIEgen/graphene oxide nanocomposite (AIEgen@GO)-based two-stage “turn-on” nucleic acid biosensor for rapid detection of SARS-CoV-2 viral sequence,

- Aggregate*, 2023, 4 (1) e195. (IF=18.8, 29/230 in the category of Multidisciplinary Chemistry, Q1) (Q. Zhang, B.H. Yin, Y.Y. Huang and C.Q. Li are Ph. D student or postdoctoral fellows of Prof. Mo Yang, who contributed to the main experiment and data analysis; Prof. Mo Yang contributed to the conceptualization, supervision and paper writing/modification)
17. M.L. Song, M.C. Wong, L.H. Li, F. Guo, Y. Liu, Y.J. Ma, X.Y. Lao, P. Wang, H.L. Chen, **M. Yang**, J.H. Hao, Rapid point-of-care detection of SARS-CoV-2 RNA with smartphone-based upconversion luminescence diagnostics, *Biosensors & Bioelectronics*, 2023, 222, 114987. (IF=12.6, 2/86 in the category of Analytical Chemistry, Q1)
 18. L.H. Li, M.L. Song, X.Y. Lao, S.Y. Pang, Y.L. Liu, M.C. Wong, Y.J. Ma, **M. Yang**, J.H. Hao, Rapid and ultrasensitive detection of SARS-CoV-2 spike protein based on upconversion luminescence biosensor for COVID-19 point-of-care diagnostics, *Materials & Design*, 2022, 223, 111263. (IF=8.4, 65/342 in the category of Multidisciplinary Materials Science, Q1)
 19. J.Y. Chen[#], G. Oudeng[#], H.T. Feng, S.X. Liu, H.W. Li, Y.P. Ho, Y. Chen*, Y. Tan*, **M. Yang***, 2D MOF nanosensor-integrated digital droplet microfluidic flow cytometry for in-situ detection of multiple miRNAs in single CTC cells, *Small*, 2022, 18(32), 2201779. (IF=13.3, 11/159 in the category of Applied Physics, Q1) (# contributes equally) (G. Oudeng is the Ph. D student of Prof. Mo Yang, who contributed to the nanosensor design, fabrication and cell experiments; Prof. Mo Yang contributed to the conceptualization, supervision and paper writing/modification)
 20. B.H. Yin, Q. Zhang, X.Y. Xia, C.Q. Li, W.K.H. Ho, J.X. Yan, Y.Y. Huang, H.L. Wu, P. Wang, C.Q. Yi, J.H. Hao, J.F. Wang, H.L. Chen, S.H.D. Wong*, **M. Yang***, A CRISPR-Cas12a integrated SERS nanoplatfrom with chimeric DNA/RNA hairpin guide for ultrasensitive amplification-free nucleic acid detection, *Theranostics*, 2022, 12(13):5914-5930. (IF=12.4, 8/136 in the category of Medicine, Research & Experimental, Q1) (B.H. Yin, Q. Zhang, C.Q. Li, J.X. Yan and Y.Y. Huang are Ph. D students or Postdoctoral fellows of Prof. Mo Yang, who contributed to the main experiment and data analysis; Prof. Mo Yang contributed to the conceptualization, supervision and paper writing/modification).
 21. B.H. Yin, W.K.H. Ho, Q. Zhang, C.Q. Li, Y.Y. Huang, J.X., Yan, H.R. Yang, J.H. Hao, S.H.D. Wong*, **M. Yang***, Magnetic-responsive surface-enhanced raman scattering platform with tunable hot spot for ultrasensitive virus nucleic acid detection, *ACS Applied Materials & Interfaces*, 2022, 14(3), 4714–4724. (IF=9.5, 55/342 in the category of Multidisciplinary Materials Science, Q1) (B.H. Yin, W.K.H. Ho, Q. Zhang, C.Q. Li, Y.Y. Huang, J.X., Yan are Ph. D students or Postdoctoral fellows of Prof. Mo Yang, who contributed to the main experiment and data analysis; Prof. Mo Yang contributed to the conceptualization, supervision and paper writing/modification).
 22. D. Jiang, Y.D. Zhang, X.J. Du, Y.H. Tan, W. Chen, **M. Yang***, Wavelength-regulated switchable photoelectrochemical system for concurrent detection of dual antibiotics, *Biosensors & Bioelectronics*, 2022, 202, 113999. (IF=12.6, 2/86 in the category of Analytical Chemistry, Q1) (D. Jiang is the Postdoctoral Fellow of Prof. Mo Yang, who contributed to the validation and writing the original paper; Prof. Mo Yang contributed to the supervision and revision of the paper)
 23. M. Xiao[#], F. Tian[#], X. Liu, Q.Q. Zhou, J.F. Pan, Z.F. Luo*, **M. Yang***, C.Q. Yi*, Virus detection: From state-of-the-art laboratories to smartphone-based point-of-care testing, *Advanced Science*, 2022, 9, 2105904. (IF=15.1, 24/342 in the category of Multidisciplinary Materials Science, Q1) (# contributes equally) (F. Tian is the Postdoctoral Fellow of Prof. Mo

