PUBLICATION LIST

SCI Publications

1. Chien-An Chen, Ting-Chung Kao, Shih-Hsiang Lin, Chun-Chih Ho,Shih-Huang Tung, Wei-Fang Su*, "Facile approach for rapid self-assembly of rod-coil block copolymers," **2018**, *Polymer* 139, 20-25.
2. Chun-Yu Chang, Chieh-Ping Wang, Rathinam Raja, Leeyih Wang, Cheng-Si Tsao, and Wei-Fang Su*, "High efficiency bulk heterojunction perovskite solar cell fabricated from one-step solution process using single solvent: synthesis and characterization of material and film formation mechanism," **2018**, *Journal of Materials Chemistry A*, 6, 4179-4188
3. Zhen-Hua Wang, Yen-Yu Chang, Jhih-Guang Wu, Chia-Yu Lin, Hsiao-Lung An, Shyh-Chyang Luo, Tang K Tang and Wei-Fang Su*, "Novel 3D neuron regeneration scaffolds based on synthetic polypeptide containing neuron cue," **2017** *Macromolecular Bioscience* (in press)
4. Meng-Huan Jao, Chun-Fu Lu, Pao-Yi Tai, Wei-Fang Su*, "Precise Facet Engineering of Perovskite Single Crystals by Ligand-Mediated Strategy," **2017**, *ACS Crystal Growth and Design*, 17, 5945-5952.
5. Ming-Chung Wu*, Tzu-Hao Lin, Shun-Hsiang Chan and Wei-Fang Su, "Improved Efficiency of Perovskite Photovoltaics Based on Ca-Doped Methlyammonium Lead Halide," **2017**, *Journal of the Taiwan Institute of Chemical Engineers*, 80, 695-700.
6. Ming-Chung Wu*, Wei-Cheng Chen, Shun-Hsiang Chan and Wei-Fang Su, "The Effect of Strontium and Barium Doping on Perovskite-Structured Energy Materials for Photovoltaic Applications," **2017**, *Applied Surface Science*, 429, 9-15.
7. Shun-Hsiang Chan, Ming-Chung Wu*, Kun-Mu Lee, Wei-Cheng Chen, Tzu-Hao Lin and Wei-Fang Su*, "Enhancing Perovskite Solar Cell Performance and Stability by Doping Barium in Methylammonium Lead Halide," **2017**, *Journal of Materials Chemistry A*, 5, 18044-18052.
8. Ming-Chung Wu*, Shun-Hsiang Chan, Tz-Feng Lin, Chun-Fu Lu and Wei-Fang Su*, "Detection of Volatile Organic Compounds Using Electrospun P3HT/PMMA Fibrous Films", **2017**, *Journal of the Taiwan Institute of Chemical Engineers*, 78, 552-560.
9. Chun-Yu Chang, Yu-Ching Huang, Cheng-Si Tsao,* Chien-An Chen, Chun-Jen Sud and Wei-Fang Su*, "Quantitative correlation of the effects of crystallinity and additives on nanomorphology and solar cell performance of isoindigo-based copolymers," **2017**, *Physical Chemistry Chemical Physics*, 19, 23515-23523.
10. Ming-Chung Wu,* Ching-Hsiang Chen, Wei-Kang Huang, Kai-Chi Hsiao, Ting-Han Lin, Shun-Hsiang Chan, Po-Yeh Wu, Chun-Fu Lu, Yin-Hsuan Chang, Tz-Feng Lin, Kai-Hsiang Hsu, Jen-Fu Hsu, Kun-Mu Lee, Jing-Jong Shyue, Krisztian Kordas and Wei-Fang Su "Improved Solar-Driven Photocatalytic Performance of Highly Crystalline Hydrogenated TiO2 Nanofibers with Core-Shell Structure" **2017,** *Scientific Reports.***7:40896**

11. Hsueh-Chung Liao, Peijun Guo, Che-Pu Hsu, Ma Lin, Binghao Wang, Li Zeng, Wei Huang, Wei-Fang Su, Michael J. Bedzyk, Michael. R. Wasielewski, Antonio Facchetti, Robert P. H. Chang, Mercouri G. Kanatzidis, Tobin J. Marks, "Enhanced Power Conversion Efficiency of Hot-Casted Large-Area Planar Perovskite Solar Cells / Modules with Controlled Chloride Incorporation," **2016**, *Advanced Energy Materials* 7, 1601660.
12. Andrew J. Yost, Artem Pimachev, Chun-Chih Ho, Seth B. Darling, Leeyih Wang, Wei-Fang Su, Yuri Dahnovsky, and TeYu Chien, "Coexistence of Two Electronic Nano-Phases on a $CH_3NH_3PbI_{3-x}Cl_x$ Surface Observed in STM Measurements," **2016,** *ACS Applied Materials and Interfaces*, 8 (42), 29110-29116.
13. Chun-Yu Chang, Yu-Ching Huang, Cheng-Si Tsao, and Wei-Fang Su*, "Formation mechanism and control of perovskite films from solution to crystalline phase studied by in-situ synchrotron scattering," **2016**, *ACS Applied Materials and Interfaces*, 8, 26712−26721.
14. Ming-Chung Wu, Shun-Hsiang Ckan, Meng-Huan Jao and Wei-Fang Su*, "Enhanced short-circuit current density of perovskite solar cells using Zn-doped TiO2 as electron transport layer," **2016**, *Solar Energy Materials and Solar Cells*, 157, 447-453.
15. Wei-Fang Su,* Chun-Chih Ho, Tzu-Hsiang Shih, Chen-Hua Wang, Chun-Hao Yeh, "Exceptional Biocompatibility of 3D Fibrous Scaffold for Cardiac Tissue Engineering Fabricated from Biodegradable Polyurethane Blended with Cellulose," **2016**, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 65(14), 703-711.
16. Meng-Huan Jao, Hseuh-Chung Liao, and Wei-Fang Su*, " Achieving High Fill Factor of Organic Solar Cells," **2016,** *Journal of Materials Chemistry A*, 4, 5784-5801.
17. Chen Wei Shih, Albert Chin, Chun Fu Lu, and Wei Fang Su, "Remarkably high mobility ultrathin-film metal-oxide transistor with strongly overlapped orbitals," **2016**, *Scientific Reports* 6, 19023.
18. Cheng-Ya Chu, Chun-Yu Chang, and Wei-Fang Su*," Low-Temperature Solution Processable n-i-p Perovskite Solar Cell," **2016**, *Japanese Journal of Applied Physics* 55, 04EA01.
19. Ying-Chih Lai, Bo-Wei Ye, Chun-Fu Lu, Chien-Tung Chen, Meng-Huan Jao, Wei-Fang Su, Wen-Yi Hung, Tai-Yuan Lin, and Yang-Fang Chen," Extraordinarily Sensitive and Low-Voltage Operational Cloth-Based Electronic Skin for Wearable Sensing and Multifunctional Integration Uses: A Tactile-Induced Insulating-to-Conducting Transition," **2016**, *Advanced Functional Materials* 26(8), 1286-1295.
20. Chun-Chih Ho, Shang-Jung Wu, Shih-Hsiang Lin, Seth B. Darling, Wei-Fang Su*, "Kinetically Enhanced Approach for Rapid and Tunable Self-Assembly of Rod‐Coil Block Copolymers," **2015**, *Macromolecular Rapid Communications 36*, 1329-1335.
21. Sin-Yi Chou, Chen-Chieh Yu, Yu-Ting Yen, Keng-Te Lin, Hsuen-Li Chen, Wei-Fang Su,"Romantic Story or Raman Scattering Rose Petals as Ecofriendly, Low-Cost Substrates for Ultrasensitive Surface-Enhanced Raman Scattering," **2015**, *Analytical Chemistry*, 87, 6017-6024**.**
22. Herman Lim, Chi-Yang Chao, Wei-Fang Su, "Modulating Crystallinity of Poly(3-hexylthiophene) via Microphase Separation of Poly(3-hexylthiophene)-polyisoprene

Block Copolymers," **2015**, *Macromolecules*, 48 (10), 3269-3281.

