相關重大研究獎項成就及歷年著作 (楊哲人 1988 -2022)

■ 2022 年 5 月獲得科技部頒發 材料科學工程領域傑出研究獎。
■ 2021 年 8 月獲得國家實驗研究院「研得發服務平台亮點成果」特優獎
■ 2020 年獲得科技部貴儀頂尖基礎建設購置最尖端的次埃米級(sub-Angstrom)精密電子顯微鏡儀器(Spectra 300):場發射單光電子束雙球差校正器掃描穿透式電子顯微鏡
■ 2019 年獲選為材料學會會士。
■ 2019 年獲選為台灣顯微鏡學會理事長(任期 2019 年–2022 年)。
■ 2018 年 12 月帶領的高熵合金研究計畫團隊，獲科技部頒發未來科技獎突破獎。
■ 2017 年年 11 月獲得韓國顯微鏡學會獲頒第一屆會士榮銜。
■ 2017 年 12 月帶領的高熵合金研究計畫團隊，獲科技部頒發未來科技突破獎。
■ 2017 年台灣金屬熱處理學會年會論文傑出獎
■ 2017 年台灣金屬熱處理學會年會論文優等獎
■ 2015 年獲得中國工程師學會傑出工程教授獎。
■ 2015 年獲得東和鋼鐵侯金堆文教基金會傑出榮譽獎。
■ 2014 年獲得英國材料及礦冶學會頒與會士榮銜（FIMMM, Institute of Materials, Minerals and Mining, IOM3, Fellow)
■ 2013 年獲推選為台灣顯微鏡學會理事長(2013 年–2017 年)。
■ 2010 年 獲得中國工程師學會詹天佑論文獎
■ 2008 年 獲得台大邁頂-基礎建設購置 200kV 場發射鎗穿透式電鏡
■ 2006 年 獲得台大邁頂-基礎建設購置 300kV 場發射鎗穿透式電鏡
■ 2002 年 - 2004 年 獲聘工業技術研院顧問
■ 2003 年 獲得原子能委原會優良研究計畫獎
■ 2002 年 獲得原子能委原會優良研究計畫獎
■ 1992 年 獲得台灣大學教學優良獎
■ 1991 年 獲得台灣大學教學優良獎
■ 1990 年 獲得台灣大學教學優良獎
■ 1989 年 獲得教育部教學特優獎

2020 年 1 月至 2022 月 10 月發表 SCI 國際期刊 25 篇。歷年來已發表 SCI 國際期刊 237 篇。目前 SCI H-index 40 (Google Scholar H-index 49)。歷年 SCI 期刊論文被引用的次數 7059 次。

SCI papers 期刊論文：

1. Neng-Hao Gan, Yi-Hsuan Sun, Tzu-Ching Tsao, Chia-Lin Li, Jia-Heng Liu, Hung-Wei Yen, Chun-Hway Hsueh, Jer-Ren Yang, Shing-Hoa Wang, Jien-Wei Yeh, Horng-Yi Chang, Wen-Hsing Hou, “Verification of the ability of Cu to dissolve in BCC δ in a δ-γ Solid Solution above 1200 °C and boosting δ nano-hardness in Cu-containing PHSS”, Scripta Materialia 211 (2022) 114505.
2. Tzu-Ching Tsao, Po-Han Chiu, Chien-Yu Tseng, Cheng-Lin Tai, Hsueh-Ren Chen, Tsai-Fu Chung, Chih-Yuan Chen, Shing-Hoa Wang, Yu-Ting Tsai and Jer-Ren Yang, “Investigation of Strain-Induced Precipitation of Niobium Carbide in Niobium Micro-Alloyed Steels at Elevated Temperatures” Metals 12 (2022) 1619.

3. X. Xu, T. F. Chung, S. Hu, Q. Zhu, J. Fu, J. R. Yang, Q. Tian, “Effect of tin microalloying on the microstructure of low-carbon free-machining steels”, Journal of Materials Research and Technology 20 (2022) 1172-1185.
4. Cheng-Ling Tai, Po-Jui Tai, Ting-Jung Hsiao, Po-Han Chiu, Chien-Yu Tseng, Tzu-Ching Tsao, Tsai-Fu Chun , Yo-Lun Yang, Chih-Yuan Chen, Shing-Hoa Wang and Jer-Ren Yang, “Effect of Natural Ageing on Subsequent Artificial Ageing of AA7075 Aluminum Alloy”, Metals 12 (2022) 1766.
5. Chen-Hsiang Ling, Chun-Yi Chou, Tsai-Fu Chung, Jing-Jong Shyue, Jer-Ren Yang, MiinJang Chen, “Conformal atomic layer etching for Ge based on sacrificial oxide with higher Gibbs free energy of formation”, Surfaces and Interfaces 30 (2022) 101893.
6. Tsai-Fu Chung, Yo-Lun Yang, Cheng-Ling Tai, Makoto Shiojiri, Chien-Nan Hsiao, Cheng-Si Tsao, Hsueh-Ren Chen, Wei-Chih Li, Zhusheng Shi, Jianguo Lin, Jer-Ren Yanga, “HR-STEM investigation of atomic lattice defects in different types of η precipitates in creep-age forming Al-Zn-Mg-Cu aluminium alloy”, Materials Science & Engineering A, 815 (2021) 141213.
7. L. Guo, Y. Tang, J. Cui, J. Li, J. R. Yang, D.Y. Li, “Tailoring M_7C_3 carbide via electron work function-guided modification”, Scripta Materialia 190 (2021) 168-173.
8. Y. Luo, Y. Tang, T. F. Chung, C. L. Tai, C. Y. Chen, J. R. Yang, D. Y. Li, “Electron work function: an indicative parameter towards a novel material design methodology”, Scientific Reports, 11(2021) 11565.
9. T. F. Chung, P. H. Chiu, C. L. Tai, Y. L. Li, L. M. Wang, C. Y. Chen, J. W. Yeh, C. N. Hsiao, D. Z. Ou , S. H. Wang, Jer-Ren Yang, “Investigation on the ballistic induced nanotwinning in the Mn-free Fe27Co24Ni23Cr26 high entropy alloy plate”, Materials Chemistry and Physics 270 (2021) 124707.
10. S. H. Wang, W. Y. Hsiao, Y. L. Yang, C. Y. Chen, J. R. Yang, W. S. Lee, C. C. Chen, and P. K. Chiu (2021). “Microstructural Characterization and Mechanical Properties of Duplex and Super Austenitic Stainless Steels under Dynamic Impact Deformation”. Journal of Materials Engineering and Performance , 30 (2021) 8169-8177.
11. C. N. Yen, L.W. Chang, C. A Hsu, J. R. Yang, H. Y. Chang, S. H. Wang, H. R. Chen (2021). “Microstructural variation in fatigued interphase arrayed nanoprecipitated Ti-microalloyed steel”. Journal Materials Research and Technology, 15 (2021) 2393-2040.
12. T. F. Chung, P. J. Chen[a], C. L. Tai, P. H. Chiu, Y. S. Lin, C. N. Hsiao, C. Y. Chen, S. H. Wang, J. W. Yeh, W. S. Lee, C. L. Kuo, J. R. Yang, “Investigation of nanotwins in the bimodal-structured $Fe_{22}Co_{22}Ni_{20}Cr_{22}Mn_{14}$ alloy subjected to high-strain-rate deformation at cryogenic temperatures”, Materials Characterization 170 (2020)110667.
13. P. J. Yu, Y. Y. Hsu, S. H.Wang, J. R. Yang, Y. L. Yang, H. Y. Chang, C. Y. Chen, H. R. Chen, “Comparison of dynamic-aging creep and pre-aged creep in Ti-15-3 beta titanium alloy”, Materials Science and Engineering A 798 (2020) 140135.
14. T. F. Chung, M. Kawasaki, P. Wang, K. Nishio, M. Shiojiri, W. C. Li, C. N. Hsiao, J. R. Yang, “Atomic-resolution energy dispersive X-ray spectroscopy mapping of η precipitates in an Al-Mg-Zn-Cu alloy”, Materials Characterization 116 (2020) 110448.