- Yang, who contributed to the validation and writing the original paper; Prof. Mo Yang contributes to the supervision and revision of the paper)
24. J.H. Wang, Y.T. Gu, X. Liu, Y.D. Fan, Y. Zhang, C.Q. Yi, C.M. Cheng, **M. Yang***, Near-infrared photothermally enhanced photo-oxygenation for inhibition of Amyloid- β aggregation based on RVG-conjugated porphyrinic metal-organic framework and indocyanine green nanoplatform, *International Journal of Molecular Sciences*, 2022, 23(18), 10885. (IF=5.6, 66/285 in the category of Biochemistry & Molecular Biology, Q1) (J.H. Wang, Y.T. Gu, X. Liu, Y.D. Fan are Ph. D students or Postdoctoral fellows of Prof. Mo Yang, who contributed to the main experiment and data analysis; Prof. Mo Yang contributed to the conceptualization, supervision and paper writing/modification).
 25. Z.J. Huang, C.P. Tsui, Y*. Deng, Y.C. Tang, **M. Yang**, M. Zhang, W.Y. Wong*, Bioinspired near-infrared light-induced ultrafast soft actuators with tunable deformation and motion based on conjugated polymers/liquid crystal elastomers, *Journal of Materials Chemistry C*, 2022, 10, 12731–12740. (IF=6.4, 31/159 in the category of Applied Physics, Q1)
 26. F.Y. Qu, L.Y. Zhao, L.Q. Li, S.R. Zhao, **M. Yang**, J. Yu, Y.P. Ho*, Thermo-induced coalescence of dual cores in double emulsions for single cell RT-PCR, *Analytical Chemistry*, 2022, 94, 33, 11670–11678 (IF=7.4, 7/86 in the category of Analytical Chemistry, Q1)
 27. Z.W. Li, Z.Q. Meng, F. Tian, X.F. Zhou, X.J. Zhong, Q. Chen, **M. Yang**, Z. Liu, Y. D. Yin*, FFT-weighted photoacoustic imaging by in vivo magnetic alignment of hybrid nanorods, *Nano Letters*, 2022, 22, 13, 5158–5166. (IF=10.8, 17/159 in the category of Applied Physics, Q1) (F. Tian is the Postdoctoral fellow of Prof. Mo Yang, who contributed to the photoacoustic imaging part; Prof. Mo Yang contributed partially to the conceptualization and supervision).
 28. M.F. Hou, W.D. Chen, J.K. Zhao, D.S. Dai, **M. Yang**, C.Q. Yi, Facile synthesis and in vivo bioimaging applications of porphyrin derivative-encapsulated polymer nanoparticles, *Chinese Chemical Letters*, 2022, 33(8), 4101-4106. (IF=9.1, 21/178 in the category of Multidisciplinary Chemistry, Q1)
 29. Z.C. Xu, K.M. Li, Y. Xin, K. Tang, **M. Yang**, G.X. Wang, Y.H. Tan, Fluid shear stress regulates the survival of circulating tumor cells via nuclear expansion, *Journal of Cell Science*, 2022, 135(10), jcs259586. (IF=4, 103/191 in the category of Cell Biology, Q3)
 30. B.H. Yin, H.R. Yang, **M. Yang***, Integrating soft hydrogel with nanostructures reinforces stem cell adhesion and differentiation, *Journal of Composites Science*, 2022, 6(1), 19. (B.H. Yin is the Postdoctoral Fellow of Prof. Mo Yang, who contributed to the validation and writing the original paper; Prof. Mo Yang contributed to the supervision and revision of the paper) (IF=3.3, 17/35 in the category of Composites in Materials Science, Q2)
 31. B.H. Yin, J.G. Ni, C.E. Witherel, **M. Yang**, J.A. Burdick, C.Y. Wen, S.H.D., Harnessing tissue-derived extracellular vesicles for osteoarthritis theranostics, *Theranostics*, 2022, 12(1), 207–231. (IF=12.4, 8/136 in the category of Medicine, Research & Experimental, Q1)
 32. Y. Xiao, L. Zhou, Z. Pan, Y. Cao, **M. Yang**, W. Chen, Analog ghost hidden in 2D random binary patterns for free-space optical data transmission, *Optics and Lasers in Engineering*, 2022, 150, 106880, (IF=4.6, 24/100 in the category of Optics, Q1)
 33. C.Y. K. Lam, Q. Zhang, B.H. Yin, Y.Y. Huang, H. Wang, **M. Yang***, S.H.D. Wong*, Recent advances in two-dimensional transition metal dichalcogenide nanocomposites biosensors for virus detection before and during COVID-19 outbreak, *Journal of Composites Science*, 2021, 5(7), 190. (C.Y. K. Lam, Q. Zhang, B.H. Yin, Y.Y. Huang are research assistant or Ph. D student or Postdoctoral Fellows of Prof. Mo Yang, who contributed to the validation and