23. Hsueh-Chung Liao, Cheng-Si Tsao, Meng-Huan Jao, Jing-Jong Shyue, Che-Pu Hsu, Yu-Ching Huang, Kuo-Yo Tian, Charn-Yin Chen, Chun-Jen Su, and Wei-Fang Su*, "Hierarchical I-P and I-N Porous Heterojunction in Planar Perovskite Solar Cells," **2015**, *Journal of Materials Chemistry A*, 3, 10526-10535.
24. Chun-Yu Chang, Cheng-Ya Chu, Yu-Ching Huang, Chien-Wen Huang, Shuang-Yuan Chang, Chien-An Chen, Chi-Yang Chao, and Wei-Fang Su*, " Tuning Perovskite Morphology by Polymer Additive for High Efficiency Solar Cell," **2015**, *ACS Applied Materials & Interfaces*,7 (8), 4955-4961.
25. Y-C. Tu, H. Lim, C-Y. Chang, J-J. Shyue, W-F. Su*, "Enhancing Performance of P3HT: TiO2 Solar Cells Using Doped and Surface Modified TiO2 Nanorods," **2015**, *Journal of Colloid and Interface Science*,448, 315-319.
26. Jhih-Fong Lin, Melinda Mohl, Mikko Nelo, Geza Toth, ´Akos Kukovecz, Zolt´an K´onya, Srividya Sridhar, Robert Vajtai, Pulickel M. Ajayan, Wei-Fang Su, Heli Jantunena and Krisztian Kordas, "Facile synthesis of nanostructured carbon materials over RANEY® nickel catalyst films printed on Al2O3 and SiO2 substrates," **2015**, *Journal of Materials Chemistry C*, 3, 1823-1829.
27. Jhih-Fong Lin, Jarmo Kukkola, Teemu Sipola, Dilip Raut, Ajaikumar Samikannu, Jyri-Pekka Mikkola, Melinda Mohl, Geza Toth, Wei-Fang Su, Tomi Laurilae and Krisztian Kordas, "Trifluoroacetylazobenzene for optical and electrochemical detection of amines," **2015**, *Journal of Materials Chemistry A*, 3, 4687-4694.
28. Po-Hsuen Chen, Hsueh-Chung Liao, Sheng-Hao Hsu, Rung-Shu Chen, Ming-Chung Wu, Yi-Fan Yang, Chau-Chung Wu, Min-Huey Chen and Wei-Fang Su*, "A novel polyurethane/cellulose fibrous scaffold for cardiac tissue engineering," **2015**, *RSC Advances*, 5, 6932-6939.
29. Cheng-Si Tsao, Chih-Min Chuang, Chun-Yu Chen, Yu-Ching Huang, Hou-Chin Cha, Fan-Hsuan Hsu, Charn-Ying Chen, Yu-Chieh Tu, and Wei-Fang Su*, "Reaction Kinetics and Formation Mechanism of TiO2 Nanorods in Solution: An Insight into Oriented Attachment," **2014**, *Journal of Physical Chemistry C*, 118, 26332-26340.
30. Hsueh-Chung Liao, Po-Hsuen Chen, Robert P. H. Chang and Wei-Fang Su*, "Morphological Control Agent in Ternary Blend Bulk Heterojunction Solar Cells," **2014**, *Polymers*, 6, 2784-2802.
31. 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.
32. Yu-Chieh Tu, Chun-Yu Chang, Ming-Chung Wu, Jing-Jong Shyue and Wei-Fang Su*, "BiFeO3/YSZ bilayer electrolyte for low temperature solid oxide fuel cell," **2014**, *RSC Advances*, 4 (38), 19925-19931.
33. Chun-Chih Ho, Chien-An Chen, Chun-Yu Chang, Michael Sternberg, Seth B. Darling, and Wei-Fang Su* , " Isoindigo-Based Copolymers for Polymer Solar Cells with Efficiency Over

7%," **2014**, *Journal of Materials Chemistry A*, 2 (21), 8026-8032.

34. Yun-Yuan Tai, Sheng-Hao Hsu, Rung-Shu Chen, Wei-Fang Su*, Min-Huey Chen* "Liquid crystalline epoxy nanocomposite material for dental application," **2014**, *Journal of the Formosan Medical Association*, 114, 46-51.
35. Chieh-Ming Tsai, Sheng-Hao Hsu, Chun-Chih Ho, Yu-Chieh Tu, Hsin-Chien Tsai, Chung-An Wang, Min-Huey Chen and Wei-Fang Su* , "High refractive index transparent nanocomposite by in-situ polymerization," **2014**, *Journal of Materials Chemistry C*, 2(12), 2251-2258.
36. Hsueh-Chung Liao, Cheng-Si Tsao, Yu-Ching Huang, Meng-Huan Jao, K.-Y. Tien, C.-M. Chuang, C.-Y. Chen, C.-J. Su, U-Ser Jeng, Yang-Fang Chen, and Wei-Fang Su*, "Insights into Solvent Vapor Annealing on the Performance of Bulk Heterojunction Solar Cells by a Quantitative Nanomorphology Study," **2014**, *RSC Advances*, 4(12), 6246-6253.
37. Ying-Chih Lai, Yi-Chuan Huang, Tai-Yuan Lin, Yi-Xian Wang, Chun-Yu Chan, Yaoxuan Li, Tzu-Yao Lin, Bo-Wei Ye, Ya-Ping Hsieh, Wei-Fang Su, Ying-Jay Yang, and Yang-Fang Chen, "Stretchable Organic Memory: Toward Learnable and Digitized Stretchable Electronic Applications,"**2014**, *NPG Asia Materials*, 6, e87.
38. Yi-Huan Lee, Yi-Lung Yang, Wei-Che Yen, Wei-Fang Su, Chi-An Dai, " Solution Self-Assembly and Phase Transformations of Form II Crystals in Nanoconfined Poly (3-hexyl thiophene) Based Rod-Coil Block Copolymers," **2014**, *Nanoscale* 6, 2194-2200.
39. Wan-Yu Tseng, Sheng-Hao Hsu, Chieh-Hsiun Huang, Yu-Chieh Tu, Shao-Chin Tseng, Hsuen-Li Chen, Min-Huey Chen, Wei-Fang Su, Li-Deh Lin, " Low pressure radio-frequency oxygen plasma induced oxidation of titanium-surface characteristics and biological effects," **2013**, *Plos One*, 8(12) e84898.
40. Ming-Chung Wu, Hsueh-Chung Liao, Yu-Cheng Cho, Che-Pu Hsu, Ting-Han Lin, Wei-Fang Su, Andras Sapi, Akos Kukovecz, Zoltan Konya, Andrey Shchukarev, Anjana Sarkar, William Larsson, Jyri-Pekka Mikkola, Melinda Mohl, Geza Toth, Heli Jantunen, Anna Valtanen, Mika Huuhtanen, Riitta L. Keiski and Krisztian Kordas, "Photocatalytic Activity of Nitrogen doped TiO_2-based Nanowires：A Photo-Assisted Kelvin Probe Force Microscopy Study," **2013**, *Journal of Nanoparticle Research*, 16:2143-2154.
41. 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," **2013**, *RSC Advances* 4, 10043-10050.
42. Charn-Ying Chen, Cheng-Si Tsao, Yu-Ching Huang, Hung-Wei Liu, Wen-Yen Chiu, Chih-Min Chuang, U-Ser Jeng, Chun-Jen Su, Wei-Ru Wu, Wei-Fang Su, Lee-yih Wang, "Mechanism and control of the structural evolution of a polymer solar cell from a bulk heterojunction to a thermally unstable hierarchical structure," **2013**, *Nanoscale*, 5 (16), 7629-7638.
43. Hsueh-Chung Liao, Che-Pu Hsu, Ming-Chung Wu, Chun-Fu Lu, Wei-Fang Su*, "Conjugated Polymer/ Nanoparticles Nanocomposites for High Efficient and Real-Time Volatile Organic Compounds Sensors," **2013**, *Analytical Chemistry* 85, 9305-9311.
44. Hsueh-Chung Liao, Chun-Chih Ho, Chun-Yu Chang, Meng-Huan Jao, Seth B. Darling and

Wei-Fang Su*, "Additives for morphology control in high-efficiency organic solar cell," **2013**, *Materials Today*, 9(18), 326-336.