15. B. P. H. Liu, T. F. Chung, J. R. Yang, J. Fu, C. Y. Chen, S. H. Wang, M. C. Tsai and C. Y. Huang, “Microstructure characterization of massive ferrite in laser-weldments of interstitial-free steels”, Metals 10(2020)898.
16. H. Mohrbacher, J. R. Yang, Y. W. Chen, J. Rehrl, T. Hebesberger, “Metallurgical effects of niobium in dual Phase Steel”, Metals 10(2020)504.
17. Y. S. Lin, J. Y. Hoo, T. F. Chung, J. R. Yang, and M. J. Chen, “Low-Temperature Physical Adsorption for the Nucleation of Sub-10 nm Al2O3 Gate Stack on Top-Gated WS2 Transistors”, ACS Appl. Electron. Mater. 2020, 2, 1289−1294.
18. C. L. Tu, K. I. Lin, J. Pu, T. F. Chung, C. N. Hsiao, A. C. Huang, J. R. Yang, T. Takenobu and C. H. Chen, “CVD growth of large-area InS atomic layers and device applications”, Nanoscale 12 (2020)9366.
19. J. S. Li, G. J. Cheng, H. Y. Yen, Y. L. Yang, H. Y. Chang, C. Y. Wu, S. H. Wang, J. R. Yang, “Microstrain and boundary misorientation evolution for recrystallized super DSS after deformation”, Materials Chemistry and Physics 246(2020)122815.
20. P. Urang, C. J. Shang, T. Senuma, J. R. Yang, A. M. Guo, H. Mohrbacher, “Molybdenum alloying in high-performance flat-rolled steel grades”, Adv. Manuf. 8(2020) 15–34.
21. C. Y. Chen, C. H. Li, T. C. Tsao, P. Han Chiu, S. P. Tsai, J. R. Yang, L. J. Chiang, S. H. Wang, “A novel technique for developing a dual-phase steel with a lower strength difference between ferrite and martensite”, Materials Today Communications 23 (2020) 100895.
22. P. C. Lin, Y. T. Tsai, N.H. Gan, J. R. Yang, S.H. Wang, H. Y. Chang, T. R. Lin and P. K. Chiu, “Characteristics of Flakes Stacked Cr2N with Many Domains in Super Duplex Stainless Steel”, Crystals 10 (**2020**) 965.
23. P. J. Yu, S. C. Chen, H. W. Yen, H. Y. Chang, J. R. Yang, S. H. Wang, P. K. Chiu and T. R. Lin “Large Delta T Thermal Cycling Induced Stress Accelerates Equilibrium and Transformation in Super DSS”, Crystals 10 (**2020**) 962.
24. K. T. Hsieh, Y. Y. Lin, C. H. Lu, J. R. Yang, P. K. Liaw, C. L. Kuo, “Atomistic simulations of the face-centered-cubic-to-hexagonal-close-packed phase transformation in the equiatomic CoCrFeMnNi high entropy alloy under

high compression", Computational Materials Science 184 (2020) 109864.
25. Y. Y. Chen, M. H. Yeh, T. F. Chung, S. P. Tsai, J. R. Yang, C. C. Hsu, K. C. Ho, I. C. Cheng and J. Z. Chen, "Electrochemical and Microstructural Investigations of PtFe Nanocompounds Synthesized by Atmospheric-Pressure Plasma Jet", Journal of The Electrochemical Society, 2020 167 056501.
26. B. P. H. Liu, J. R. Yang, Y. Wu, P. Shen, J. Fu, C. Y. Chen, S. H. Wang, M. C. Tsai, C. Y. Huang, "Investigation of massive ferrite in an interstitial-free steel", Materials Characterization 157 (2019) 109920.
27. T. F. Chung, Y. L. Yang, M. Shiojiri, C. N. Hsiao, W. C. Li, C. S. Tsao, Z. Shi, J. Lin, J. R. Yang, "An atomic scale structural investigation of nanometre-sized η precipitates in the 7050 aluminium alloy", Acta Materialia 174 (2019) 351-368.
28. Z.J. Xie, B. Langelier, Y.T. Tsai, C.J. Shang, J.R. Yang, S.V. Subramanian, X.P. Ma, X.L.Wang, "Characterization of nano-sized precipitation and dislocations and the correlation with mechanical properties of a low alloy TRIP-aided steel", Materials Science & Engineering A 763 (2019) 163149.
29. C. Celada-Casero, B.M. Huang, J.-R. Yang, D. San-Martin, "Microstructural mechanisms controlling the mechanical behaviour of ultrafine grained martensite/austenite microstructures in a metastable stainless steel", Materials & Design 181 (2019)107922.
30. J. S. Li, G. J. Cheng, H. W. Yen, L. T. Wu, Y. L. Yang, R. T. Wu, J. R. Yang, S. H. Wang, "Thermal cycling induced stress–assisted sigma phase formation in super duplex stainless steel", Materials and Design 182 (2019) 108003.
31. S. C. Chen, Y. T. Wang, Y.C. Lin, C.Y. Huang, J. R. Yang, H. W. Yen, "Microstructure and mechanical behaviors of GPa-grade TRIP steels enabled by hot-rolling processes", Materials Science & Engineering A 761 (2019) 1380005.
32. Y. S. Lin, I. Kwak, T. F. Chung, J. R. Yang, A.C. Kummel, M. J. Chen, "Nucleation engineering for atomic layer deposition of uniform sub-10 nm high-k dielectrics on $MoTe_2$", Applied Surface Science 492 (2019) 239-244.
33. M. Y. Gao, S. P. Tsai a, J. R. Yang, Y. L. Chang, T. Ohmura, C. Y. Chen, S. H. Wang, Y. T. Wang, Ching-Yuan Huang, "In-situ transmission electron microscopy investigation of compressive deformation in interphase-precipitated-carbide strengthened α-iron single-crystal nanopillars", Materials Science & Engineering A 746 (2019) 406-415.
34. K. Li, B. Yu, R.D.K. Misra, G. Han, Y.T. Tsai, C.W. Shao, C.J. Shang, J.R. Yang, Z.F. Zhang, "Strain rate dependence on the evolution of microstructure and deformation mechanism during nanoscale deformation in low carbon-high Mn TWIP steel", Materials Science & Engineering A 742 (2019) 116-123.
35. S. P. Tsai, Y. T. Tsai, Y. W. Chen, P. J. Chen, P. H. Chiu, C. Y. Chen, W. S. Lee, J. W. Yeh, J. R. Yang, "High-entropy CoCrFeMnNi alloy subjected to high-strain-rate compressive deformation", Materials Characterization 147 (2019)193 -198.
36. C. H. Li, C. Y. Chen, S. P. Tsai, J. R. Yang, "Microstructure characterization and strengthening behavior of dual precipitation particles in Cu-Ti microalloyed dual-phase steels" Materials & Design 166 (2019) 107613.
37. F. G. Caballero, R. Rementeria, L. Morales-Rivas, M. Benito-Alfonso, J. R. Yang, D. Castro, J. D. Poplawsky, T. Sourmail and C. Garcia-Mateo, "Understanding Mechanical Properties of Nano-Grained Bainitic Steels from Multiscale Structural Analysis", Metals 9 (2019), Article number 426, 1-9.
38. J.H. Lia, S.F. Wang, T.F. Chung, J.R. Yang, "Effects of addition of Sc2O3 on microstructure and dielectric properties of BaTiO3-based X8R MLCCs", Journal of Physics and Chemistry of Solids 127(2019) 194-201.
39. T. F. Chung, Y. L. Yang, M. Shiojiri, C. N. Hsiao, W. C. Li, J.R. Yang, "Intrinsic twin boundary of η-MgZn2 precipitates in the AA7050", Procedia Manufacturing 37 (2019) 201–206.
40. S Yuan, C Shang, Z Xie, X Wang, J Yang, RDK Misra, "Impact of Intercritical Annealing on Retained Austenite and Toughness of a 460 MPa Grade Multiphase Heavy Gauge Plate Steel", Steel Research Int. 2018, 89, Article number 1800006.