- writing the original paper; Prof. Mo Yang contributed to the supervision and revision of the paper) (IF=3.3, 17/35 in the category of Composites in Materials Science, Q2)
34. Z. Pan, Y. Xiao, L. Zhou, Y. Cao, **M. Yang**, W. Chen, Non-line-of-sight optical information transmission through turbid water, *Optics Express*, 2021, 29(24), 39498—39510. (IF=3.8, 30/100 in the category of Optics, Q2)
 35. F. Tian, X.J. Zhong, J.K. Zhao, Y.T. Gu, Y.D. Fan, F. Shi, Y. Zhang, Y.H. Tan, W. Chen, C.Q. Yi*, **M. Yang***, Hybrid theranostic microbubbles for ultrasound/photoacoustic imaging guided starvation/low-temperature photothermal/hypoxia-activated synergistic cancer therapy, *Journal of Materials Chemistry B*, 2021, 9, 9358 – 9369 (IF=7, 10/45 in the category of Biomaterials, Material Science, Q1) (F. Tian, X.J. Zhong, Y.T. Gu, Y.D. Fan, F. Shi are Ph. D students or Postdoctoral Fellows of Prof. Mo Yang, who contributed to the validation and writing the original paper; Prof. Mo Yang contributed to the supervision and revision of the paper)
 36. W.D. Chen, J.K. Zhao, M.F. Hou, **M. Yang**, C.Q. Yi*, Gadolinium-porphyrin based polymer nanotheranostics for fluorescence/magnetic resonance imaging guided photodynamic therapy, *Nanoscale*, 2021, 13, 16197-16206. (IF=6.7, 83/242 in the category of Multidisciplinary Materials Science, Q1)
 37. X. Chen, Y.D. Fan, J.H. Sun, Z.P. Zhang, Y. Xin, K.M. Li, K. Tang, P.Y. Du, Y.Y. Liu, G.X. Wang, **M. Yang***, Y.H. Tan*, Nanoparticle-mediated specific elimination of soft cancer stem cells by targeting low cell stiffness, *Acta Biomaterialia*, 2021, 135, 493-505. (IF=9.7, 9/96 in the category of Biomedical Engineering, Q1) (Y.D. Fan is the Ph. D student of Prof. Mo Yang, who contributed to nanoprobe synthesis part of the whole experiment; Prof. Mo Yang contributed to the supervision and revision of the paper)
 38. F. Tian, S.Y. Wang, K.D. Shi, X.J. Zhong, Y.T. Gu, Y.D. Fan, Y. Zhang, **M. Yang***, Dual-depletion of intratumoral lactate and ATP with radicals generation for cascade metabolic-chemodynamic therapy, *Advanced Science*, 2021, 8(24), 2012595. (IF=15.1, 24/342 in the category of Multidisciplinary Materials Science, Q1) (F. Tian, S.Y. Yao, X.J. Zhong, Y.T. Gu, Y.D. Fan are research assistant or Ph. D student or Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper)
 39. L. Zhang[#], Y.D. Fan[#], Z. Yang, **M. Yang***, C.Y. Wong*, NIR-II-driven and glutathione depletion-enhanced hypoxia-irrelevant free radicals nanogenerator for combined cancer therapy, *Journal of Nanobiotechnology*, 2021 19, 265. ([#] equivalent contribution) (IF=10.2, 12/156 in the category of Biotechnology and Applied Microbiology, Q1) (Y.D. Fan is the Ph. D student of Prof. Mo Yang, who contributed to animal experimental part of the whole experiment; Prof. Mo Yang contributed to the supervision and revision of the paper)
 40. M.T. Au[#], J.Y. Shi[#], Y.D. Fan, J.G. Ni, C.Y. Wen*, **M. Yang***, Nerve growth factor-targeted molecular theranostics based on molybdenum disulfide nanosheet coated gold nanorods (MoS₂-AuNR) for osteoarthritis pain, *ACS Nano*, 2021, 15, 7, 11711–11723. (IF=17.1, 20/342 in the category of Multidisciplinary Material Science, Q1) (J.Y. Shi is the Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing part of the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper) (# equal contribution)
 41. M. He, B. Yang; F.J. Huo, X. Li, **M. Yang***, W.A.D. Tian*, A novel coating with universal adhesion and inflammation-responsive drug release functions to manipulate