45. Chun-Chih Ho, Sheng-Yung Chang, Tzu-Chia Huang, Chien-Ann Chen, Hsueh-Chung Liao, Yang-Fang Chen, and Wei-Fang Su*, "Synthesis, Characterization and Photovoltaic Properties of Poly(cyclopentadithiophene-alt-isoindigo)," **2013**, *Polymer Chemistry*, 4, 5351-5360.
46. Hsueh-Chung Liao, Cheng-Si Tsao, Yu-Tsun Shao, Sheng-Yung Chang,Yu-Ching Huang, Chih-Min Chuang, Tsung-Han Lin, Charn-Ying Chen, Chun-Jen Su, U-Ser Jeng, Yang-Fang Chen, and Wei-Fang Su* , " Bi-hierarchical nanostructures of donor-acceptor copolymer and fullerene for high efficient bulk heterojunction solar cells," **2013**, *Energy & Environmental Science* 6, 1938-1948.
47. Shih-Hsiang Lin, Shang-Jung Wu, Chun-Chih Ho and Wei-Fang Su*, "Rational Design of Versatile Self-Assembly Morphology of Rod-Coil Block Copolymer," **2013**, *Macromolecules*, 46, 2725-2732.
48. Sheng-Hao Hsu, Yuan-Ling Chang, Yu-Chieh Tu, Chieh-Ming Tsai and Wei-Fang Su*, "Omniphobic Low Moisture Permeation Transparent Polyacrylate/silica Nanocomposite," **2013**, *ACS Applied Materials and Interface*, 5, 2991-2998.
49. Chia-Sheng Lai, Chun-Chih Ho, Wei-Fang Su, Hsin-Lung Chen, "Phase Behavior of the Blend of Rod-Coil Diblock Copolymer and the Corresponding Coil Homopolymer," **2013**, *Macromolecules*, 46(6), 2249-2257.
50. Yu-Ching Huang, Hou-Chin Chia, Chih-Min Chuang, Cheng-Si Tsao, Charn-Ying Chen and Wei-Fang Su*, "Facile Hot Solvent Vapor Annealing for High Performance Polymer Solar Cell Using Spray Process," **2013,** *Solar Energy Materials and Solar Cells*, 114, 24-30.
51. Ming-Chung Wu, Hsueh-Chung Liao, Yu-Cheng Cho, Yang-Fang Chen, Wei-Fang Su, Krisztian Kordas, "Photo-Kelvin Probe Force Microscopy for Photocatalytic Performance Characterization of Single Filament of TiO2 Nanofiber Photocatalysts," **2013**, Journal of Materials Chemistry A, 1, 5715-5720.
52. Ying-Chieh Hung, Chi-Yang Chao, Chi-An Dai, Wei-Fang Su, Shiang-Tai Lin, "Band Gap Engineering via Controlling Donor-Acceptor Compositions in Conjugated Copolymers", **2013**, *Journal of Physical Chemistry B*. 117 (2), 690-696.
53. Sheng-Yung Chang, Hsueh-Chung Liao, Yu-Tsun Shao, Yu-Ming Sung, Sheng-Hao Hsu, Chun-Chih Ho, Wei-Fang Su* and Yang-Fang Chen, "Enhancing the Efficiency of Low Bandgap Conducting Polymer Bulk Heterojunction Solar Cell Using P3HT as a Morphology Control Agent," **2013** *Journal of Materials Chemistry A*. 1, 2447-2452.
54. Jhih-Fong Lin, Guang-Yao Tu, Chun-Chih Ho, Wei-Che Yen, Sheng-Hao Hsu, Chun-Yu Chang, Yang-Fang Chen, Wei-Fang Su*, "Molecular Structure Effect of Pyridine Based Surface Ligand on the Performance of P3HT:TiO2 Hybrid Solar Cell", **2013**, *ACS Applied Materials & Interfaces*. 5(3), 1009-1016.
55. Jhih-Fong Lin, Wei-Che Yen, Chun-Yu Chang, Yang-Fang Chen and Wei-Fang Su*, "Enhancing organic: inorganic hybrid solar cell efficiency using rod-coil diblock polymer additive", **2013**, *Journal of Materials Chemistry A*, 1, 665-670.

56. Hsueh-Chung Liao, Meng-Huan Jao, Jing-Jong Shyue, Yang-Fang Chen and Wei-Fang Su*, "Facile Synthesis of Wurtzite Copper-Zinc-Tin-Sulfide Nanocrystals from Plasmonic Djurleite Nuclei", **2013**, *Journal of Materials Chemistry A*, 1(2), 337-341.
57. Chiang-Ting Chen, Fang-Chi Hsu, Yun-Ming Sung, Hsueh-Chung Liao, Wei-Che Yen, Wei-Fang Su, Yang-Fang Chen, "Effects of metal-free conjugated oligomer as a surface modifier in hybrid polymer/ZnO solar cells," **2012** *Solar Energy Materials and Solar Cells*, 107, 69-74.
58. Meng-Huan Jao, Hsueh-Chung Liao, Ming-Chung Wu, Wei-Fang Su*, " Synthesis and Characterization of Wurtzite Cu2ZnSnS4 Nanocrystals", **2012**, *Japanese Journal of Applied Physics*, 51, 10NC30.
59. 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(1), 61-68.
60. Sheng-Hao Hsu, Rung-Shu Chen, Yuan-Ling Chang, Min-Huey Chen, Kuo-Chung Cheng, Wei-Fang Su*, "Biphenyl liquid crystalline epoxy resin as a low-shrinkage resin-based dental restorative nanocomposite", **2012** *Acta Biomaterialia*, 8, 4151-4161.
61. 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.
62. Chi-Yang Chao, Chung-Hsiang Chao, Lung-Pin Chen,Ying-Chieh Hung, Shiang-Tai Lin, Ching-Fuh Lin, Wei-Fang Su, "Band Structure Engineering for Low Band Gap Polymers Containing Thienopyrazine", **2012**, *Journal of Materials Chemistry*, 22(15), 7331-7341.
63. Jus-fong Yu, Tsung-Lung Shen, Wei-Hsiang Weng, Yu-Chen Huang, Ching-I Huang, Wei-Fang Su, Syang-Peng Rwei, Kuo-Chuan Ho, and Lee-yih Wang, "Molecular design of interfacial modifiers for polymer-inorganic hybrid solar cells", **2012** Advanced Energy Materials, 2, 245-252.
64. Yu-Ching Huang, Gregory C. Welch, Guillermo C. Bazan, Michael L. Chabinyc and Wei-Fang Su* , "Self-vertical phase separation study of nanoparticle/polymer solar cells by introducing fluorinated small molecule", **2012** *Chemical Communications*, 48 (58), 7250 -7252.
65. Yu-Ching Huang, Cheng-Si Tsao, Chih-Min Chuang, Chia-Hsin Lee, Fan-Hsuan Hsu, Hou-Chin Cha, Charn-Ying Chen, Tsung-Han Lin, Chun-Jen Su, U-Ser Jeng, Wei-Fang Su*, "Small and Wide Angle X-ray Scattering Characterization of Bulk Heterojunction Polymer Solar Cells with Different Fullerene Derivatives", **2012** *Journal of Physical Chemistry C*, 116, 10238-10244.
66. Yu-Chieh Tu, Jhin-Fong Lin, Wei-Chun Lin, Chi-Ping Liu, Jing-Jong Shyue and Wei-Fang Su*, "Improving Electron Mobility of TiO2 Nanorods for Enhanced Efficiency of Polymer-Nanoparticle Solar Cell," **2012** CrystEngComm, 14, 4772-4776.