41. J. Y. Maetz, M. Militzer, Y.W. Chen, J.R. Yang, N. H. Goo, S. J. Kim, "Modeling of Precipitation Hardening during Coiling of Nb–Mo Steels", Metals 8 (2018), Article number 758, 1-23.
42. T. F. Chung, Y. L. Yang, B. M. Huang, Z. Shi, J. Lin, T. Ohmura, J. R. Yang, "Transmission electron microscopy investigation of separated nucleation and in-situ nucleation in AA7050 aluminium alloy", Acta Materialia 149 (2018) 377-387.
43. L. Morales-Rivas, F. Archie, S. Zaefferer, M. Benito-Alfonso, S. P. Tsai, J. R. Yang, D. Raabe, C. Garcia-Mateo F. G. Caballero, "Crystallographic examination of the interaction between texture evolution, mechanically induced martensitic transformation and twinning in nanostructured bainite", Journal of Alloys and Compounds 752 (2018) 505-519.
44. S. P. Tsai, S. N. Tsai, Y. T. Tsai, Y. W. Chen, P. Y. Tung, J. R. Yang, H. R. Chen, C. Y. Chen, Y. T. Wang, C. Y. Huang, "The application of convergent beam electron diffraction (CBED) analysis on transformation-induced plasticity (TRIP) steels", Microscopy Research and Technique 2018;00:1-8.
45. S. P. Tsai, Y. T. Tsai, Y. W. Chen, J. R. Yang, C. Y. Chen, Y. T. Wang, C. Y. Huang, "Precipitation behavior in bimodal ferrite grains in a low carbon Ti-V-bearing steel", Scripta Materialia 143 (2018) 103-107.
46. C. H. Hsueh, M. J. Liao, S. H. Wang, Y. T. Tsai, J. R. Yang, R. Wu, W. S. Lee, "Size effect and strain induced double

twin by nanoindentation in DSS weld metal of vibration-assisted GTAW", Materials Chemistry and Physics 219 (2018) 40-50.
47. Y. W. Chen, Y. Ting Tsai, P. Y. Tung, S. P. Tsai, C. Y. Chen, S. H. Wang, J. R. Yang, "Phase quantification in low carbon Nb-Mo bearing steel by electron backscatter diffraction technique coupled with kernel average misorientation" Materials Characterization 139 (2018) 49-58.
48. Yu-Ting Tsai, Po-Chiang Lin, Yu-Wen Chen, Shing-Hoa Wang, Jer-Ren Yang, "Fatigue behavior and microstructural characteristics of a duplex stainless steel weld metal under vibration-assisted welding", Materials Science and Engineering A 721(2018) 319-327.
49. A. Saastamoinena, A. Kaijalainena, D. Porter, P. Suikkanenb, J. R. Yang, Y. T. Tsai, "The effect of finish rolling temperature and tempering on the microstructure, mechanical properties and dislocation density of direct quenched steel", Materials Characterization 139 (2018) 1-10.
50. S. Chakrabarti, R. Panja, S. Roy, A. Roy, S. Samanta, M. Dutta, S. Ginnaram, S. Maikap, H. M. Cheng, L. N. Tsai, Y. L. Chang, R. Mahapatra, D. Jana, J. T. Qiu, J. R. Yang, "Evolution of resistive switching mechanism through H2O2 sensing by using TaOx-based material in W/Al2O3/TaOx/TiN structure", Applied Surface Science 433 (2018) 51-59.
51. T. F. Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, B. M. Huang, C. S. Tsao, Z. Shi, J. Lin, P. E. Fischione, T. Ohmura, J. R. Yang, "Morphological evolution of GP zones and nanometer-sized precipitates in the AA2050 aluminium alloy", International Journal of Lightweight Materials and Manufacture 1 (2018) 142-156
52. J. Hannula, J. Komi, D. A. Porter, M. C. Somani, A.Kaijalainen, P. Sukkanen, J. R. Yang, and S. P. Tsai, "Effect of Boron on the Strength and Toughness of Direct-Quenched Low-Carbon Niobium Bearing Ultra-High-Strength Martensitic Steel", Metall. Mater. Trans. A 48 (2017)5344-5356.
53. Y. T. Tsai, Y. W. Chen and J. R. Yang, "Severe deformation of nanostructured bainitic steel", Procedia Engineering 207(2017) 1862-1867.
54. Y. W. Chen, B. M. Huang, Y. T. Tsai, S. P. Tsai, C. Y. Chen, J. R. Yang, "Microstructural evolutions of low carbon Nb/Mo-containing bainitic steels during high-temperature tempering", Materials Characterization 131 (2017) 298-305.
55. S. Chakrabarti, S. Ginnaram, S. Jana, Z.Y. Wu, K.Singh, A. Roy, P. Kumar, S. Maikap, J.T. Qiu, H.M. Cheng, L.N.Tsai, Y.L. Chang, R. Mahapatra and J. R. Yang, "Negative voltage modulated multi-level resistive switching by using a Cr/BaTiOx/TiN structure and quantum conductance through evidence of H2O2 sensing mechanism", Scientific Reports 7, Article number: 4735 (2017).
56. S. P. Tsai, T. C. Su, J. R. Yang, C. Y. Chen, Y. T. Wang, C. Y. Huang, "Effect of Cr and Al additions on the development of interphase-precipitated carbides strengthened dual-phase Ti-bearing steels", Materials and Design 119 (2017) 319-325.
57. Y. J. Lin, S. F. Wang, B. C. Lai, Y. X. Liu, Y. L. Chang, J. R. Yang, "Densification, microstructure evolution, and microwave dielectric properties of $Mg_{1-x}Ca_xZrTa_2O_8$ ceramics", Journal of the European Ceramic Society, 37 (2017) 2825-2831.
58. Y. T. Chi, Y. T. Tsai, B. M. Huang and J. R. Yang, "Investigation of idiomorphic ferrite and allotriomorphic ferrite using electron backscatter diffraction technique", Materials Science and Technology, 33(2017) 537-545.
59. S. P. Tsai, S, C. H. Jen, H. W. Yen, C. Y. Chen, M. C. Tsai, J. R. Yang, "Effects of interphase TiC precipitates on tensile properties and dislocation structures in a dual phase steel" Materials Characterization 123 (2017) 153–158.
60. P. Kumar, S. Maikap, S. Ginnaram and J. R. Yang, "Cross-Point Resistive Switching Memory and Urea Sensing by Using Annealed GdOx Film in IrOx/GdOx/W Structure for Biomedical Applications", Journal of the Electrochemical Society, 164 (2017) B127-B135
61. Y. Li, Z. Shi, J. Lin, Y.L. Yang, Q. Rong, B. M. Huang, T. F. Chung, C. S. Tsao, J. R. Yang, D. S. Balint, "A unified constitutive model for asymmetric tension and compression creep-ageing behaviour of naturally aged Al-Cu-Li alloy", International Journal of Plasticity 89 (2017) 130-149.
62. X.L. Wang, Y.R. Nana, Z.J. Xie, Y.T. Tsai, J.R. Yang, C.J. Shang, "Influence of welding pass on microstructure and toughness in the reheated zone of multi-pass weld metal of 550 MPa offshore engineering steel", Materials Science and Engineering A, 702(2017) 196-205.
63. Y. C. Hsieh, L. Zhang, T. F. Chung, Y. T. Tsai, J. R. Yang, T. Ohmura and T. Suzuki, "In-situ transmission electron microscopy investigation of the deformation behavior of spinodal nanostructured δ-ferrite in a duplex stainless steel", Scripta Materialia 125(2016)44-48.
64. C. Celada-Casero, B.M. Huang, M.M. Aranda, J. R. Yang, D. SanMartin, "Mechanisms of ultrafine-grained austenite formation under different isochronal conditions in a cold-rolled metastable stainless steel", Materials Characterization 118 (2016) 129-141.
