＊吳明忠副教授

所有發表期刊論文

1. Ming-Chung Wu*, Jyun-Sian Chih and Wei-Kang Huang, "Bismuth Doping Effect on TiO_2 Nanofibers for Morphological Change and Photocatalytic Performance", 2014, ***CrystEngComm***, 16, 10692-10699.
2. Ming-Chung Wu*, Min-Ping Lin, Shih-Wen Chen, Pei-Huan Lee, Jia-Han Li and Wei-Fang Su*, "Surface-enhanced Raman Scattering Substrate Based on Ag Coated Monolayer Sphere Array of SiO_2 for Organic Dye Detecting", 2014, ***RSC Advances***, 4, 10043-10050.
3. Ming-Chung Wu*, Hseuh-Chung Liao, Yu-Cheng Cho, Che-Pu Hsu, Ting-Han Lin, Wei-Fang Su, András Sápi, Ákos Kukovecz, Zoltán Kónya, Andrey Shchukarev, Anjana Sarkar, William Larsson, Jyri-Pekka Mikkola, Melinda Mohl, Géza Tóth, Heli Jantunen, Anna Valtanen, Mika Huuhtanen, Riitta L. Keiski and Krisztián Kordás, "Photocatalytic Activity of Nitrogen doped TiO_2-based Nanowires: A Photo-Assisted Kelvin Probe Force Microscopy Study", 2014, ***Journal of Nanoparticle Research***, 16(2143), 1-11.
4. Ming-Chung Wu*, I-Chun Chang, Wei-Kang Huang, Yu-Chieh Tu, Che-Pu Hsu and Wei-Fang Su, "Correlation between Palladium Chemical State and Photocatalytic Performance of TiO_2-Pd Based Nanoparticles", 2014, ***Thin Solid Films***, 570, 371-375.
5. Yu-Chieh Tu, Chun-Yu Chang, Ming-Chung Wu, Jing-Jong Shyue and Wei-Fang Su*, "$BiFeO_3$/YSZ Bilayer Electrolyte for Low Temperature Solid Oxide Fuel Cell", 2014, ***RSC Advances***, 4, 38, 19925-19931.
6. Che-Pu Hsu, Tsung-Wei Zeng, Ming-Chung Wu, Yu-Chieh Tu, Hsueh-Chung Liao and Wei-Fang Su*, "Hybrid Poly(3-hexyl thiophene):TiO_2 Nanorods Oxygen Sensor" 2014, ***RSC Advances***, 4, 44, 22926-22930.
7. Ming-Chung Wu*, Hsueh-Chung Liao, Yu-Cheng Cho, Geza Tóth, Yang-Fang Chen, Wei-Fang Su and Krisztián Kordás, "Photo-Kelvin Probe Force Microscopy for Photocatalytic Performance Characterization of Single Filament of TiO_2 Nanofiber Photocatalysts", **2013**, ***Journal of Materials Chemistry A***, 1, 5715-5720.
8. Hsueh-Chung Liao‡, Che-Pu Hsu‡, Ming-Chung Wu‡,Chun-Fu Lu and Wei-Fang Su*, "Conjugated Polymer/Nanoparticles Nanocomposites for High Efficient and Real-Time Volatile Organic Compounds Sensors", **2013,** ***Analytical Chemistry***, 85, 9305-9311. (‡ The authors contributed equally.)Ming-Chung Wu, Shih-Wen Chen, Jia-Han Li, Yi Chou, Jhih-Fong Lin, Yang-Fang Chen and Wei-Fang Su*, "Manipulation of

Extinction Spectra of P3HT/PMMA Medium Arrays on Silicon Substrate Containing Self-assembled Gold Nanoparticles", **2012**, ***Materials Chemistry and Physics***, 137, 61-68.