67. Chen-Chieh Yu, Kuan-Hung Ho, Hsuen-Li Chen, Shang-Yu Chuang, Shao-Chin Tseng, and Wei-Fang Su,“ Using the nanoimprint-in-metal method to prepare corrugated metal structures for plasmonic biosensors through both surface plasmon resonance and index-matching effects,” **2012** *Biosensors and Bioelectronics* 33, 267-273.
68. Hsueh-Chung Liao, Chia-Hsin Lee, Yi-Chen Ho, Meng-Huan Jao, Chieh-Ming Tsai, Chih-Min Chuang, Jing-Jong Shyue, Yang-Fang Chen and Wei-Fang Su*, “Diketopyrrolopyrrole-based oligomer modified TiO2 nanorods for air-stable and all solution processed poly(3-hexylthiophene):TiO2 bulk heterojunction inverted solar cell”, **2012**, *Journal of Materials Chemistry*, 22, 10589.
69. Shih-Hsiang Lin, Chun-Chih Ho and Wei-Fang Su*, “Cylinder-to-Gyroid Phase Transition in Rod-Coil Diblock Copolymer”, **2012**, *Soft Matter* 8(18), 4890-4893.
70. Hsueh-Chung Liao, Cheng-Si Tsao, Tsung-Han Lin, Meng-Huan Jao, Chih-Min Chuang, Sheng-Yong Chang, Yu-Ching Huang, Yu-Tsun Shao, Charn-Ying Chen, Chun-Jen Su, U-Ser Jeng, Yang-Fang Chen, and Wei-Fang Su*, “Nanoparticle Tuned Self-Organization of Bulk Heterojunction Hybrid Solar Cell with Enhanced Performance”, **2012**, *ACS Nano* 6(2), 1657-1666.
71. 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.
72. Chun-Chih Ho, Yu-Cheng Liu, Shih-Hsiang Lin, and Wei-Fang Su*,“Synthesis, Morphology, Optical and Electrochemical Properties of Poly(3-hexylthiophene)-b-Poly(3-thiophene hexylacetate)”, **2012**, *Macromolecules*, 45, 813-820.
73. Jhih-Fong Lin, Wei-Ben Wang, Chun-Chih Ho, Jwo-Huei. Jou, Yang-Fang Chen, Wei-Fang Su*, “Enhancing P3HT/TiO2 Hybrid Photovoltaic Performance by Incorporating High Surface Potential Silica Nanodots into Hole Transport Layer”, **2012**, *Journal of Physical Chemistry C* 116, 1955-1960.
74. 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(3), 896-905.
75. Yun-Ming Sung, Chiang-Ting Chen, Fang-Chi Hsu, Wei-Fang Su and Yang-Fang Chen, “Enhanced Photocurrent and Stability of Inverted Polymer/ZnO-nanorod Solar Cells by 3-Hydroxyflavone Additive”, **2012**, Solar Energy Materials and Solar Cells, 98, 103-109.
76. Yen-Hui Chan, Tsung-Wei Huang, Ya-Shuan Chou, Sheng-Hao Hsu, Wei-Fang Su* , Pei-Jen Lou, Tai-Horng Young, “Formation of post-confluence structure in human parotid gland acinar cells on PLGA through regulation of E-cadherin,”, **2012**, *Biomaterials* 33, 464-472.
77. Ming-Chung Wu, Geza Tóth, András Sápi, Zoltán Kónya, Á kos 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.
78. Chun-Jie Chang, Yi-Huan Lee, Hsin-Lung Chen, Chien-Hung Chiang, Hsiu-Fu Hsu,

Chun-Chih Ho, Wei-Fang Su and Chi-An Dai, " Effect of rod-rod interaction on self-assembly behavior of ABC pi-conjugated rod-coil-coil triblock copolymers", **2011**, *Journal of Polymer Science Part A-Polymer Chemistry*, 49, 2325-2338.

79. Tsung-Wei Zeng, Chun-Chih Ho, Yu-Chieh Tu, Guan-Yao Tu, Lee-Yih Wang and Wei-Fang Su*, "Correlating interface heterostructure, charge recombination and device efficiency of poly(3-hexyl thiophene):TiO2 nanorod solar cell", **2011**, *Langmuir* 27, 15255-15260.
80. Jia-Han Li, Shih-Wen Chen, Chou Yi, 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.
81. 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, Á kos Kukovecz, Zoltán Kónya, Krisztián Kordás, "Low-temperature growth of multi-walled carbon nanotubes by thermal CVD", **2011**, *Physica Status Solidi (b)*, 248, 2500-2503.
82. Yun-Ming Sung, Fang-Chi Hsu, Di-Yan Wang, I.-Sheng Wang, Chia-Chun Chen, Hsueh-Chung Liao, Wei-Fang Su and Yang-Fang Chen, "Enhanced charge extraction in inverted hybrid photovoltaic cells assisted by graphene nanoflakes", **2011**, *Journal of Materials Chemistry* 21(43) 17462-17467.
83. Shang-Yu Chuang, Chen-Chieh Yu, Hsuen-Li Chen n, Wei-Fang Su, Chun-Wei Chen, "Exploiting optical anisotropy to increase the external quantum efficiency of flexible P3HT:PCBM blend solar cells at large incident angles", **2011**, *Solar Energy Materials & Solar Cells* 95, 2141-2150.
84. Yi-Huan Lee, Wei-Che Yen, Wei-Fang Su, Chi-An Dai, "Self-Assembly and Phase Transformations of π-Conjugated Block Copolymers that Bend and Twist：From Rigid-Rod Nanowires to Highly Curvaceous Gyroids", **2011**, *Soft Matter* 7, 10429-10442.
85. Hsueh-Chung Liao, Cheng-Si Tsao, Tsung-Han Lin, Chih-Min Chuang, Charn-Ying Chen, U-Ser Jeng, Chiu-Hun Su, Yang-Fang Chen, Wei-Fang Su*, "Quantitative Nanoorganized Structural Evolution for a High Efficiency Bulk Heterojunction Polymer Solar Cell ", **2011**, *Journal of the American Chemical Society*, 133, 13064-13073.
86. 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.
87. Yu-Hong Lin, Po-Ching Yang, Jing-Shun Huang, Guo-Dong Huang, Ing-Jye Wang, Wen-Hao Wu, Ming-Yi Lin, Wei-Fang Su, Ching-Fuh Lin, "High-efficiency inverted polymer solar cells with solution-processed metal oxides", **2011**, *Solar Energy Materials & Solar Cells* 95, 2511-2515.

88. Tsung-Wei Zeng, I-Shuo Liu, Kuo-Tung Huang, Hsuieh-Chung Liao, Chih-Tao Chien, Daniel Kwan-Pang Wong, Chun-Wei Chen, Jih-Jen Wu, Yang-Fang Chen and Wei-Fang Su*, "Effects of bifunctional linker on the optical properties of ZnO nanocolumn-linker-CdSe quantum dots heterostructure," **2011**, *Journal of Colloid and Interface Science* 358, 323-328.
89. Yu-Ching Huang, Jui-Hung Hsu, Yu-Chia Liao, Wei-Che Yen, Shao-Sian Li, Shiang-Tai Lin, Chun-Wei Chen and Wei-Fang Su*, "Employing an amphiphilic interfacial modifier to enhance the performance of a poly(3-hexyl thiophene)/TiO2 hybrid solar cell," **2011**, *Journal of Materials Chemistry* 21 (12), 4450-4456.
90. 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.
91. Yen, Wei-Che, Lee, Yi-Huan, Lin, Jhih-Fong, Dai, Chi-An, Jeng, U-Ser, Su, Wei-Fang*, "Effect of TiO2 Nanoparticles on Self-Assembly Behaviors, Optical and Photovoltaic Properties of P3HT-b-P2VP Block Copolymer," **2011** *Langmuir* 27(1), 109-115.
92. K. Kordas, M-C Wu, M. Huuhtanen, A. Sapi, Z. Konya, G. Toth, R. Keiski, A. Avila, J. T. Hiltunen, H. Jantunen, W-F Su, A. Kukovecz, "Enhanced photocatalytic activity of TiO2 nanofibers and their flexible composite films：Decomposition of organic dyes and efficient H2 generation from ethanol-water mixture, " **2011** *Nano Research*, 4(4), 360-369.
93. Chuang, Chia-Hao, Lin, Yun-Yue, Tseng, Yun-Heng, Chu, Tsung-Hung, Lin, Chih-Cheng, Su, Wei-Fang and Chun-Wei Chen, "Nanoscale Morphology Control of Polymer/TiO2 Nanocrystal Hybrids: Photophysics, Charge Generation, Charge Transport, and Photovoltaic Properties," **2010** *Journal of Physical Chemistry C*, 114, 18717-18724.
94. Shao-Sian Li, Yun-Yue Lin, Wei-Fang Su and Chun-Wei Chen, "Polymer/Metal Oxide Nanocrystals Hybrid Solar Cells," **2010** *IEEE Journal of Selected Topics in Quantum Electronics*, 16(6), 1635-1640.
95. Lee, WH; Chuang, SY; Chen, HL, W.F. Su and C.H. Lin, "Exploiting optical properties of P3HT:PCBM films for organic solar cells with semitransparent anode," **2010** *Thin Solid Films* 518(24), 7450-7454.
96. Lee, CY; Lin, MY; Wu, WH, C Y Lee, M Y Lin, W H Wu, J Y Wang, Y Chou, W F Su, Y F Chen and C F Lin, "Flexible ZnO transparent thin-film transistors by a solution-based process at various solution concentrations," **2010** *Semiconductor Science and Technology* 25(10), 105008.
97. Kuo-Chung Cheng, Yuan-Yuan Su, Tsu-Hwang Chuang,Wenjeng Guo, and Wei-Fang Su, "Kinetic Model of Hyperbranched Polymers Formed by Self-Condensing Vinyl or Self-Condensing Ring-Opening Polymerization of AB MonomersActivated by Stimuli with Different Reactivities," **2010** *Macromolecules* 43, 8965-8970.
98. Tsung-Wei Zeng, I-Shuo Liu, Fang-Chi Hsu, Kuo-Tung Huang, Hsuieh-Chung Liao, and Wei-Fang Su*, "Effects of bifunctional linker on the performance of P3HT/CdSe quantum dot-linker-ZnO nanocolumn photovoltaic device," **2010** *Optics Express.* 18, A357-365.
99. Herman Lim, Kuo-Tung Huang, Wei-Fang Su and Chi-Yang Chao, "Facile Syntheses,

Morphologies, and Optical Absorptions of P3HT Coil-Rod-Coil Triblock Copolymers, ” **2010**, *Journal of Polymer Science: Part A: Polymer Chemistry* 48, 3311-3322.