65. Y. L. Chang, P. Y. Chen, Y. T. Tsai, and J. R. Yang, "Crystallographic analysis of lenticular martensite in Fe-1.0C-17Cr stainless steel by electron backscatter diffraction", Materials Characterization 113 (2016) 17-25.
66. Y. T. Tsai, C. R. Lin, W. S. Lee, C. Y. Huang, and J. R. Yang, "Mechanical behavior and microstructural evolution

of nanostructured bainite under high-strain rate deformation by Hopkinson bar", Scripta Materialia, 115(2016)46-51.
67. Y. Li, Z. Shi, L. Lin, Y. L. Yang, B. M. Huang, T. F. Chung and J. R. Yang, "Experimental investigation of tension and compression creep-ageing behaviour of AA2050 with different initial tempers" Materials Science and Engineering A, 657 (2016) 299-308.
68. T. Lin, Z.R.Qiu, J.R.Yang, L.W. Ding, Y. Gao e, Z.C. Feng, "Investigation of photoluminescence dynamics in InGaN/GaN multiple quantum wells", Materials Letters 173(2016)170-173.
69. C.Y. Chen, J.R. Yang, C.C.Chen, S.F. Chen, "Microstructural characterization and strengthening behavior of nanometer sized carbides in Ti–Mo microalloyed steels during continuous cooling process", Materials Characterization 114 (2016) 18-29.
70. M. Martin-Aranda, R. Rementeria, R. Hackenberg, E. Urones-Garrote, S. P. Tsai, J. R. Yang and C. Capdevila, "The non-steady state growth of pearlite outside the Hultgren extrapolation", Materials, 9:998 (2016) 1-10.
71. P. Kumar, S. Maikap, K. Singh, S. Chatterjee,Y. Y. Chen, H. M. Cheng, R. Mahapatra, J. T. Qiu, and J. R. Yang, "Highly Reliable Label-Free Detection of Urea/Glucose and Sensing Mechanism Using SiO2 and CdSe-ZnS Nanoparticles in Electrolyte-Insulator-Semiconductor Structure", Journal of the electrochemical Society, 163 (2016) B 580-587.
72. P. Kumar, S. Maikap, J. T. Qiu, S. Jana, A. Roy, K. Singh, H.M. Cheng, M. T. Chang, R. Mahapatra, H.C. Chiu and J. R. Yang, "Detection of pH and Enzyme-Free H2O2 Sensing Mechanism by Using GdO x Membrane in Electrolyte-Insulator-Semiconductor Structure", Nanoscale Research Letters, 11:434(2016)1-8.
73. X. L. Wang, Y. T. Tsai, J. R. Yang, C. J. Shang, X. M. Wang, L. M. Dong and W. W. Yang, "Investigation of the microstructure and toughness of 550 MPa grade pipeline after the hot-bending Process", Materials Science and Technology, 32 (2016) 664-674.
74. Y. T. Tsai, H. T. Chang, B. M. Huang, C. Y. Huang, J. R. Yang, "Microstructural characterization of Charpy-impact-tested nanostructured bainite", Materials Characterization 107 (2015) 63-69.
75. C. Y. Chen, C. C. Chen and J. R. Yang, "Synergistic effect of austenitizing temperature and hot plastic deformation strain on the precipitation behavior in novel HSLA steel", Materials Science & Engineering A, 639 (2015) 145-154.
76. C. Garcia-Mateo, J.A. Jimenez, H.-W. Yen, M.K. Miller, L. Morales-Rivas, M. Kuntz, S.P. Ringer, J.-R. Yang and F.G. Caballero, "Low temperature bainitic ferrite: Evidence of carbon super-saturation and tetragonality", Acta Materialia, 91(2015) 162-173.
77. C. Y. Chen, C. C. Chen and J. R. Yang, "Control of precipitation morphology in the novel HSLA steel", Materials Science & Engineering A, 634 (2015) 123-133.
78. M. Kawasakia, C.N. Hsiao, J.R. Yang, M. Shiojiri, "Structural investigation of Ru/Pt nanocomposite films prepared by plasma-enhanced atomic layer depositions", MICRON, 74(2015) 8-14.
79. S. Roy, S. Maikap, G. Sreekanth, M. Dutta, D. Jana, Y.Y. Chen and J. R. Yang, "Improved resistive switching phenomena and mechanism using Cu-Al alloy in a new Cu:AlOx/TaOx/TiN structure" Journal of Alloys and Compounds 637 (2015) 517-523.
80. C. Y. Chen, C. C. Chen and J. R. Yang, "Dualism of precipitation morphology in high strength low alloy steels", Materials Science & Engineering A, 626 (2015)74–79.
81. L. Li, B.H. Song, Y.L. Chang, H. Xia, J.R. Yang, K.S. Lee, L. Lu, "Retarded phase transition by fluorine doping in Li-rich layered $Li_{1.2}Mn_{0.54}Ni_{0.13}Co_{0.13}O_2$ cathode material" JOURNAL OF POWER SOURCES, 283 (2015) 162-170.
82. H.Y. Shih, M Shiojiri, C.H. Chen, S.F. Yu, C.T. Ko, J.R.Yang, R.M. Lin and M.J. Chen, "Ultralow threading dislocation density in GaN epilayer on near-strain-free GaN compliant buffer layer and its applications in hetero-epitaxial LEDs", Scientific Reports, Volume: 5, Article Number: 13671, 2015.
83. L. Morales-Rivas, H.W. Yen, B. M. Huang, M. Kuntz, F. G. Caballero, J.R.Yang, and C. Garcia-Mateo, "Tensile Response of Two Nanoscale Bainite Composite-Like Structures", JOM 67(2015) 2223-2235.
84. J. R. Yang, Y. C. Hsieh, L. Zhang, T. Ohmura and T. Suzuki, "Insight into the deformation behavior of spinodal nanostructured δ-ferrite in a 2205 duplex stainless steel", Microscopy, 64(2015), Supplement 1, i27.
85. T. F. Chung, B. M. Huang, J. R. Yang and T. Ohmura, "The effect of aging on the phase transformation of AA7050 aluminium alloy", Microscopy, 64(2015), Supplement 1, i83.
86. Y. L. Chang, Y. T. Tsai, P. Y. Chen and J. R. Yang, "The misorientation change in lenticular martensite determined by EBSD and CBED", Microscopy, 64(2015), Supplement 1, i107.
87. Y. T. Tsai and J. R. Yang, "The investigation of Moire patterns between ferrite and cementite precipitate in a Si-containing steel", Microscopy, 64(2015), Supplement 1, i107.
88. P. Y. Chen, C. P. Chang, T. Y. Wang, M. W. Chu and J. R. Yang, "Magnetic properties and domain observations of annealed Fe-Si-B-C amorphous ribbons", Microscopy, 64(2015), Supplement 1, i114.
89. B.M. Huang, J.R. Yang, H.W. Yen, C.H.Hsu, C. Y. Huang, H. Mohrbacher, "Secondary hardened bainite", Materials Science and Technology, 30 (2014) 1014 – 1023.

90. Z. J. Xie, S.F. Yuan, W.H. Zhou, J.R. Yang, H. Guo, C.J. Shang, “Stabilization of retained austenite by the two-step intercritical heat treatment and its effect on the toughness of a low alloyed steel”, Materials & Design, 59 (2014) 193–198.
91. Z.J. Xie, Y.Q. Ren, W.H. Zhou, J.R. Yang, C.J. Shang and R.D.K. Misra, “Stability of retained austenite in multi-phase microstructure during austempering and its effect on the ductility of a low carbon steel”, Material Science and Engineering A, 603 (2014) 69 - 75.
92. C.P. Chang, M.W. Chu, H.T. Jeng, S.L. Cheng, J.G. Lin, J.R. Yang and C.H. Chen, “Condensation of two-dimensional oxide-interfacial charges into one-dimensional electron chains by the misfit-dislocation strain field”, Nature Communications, Vol. 5 (2014), Article3522 (DOI: 10.1038).
93. M. Y. Chen, M. Goune, M. Verdier, Y. Brechet and J. R. Yang, “Interphase precipitation in vanadium-alloyed steels: Strengthening contribution and morphological variability with austenite to ferrite transformation”, Acta Materialia, 64(2014) 78-92.