- osteimmunomodulation of implants, *Journal of Materials Chemistry B*, 2021, 9, 5272–5283. (IF=7, 10/45 in the category of Biomaterials, Material Science, Q1) (M. He is the Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing part of the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper)
42. D. Jiang, C.Q. Yang, Y.D. Fan, P. H.M. Leung, I. Kiao, Y. Zhang, Z.Y. Li, **M. Yang***, Ultra-sensitive photoelectrochemical aptamer biosensor for detecting E. coli O157:H7 based on nonmetallic plasmonic two-dimensional hydrated defective tungsten oxide nanosheets coupling with nitrogen-doped graphene quantum dots (dWO₃-H₂O@N-GQDs), *Biosensors & Bioelectronics*, 2021, 183, 113214. (IF=12.6, 2/86 in the category of Analytical Chemistry, Q1) (D. Jiang, C.Q. Yang, Y.D. Fan are research assistant or Ph. D student or Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper)
 43. M. He, X.H. Gao, Y.D. Fan, Xie, Li; **M. Yang***, W.D. Tian*, Tannic Acid/Mg²⁺ Based Versatile Coating to Manipulate Osteoimmunomodulation of Implants, *Journal of Materials Chemistry B*, 2021, 9, 1096-1106. (IF=7, 10/45 in the category of Biomaterials, Material Science, Q1) (M. He is the Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing part of the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper)
 44. M.L. Song, **M. Yang***, J.H. Hao*, Pathogenic virus detection by optical nanobiosensors, *Cell Reports Physical Science*, 2021, 188, 9. (IF=8.9, 8/85 in the category of Multidisciplinary Physics, Q1)
 45. J.K. Zhao, X. Chen, K.H. Ho, C. Cai, C.W. Li, **M. Yang***, C.Q. Yi*, Nanotechnology for diagnosis and therapy of rheumatoid arthritis: evolution towards theranostic approaches, *Chinese Chemical Letters*, 2021, 32(1), 66-86. (IF=9.1, 21/178 in the category of Multidisciplinary Chemistry, Q1)
 46. Q. Wang, Y.P. Shi, W.D. Chen, **M. Yang**, C.Q. Yi*, Synthesis of fluorescent nanoprobe with simultaneous response to intracellular pH and Zn²⁺ for tumor cell distinguishment, *Microchimica Acta*, 2021, 188, 9. (IF=6.408, 13/87 in the category of Analytical Chemistry, Q1)
 47. G. Oudeng, M. Benz, A. Popova, Y. Zhang, C.Q. Yi, L. Pavel*, **M. Yang***, Droplet-Microarray Based on Nanosensing Probe Patterns for Simultaneous Detection of Multiple HIV Retroviral Nucleic Acids, *ACS Applied Materials & Interfaces*, 2020, 12, 50, 55614–55623. (IF=9.5, 55/342 in the category of Multidisciplinary Materials Science, Q1) (G. Oudeng is the Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing part of the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper)
 48. Y. Xin, K.M. Li, **M. Yang**, Y.H. Tan* Fluid shear stress induces EMT of circulating tumor cells via JNK signaling in favour of their survival during hematogenous dissemination, *International Journal of Molecular Sciences*, 2020, 21(21), 8115. (IF=5.6, 66/285 in the category of Biochemistry & Molecular Biology, Q1)
 49. M.J. Shen, K.L. Di, H.Z. He, Y.Y. Xia, H. Xie, R.G. Huang, C. Liu, **M. Yang***, .S.Y. Zheng*, N.Y. He*, Z.Y. Li*, Progress in exosome associated tumor markers and their detection methods, *Molecular Biomedicine*, 2020, 1, 3. (New Journal)
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- resonance properties for dual-readout logic gate operations, *Carbon*, 2020, 166, 265-272. (IF: 10.9, 39/342 in the category of Multidisciplinary Materials Science, Q1)
51. C.M. Cheng, R.L. Zhang, J.H. Wang, Y. Zhang, S.S. Xiong, Y. Huang*, **M. Yang***, Porphyrinic metal-organic framework nanorod-based dual-modal nanoprobe for sensing and bioimaging of phosphate, *ACS Applied Materials & Interfaces*, 2020, 12, 26391–26398. (IF=9.5, 55/342 in the category of Multidisciplinary Materials Science, Q1) (C.M. Cheng, R.L. Zhang, J.H. Wang are Ph. D student or Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper)
 52. C.M. Cheng, R.L. Zhang, J.H. Wang, Y. Zhang, C.Y. Wen, Y.H. Tan, **M. Yang***, An ultrasensitive and selective fluorescence nanosensor based on porphyrinic metal-organic framework nanoparticles for Cu²⁺ detection, *Analyst*, 2020, 145, 797-804. (IF: 4.2, 24/86 in the category of Analytical Chemistry, Q1) (C.M. Cheng, R.L. Zhang, J.H. Wang are Ph. D student or Postdoctoral Fellow of Prof. Mo Yang, who contributed to the main experimental parts and writing the original paper; Prof. Mo Yang contributed to the conceptuality, supervision and revision of the paper)
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 56. H.P. Bei, Y.H. Yang, Q. Zhang, Y. Tian, X.M. Luo, **M. Yang***, X. Zhao*, Graphene-Based Nanocomposites for Neural Tissue Engineering, *Molecules*, 2019, 24(4), 658 (IF=4.6, 63/178 in the category of Multidisciplinary Chemistry, Q2)
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 58. W. Chen, Q. Wang, J. Ma, C.W. Li, **M. Yang**, C.Q. Yi. A ratiometric fluorescent core-shell nanoprobe for sensing and imaging of zinc(II) in living cell and zebrafish. *Microchimica Acta*. 2018, 185(11), 523. (IF=5.7, 12/8 in the category of Analytical Chemistry, Q1)
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119. **M. Yang**, X. Zhang, Y. Zhang, C.S. Ozkan, Stochastic frequency signature for chemical sensing using noninvasive neuronelectronic interface, *IEEE Transactions on Biomedical Engineering*, 52(5) 916-922, 2005. (IF=4.756, 37/98 in Biomedical Engineering, Q2)
120. **M. Yang**, X. Zhang, Y. Zhang, C.S. Ozkan, Characteristics of single neurons cultured on microelectrode arrays in vitro for chemical sensing, *IEEE Sensors Journal* 5(4), 690-695, 2005. (IF=4.325, 14/64 in the category of Instruments and Instrumentation, Q1)
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122. **M. Yang**, S. Prasad, X. Zhang, M. Ozkan, C.S. Ozkan, Cascaded chemical sensing using a single cell as a sensor, *Sensor Letters*, 2004, 2(1), 1-8. (Cover paper) (IF=0.558, 68/76 in the category of Analytical Chemistry, Q4)
123. **M. Yang**, S. Prasad, X. Zhang, A. Morgan, M. Ozkan, C.S. Ozkan., Cellular microarrays for chemical sensing, *Sensors and Materials*, 2003, 15(6), 313-333. (IF=0.879, 59/64 in the category of Instruments & Instrumentation, Q4)
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129. S. Prasad, **M. Yang**, X. Zhang, C.S. Ozkan, M. Ozkan, Electric field assisted patterning of neuronal networks for the study of brain functions, *Biomedical Microdevices*, 2003, 5(2), 125-137. (IF=3.783, 52/98 in the category of Biomedical Engineering, Q3)
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131. X. Zhang, **M. Yang**, K. Vafai and C.S. Ozkan. Design and analysis of microcantilevers for biosensing applications, *SLAS Technology*, 2003, 8(2), 90-93. (IF=2.813, 49/87 in the category of Analytical Chemistry, Q3)

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2. BOOK CHAPTERS

1. J.H. Wang, M. Yang, “Two-dimensional nanomaterials in cancer theranostics”, *Theranostic Bionanomaterials*, Elsevier, ISBN: 9780128153413, 2019
2. C.S. Ozkan, M. Ozkan, **M. Yang**, X. Zhang S. Prasad, "Bridging Microelectronics and Biotechnology: Cell Based Microarray Biosensors". *Encyclopedia of Sensors*, American Scientific Publishers, United States, ISBN 158883056X, Vol. 1, 401-420, 2006,
3. C.S. Ozkan, M. Ozkan, **M. Yang**, X. Zhang, S. Prasad, A. Morgan, "Cell Based Sensors for Chemical Detection " *BioMEMS and Biomedical Nanotechnology V4: Biomolecular Sensing, Processing and Analysis*, Springer, New York, ISBN 978-0-387-25561-3, 55-89, 2006.
4. M. Ozkan. C.S. Ozkan, S. Prasad, **M. Yang**, X. Zhang, “ Microarray and Fluidic Chip for Extracellular Sensing”, *BioMEMS and Biomedical Nanotechnology V2: Micro/Nano Technologies for Genomics and Proteomics*, Springer, New York, ISBN 978-0-387-25561-3, 47-98, 2006.