100. 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**, *Journal of Physical Chemistry B.* 114, 10277–10284.
101. 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/TiO2 Nanorod Bulk Heterojunction Photovoltaic Devices, ” **2010**, Nanoscale 1448-1454.
102. Chun-Yu Lee, Jing-Shun Huang, Sheng-Hao Hsu, Wei-Fang Su, and Ching-Fuh Lin, “Characteristics of n-type ZnO nanorods on top of p-type poly(3-hexylthiophene) heterojunction by solution-based growth, ” **2010**, *Thin Solid Films* 518(21), 6066-6070
103. Chun-Yu Lee, Jen-Yi Wang Yi-Chou, Meng-Yueh Liu, Wei-Fang Su, Yang-Fang Chen and Ching-Fuh Lin, “Enhanced ultraviolet electroluminescence from ZnO nanowires in TiO2/ZnO coaxial nanowires/Poly(3,4-ethylenedioxythiophene)-poly(styrene-sulfonate) heterojunction, ” **2010**, *Journal of Applied Physics* 107, 034310.
104. Yu-Ching Huang, Wei-Che Yen, Yu-Chia Liao, Ya-Chien Yu, Cheng-Chih Hsu, Mei-Lin Ho, Pi-Tai Chou and Wei-Fang Su*, “Band gap aligned conducting interface modifier enhances the performance of thermal stable polymer-TiO2 nanorod solar cell, ” **2010**, *Applied Physics Letters* 96, 123501.
105. Chien-Chih Lin, Sheng-Hao Hsu, Yuan-Ling Chang and Wei-Fang Su*, “Transparent Hydrophobic Durable Low Moisture Permeation Poly(fluoroimide acrylate)/SiO2 Nanocomposite from Solventless Photocurable Resin System, ” **2010**, *Journal of Materials Chemistry* 20, 3084-3091.
106. Y.Galagan, Sheng-Hao Hsu, and Wei-Fang Su*, “Monitoring time and temperature by methylene blue containing polyacrylate film, ” **2010**, *Sensors & Actuators: B. Chemical* 144, 49-55.
107. Kuo-Chung Cheng, Tsu-Hwang Chuang, Teh-Hua Tsai, Wenjeng Guo and Wei-Fang Su, “First shell substitution effects on hyperbranched polymers formed from monomers A(2) and B-3 with end-capping molecules, ” **2009**, *European polymer journal* 45(10), 2942-2950.
108. C. Y. Lee, J. Y. Wang, Y. Chou, C. L. Cheng, C. H. Chao, S. C. Shiu, S. C. Hung, J. J. Chao, M. Y. Liu, W. F. Su, Y. F. Chen and C. F. Lin, “White-light electroluminescence from ZnO nanorods/polyfluorene by solution-based growth, ” **2009**, *Nanotechnology* 20, 425202.
109. Joseph Lik Hang Chau, Hsien-Wen Liu and Wei-Fang Su, “Fabrication of hybrid surface-modified titania–epoxy nanocomposite films, ” **2009**, *Journal of Physics and Chemistry of Solids* 70, 1385–1389.
110. C. W. Liang, W. F. Su*, L. Y. Wang*, “Enhancing the photocurrent in poly(3-hexylthiophene)/[6,6]-phenyl C61 butyric acid methyl ester bulk heterojunction solar

cells by using poly(3-hexylthiophene) as a buffer layer, " **2009**, *Applied Physics Letters* 95,133303 and 219902 .

111. 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/La0.7Sr0.3MnO3 Periodic Arrays, " **2009**, *ACS Applied Materials & Interfaces* 1(11), 2484-2490.
112. Kotcherlakota Aravind, Ya-Wen Su, I-Lin Ho, Cen-Shawn Wu, Kuei-Shu Chang-Liao, Wei-Fang Su, Kuei-Hsien Chen, Li-Chyong Lin Chen and Chii-Dong Chen, "Coulomb blockade behavior in an indium nitride nanowire with disordered surface states," **2009**, *Applied Physics Letters* 95, 092110.
113. Ya-Wen Su, Kotcherlakota Aravind, Cen-Shawn Wu, Watson Kuo, Kuei-Hsien Chen, Li-Chyong Lin Chen, Kuei-Shu Chang-Liao, Wei-Fang Su and Chii-Dong Chen, "Magnetoresistance fluctuations in a weak disorder indium nitride nanowire, " **2009**, *Journal of Physics D: Applied Physics* 42, 185009.
114. Wei-Che Yen, Bikash Pal, Jye-Shane Yang, Ying-Chieh Hun4, Shiang-Tai Lin, Chi-Yang Chao and Wei-Fang Su*, "Synthesis and Characterization of Low Bandgap Copolymers based on Indenofluorene and Thiophene Derivative," **2009**, *Journal of Polymer Science Part A-Polymer Chemistry* 47, 5044-5056.
115. Tsung-Wei Zeng, Fang-Chi Hsu, Yu-Chieh Tu, Tsung-Han Lin and Wei-Fang Su*, "Kelvin Probe Force Microscopy Study on Hybrid P3HT:Titanium Dioxide Nanorod Materials," **2009**, *Chemical Physics Letters*, 479, 105-108.
116. Shang-Yu Chuang, Hsuen-Li Chen, Wen-Hao Lee, Yu-Ching Huang, Wei-Fang Su, Wei-Ming Jen and Chun-Wei Chen, "Regioregularity effects in the chain orientation and optical anisotropy of composite polymer/fullerene films for high-efficiency, large-area organic solar cells," **2009**, *Journal of Materials Chemistry*, 19(31), 5554-5560.
117. 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.
118. Chun-Chih Ho, Yi-Huan Lee, Chi-An Dai, Rachel Segalman, Wei-Fang Su*, "Synthesis and Self-Assembly of Poly(diethylhexyloxy-p-phenylenevinylene)-b-poly(methyl methacrylate) Rod-Coil Block Copolymers," **2009**, *Macromolecules*, 42(12), 4208-4219.
119. Ying-Chieh Hung, Jyh-Chiang Jiang, Chi-Yang Chao, Wei-Fang Su, Shiang-Tai Lin*, "Theoretical Study on the Correlation between Band Gap, Bandwidth, and Oscillator Strength in Fluorene-based Donor-Acceptor Conjugated Copolymers," **2009**, *Journal of Physical Chemistry B*, 113, 8268-8277.
120. 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):TiO2 Nanorod

Photovoltaic Devices", **2009**, *Solar Energy Materials and Solar Cells*, 93, 869-873.