94. M. Y. Chen, M. Gouné, M. Militzer, Y. Bréchet and J. R. Yang “Superledge Model for Interphase Precipitation During Austenite-to-Ferrite Transformation” Metallurgical and Materials Transactions A, 45 (2014) 5351-5361.
95. F.G. Caballeroa, H.W. Yen, M.K. Miller, J. Cornide, H.T. Chang, C. Garcia-Mateo and J.R.Yang, “Three phase crystallography and solute distribution analysis during residual austenite decomposition in tempered nanocrystalline bainitic steels”, Materials Characterization, 88 (2014) 15-20.
96. C. Y. Chen, C.C. Chen and J. R. Yang, “Microstructure Characterization of nanometer carbides heterogeneous precipitation in Ti-Nb and Ti-Nb-Mo steel”, Materials Characterization, 88 (2014) 69-79.
97. P. K. Chiu, B. H. Liou, C. N. Hsiao and J. R. Yang, “Investigation on optical and electrical properties of ZnO sandwich structure with metal interlayer” Japanese Journal of Applied Physics, Vol. 53 (2014), Article Number: 05FF05.
98. D. Jana, S. Maikap, A. Prakash, Y.Y. Chen, H.C. Chiu and J. R. Yang, “Enhanced resistive switching phenomena using low-positive-voltage format and self-compliance IrOx/GdOx/W cross-point memories”, Nanoscale Research Letters (2014) Volume 9, Article12.
99. P. K. Chiu, CT Lee, D.Y. Chiang, W.H. Cho, C.N. Hsiao, Y.Y. Chen, B.M. Huang, J.R. Yang, “Conductive and transparent multilayer films for low-temperature TiO2/Ag/SiO2 electrodes by E-beam evaporation with IAD”, Nanoscale Research Letters, Volume: 9 (2014), Article Number: 35.
100. J. Lu, Y. L. Chang, B. Song, J. R. Yang, K.S. Lee and L. Lu, “High energy spinel-structured cathode stabilized by layered materials for advanced lithium-ion batteries”, Journal of Power Sources 271(2014) 604-613.
101. L. Li, Y. L. Chang, H. Xia, B. H. Song, J. R. Yang, K.S. Lee and L. Lu, “NH4F surface modification of Li-rich layered cathode materials”, Solid State Ionics, 264 (2014) 36-44.
102. S. Ye, J. Fuh, L. Lu, Y. L. Chang and J. R. Yang, “Structure and properties of hot-pressed lead-free (Ba0.85Ca0.15)(Zr0.1Ti0.9)O-3 piezoelectric ceramics”, RSC ADVANCES, 3 (2013) 20693-20698.
103. M. Y. Chen, H. W. Yen and J. R. Yang, “The transition from interphase-precipitated carbides to fibrous carbides in a vanadium-containing medium-carbon steel”, Scripta Materialia 68 (2013) 829–832.
104. Y. Y. Chen, J. R. Yang, S. L. Cheng and M. Shiojiri, “Structural investigation of ZnO: Al films deposited on the Si substrates by radio frequency magnetron sputtering, Thin Solid Films, 545(2013) 183-187.
105. J. F. Chien, Y. H. Huang, Y. J. Chang, J. R. Yang, M. Shiojiri and M. J. Chen, “Tunable Optical and Structural Properties of $Mg_xZn_{1-x}O$ Films Prepared by In Situ Atomic Layer Doping Technique”, ESC Journal of Solid State Science and Technology, 2 (2013) 31-35.
106. M. Kawasaki, M. J. Chen, J. R. Yang, W. A. Chiou, and M. Shiojiri, “Structural analysis of Au/TiO2 thin films deposited on the glass substrate” , Applied Physics Letters, Volume: 102, Issue: 9, Article Number: 091603 (2013).
107. C. P. Chang, J. G. Lin , H. T. Jeng, S-L. Cheng, W. F. Pong, Y. C Shao, Y. Y. Chin, H. -J. Lin, C. W. Chen, J. R. Yang, C. H. Chen, and M. -W. Chu, “Atomic-scale observation of a graded polar discontinuity and a localized two-dimensional electron density at an insulating oxide interface”, Physical Review B, Volume: 87, Issue: 7, Article Number: 075129 (2013).
108. Z.C. Feng, L.H. Zhu, T.W. Kuo, C.Y. Wu, H.L. Tsai, B.L. Liu, J.R. Yang, “Optical and structural studies of dual wavelength InGaN/GaN tunnel-injection light emitting diodes grown by metalorganic chemical vapor deposition”, Thin Solid Films, 529(2013) 269-274.
109. J. R. Yang, H. W. Yen, P. Y. Chen and C. Y. Huang, “The development of interphase precipitated nanometer-sized carbides in the advanced low-alloy steels”, Materials Science Forum 762(2013) 95-103.
110. B. M. Huang, H. W. Yen, D. Ho, H. Ho and J. R. Yang, “The influence of Widmanstätten ferrite on yielding behavior of Nb-containing reinforcing steel bars”, Scripta Materialia, 67 (2012) 431–434
111. H. W. Yen, M. Huang, C. P. Scott and J. R. Yang, “Interactions between deformation-induced defects and carbides in a vanadium-containing TWIP steel”, Scripta Materialia, 66(2012) pp. 1018-1023.
112. W. Banerjee, S Maikap, C.S. Lai, Y.Y. Chen, M.J. Tsai and J.R.Yang, “Formation polarity dependent improved

resistive switching memory characteristics using nanoscale (1.3 nm) core-shell IrOx nano-dots", NANOSCALE RESEARCH LETTERS Volume: 7, Article Number: 194 (2012).
113. W. Banerjee, S. Maikap, S. Z. Rahaman, A . Prakash, T.C. Tien, W.C. Li and J.R. Yang, "Improved Resistive Switching Memory Characteristics Using Core-Shell IrOx Nano-Dots in Al2O3/WOx Bilayer Structure", JOURNAL OF THE ELECTROCHEMICAL SOCIETY, 159 (2012)pp. H177-H182.
114. M. J. Chen, J.R. Yang and M. Shiojiri, "ZnO-based ultra-violet light emitting diodes and nanostructures fabricated by atomic layer deposition", Semiconductor Science and Technology, 27(2012) 074005.
115. P.K. Chiu, W.H. Cho, H.P. Chen, C.N. Hsiao and J.R. Yang, "Study of a sandwich structure of transparent conducting oxide films prepared by electron beam evaporation at room temperature", NANOSCALE RESEARCH LETTERS, (2012)Volume: 7, Article Number: 304.
116. P.W. Hsu, F. H. Kao, S.H. Wang and JR Yang, "Twinned formation in weld metal of titanium bearing nano precipitated high strength steel", Materials Chemistry and Physics, 136(2012) 1103–1108.
117. M. C. Lin, MK Wu, MJ Chen, JR Yang, M Shiojiri, "Blue-shifted stimulated emission from ZnO films deposited on SiO by atomic layer deposition", Materials Chemistry and Physics, 135(2012)88-93.
118. H. W. Yen, P. Y. Chen, C. Y. Huang and J. R. Yang, "Interphase precipitation of nanometer-sized carbides in a titanium-molybdenum-bearing low-carbon steel", Acta Materialia, 59(2011) pp. 6264-6274.
119. H. L. Yi, J. H. Ryu, H. K. D. H. Bhadeshia, H.W. Yen and J. R. Yang, "Low-alloy duplex, directly quenched transformation-induced plasticity steel", Scripta Materialia, 65(2011) pp. 604-607.
120. K. H. Tu, S. S. Li, W. C. Li, J. R. Yang and M. W. Chu, "Solution processable nanocarbon platform for polymer solar cells", Energy & Environmental Science, 4(2011) pp. 3521-3526.
121. F. G. Caballero, H. Y. Yen, M. K. Miller and J. R. Yang, "Complementary use of transmission electron microscopy and atom probe tomography for the examination of plastic accommodation in nanocrystalline bainitic steels", Acta Materialia, 59(2011) pp. 6117-6123.