3. GRANTS

External Competitive Grants as Principal Coordinator (PC)/Principal Investigator (PI) /Co-Principal Investigator (Co-PI)

1. **Hong Kong Research Grants Council (RGC) Collaborative Research Fund (CRF)**, “High-resolution single-cell multi-omics: Joint profiling of multiple types of biomolecules in the same single cell”, HK\$ 6,412,248 (C5005-23WF), 2024-2027. (**PC: Prof. Mo Yang**; Co-PIs: Dr. Tan Youhua, Prof. Zhang Weixiong, Dr. Ho Yi-ping Megan, Prof. Henry Hei Ning, Prof. Pan Yihang).
2. Shenzhen Science and Technology Program-Basic Research Scheme, 集成纳米传感器的微流控芯片平台用于乳腺癌来源细胞外囊泡的多维度检测, RMB 300,000 (JCYJ20220531090808020), 2022-2025. **PI: Prof. Mo Yang**
3. **Hong Kong Research Grants Council (RGC) Collaborative Research Fund (CRF)**, “An upright multiphoton microscope for intravital imaging and optogenetic studies”, (C5078-21EF), HK\$ 7,820,000, (2022-2025) (**PC: Prof. Mo Yang**; Co-PIs: Dr Hu, Xiaoling, Prof Ip, Jacque Pak Kan; Dr. Lai Puxiang, Dr. Lau, Geoffrey C.Y, Prof. Leung, Yun-chung, Dr. Pan Feng, Dr Tse, Kai Hei, Dr. Yoo, Jung Sun, Prof Yung, Ken Kin lam and Prof. Zheng Yongping).
4. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “Development of biomimic MXene-engineered exosome nanosystem for enhanced NIR-II photothermal immunotherapy with tumor-associated macrophage polarization”, (PolyU 15216622), HK\$ 867,067, (**PI: Prof. Mo Yang**; **Co-I: Prof. Zhiyang Li and Prof. Wen Feiqiu**), 2023-2025.
5. **Innovation Technology Fund (Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS))**, “Single-cell Droplet RNA Sequencing Platform Based on DNA-encoded Nanoparticles for Pediatric Neuroblastoma Research” (GHP/032/20SZ), HK\$ \$2,407,400 (**PI: Prof. Mo Yang**; Co-I: Dr. HUANG, Chien-ling), 2022-2024

6. **深港澳科技计划C类项目**, “用于新冠病毒和流感病毒现场筛查的快速检测技术和便携式微纳机电系统”, (SGDX2020110309260000) RMB 1,000,000 (**PI: Prof. Mo Yang**; Co-I: Prof. Changqing Yi and Dr. Zhaofan Luo), 2021-2023.
7. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “Multiplexed single exosome analysis based on hybridization chain reaction (HCR) enhanced multi-color fluorescence resonance energy transfer (FRET) nanoprobe in a droplet optofluidic platform”, (PolyU 15217621), HK\$ 815,601, 2022-2024 (**PI: Prof. Mo Yang**; Co-I: Dr Wen Chan, Prof. Zhiyang Li).
8. **Hong Kong Research Grants Council (RGC) Collaborative Research Fund (CRF)**, “Multi-scale spatiotemporal single-cell in-situ analysis: Mechanism and biomedical applications”, (C5011-19G), HK\$2,349,052, 2020-2021. (**PC: Prof. Mo Yang**; Co-PIs: Dr. Tan Youhua, Dr. Chen Wen; Dr. Li Hungwing; Dr. Megan Ho Yi-Ping)
9. **Innovation Technology Fund (Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS))**, “Development of an integrated microfluidic platform for high-throughput isolation of circulating tumor cells (CTCs) and on-chip detection of CTC-heterogeneity via multicolor nanoprobe”, (GHP-039-18GD), HK\$1,472,500, 2020-2021. (**PI: Prof. Mo Yang**; Co-I: Dr. Tan Youhua)
10. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “Hybrid ZnIn₂S₄/GQD nanointerface based artificial photoreceptors for restoring human-like colour sensitivity of degenerative retina”, (PolyU 15214619), HK\$, 869,898, 2020-2022 (**PI: Prof. Mo Yang**; Co-I: Dr Pan Feng).
11. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “A hybrid nanosystem for photo-treatment of Alzheimer’s disease in a blood-brain barrier on-a-chip”, (PolyU 15210818), HK\$ 632,421, 2019-2021 (**PI: Prof. Mo Yang**; Co-I: Dr Chan Koon-Ho and Dr. Zhao Xin).
12. **RGC Germany/Hong Kong Joint Research Scheme**, Multi-colour Nanoprobes Based In-situ Multiplexed Detection of miRNAs in Stem Cells via Droplet-microarray Platform (G-PolyU506/18), 2019-2020. HK\$ 89,600 (**PI**)
13. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “A hybrid molybdenum disulfide (MoS₂)/graphene quantum dot (GQD) nanosystem for imaging-guided combinatorial phototherapy targeting cancer stem cells”, (PolyU 15216917), HK\$ 443,950, 2018-2020 (**PI: Prof. Mo Yang**; Co-I: Dr. Youhua Tan).
14. **Natural Science Foundation General Project (面上項目) (Natural Science Foundation of China (NSFC))** “用於單細胞水平上檢測幹細胞內多種 miRNA 原位表達的多色納米感測探針的研究”, (NSFC 31771077), CNY 60 万, 2018-2021 (**PI: Prof. Mo Yang**; Co-I: Dr. Yu Zhang)
15. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)** “A graphene quantum dot based intracellular fluorescence resonance energy transfer (FRET) assay for monitoring caspase-3 protease activity during apoptosis process in single cells”, (PolyU 15221315) HK\$ 845,000, 2016-2018 (**PI: Prof. Mo Yang**; Co-I: Prof Qingjun Liu)
16. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)** “A hydrophilic polymer based microfluidic patch clamp array system for simultaneous multiple cell recording”, (PolyU 530511), HK\$, 818,800, 2012-2015 (**PI: Prof. Mo Yang**; Co-I: Prof. Xiaoqiang YAO).

17. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)** "Simultaneous and rapid detection of multiple foodborne pathogens by nanoporous membrane based impedance arrays" (PolyU 535809), HK\$ 607,000, 2010-2013 (PI: Prof. Mo Yang; Co-I: Dr. Leung Hang Mei Polly and Prof. Xin Zhang).
18. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)** "An integrated microfluidic chip for single cell electrophysiological studies within picoliter volume", (PolyU 531607), HK\$ 429,000, 2008-2010 (PI: Prof. Mo Yang; Co-I: Dr. Lee Yi-Kuen and Prof. Wang Ping).
19. **Natural Science Foundation General Project (面上項目) (Natural Science Foundation of China (NSFC))** “基於納米孔膜的微納機電系統及其在食源性病原微生物檢測上的應用”, (NSFC 81471747), CNY 73 万, 2015-2018 (PI: Prof. Mo Yang; Co-I: Dr. Yu Zhang)
20. **Hong Kong Research Grants Council (RGC) Postdoctoral Fellowship Fund**, “A Hybrid Nanoplatform for Imaging-guided Combinatorial Phototherapy and Immunotherapy for Cancer Treatment”, (PDFS2223-5S07), HK\$ 1,219,650, 2022-2025 (PI: Prof. Mo Yang)
21. **Hong Kong Research Grants Council (RGC) Collaborative Research Fund (CRF)**, “Multi-level synergistic COVID-19 point-of-care diagnostics based on upconversion luminescence biosensing platform” (C5110-20G), HK\$8, 408,102, 2021-2024 (PC: Prof. Hao Jianhua; Co-PIs: Prof. Mo Yang (sharing HK\$ 2 million), Prof. Chen Honglian and Prof. Wang Feng).

External Competitive Grants as Co-Investigator

1. **Health and Medical Research Fund (HMRF)**, The roles of cell mechanics in targeting soft cancer stem cells and chemoresistance through nanoparticle-delivered drugs, 2022-2024, HK \$1,255,000, (HMRF18191421) (PI: Dr. Tan Youhua; Co-I: Prof. Mo Yang).
2. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, Light actuatable nanocomposite based 3D micro-nano-structured dynamic cell training platform for force enhancement of grown cardiac muscle tissues, 2022-2024, HK\$748,015 (PI: Dr. TSUI Chi Pong, Co-I: Prof. Mo Yang).
3. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “Non-invasive Ultrasound Monitoring of Blood Viscosity Using A Stretchable, Conformal, and Wearable Nanocomposite Sensing Array: Fundamental Research & Proof of Concept”, (PolyU 15202820), 2021-2023, HK\$ 873,995. (PI: Prof. SU Zhongqing, Co-I: Prof. Mo Yang).
4. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “Enhancing the Sensitivity of Plasmonic Nanosensors by Manipulating the Number of Free Carriers in Doped Semiconductor Nanocrystals through Hetero-nanostructures”, HK\$ 466,667, 2019-2021. (PI: Dr. LAW Wing Cheung; Co-I: Prof. Mo Yang)
5. **Hong Kong Research Grants Council (RGC) General Research Fund (GRF)**, “The application of organic electrochemical transistor in cell-based biosensors for single-cell analysis”, (PolyU 532210), HK\$ 776,000, 2011-2014 (PI: Prof. Feng Yan; Co-I: Prof. Mo Yang)
6. **ITF Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS)**, “Study of nanoparticle based microfluidic biosensing techniques for simultaneous detection of multiple risky factors in food” CNY\$ 1,000,000, 2015-2017 (PI: Dr. Changqing Yi; Co-I: Dr. Baohui Jin, Prof. Mo Yang, Dr. Rong Song, Dr. Jianhua Zhou, Dr. Lelun Jiang, Dr. Guanzhen Liu, Dr. Jinchuan Shen, Dr. Heng Zhang; Dr. Youhua Tan)

7. **Shenzhen Key Research Programme Fund** (深圳市基礎研究重點項目), Mechanical regulation of tumor cell metastatic tropism and the underlying mechanotransduction mechanisms (2020N370), CNY\$ 1,500,000, (2020-2023) (PI: Dr. Youhua Tan; Co-I: **Prof. Mo Yang**)
8. **Shenzhen Basic Research Programme Fund** (深圳市基礎學科布局項目), Mechanical regulation of liver cancer stem cells during tumor progression and metastasis and the underlying mechanisms, CNY \$ 2,000, 000, 2017-2021 (PI: Dr. Youhua Tan; Co-I: Prof. Yongping Zheng, **Prof. Mo Yang**, Dr. Jianhua Li, Dr. Xin Zhao)
9. **Innovation Technology Fund** (ITF-tier 3) Development of Upconversion Luminescence Nanoprobes for Ultrasensitive and Rapid Detection of Influenza Virus, 2015-2017 ITS/057/15, HK\$ 1,453,535 (PI: Prof. Jianhua Hao; **Co-I and Deputy Project Coordinator: Prof. Mo Yang**; Co-I: Prof Helen Chan; Dr. Wei Lu)

4. PATENTS & KNOWLEDGE/TECHNOLOGY TRANSFER

Patents:

- 欧登格日乐, 刘四喜, **杨莫**, 检测 SARS-CoV-2 的组合物及其试剂盒和应用, China patent, CN115948609A
- 刘宗彬, 袁秀丽, 陈小文, 文飞球, 崔秀芳, **杨莫**, 一种评估患有肿瘤或特定肿瘤风险的方法, China patent, 202211271374.8
- **杨莫**, 陈艳, 欧登格日乐, 陈俊粤, 一种纳米探针及其制备方法和应用、循环肿瘤细胞的 miRNAs 的检测系统, China patent, 202110467712.4
- 谭又华, **杨莫**, 陈茜, 一种制备用于靶向肿瘤干细胞的产品的方法、产品及应用, China patent, 202110176366.4.
- J.H. Hao, **M. Yang**, M.K. Tsang, W.W. Ye, “Heterogeneous Microarray Based Hybrid Upconversion nanoprobe/nanoporous membrane system”, U.S. Patent No. 10,266,403, issued on April 23, 2019.
- K. Vafai, C.S. Ozkan, R.C. Haddon, A.R.A. Khaled, **M. Yang**, “Innovative biosensors for chemical and biological assays”, US Patent, No.7695951, issued on April, 13, 2010
- K. Vafai, C.S. Ozkan, R.C. Haddon, A.R.A. Khaled, **M. Yang**, “Microcantilevers for biological and chemical assays and method of making and using thereof”, US Patent, No.7288404, issued on Oct, 30, 2007.
- M. Ozkan, C.S. Ozkan, **M. Yang**, X. Zhang, S. Prasad, "Biosensors having single reactant components immobilized over single electrodes and methods of making and using thereof", US Patent, Publication No. US2006/0188904 A1 (Publication date: August 24, 2006)