10. Ming-Chung Wu, Geza Tóth, András Sápi, Zoltán Kónya, Ákos Kukovecz, Wei-Fang Su and Krisztián Kordás*, "Synthesis and Photocatalytic Performance of Titanium Dioxide Nanofibers and The Fabrication of Flexible Composite Films From Nanofibers", **2012**, ***Journal of Nanoscience and Nanotechnology***, 12, 1421-1424.
11. Meng-Huan Jao, Hsueh-Chung Liao, Ming-Chung Wu and Wei-Fang Su, "Synthesis and Characterization of Wurtzite Cu_2ZnSnS_4 Nanocrystals", **2012**, ***Japanese Journal of Applied Physics***, 51, 10NC30.
12. Jarmo Kukkola, Melinda Mohl, Anne-Riikka Leino, Geza Tóth, Ming-Chung Wu, Andrey Shchukarev, Alexey Popov, Jyri-Pekka Mikkola, Janne Lauri, Markus Riihimäki, Jyrki Lappalainen, Heli Jantunen andKrisztián Kordás*, "Inkjet-printed Gas Sensors: Metal Decorated WO_3 Nanoparticles and Their Gas Sensing Properties", **2012**, ***Journal of Materials Chemistry***, 22, 17878-17886.
13. Shao-Chin Tseng, Chen-Chieh Yu, Dehui Wan, Hsuen-Li Chen,* Lon Alex Wang, Ming-Chung Wu, Wei-Fang Su, Hsieh-Cheng Han and Li-Chyong Chen, "Eco-friendly Plasmonic Sensors: Using The Photothermal Effect to Prepare Metal Nanoparticle-containing Test Papers for Highly Sensitive Colorimetric Detection",**2012,** ***Analytical Chemistry***, 84, 5140-5145.
14. Sheng-Hao Hsu, Ming-Chung Wu, Sharon Chen, Chih-Min Chuang, Shih-Hsiang Lin and Wei-Fang Su*, "Synthesis, Morphology and Physical Properties of Multi-walled Carbon Nanotube/Biphenyl Liquid Crystalline Epoxy Composites", **2012**, ***Carbon***, 50, 896-905.
15. Hsueh-Chung Liao, Ming-Chung Wu, Meng-Huan Jao, Chih-Min Chuang, Yang-Fang Chen and Wei-Fang Su*, "Synthesis, Optical and Photovoltaic Properties of Bismuth Sulfide Nanorods", **2012**,***CrystEngComm***, 14, 3645-3652.
16. Ming-Chung Wu, Jussi Tapio Hiltunen, András Sápi, Anna Avila, William Larsson, Hsueh-Chung Liao, Mika Huuhtanen, Géza Tóth, Andrey Shchukarev, Noémi Laufer, Akos Kukovecz, Zoltan Konya, Jyri-Pekka Mikkola, Riitta Keiski, Wei-Fang Su, Yang-Fang Chen, Heli Jantunen, Pulickel M Ajayan, Robert Vajtai* and Krisztián Kordás, "Nitrogen-doped Anatase Nanofibers Decorated with Noble Metal Nanoparticles for Photocatalytic Production of Hydrogen", **2011**, ***ACS Nano***, 5, 5025-5030..

17. Ming-Chung Wu, András Sápi, Anna Avila, Mária Szabó, Jussi Hiltunen, Mika Huuhtanen, Géza Tóth, Ákos Kukovecz, Zoltán Kónya, Riitta Keiski, Wei-Fang Su, Heli Jantunen and Krisztián Kordás*, "Enhanced Photocatalytic Activity of TiO_2 Nanofibers and Their Flexible Composite Films: Decomposition of Organic Dyes and Efficient H_2 Generation from Ethanol-water Mixture", **2011**, ***Nano Research,*** 4, 360-369.
18. Jia-Han Li, Shih-Wen Chen, Yi Chou, Ming-Chung Wu, Chun-Hway Hsueh* and Wei-Fang Su*, "Effects of Gold Film Morphology on Surface Plasmon Resonance Using Periodic P3HT:PMMA/Au Nanostructures on Silicon Substrate for Surface-enhanced Raman Scattering", **2011**, ***Journal of Physical Chemistry C***, 115, 24045-24053.
19. Niina Halonen, András Sápi, László Nagy, Róbert Puskás, Anne-Riikka Leino, Jani Mä klin, Jarmo Kukkola, Geza Tóth, Ming-Chung Wu, Hsueh-Chung Liao, Wei-Fang Su, Andrey Shchukarev, Jyri-Pekka Mikkola, Ákos Kukovecz, Zoltán Kónya and Krisztián Kordás, "Low-Temperature Growth of Multi-walled Carbon Nanotubes by Thermal CVD", **2011**, ***Physica Status Solidi (B) - Basic Solid State Physics,*** 248, 2500-2503.
20. Sharon Chen, Sheng-Hao Hsu, Ming-Chung Wu and Wei-Fang Su*, "Kinetics Studies on The Accelerated Curing of Liquid Crystalline Epoxy Resin/Multi-walled Carbon Nanotube Nanocomposites",**2011**, ***Journal of Polymer Science Part B: Polymer Physics***, 49, 301-309.
21. Ming-Chung Wu, Hsueh-Chung Liao, Yi Chou, Che-Pu Hsu, Wei-Che Yen, Chih-Min Chuang, Yun-Yue Lin, Chun-Wei Chen, Yang-Fang Chen* and Wei-Fang Su*, "Manipulation of Nanoscale Phase Separation and Optical Properties of P3HT/PMMA Polymer Blends for Photoluminescent Electron Beam Resist",**2010**, ***The Journal of Physical Chemistry B***, 114, 10277–10284.
22. Ming-Chung Wu, Yi-Jen Wu, Wei-Che Yen, Hsi-Hsing Lo, Ching-Fuh Lin and Wei-Fang Su*,"Correlation between Nanoscale Surface Potential and Power Conversion Efficiency of P3HT/TiO_2Nanorods Bulk Heterojunction Photovoltaic Devices", **2010**, ***Nanoscale***, 2, 1448–1454.
23. Ming-Chung Wu, Yi Chou, Chih-Min Chuang, Che-Pu Hsu, Chin-Feng Lin, Yang-Fang Chen* and Wei-Fang Su*, "High-sensitivity Raman Scattering Substrate Based on Au/La0.7Sr0.3MnO 3 Periodic Arrays", **2009**, ***ACS Applied Materials & Interface***, 1, 2484-2490.
24. Ming-Chung Wu, Hsueh-Chung Liao, Hsi-Hsing Lo, Sharon Chen, Yun-Yue Lin, Wei-Che Yen, Tsung-Wei Zeng, Chun-Wei Chen, Yang-Fang Chen and Wei-Fang Su*, "Nanostructured Polymer Blends (P3HT/PMMA): Inorganic