122. W. C. Li, H. L Tsai, H. C. Chen, M. K. Wu, H. R. Chen, M. J. Chen, J. R. Yang and M. Shiojiri,"Structural investigation of *n*-ZnO/*p*-GaN ultraviolet light emitting diodes grown by atomic layer deposition," Functional Materials Letters, Vol. 4 (2011) pp.221-224.
123. S. S. Li, C. P. Chang, C. C. Lin, C. C. Chang, J. R. Yang, M. W. Chu and C. W. Chen, "Interplay of Three-Dimensional Morphologies and Photocarrier Dynamics of Polymer/TiO(2) Bulk Heterojunction Solar Cells", Journal of the American Chemical Society, 133(2011) pp. 11614-11620.
124. P. W. Hsu, R. S. Chen, F. H. Kao, S. H. Wang and J. R. Yang, "Martensite nucleation site and grain refinement in duplex titanium alloy weldment by active flux with nanoparticle addition", Science and Technology of Welding and Joining, 16(2011) pp. 514-521.
125. Y. H. Lin, K. H. Hu, F. H. Kao, S. H. Wang and J. R. Yang, "Dynamic strain aging in low cycle fatigue of duplex titanium alloys", Materials Science and Engineering A, 528 (2011) pp. 4381-4389..
126. Y. H. Lin, S. M. Wu, F. H. Kao, S. H. wang and J. R. Yang, "Microtwin formation in the a phase of duplex titanium alloys affected by strain rate", Materials Science and Engineering A, 528 (2011) pp. 2271-2276.
127. W. C. Li, W. Banerjee, M. Siddheswar and J. R. Yang, "Particle Size and Morphology of Iridium Oxide Nanocrystals in Non-Volatile Memory Device", Materials Transctions, 52(2011) pp. 331-335.
128. T. P. Wang, F. H. Kao, S.H. wang and J. R. Yang, "Isothermal treatment influence on nanometer-size carbide precipitation of titanium-bearing low carbon steel", Materials Letters, 65(2011) pp. 396-399.
129. Y.T. Shih, J. F. Chien, M. J. Chen. J. R. Yang and M. Shiojiri, "P-Type ZnO:P Films Fabricated by Atomic Layer Deposition and Thermal Processing", Journal of the Electrochemical Society, 158(2011) pp. H516-520.
130. W. Banerje, S. Maikap, T. -C Tien, W. -C Li, J. R. Yang, "Impact of metal nano layer thickness on tunneling oxide and memory performance of core-shell iridium-oxide nanocrystals", Journal of Applied Physics, 110(2011), Number: 074309.
131. H. C., Chen, , M. J. Chen, , Y. H. Huang, , W. C. Sun, , W. C. Li, , J. R. Yang, , H. Kuan and M. Shiojiri, "White-Light Electroluminescence From n-ZnO/p-GaN Heterojunction Light-Emitting Diodes at Reverse Breakdown Bias" IEEE TRANSACTIONS ON ELECTRON DEVICES, 58(2011)3970-3975.
132. S. Maikap, W. Banerjee, T.C. Tien, T. Y. Wang, J. R. Yang, "Temperature-Dependent Physical and Memory Characteristics of Atomic-Layer-Deposited RuO(x) Metal Nanocrystal Capacitors", Journal of Nanomaterials, 2011, Article Number: 810879.
133. C. C. Wu, C. Y. Chen, S. H. Wang, J. R. Yang and J. Fang, "Weld metal phase transformation of as welded 6Mo superaustenitic stainless steel after cross-weld fatigue", Science and Technology of Welding and Joining, 15(2010) pp. 407-413.
134. H. W. Yen, C. Y. Huang, J. R. Yang, "The nano-carbide control: design of super-ferrite in steels", Advanced Materials Research, 89-91 (2010) 663-668.
135. H.Y. Lee , H. W. Yen , H. T. Chang, J. R. Yang, "Substructures of martensite in Fe-1C-17Cr stainless steel", Scripta Materialia, 62 (2010) 670-673.

136. H. W. Yen , C.Y. Chen , T. Y. Wang , C. Y. Huang , J. R. Yang, "Orientation relationship transition of nanometre sized interphase precipitated TiC carbides in Ti bearing steel", Materials Science and Technology, 26 (2010) 421-430.
137. H.C. Chen, M. J. Chen, T. C. Liu, J. R. Yang and M. Shiojiri, "Structure and stimulated emission of a high-quality zinc oxide epilayer grown by atomic layer deposition on the sapphire substrate", Thin Solid Film, 519 (2010)536-540.
138. T. P. Wang, F. H.Kao, S. H. Wang, J. R. Yang, C. Y. Huang and H. R. Chen, "Isothermal treatment influence on nanometer-size carbide precipitation of titanium-bearing low carbon steel", Materials Letters, 65 (2010) 396-399.
139. Y. T. Shih, C. Y. Chiu, C. W. Chang, J. R. Yang, M. Shiojiri, M. J.Chen, " Stimulated Emission in Highly (0001)-Oriented ZnO Films Grown by Atomic Layer Deposition on the Amorphous Glass Substrates", Journal of the Electrochemical Society, 157 (2010) H879-H883.
140. M. J. Chen, Y. T. Shih , M. K. Wu, H. C. Chen, H. L. Tsai, W. C. Li, J. R. Yang, H. Kuan, M. Shiojiri, "Structure and Ultraviolet Electroluminescence of n-ZnO/SiO2-ZnO Nanocomposite/p-GaN Heterostructure Light-Emitting Diodes", IEEE Transactions on Electron Devices, 57 (2010) 2195-2202.
141. E. Sun, F. H. Su, C.H. Chen, H. L. Tsai, J. R. Yang and M. J. Chen, "Temperature-dependent photoluminescence of arsenic-doped Si nanocrystals", Journal of Luminescence, 130 (2010) 1485-1488.
142. M. Ceh , H. C. Chen , M. J. Chen , J. R. Yang, M. Shiojiri, "Structure and Electro-Optical Properties of Thin Films Grown by Alternate Atomic Layer Deposition of ZnO and Al2O3 on the Sapphire Substrate", Materials Transactions, 51 (2010) 219-226.
143. M. K. Wu , M. J. Chen , F. Y. Tsai , J. R. Yang, M. Shiojiri, "Fabrication of ZnO Nanopillars by Atomic Layer Deposition" , Materials Transactions, 51 (2010) 253-255.
144. A. Das, S. Maikap, C.-H. Lin, P.-J. Tzeng, T.-C. Tien, T.-Y. Wang, L.-B. Chang, J.-R. Yang and M. J. Tsai, "Ruthenium oxide metal nanocrystal capacitors with high-κ dielectric tunneling barriers for nanoscale nonvolatile memory device applications", Microelectronic Engineering, 87 (2010) 1821-1827.
145. H. W. Yen , C. Y. Huang, J. R. Yang, "The nano-carbide control: design of superferrite in steels", Advanced Materials Research, 89-91 (2010) 663-668.
146. H. C. Chen , M. J. Chen , Y. C. Cheng , J.R. Yang, M. Shiojiri., " Amplified Spontaneous Emission From ZnO in n-ZnO/p-GaN Heterojunction Light-Emitting Diodes With an External-Feedback Reflector", IEEE Photonics Technology Letters, 22 (2010) 248-250.
147. H. C. Hsu, Y. C Lin, S. H. Wang, F. H. Kao, W. C. Lee, J. R. Yang, P. W. Hsu, H. W. Yen, W. S. Lee, "Inducement of bainite and carbide transformation from retained austenite based on a high strain rate", Scripta Materialia, 62 (2010) 372-375.
148. Y. T. Shih, M. K. Wu, M. J. Chen, Y. C. Cheng, J. R. Yang and M. Shiojiri, "ZnO-based heterojunction light-emitting diodes on p-SiC(4H) grown by atomic layer deposition", Applied Physics B- Laser and Optics, 98(2010) 767-772.