International Exhibition Awards:

- “High-throughput microfluidic platform for CTCs detection in cancer precision diagnostics” , **Mo Yang**, Gerile Oudeng, Huang Lai, Gold medal award, the 48th International Exhibition of Inventions Geneva, 2023
- “Nano biosensor for rapid detection of flu virus” Jianhua Hao, **Mo Yang**, Ming-Kiu Tsang, Weiwei Ye, **Gold medal award** with congratulations of Jury and special merit award from scientific community of Romania, the 45th International Exhibition of Inventions of Geneva Brussels, 2017.
- “Biosensor to safeguard food safety”, **Mo Yang**, Leung Hang Mei Polly, Jingjiang Yu, **Gold medal award** in Brussels Eureka 2009, also known as the 58th World Exhibition of Innovation, Research and Industrial Innovation, November,19-21, 2009.

5. HONORS, AWARDS AND FELLOWSHIPS

- **Gold medal award** in the 48th International Exhibition of Inventions of Geneva Brussels, “High-throughput Microfluidic Platform for CTCs Detection in Cancer Precision Diagnostics”, **Yang Mo**, Oudeng Gerile, Lai Huang, April 26-30, 2023. (**Principal Investigator**).
- **The Faculty Award for Outstanding Performance/Achievement in Research (Individual)**, Faculty of Engineering, 2022.
- **The Faculty Merit Award for Outstanding Performance/Achievement in Research (Individual)**, Faculty of Engineering, 2015.
- **The Faculty of Engineering Research Grant Achievement Award**, 2022.
- **The Faculty of Engineering Research Grant Achievement Award**, 2021.
- **The Faculty of Engineering Research Grant Achievement Award**, 2019.
- **The Faculty of Engineering Research Grant Achievement Award**, 2017.
- **Gold medal award** with congratulations of Jury and special merit award from scientific community of Romania, the 45th International Exhibition of Inventions of Geneva Brussels, March 29-April 2, 2017, “Nano Biosensor for Rapid Detection of Flu Virus”, Hao Jianhua, **Yang Mo**, Tsang, Ming-Kiu, Ye Weiwei. (**Co-Principal Investigator**)
- **Gold medal award** in Brussels Eureka 2009, also known as the 58th World Exhibition of Innovation, Research and Industrial Innovation, November, 19-21, 2009, “Biosensor to safeguard food safety” **Mo Yang**, Leung Hang Mei Polly, Jingjiang Yu (**Principal Investigator**)
- **Bronze medal award** in the 60th International Trade Fair "Ideas–Inventions–New Products" (iENA), Nuremberg, Germany, Oct 30-Nov 2, 2008, “Smart therapy”, S.C.L. Lo, M. C. P. Leung, W.W.F. Leung, C.H. Cheng, **M. Yang** (**Co-Investigator**)
- **Young Scholar Award in the 9th WACBE World Congress on Biomedical Engineering**, “Biofunctionalized MoS₂ nanosheet probe for one-step in situ detection of miRNA-21 in single cancer cells”, August 16-19, 2019, Taipei. Ph. D student: OUDENG Gerile, Chief Supervisor: Prof. Mo Yang.
- **First Runner-up of Best Young Engineers’ Paper Competition Award**, Hong Kong Medical and Healthcare Device Industries Association, 2017-2018, Ph. D student: OUDENG Gerile, Chief Supervisor: Prof. Mo Yang.
- **Best Oral Paper Award (2nd Place)** in 2016 Asian University Symposium on Biomedical Engineering, July 20-21, 2016, Beijing, Ph. D student: Shi jingyu, Chief Supervisor: Prof. Mo Yang
- **Top prize of Best Young Engineers’ Paper Competition Award**, Hong Kong Medical and Healthcare Device Industries Association, 30 November 2015, Hong Kong, Ph. D student: Shi jingyu, Chief Supervisor: Prof. Mo Yang.
- **Second Runner-up of Best Young Engineers’ Paper Competition Award**, Hong Kong Medical and Healthcare Device Industries Association, 23 November 2014, Hong Kong, Ph. D student: Shi jingyu, Chief Supervisor: Prof. Mo Yang.
- **Second Prize for Best Poster Paper Award**, 2014 Asia University Symposium on Biomedical Engineering (AUSBME), Dec 12-14, 2014, Taiwan. Ph. D student: Chan Chunyu, Chief Supervisor: Prof. Mo Yang.
- **Second runner up for Best Oral Presentation Award**, BME 2014 Biomedical Engineering International Conference, December 4-6, 2014, Hong Kong, Ph. D student, Chan Chunyu, Chief Supervisor: Prof. Mo Yang.