121. Tsung-Wei Zeng, Hsi-Hsing Lo, Chia-Hao Chang, Yun-Yue Lin, Chun-Wei Chen and Wei-Fang Su*, "Hybrid Poly (3-hexylthiophene) / Titanium Dioxide Nanorods Material for Solar Cell Applications," **2009**, *Solar Energy Materials and Solar Cells*, 93, 952-957.
122. 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.
123. 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.
124. Chien-Chih Lin, Kuo-Hsin Chang, Keng-Ching Lin, Wei-Fang Su*, "In-Situ Probe Nanophase Transition in Nanocomposite Using Thermal AFM," **2009**, *Composites Science and Technology*, 69, 1180-1186.
125. Yun-Yue Lin, Tsung-Hung Chu, Shao-Sian Li, Chia-Hao Chuang, Chia-Hao Chang, Wei-Fang Su, Ching-Pin Chang, Ming-Wen Chu and Chun-Wei Chen*, "Interfacial nanostructuring on the performance of polymer/TiO2 nanorod bulk heterojunction solar cells," **2009**, *Journal of The American Chemical Society*, 131, 3644.
126. H. L. Chen* , S. Y. Chuang, W. H. Lee, S.S. Kuo, W. F. Su, S. L. Ku and Y. F. Chou, "Extraordinary transmittance in three-dimensional crater, pyramid, and hole-array structures prepared through reversal imprinting of metal films," **2009**, *Optics Express*, 17(3), 1636-1645.
127. Chih-Wei Hsu, Leeyih Wang* and Wei-Fang Su*, "Effect of chemical structure of interface modifier of TiO2 on photovoltaic properties of poly(3-hexylthiophene)/TiO2 layered solar cells," **2009**, *Journal of Colloid And Interface Science*, 329(1), 182-187.
128. Ming-Chung Wu, Chih-Min Chuang, Jhih-Fong Lin, Yu-Ching Huang, Yang-Fang Chen* and Wei-Fang Su*, "Nanopatterned Optical and Magnetic La0.6Ca0.4MnO3 Arrays: Synthesis, Fabrication, and Properties", **2009**, *Journal of Materials Research*, 24(2), 394-403.
129. 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 multi-wall Carbon Nanotubes," **2009**, *Chemical Physics Letters*, 468, 64-68.
130. Chun-Chih Ho, Chi-An Dai and Wei-Fang Su*, "High Yield Synthesis of Diverse Well-Defined End-Functionalized Polymer by Combination of Anionic Polymerization and Click Chemistry," **2009**, *Journal of Applied Polymer Science*, 111(3), 1571-1580.
131. Tze-Hsuan Chang, Yu-Ching Huang, Wei-Fang Su and Jean-Fu Kiang*, "Wideband Dielectric Resonator Antenna With A Tunnel," **2008**, *Antennas and Wireless Propagation Letters, IEEE*, 7, 275-278.
132. Yi-Ming Chang , Wei-Fang Su and Lee-Yih Wang*, "Polymer solar cells with poly(3,4-ethylenedioxythiophene) as transparent anode," **2008**, *Organic Electronics*, 9,

968-973.

133. Yi-Ming Chang , Wei-Fang Su and Lee-Yih Wang*, "Photoactive Polythiophene:Titania Hybrids with Excellent Miscibility for Use in Polymer Photovoltaic Cells," **2008**, *Macromolecular Rapid Communications*, 29, 1303-1308.
134. Chun-Yu Lee, Yuen-Yung Hui, Wei-Fang Su and Ching-Fuh Lin*, "Electroluminescence from monolayer ZnO nanoparticles using dry coating technique," **2008**, *Applied Physics Letters*, 92, 261107.
135. Kuo-Chung Cheng*, Tsu-Hwang Chuang, The-Hua Tsai, Wenjeng Guo, and Wei-Fang Su, "Model of hyperbranched polymers formed by monomers A2 and Bg with and-capping molecules," **2008**, *European Polymer Journal*, 44(9), 2998-3004.
136. Chih-Wei Hsu, Huei-Ru Liou, Wei-Fang Su*, and Leeyih Wang*, " Self-assembled monolayers of 2-(thienyl) hexylphosphonic acid on native oxide surface of silicon fabricated by air–liquid interface-assisted method," **2008**, *Journal of Colloid and Interface Science*, 324, 236-239.
137. Yi-Ming Chang, Wei-Fang Su and Leeyih Wang*, "Influence of photo-induced degradation on the optoelectronic properties of regioregular poly(3-hexylthiophene)," **2008**, *Solar Energy Materials and Solar Cells*, 92, 761-765.
138. Goki Eda*, Yun-Yue Lin, Steve Miller, Chun-Wei Chen*, Wei-Fang Su(林唯芳), and Manish Chhowalla*, "Transparent and conducting electrodes for organic electronics from reduced graphene oxide," **2008**, *Applied Physics Letters*, 92, 233305.
139. Chieh-Feng Chang, Chao-Yu Chen, Fu-Hsiung Chang*, Shih-Peng Tai, Cheng-Ying Chen, Che-Hang Yu, Yi-Bing Tseng, Tsung-Han Tsai, I-Shuo Liu, Wei-Fang Su and Chi-Kuang Sun*, "Cell tracking and detection of molecular expression in live cells using lipid-enclosed CdSe quantum dots as contrast agents for epi-third harmonic generation microscopy," **2008**, *Optics Express*, 16(13), 9534-9548.
140. Ming-Chung Wu, Yi-Jen Wu, Yu-Ching Huang, Chih-Min Chuang, Kuo-Chung Cheng, Ching-Fuh Lin, Yang-Fang Chen* and Wei-Fang Su*, "Surface Potential and Magnetic Properties of La0.7Sr0.3MnO3 Periodic Arrays Fabricated by Direct Electron Beam Writing," **2008**, *Journal of Applied Physics*, 104, 024517.
141. Ming-Chung Wu, Chia-Hao Chang, Hsi-Hsing Lo, Yi-Shen Lin, , Yun-Yue Lin, Wei-Che Yen, Wei-Fang Su*, Yang-Fang Chen and Chun-Wei Chen*, " Nanoscale morphology and performance of molecular-weight-dependent poly (3-hexylthiophene)/TiO 2 nanorod hybrid solar cells," **2008**, *Journal of Materials Chemistry*, 18, 4097-4102.
142. Bikash Pal, Wei-Che Yen, Jye-Shane Yang, Chi-Yang Chao, Ying-Chieh Hung, Shiang-Tai Lin, Chia-Hao Chuang, Chun-Wei Chen and Wei-Fang Su*, "Substituent Effect on the Optoelectronic Properties of Alternating Fluorene-Cyclopentadithiophene Copolymers," **2008**, *Macromolecules*, 41, 6664-6671.
143. I-Shuo Liu, Yang-Fang Chen and Wei-Fang Su*, "Modulating the photoluminescence of conducting polymer by the surface plasmon of Au colloids," **2008**, *Journal of Photochemistry and Photobiology A-Chemistry*, 199, 291-296.

144. Chih-Tao Chien, Ming-Chung Wu, Chun-Wei Chen*, Hung-Hsien Yang, Jih-Jen Wu, Wei-Fang Su, Chauo-Sung Lin and Yang-Fang Chen, "Polarization-dependent confocal Raman microscopy of an individual ZnO nanorod," **2008**, *Applied Physics Letters*, 92, 223102.
145. Yun-Yue Lin, Chun-Wei Chen*, Wei-Che Yen, Wei-Fang Su, Chen-Hao Ku and Jih-Jen Wu, "Near-ultraviolet photodetector based on hybrid polymer/zinc oxide nanorods by low-temperature solution processes," **2008**, *Applied Physics Letters*, 92, 233301.
146. Chi-An Dai*, Chun-Jie Chang, Hung-Yu Chi, Hung-Ta Chien, Wei-Fang Su and Wen-Yen Chiu,"Emulsion synthesis of nanoparticles containing PEDOT using conducting polymeric surfactant: Synergy for colloid stability and intercalation doping, " **2008**, *Journal of Polymer Science Part A-polymer Chemistry*, 46, 2536-2548.
147. Cheng-Yuan Chen, Jia-Ren Lee, Chi-Ta Chia, Chien-Rong Lu*, I-Shuo Liu and Wei-Fang Su, "Optical characterization of CdSe nanocrystals," **2008**, *Journal of Physics and Chemistry of Solids*, 69, 629-632. (SCI, IF:2.059) (Times Cited:2) (N/M=77/166=46%, Chemistry, Multidisciplinary)
148. Y. Galagan and W-F Su*, "Fadable ink for time-temperature control of food freshness: novel new time-temperature indicator," **2008**, *Food Research International*, 41, 653-657.
149. Ming-Chung Wu, Chih-Min Chuang, Hsi-Hsing Lo, Kuo-Chung Cheng, Yang-Fang Chen, 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.
150. Chia-Hao Chang, Tse-Kai Huang, Yu-Ting Lin, Yun-Yue Lin, Chun-Wei Chen*, Tsung-Hung Chu, and Wei-Fang Su, "Improved charge separation and transport efficiency in poly (3-hexylthiophene)–TiO2 nanorod bulk heterojunction solar cells," **2008**, *Journal of Materials Chemistry*, 18, 2201-2207.
151. Yun-Yue Lin, Tsung Hung Chu, Chun-Wei Chen* and Wei-Fang Su*(林唯芳),"Improved Performance of Polymer/TiO2 Nanorods Bulk Heterojunction Photovoltaic Devices by Interface Modification," **2008**, *Applied Physics Letters*, 92, 053312.
152. I-Shuo Liu, Hsi-Hsing Lo, Chih-Tao Chien, Yun-Yue Lin, Chun-Wei Chen, Yang-Fang Chen*, Wei-Fang Su* and Sz-Chian Liou, "Enhancing photoluminescence quenching and photoelectric properties of CdSe quantum dots with hole accepting ligands," **2008**, *Journal of Materials Chemistry*, 18, 675-682.
153. 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 La0.7Sr0.3MnO3 resist," **2008**, *Journal of Materials Chemistry*, 18, 780-785.
154. Steve Miller*, Giovanni Fanchini*, Yun-Yue Lin, Cheng Li, Chun-Wei Chen, Wei-Fang Su and Manish Chhowalla*, "Investigation of nanoscale morphological changes in organic photovoltaics during solvent vapor annealing," **2008**, *Journal of Materials Chemistry*, 18, 306-312.
155. Yulia Galagan and Wei-Fang Su*, "Reversible Photoreduction of Methylene Blue in Acrylate Media Containing Benzil Dimethyl Ketal," **2008**, *Journal of Photochemistry and Photobiology*