Titania Hybrid Photovoltaic Devices", **2009**, ***Solar Energy Materials and Solar Cells***, 93, 961-965.

25. Ming-Chung Wu, Hsi-Hsing Lo, Hsueh-Chung Liao, Sharon Chen, Yun-Yue Lin, Wei-Che Yen, Tsung-Wei Zeng, Yang-Fang Chen, Chun-Wei Chen and Wei-Fang Su*, "Using Scanning Probe Microscopy to Study The Effect of Molecular Weight of Poly(3-hexylthiophene) on The Performance of Poly(3-hexylthiophene):TiO_2 Nanorod Photovoltaic Devices", **2009**, ***Solar Energy Materials and Solar Cells***, 93, 869-873.

26. Ming-Chung Wu, Yun-Yue Lin, Sharon Chen, Hsueh-Chung Liao, Yi-Jen Wu, Chun-Wei Chen, Yang-Fang Chen* and Wei-Fang Su*, "Enhancing Light Absorption and Carrier Transport of P3HT by Doping Multiwall Carbon Nanotubes", **2009**, ***Chemical Physics Letters***, 468, 64-68**.**

27. Ming-Chung Wu, Chih-Min Chuang, Jhih-Fong Lin, Yu-Ching Huang, Yang-Fang Chen* and Wei-Fang Su*, "Nanopatterned Optical and Magnetic $La_{0.6}Ca_{0.4}MnO_3$ Arrays: Synthesis, Fabrication, and Properties", **2009***, **Journal of Materials Research***, 24(2), 394-403**.**

28. Yu-Ching Huang, Yu-Chia Liao, Shao-Sian Li, Ming-Chung Wu, Chun-Wei Chen and Wei-Fang Su*, "Study The Effect of Annealing Process on The Performance of P3HT/PCBM Photovoltaic Devices Using Scanning Probe Microscopy", **2009**, ***Solar Energy Materials and Solar Cells***, 93, 888-892.

29. Yu-Ching Huang, Shang-Yu Chuang, Ming-Chung Wu, Hsuen-Li Chen, Chun-Wei Chen and Wei-Fang Su*, "Quantitative Nanoscale Monitoring The Effect of Annealing Process on The Morphology and Optical Properties of P3HT/PCBM Thin Film Used in Photovoltaic Devices," **2009**, ***Journal of Applied Physics***, 106, 034506.

30. Ming-Chung Wu, Chih-Min Chuang, Yang-Fang Chen* and Wei-Fang Su*, "Fabrication and Optical Properties of Periodical Structures Based on A Water-developable and Tunable $La_{0.7}Sr_{0.3}MnO_3$ Resist,"**2008**, ***Journal of Materials Chemistry***, 18, 780-785.