- **First Runner-up of Best Young Engineers' Paper Competition Award**, Hong Kong Medical and Healthcare Device Industries Association, 23 November 2014, Hong Kong Ph. D student, Chan Chunyu, Chief Supervisor: Prof. Mo Yang.
- **Second Prize in Asian-Pacific Medical Device Design Competition 2014**, sponsored by International Federation of Medical & Biological Engineering (IFMBE), October 10, 2014, Taiwan, Ph. D Student: YE Weiwei, Chief Supervisor: Prof. Mo Yang.
- **Second Place Prize in the IEEE EMBS HK-Macau joint chapter student paper competition**, August 16, 2014, Hong Kong, Ph. D Student: YE Weiwei, Chief Supervisor: Prof. Mo Yang.
- **Third Place Prize of the Sixth Nanshan Forum for PhD Candidates from Shenzhen, Hong Kong, Macao and Taiwan**, December 15, 2013, Shenzhen, China, Ph. D Student: YE Weiwei, Chief Supervisor: Prof. Mo Yang.
- **First Runner-up of Best Young Engineers' Paper Competition Award**, BME2012 Biomedical Engineering International Conference, 6 December 2012, Hong Kong, Ph. D Student: YE Weiwei, Chief Supervisor: Prof. Mo Yang.
- **Outstanding Graduate Award** in Shanghai Jiaotong University, 1998.
- **Excellent Student Award** (优生 Top 1%) in Shanghai Jiaotong University, 1997
- **National Bao Gang Scholarship for Excellent Students** (全国宝钢优秀奖学金), China, 1997
- **Excellent Academic Performance Award**, Shanghai Jiaotong University, 1996

7. EDITORSHIPS, OFFICES AND MEMBERSHIPS

a) Editorships

1. **Associate Editor**, Frontiers in Chemistry, SCI indexed journal (IF=5.545), (2022-current)
2. **Associate Editor**, Frontiers in Lab on a chip Technologies (2022-current)
3. **Associate Editor**, Frontiers in Sensors (2022-current)
4. **Associate Editor**, Journal of Integrated OMICS, Publisher: American Society of Brewing Chemists, 2012-2017
5. **Section Editor**, Journal of Nanomedicine, Publisher: MedDocs Publishers, 2017-current
6. **Guest Editor**, Special issue "Advances in Biosensing Technologies", Journal of Sensors (SCI indexed journal, Web of science), 2017
7. **Guest Editor**, Special issue "Sensor and Biosensor Technologies for Healthcare", Journal of Healthcare Engineering, (SCI indexed journal, Web of science), 2017
8. **Editorial Board Member**, Chinese Chemical Letters (SCI indexed journal, Elsevier), 2018-current
9. **Editorial Board Member**, Journal of Engineering (SCI indexed journal, Web of science), 2012-2017
10. **Editorial Board Member**, Nano Biomedicine and Engineering (Pubmed indexed journal), 2009-current
11. **Editorial Board Member**, Austin Journal of Biosensors & Bioelectronics, Publisher: Austin Publishers, 2014-current
12. **Editorial Board Member**, Allied Journal of Biomedical Imaging and Bioengineering, Publisher: Allied Academics, 2016-current
13. **Editorial Board Member**, Annals of Nutrition and Food Science, Publisher: Remedy Publication, 2017-current

14. **Editorial Board Member**, Journal of Cancer Research Forecast, Publisher: Science Forecast, 2017-current
15. **Editorial Board Member**, International Journal of Bioanalysis & Biomedicine, 2017-current
16. **Editorial Board Member**, Journal of Cancer Research Forecast, 2017-current
17. **Editorial Board Member**, Nanoscience & Nanotechnology-Asia, 2017-current
18. **Editorial Board Member**, Current Nanomaterials, 2017-current

b) Service/Membership to International/Local Professional Conferences and Society

1. **The Engineering Panel Member (Joint Research Schemes) of the Research Grants Council (RGC) of Hong Kong** (2022 to current)
2. **Council Member**, the World Association for Chinese Biomedical Engineers (WACBE) 2019-2022
3. 浙江大学生物医学工程教育部重点实验室学术委员会委员（海外），2022-2027
4. **Organizing Committee Member**, the Nano-Micro Conference 2018, in Jeju Korea from September 17 to 21, 2018
5. **Financial Chair and Organizing Committee Member**, the 8th WACBE World Congress on Bioengineering 2017 (WACBE 2017), July 31-August 3, 2017, Hong Kong
6. **Organizing Committee Member**, the 8th International Symposium on Microchemistry and Microsystems (ISMM 2016), May 30-June 1, 2016, Hong Kong
7. **Organizing Committee Member**, the 3rd International Conference on Optofluidics, Aug 15-17, 2013, Hong Kong
8. **International Scientific Committee Member**, the 6th World Congress of Bioengineering (WACBE), Beijing, China, August 5-8, 2013
9. **Organizing Committee Member**, the second International Symposium on Surface and Interface of Biomaterials, Hong Kong, Jan 4-6, 2010.
10. **Program Committee Member**, the 3rd International Conference on Biomedical Engineering and Informatics, Yantai, China, 16-18, Oct, 2010
11. **Program Committee Member**, Bioinformatics and Biomedicine forum, National Ph. D Student NBIC forum 2007, Hangzhou, China, October 22-25, 2007.
12. **Conference Session Chair**, BME 2010 Biomedical Engineering International Conference, Hong Kong, November 2-5, 2010.
13. **Symposium Session Chair**, the second International Symposium on Surface and Interface of Biomaterials, Hong Kong, Jan 4-6, 2010.
14. **Conference Session Chair**, WACBE World Congress on Bioengineering 2009, Hong Kong, July 26-29, 2009
15. **Conference Session Chair**, the 7th IEEE International Conference on Nanotechnology, Hong Kong., August 2-5, 2007.
16. **Forum judge for best paper**, Bioinformatics and Biomedicine forum, National Ph. D Student NBIC forum 2007, Hangzhou, China, October 22-25, 2007.
17. **Selection Panel Member**, Student Paper Competition Committee of IEEE the Engineering in Medicine and Biology Society (EMBS) Hong Kong Chapter, Hong Kong, August 2010.
18. **Life Membership for World Association for Chinese Biomedical Engineers (WACBE)**, 2006-current.