A-Chemistry, 195, 378-383.

156. Yun-Yue Lin, Chun-Wei Chen*, Tsung-Hung Chua, Wei-Fang Su*, Chih-Cheng Lin, Chen-Hao Ku, Jih-Jen Wu and Cheng-Hsuan Chen, "Nanostructured metal-oxide/conjugated polymer hybrid solar cells by low-temperature solution processes," **2007**, *Journal of Materials Chemistry*, 17, 4571-4576.
157. Bikash Pal, Wei-Che Yen, Jye-Shane Yang, Wei-Fang Su*, "Substitute Effect on the Optoelectronic Properties of Alternating Fluorene-Thiophene Copolymers," **2007**, *Macromolecules*, 40, 8189-8194.
158. Chi-An Dai*, Wei-Che Yen, Yi-Huan Lee, Chun-Chih Ho and Wei-Fang Su*, "Facile Synthesis of Well-Defined Block Copolymers Containing Regioregular Poly(3-hexylthiophene) via Anionic Macroinitiation Method and Their Self-Assembly Behavior," **2007**, *Journal of the American Chemical Society*, 129(36), 11036-11038.
159. Joseph Lik Hang Chau*, Yu-Ming Lin, Ai-Kang Li, Wei-Fang Su, Kuo-Shin Chang, Steve Lien-Chung Hsu, Tung-Lin Li, "Transparent high refractive index nanocomposite thin films," **2007**, *Materials Letters*, 61, 2908-2910.
160. Yulia Galagan, Yu-Ching Huang, Wei-Fang Su* and Swrgey Nedilko, "Facile Preparation of Environmental Stable High-Temperature Superconducting Ceramic and Polymer Composites," **2007**, *Journal of the American Ceramic Society*, 90 [8] 2673–2675.
161. Ming-Chung Wu, M-K Hsieh, Y-C Huang, C-W Yen, W-T Huang, W-F Su*, "Low Sintering BaNd2Ti4O12 Microwave Ceramics Prepared by CuO Thin Layer Coated Powder," **2007**, *Journal of the European Ceramic Society*, 27(8-9), 2835-2839.
162. Ming-Chung Wu, Yu-Ching Huang, Wei-Fang Su*, "Silver Cofirability Differences between Bi1.5Zn0.92Nb1.5O6.92 and Zn3Nb2O8," **2007**, *Journal of the European Ceramic Society*, 27(8-9), 3017-3021.
163. Yu-Ching Huang, Ming-Chung Wu, Tze-Hsuan Chang, Jean-Fu Kiang, Wei-Fang Su*, "Broadband DR Antenna Made of High-Q Ceramic," **2007**, *Journal of the European Ceramic Society*, 27(8-9), 2841-2844.
164. Horng-Shyang Chen, Dong-Ming Yeh, Chih-Feng Lu, Chi-Feng Huang, Wen-Yu Shiao, Jian-Jang Huang, C. C. Yang*, I-Shuo Liu, and Wei-Fang Su, "White Light Generation With CdSe–ZnS Nanocrystals Coated on an InGaN–GaN Quantum-Well Blue/Green Two-Wavelength Light-Emitting Diode," **2006**, *IEEE Photonics technology letters*, 18(13), 1430-1432.
165. Chun-Yu Lee, Yan-Te Haung, Wei-Fang Su, and Ching-Fuh Lin*, "Electroluminescence from ZnO nanoparticles/Organic nanocomposites," **2006**, *Applied Physics Letters*, 89, 231116-1~231116-3. (SCI, IF: 3.411) (Times Cited:48) (N/M=28/148=20%, Physics, Applied)
166. Yu-Ting Lin, Tsung-Wei Zeng, Wei-Zong Lai, Chun-Wei Chen*, Yun-Yue Lin, Yu-Sheng Chang , Wei-Fang Su*, "Efficient photoinduced charge transfer in TiO2 nanorod/conjugated polymer hybrid materials," **2006**, *Nanotechnology*, 17, 5781-5785
167. Chih-Min Chuang, Ming-Chung Wu, Wei-Fang Su*, Kuo-Chung Cheng and Yang-Fang Chen, "High intensity fluorescence of photoactivated silver oxide from composite thin film

with periodic array structure," **2006**, *Applied Physics Letters*, 89(6), 061912.

168. Chih-Min Chuang, Ming-Chung Wu, Yu-Ching Huang, Kuo-Chung Cheng, Ching-Fu Lin, Yang-Fang Chen and Wei-Fang Su*, "Nanolithography made from water-based spin-coatable LSMO resist," **2006**, *Nanotechnology*, 17**,** 4399-4404.
169. M-C Wu, K-T Huang, Wei-Fang Su*, "Microwave dielectric properties of doped Zn3Nb2O8 ceramics sintered below 950oC and their compatibility with silver electrode," **2006**, *Materials Chemistry and Physics*, 98, 406-409.
170. Chi-An Dai*, Yu-Lin Wu, Yi-Huan Lee, Chun-Jie Chang, Wei-Fang Su, "Fabrication of 2D ordered structure of self-assembled block copolymers containing gold nanoparticles" **2006**, *Journal of Crystal Growth*, 288(1), 128-136.
171. Tsung-Wei Zeng, Yun-Yue Lin, His-Hsing Lo, Chun-Wei Chen*, Cheng-Hsuan Chen, Sz-Chian Liou, Hong-Yun Huang and Wei-Fang Su*, "A large interconnecting network within hybrid MEH-PPV/TiO2 nanorod photovoltaic devices," **2006**, *Nanotechnology*, 17, 5387–5392.
172. M-C Wu, S. Kamba, V. Bovtun and Wei-Fang Su*, "Comparison of microwave dielectric behavior between Bi1.5Zn0.92Nb1.5O6.92 and Bi1.5ZnNb1.5O7", **2006**, *Journal of The European Ceramic Society*, 26, 1889-1893.
173. Yun-Yue Lin, Chun-Wei Chen*, J. Chang, T-Y Lin, I-S Liu, Wei-Fang Su, "Exciton dissociation and migration in enhanced order conjugated polymer/nanoparticle hybrid materials", **2006**, *Nanotechnology*, 17(5), 1260-1263.
174. Chun-Wei Chen*, Cheng-Chia Huang, Yun-Yue Lin, Wei-Fang Su, Li-Chyong Chen* and Kuei-Hsien Chen, "Photoconductivity and highly selective ultraviolet sensing features of amorphous silicon carbon nitride thin films," **2006**, *Applied Physics Letters*, 88(7), 073515.
175. Min-Huey Chen, Ci-Rong Chen, Seng-Haw Hsu, Shih-Po Sun and Wei-Fang Su*, "Low shrinkage light curable nanocomposite for dental restorative material," **2006**, *Dental Materials*, 22, 138-145.
176. Dong-Ming Yeh, Chi-Feng Huang, Horng-Shyang Chen, Tsung-Yi Tang, Chih-Feng Lu, Yen-Cheng Lu, Jian-Jang Huang, C-C Yang*, I-S Liu, Wei-Fang Su, "Control of the Color Contrast of a Polychromatic Light-Emitting Device With CdSe-ZnS Nano-Crystals on an InGaN-GaN Quantum-Well Structure," **2006**, *IEEE Photonics Technology Letters*, 18(5), 712-714.
177. M-C Wu, Y-C Huang, Wei-Fang Su*, "Silver cofirable Bi1.5Zn0.92Nb1.5O6.92 microwave ceramic containing CuO-based dopants," **2006**, *Materials Chemistry and Physics*, 100(2-3) , 391–394
178. Chun-Wei Chen, C-C Huang, Y-Y Lin, L-C Chen, K-H Chen, Wei-Fang Su, "Optical properties and photoconductivity of amorphous silicon carbon nitride thin film and its application for UV detection", **2005**, *Diamond and Related Materials*, 14(3-7), 1010-1013.
179. K-C Cheng, T-H Chuang, J-S Chang, W-J Guo and Wei-Fang Su(林唯芳), "Effect of feed rate on structure of hyperbranched polymers formed by self-condensing vinyl polymerization in semibatch reactor," **2005**, *Macromolecules*, 38(20), 8252-8257.