149. J. R. Yang, W.C. Li, H. L. Tsai, J. T. Hsu and M. Shiojiri, "Electron microscopy investigations of V defects in multiple InGaN/GaN quantum wells and InGaN quantum dots", Journal of Microscopy, 237 (2010) 275-281.
150. H. C. Chen; M. J. Chen; M. K. Wu; Wei-Chih Li; H. L. Tsai; J. R. Yang; H.Kuan; M. Shiojiri, "UV Electroluminescence and Structure of n-ZnO/p-GaN Heterojunction LEDs Grown by Atomic Layer Deposition", IEEE Journal of Quantum Electronics, 46 (2010) 265-271.
151. H. W. Yen, C. Y. Huang and J. R. Yang, "Characterization of interphase-precipitated nanometer-sized carbides in a Ti–Mo-bearing steel", Scripta Materialia, 61 (2009) 616-619.
152. H.T. Kuo, R.C. Wei, W.F. Wu and J.R. Yang, "Simulated heat affected zone in ASTM A533-B steel plates under low heat inputs", Materials Chemistry and Physics, 117 (2009) 471-477.
153. E. Sun , F. H. Su , Y. T. Shih , H. L. Tsai , C. H. Chen , M. K. Wu , J. R. Yang and M. J. Chen, "An efficient Si light-emitting diode based on an n-ZnO/SiO2-Si nanocrystals-SiO2/p-Si heterostructure", Nanotechnology 20, 445202 (2009).
154. S. J. Wang, E. H Park, Z. C. Feng, H. L. Tsai, J. R. Yang and I Ferguson, "Suppression of phase separation in InGaN layers grown on lattice-matched ZnO substrates", Journal of Crystal Growth, 311 (2009) 4628-4631.
155. Das, S. Maikap, W. C. Li, L. B. Chang, and J. R. Yang, "Physical and Memory Characteristics of Atomic-Layer-Deposited High-kappa Hafnium-Aluminum-Oxide Nanocrystal Capacitors with Iridium-Oxide Metal Gate", Jpn. J. Appl. Phys. 48 (2009) 05DF02.
156. M. K. Wu, Y. T. Shih, M. J. Chen, J. R. Yang, M. Shiojiri, "ZnO quantum dots embedded in a SiO2 nanoparticle layer grown by atomic layer deposition", Physica Status Solidi-Rapid Research Letters, 3 (2009) 88-90.
157. Y. T. Shih, M. K. Wu, W. C. Li, H. Kuan, J. R. Yang, M. Shiojiri and M. J. Chen, "Amplified spontaneous emission from ZnO in n-ZnO/ZnO nanodots–SiO_2 composite/p-AlGaN heterojunction light-emitting diodes", Nanotechnology 20, 165201 (2009).
158. F.H. Kao, W.C. Li , C. Y. Chen , C. Y. Huang, J. R. Yang and S. H. Wang," Cross-sectional observation of the intermetallic phase in a galvannealed steel", Materials Science and Engineering A, 499 (2009)45-48.

159. C. Y. Chen , H. W. Yen, .F.H. Kao, W. C. Li , C. Y. Huang, J. R. Yang and S. H. Wang, "Precipitation hardening of nanometer-sized carbides in high-strength low-alloy steels", Materials Science and Engineering A, 499(2009)162-166.
160. S. H. Wang, H.H. Lee , C.Y. Chen and J. R. Yang, "The variation of beta phase morphology after creep and negative creep for duplex titanium alloys", Journal of Materials Science, 44 (2009) 408-413.
161. S. Y. Huang and J. R. Yang, "A Transmission Electron Microscopy Observation of Dislocations in GaN Grown on (0001) Sapphire by Metal Organic Chemical Vapor Deposition", Japanese Journal of Applied Physics, 47 (2008) 7998-8002.
162. S. Maikap, T.Y. Wang, P.J. Tzeng, and J.R. Yang, "Low voltage operation of high-k HfO2/Tio2/Al2O3 single quantum well for nanoscale flash memory device applications", Japanese Journal of Applied Physics, 47 (2008) 1818-1821.
163. S. Maikap, P.J. Tzeng, T.Y. Wang and J.R. Yang, "Memory characteristics of atomic-layer-deposited high-k HfAlO nanocrystal capacitors" Electrochemical and Solid State Letters, 11(2008) K50-K52.
164. M. K. Wu, Y.T. Shih, W.C. Li, M. J. Chen, J. R. Yang and M. Shiojiri, "Ultraviolet Electroluminescence From n-ZnO-SiO2-ZnO Nanocomposite/p-GaN Heterojunction Light-Emitting Diodes at Forward and Reverse Bias", IEEE Phtonics Technology Letters, 20(2008)1772-1774.
165. S. H. Wang, C.Y. Chen, S. W. Lee and J. R. Yang, "Effects of dynamic impact on mechanical properties and microstructure of special stainless steel weldments", Materials Chemistry and Physics, 111 (2008) 172-179.
166. J. R. Yang, H. L. Tsai, T. Y. Wang, H. W. Yen, C. Y. Chen, W. C. Li and H. R. Chen, "Nanostructural analysis of a GaN-based violet laser diodes", Surface Review and Letters, 15(2008)189-193.
167. S. Maikap, T. Y. Wang, T.J. Tzeng and J. R. Yang, "Band offsets and charge storage characteristics of atomic layer deposited high-k HfO_2/TiO_2 multilayers", Applied Physics Letters, 90, 262901 (2007).
168. Y. Chen, H. W. Yen and J. R. Yang, "Sympathetic nucleation of austenite in a Fe-22Cr-5Ni duplex stainless steel", Scripta Materialia 56 (2007) 673-676.
169. Wu, S.H. Wang, C. Y. Chen, J. R. Yang, P. K. Chiu and J. Fang, "Inverse effect of strain rate on mechanical behavior and phase transformation of superaustenitic stainless steel", Scripta Materialia, 56 (2007) 717-720.
170. T.H. Yu and J. R. Yang, "Effect of retained Austenite on GPM A30 high-speed steel", Journal of Materials Engineering and Performance, 16(2007)500-507.
171. T.H. Yu, C.Y. Chen and J. R. Yang, "Decomposition of retained Austenite in a high-speed steel GPM A30", Journal of Materials Engineering and Performance, 16(2007) 102-108.
172. H. L. Tsai, T. Y. Wang, J. R. Yang, C. C. Chuo , J. T. Hsu, M. Ceh, H. Saijo and M. Shiojiri, "Structural analysis of strained p-type AlGaN/GaN superlattice, Journal of Applied Physics, 101, 023521 (2007).
173. H. L. Tsai, T. Y. Wang, J. R. Yang, C.C. Chuo, J. T. Hsu, Z. C. Feng and M. Shiojiri, "Observation of V-defects in multiple InGaN/GaN Quantum well layers", Materials Transactions, 48(2007) 894-898.
174. S. Maikap, P. J. Tzeng, T. Y. Wang, H. Y. Lee, C. H. Lin, C. C. Wang, L. S. Lee, J. R. Yang and M. J. Tsai, ,"HfO_2/HfAlO/HfO_2 nanolaminate charge trapping layers for high performance nonvolatile memory device applications", Japanese Journal of Applied Physics, 45(2007)1803-1807.
175. S. Maikap, T. Y. Wang, ,P. J. Tzeng, H. Y. Lee, C. H. Lin, C. C. Wang, L. S. Lee, J. R. Yang and M. J. Tsai, "Charge storge characteristics of atomic layer deposited RuO_x nanocrystals" Applied Physics Letters, 90, 253108 (2007).
176. H. L. Tsai, T. Y. Wang, J. R. Yang, T. C. Wang, J. T. Hsu and M. Shiojiri, "Observation of high density INGaN quantum dots", Journal of Applied Physics, 102 (2007) 013521.
177. Y. Chen, H.W.Yen, T.H. Yu and J. R. Yang, "Intragranularly nucleated austenite in a 2205 duplex stainless steel", Materials Science Forum, Vols. 539-543 (2007) 4881-4886.