31. Ming-Chung Wu, Chia-Hao Chang, His-Hsing Lo, Yi-Shen Lin, Yun-Yue Lin, Wei-Che Yen, Yang-Fang Chen, Chun-Wei Chen* and Wei-Fang Su*, "Nanoscale Morphology and Performance of Molecular-weight-dependent Poly(3-hexylthiophene)/TiO_2 Nanorods Hybrid Solar Cell", **2008**, ***Journal of Materials Chemistry***, 18, 4079-4102.

32. Ming-Chung Wu, Yi-Jen Wu, Yu-Ching Huang, Chih-Min Chuang, Kuo-Chung Cheng, Chin-Feng Lin, Yang-Fang Chen* and Wei-Fang Su*, "Surface Potential and Magnetic Properties of $La_{0.7}Sr_{0.3}MnO_3$Periodic Arrays

Fabricated by Direct Electron Beam Writing", **2008,** ***Journal of Applied Physics***, 104, 024517.

33. Chih-Tao Chien, Ming-Chung Wu, Hung-Hsien Yang, Jih-Jen Wu, Wei-Fang Su, Chao-Sung Lin, Yang-Fang Chen and Chun-Wei Chen*, "Polarization Dependent Confocal Raman Microscopy of an Individual ZnO Nanorod", **2008,** ***Applied Physics Letters***, 92, 223102.
34. Ming-Chung Wu, Chih-Min Chuang, His-Hsing Lo, Kuo-Chung Cheng, Yang-Fang Chen* and Wei-Fang Su*, "Surface Plasmon Resonance Enhanced Photoluminescence from Au Coated Periodic Arrays of CdSe Quantum Dots and Polymer Composite Thin Film", **2008**, ***Thin Solid Films***, 517, 863-866.
35. Ming-Chung Wu, Yu-Ching Huang and Wei-Fang Su*, "Silver Cofirability Differences between$Bi_{1.5}Zn_{0.92}Nb_{1.5}O_{6.92}$ and $Zn_3Nb_2O_8$", **2007**, ***Journal of the European Ceramic Society***, 27, 3017-3021.
36. Ming-Chung Wu, Ming-Kang Hsieh, Yu-Ching Huang, Cheng-Wei Yen, Welter Huang and Wei-Fang Su*, "Low Sintering $BaNd_2Ti_4O_{12}$ Microwave Ceramics Prepared by CuO Atomic Layer Coated Powder", **2007**, ***Journal of the European Ceramic Society***, 27, 2835-2839.
37. Yu-Ching Huang, Ming-Chung Wu, Tze-Hsuan Chang, Jean-Fu Kiang and Wei-Fang Su*, "Broadband DR Antenna Made of High-Q Ceramic", **2007**, ***Journal of the European Ceramic Society***, 27, 2841-2844.
38. Ming-Chung Wu, Stanislav Kamba, Viktor Bovtun and Wei-Fang Su*, "Comparsion of Microwave Dielectric Behavior Between $Bi_{1.5}Zn_{0.92}Nb_{1.5}O_{6.92}$ and $Bi_{1.5}ZnNb_{1.5}O_7$", **2006**, ***Journal of the European Ceramic Society***, 26, 1889-1893.
39. Ming-Chung Wu, Kuo-Tung Huang and Wei-Fang Su*, "Microwave Dielectric Properties of Doped $Zn_3Nb_2O_8$ Ceramics Sintered below 950°C and Their Compatibility with Silver Electrode", **2006**, ***Materials Chemistry and Physics***, 98, 406-409.
40. Ming-Chung Wu, Yu-Ching Huang and Wei-Fang Su*, "Siliver Cofirable $Bi_{1.5}Zn_{0.92}Nb_{1.5}O_{6.92}$Microwave Ceramics Containing CuO Based Dopants", **2006**, ***Materials Chemistry and Physics***, 100, 391-394.
41. Chih-Min Chuang, Ming-Chung Wu, Kuo-Chung Cheng, Yang-Fang Chen and Wei-Fang Su*, "High Intensity Fluorescence of Photoactivated Silver Oxide from Composite Thin Film with Periodic Array Structure", **2006**, ***Applied Physics Letters***, **89**, 061912.
42. Chih-Min Chuang, Ming-Chung Wu, Yu-Ching Huang, Yang-Fang Chen, Ching-Fuh Lin and Wei-Fang Su*, "Nanolithography Made from Dual

Function Water Based Spin-coatable LSMO Resist", **2006**, ***Nanotechnology***, 17, 4399-4004.