180. C-M Chuang, W-B Lu, Wei-Fang Su*, C-M Lin and Y-F Chen, "Manipulation of Luminescence from CdSe Nanoparticles by 3-D Photonic Crystal," **2005**, *Journal of Applied Physics*, 97, 096104.
181. Wei-Fang Su*, Jiann-Fong Lee, Ming-Yao Chen and Ron-Ming Ho, "Bismuth titanate nanoparticles dispersed polyacrylates", **2004**, *Journal of Materials Research*, 19(8), 2343-2348
182. Yeh-Fang Duann*, Tsan-Min Liu, Kuo-Chung Cheng and Wei-Fang Su, "Thermal stability of some naphthalene- and phenyl-based epoxy resins", **2004**, *Polymer Degradation and Stability*, 84(2), 305-310.
183. Ching-Fuh Lin*, Eih-Zhe Liang, Sheng-Ming Shih and Wei-Fang Su, "Significance of Surface Properties of CdS Nanoparticles," **2003**, *Japanese Journal of Applied Physics*, 42(6A), L610 - L612.
184. Wei-Fang Su* and Shin-Chih Lin, "Interfacial behavior between Bi1.5ZnNb1.5O7 • 0.02V2O5 and Ag," **2003**, *Journal of the European Ceramic Society*, 23, 2593-2596.
185. Wei-Fang Su* and Yen-Ting Lu, "Synthesis, Phase Transformation and Dielectric Properties of Sol-Gel Derived Bi2Ti2O7 Ceramics," **2003**, *Materials Chemistry and Physics*, 80(3), 632-637.
186. C-S Wu, C-D Chen*, S-M Shih and Wei-Fang Su, "Single-electron transistors and memory cells with Au colloidal islands," **2002**, *Applied Physics Letters*, 81(24), 4595-4597.
187. Sheng-Ming Shih, Wei-Fang Su*, Yuh-Jiuan Lin, Cen-Shawn Wu and Chii-Dong Chen, "Two-Dimensional Arrays of Self-Assembled Gold and Sulfur-Containing Fullerene Nanoparticles," **2002**, *Langmuir*, 18(8), 3332-3335.
188. Ching-Fuh Lin*, Peng-Fei Chung, Miin-Jang Chen and Wei-Fang Su, "Nanoparticle-modified metal-oxide-silicon structure enhancing silicon band-edge electroluminescence to near-lasing action," **2002**, *Optics Letters*, 27(9), 713-715.
189. Wei-Fang Su*, Yin-Chung Lee and Wei-Ping Pan, "Thermal Properties of Phthalic Anhydride- and Phenolic Resin-Cured Rigid Rod Epoxy Resins," **2002**, *Thermochimica Acta*, 392-393C , 395-398.
190. Wei-Fang Su*, Hong-Wen Huang and Wwi-Ping Pan, "Thermal Properties of Rigid Rod Epoxies Cured with Diaminodiphenylsulfone and Dicyandiamide," **2002**, *Thermochimica Acta*, 392-393C, 391-394.
191. Wei-Fang Su*, Ya-Ching Fu and Wei-Ping Pan, "Thermal Properties of High Refractive Index Epoxy Resin System," **2002**, *Thermochimica Acta*, 392-393C, 385-389.
192. Wei-Fang Su* and Chih-Min Chuang, "Effects of Chemical Structure Changes on Curing Reactions and Thermal Properties of Cyanate Ester-Cured Rigid-Rod Epoxy Resins," **2002**, *Journal of Applied Polymer Science*, 85(11), 2419-2422.
193. Wei-Fang Su* and Hong-Ru Kuo, "Synthesis, Microstructure and Thermal properties of Photoluminescent Hydrogenated Amorphous Silicon Oxide Nanopowders," **2002**, *Materials Chemistry and Physics*, 74(3), 239-244.
194. Wei-Fang Su* and Hong-Ru Kuo, "Photoluminescent properties of hydrogenated amorphous

silicon oxide powders," **2002** , *Journal of Materials Research*, 17(5), 977-980.

195. W-F. A. Su*, K-C Chen and S-Y Tseng, "Effects of Chemical Structure Changes on Thermal, Mechanical, and Crystalline Properties of Rigid Rod Epoxy Resins," **2000**, *Journal of Applied Polymer Science*, 78, 446-451.
196. W-F. A. Su*, "Effects of Additives on Perovskite Formation in Sol-Gel Derived Lead Magnesium Niobate," **2000**, *Materials Chemistry and Physics*. 62(1), 18-22.
197. W-F. A. Su*, K-F Schoch, Jr. and J-D B. Smith, "Comparison of Cure Conditions for Rigid Rod Epoxy and Bisphenol A Epoxy Using Thermomechanical Analysis," **1998**, *Journal of Applied Polymer Science*, 70(11), 2163-2167.
198. W-F. A. Su*, R-M Young, K-F Schoch, Jr. and J-D B. Smith, "Electroluminescent edge emission from poly (phenylene vinylene) films," **1995**, *Thin Solid Films*, 254, 216-217.
199. W-F. A. Su*, "Thermoplastic and Thermoset Main Chain Liquid Crystal Polymers Prepared from Biphenyl Mesogen," **1993**, *Journal of Polymer Science Part A-Polymer Chemistry*, 31, 3251-3256.
200. K-F Schoch, Jr., W-F. A. Su* and M-G Burke, "Deposition and Characterization of Polyimide Langmuir-Blodgett Films," **1993**, *ACS, Langmuir*, 9(1), .278-283.
201. W-F. A. Su*, T. Kurata, H. Nobutoki and H. Koezuka*, "Quantitative Study of Molecular Orientation in Hemicyanine Langmuir-Blodgett Films by Fourier Transform Infrared Spectroscopy and Second Harmonic Generation," **1992**, *ACS, Langmuir*, 8(3), 915-919.
202. W-F. A. Su*, J-D B. Smith and A-H Long, "UV Curable Adhesives for Electronic Packaging," **1988**, *SAMPE Journal*, 24(6), 27-32.
203. A-M Grosset* and W-F. A. Su*, "Ultraviolet Radiation Curable Paints," **1985**, *I&EC Product Research & Development*, 24, 113.
204. W-F. A. Su*, "The Dechlorination of Polychlorinated Biphenyls by Sodium Hydride and Alkylamine," **1984**, *IEEE Transactions on Power Apparatus and Systems*, PAS-103(1), 140-142.
205. W-F. A. Su, S.H. Carr and J.O.Brittain, "Thermally Stimulated Discharge Current Studies on Low-Temperature Relaxation in Epoxy Resin," **1980**, *Journal of Applied Polymer Science*, 25, 1355-1363.
206. C.P. Lillya, W.J. Macknight, R.M. Newman, W-F. A. Suand P.C. Uden, "Thermal Degradation of Glutamate Polymers," **1980**, *Journal of Macromolecular Science: Part A - Chemistry:Pure and Applied Chemistry*, A14(8), 1181-1196.