178. S. Maikap, H. Y. Lee, T. Y. Wang, P. J. Tzeng, C.C. Wang, L. S. Lee, K. C. Liu, J. R. Yang and M. J. Tsai, "Charge trapping characteristics of atomic-layer-deposited HfO_2 films with Al_2O_3 as a blocking oxide for high-density non-volatile memory device applications" Semicoductor Science and Technology, 22(2007) 884-889.
179. H. Wang, C.C. Wu, C.Y. Chen, J. R. Yang, P. K. Chiu and J. Fang, "Cyclic deformation and phase transformation of 6 Mo superaustenitic stainless steel", Metals and Materials International, 13(2007) 275-283.
180. H. S. Wang, C.Y. Huang and J.R. Yang, "Cross-sectional transmission electron microscopy of ultra-fine wires of AISI 316L stainless steel", Philosophical Magazine, 86(2006), pp.237-251.
181. J. H. Chen, Z. C. Feng, H. L. Tsai, J. R. Yang, P. Li., C. Wetzel, T. Detchprohm and J. Nelson, " Optical and structural properties of INGaN/GaN multiple quantum well structure grown by metalorganic chemical vapor deposition", Thin Solid Film 498(2006), pp.123-127.
182. J. H. Chen, Z. C. Feng, J. C. Wang, H. L. Tsai, J. R. Yang, A. Parekh, E. Armour and P. Faniano, "Study of Carrier Localization in InGaN/GaN Quantum Well Blue-Light-Emitting Diode Structures", Journal of Crystal Growth, 287(2006), pp.345-358
183. M. Shiojiri , C. C. Chuo , J. T. Hsu , J. R. Yang and H.Saijo, "Structure and formation mechanism of V defects in multiple InGaN/GaN quantum well layers", Journal of Applied Physics, 99(2006), 073505.

184. S. H. Wang, P. K. Chiu, J. R. Yang and J. Fang, “Gamma phase transformation in pulsed GTAW weld metal of duplex stainless steel”, Materials Science and Engineering A, 420 (2006), pp.26-33.
185. T. C. Wang , H. C. Kuo , T. C. Lu , C. E. Tsai , M. Y. Tsai , J. T. Hsu ,and J.R. Yang, “Study of InGaN multiple quantum dots by metal organic chemical vapor deposition”, Japanese Journal of Applied Physics, 45(2006), pp.3560-3563.
186. P. K. Chiu, S. H. Wang , J. R.Yang, K. L. Weng and Fang J, “The effect of strain ratio on morphology of dislocation in low cycle fatigued SAF 2205 DSS”, Materials Chemistry and Physics, 98(2006), pp.103-110.
187. S. Chatterjee, H.S.Wang, J.R.Yang and H.K.D.H. Bhadeshia, “The Mechanical Stabilisation of Austenite”, Materials Science and Technology, 22 (2006), pp.641-644.
188. M. Shiojiri, M. Ceh , S. Sturm , C. C. Chuo , J. T. Hsu , J. R. Yang and H. Saijo, “Structural and Compositional Analyses of a Strained AlGaN/GaN Superlattice”, Journal of Applied Physics, 100, (2006), 013110.
189. S. C. Chin, C. Y. Chi, L. Hong, C. C. Yang and J. R. Yang, “Nano-structure study of ZnO thin films on sapphire grown with different temperature conditions”, Journal of Crystal Growth, 293(2006), pp.344-350.
190. J.R. Yang, T. H. Yu and C.H. Wang, “Martensitic Transformations in AISI 440C Stainless Steel”, Materials Science and Engineering A438-440 (2006) 276-280.
191. P. K. Chiu, K. L. Weng, S. h. Wang, J. R. Yang, Y. S. Huang, Jason Fang, “Low-Cycle Fatigue Induced Martensitic Transformation in SAF 2205 Duplex Stainless Steel,” Materials Science and Engineering A, Vol.398, (2005), pp.348-359.
192. M. Shiojiri, M. Ceh, S. Sturm, C.C. Chuo, J. T. Hsu, J. R. Yang and H. Sajio. ”Determination of thickness and lattice distortion for the individual layer of strained AlGaN/GaN superlattice by high-angle annular dark-field scanning transmission electron microscopy”, Applied Physics Letters, 87(2005) pp.031914-031916.
193. M. K. Chen, Y.C. Cheng, J. Y. Chen, C. M. Wu, C. C. Yang, K. J. Ma, J. R. Yang and A. Rosenauer, “Effects of Silicon Doping on the Nanostructures of InGaN/GaN Quantum Wells”, Journal of Crystal Growth, 279/1-2 (2005) pp.55-64.
194. H .S. Wang, J. R. Yang and H. K. D. H. Bhadeshia, “Characterisation of Severely Deformed Austenitic Stainless Steel Wire”, Materials Science and Technology, 21(2005), pp.1323-1328
195. H. Saijo, J. T. Hsu, R. C. Tu, M. Yamada, M. Nakagawa, J. R. Yang, M. Shiojiri, " Mapping of multiple-quantum-well layers and structure of V defects in InGaN / GaN diodes" , Applied Physics Letters, 84(2004)2271-2273.
196. Y. C. Cheng, E. C. Lin, C. M. Wu, C.C. Yang and J. R. Yang, “Nanostructures and carrier localization behaviors of green-luminescence InGaN/GaN quantum-well structures of various silicon-doping conditions”, Applied physics Letters, 84(2004)2506-2508.
197. Y. C. Chen, C. M. Wu, M. K. Chen, C. C. Yang, Z. C. Feng, and J.R. Yang, “Improvements of InGaN/GaN quantum-well interfaces and radiative efficiency with InN interfacial layers”, Applied Physics Letters, 84(2004)5422-5424.
198. H. Saijo, M. Yamada, M. Nakagawa, J. T. Hsu, R. C. Tu, J. R. Yang, M. Shiojiri, " High-resolution scanning electron microscopy observation of GaN / AlGaN Strained-Layer Superstructures in GaN-based violet Laser Diodes" , Japanese Journal of Applied Physics, 43(2004)968-969.
199. K. L. Weng, H. R. Chen and J. R. Yang, 2004, “The Low- Temperature Aging Embrittlement in a 2205 Duplex Stainless Steel,” Materials Science and Engineering A, Vol.398 (2004), pp.349-359.
200. M. C. Tsai and J. R. Yang, "Microstructural degeneration of simulated heat-affected zone in 2.25Cr-1Mo steel during high temperature exposure" , 2003, Materials Science and Engineering A, A340(2003)15-32.
201. K. Watanabe, J. R. Yang, N. Nakanishi, K. Inoke and M. Shiojiri, " Formation and Structure of inverted hexagonal pyramid defects in multiple quantum wells InGaN / GaN" , 2003, Applied Physics Letters, 82(2003)718-720.
202. K. Watanabe, J. R. Yang, N. Nakanishi, K. Inoke and M. Shiojiri, " Atomic-scale strain field and In atom distribution in multiple quantum wells InGaN / GaN" , 2003, Applied Physics Letters, 82(2003)715-717.
203. L.W. Tsay , T.S. Chern , C.Y. Gau and J. R. Yang, 1999, " Microstructures and fatigue crack growth of EH36 TMCP steel weldments", International Journal of Fatigue, 21(2003), pp.857-864.
204. K. Watanabe, J. R. Yang, N. Nakanishi, K. Inoke and M. Shiojiri, 2003, " Formation and structure of inverted hexagonal pyramid defects in multiple quantum wells InGaN/GaN," Applied Physics Letters, 82(2003)718-720.
205. M. C. Tsai, C. S. Chiou and J. R. Yang, 2003, “Microstructural Evolution of Simulated Heat-affected Zone in Modified 2.25Cr-1Mo Steel during High Temperature Exposure,” Journal of Materials Science, 38(2003), pp.2373-2391.
206. K. Watanabe, J. R. Yang, N. Nakanishi, K. Inoke and M. Shiojiri, 2002," Direct Determination of Atomic Structure in MQW-InGaN / GaN," Applied Physics Letters, 80(2002) 761-762.
207. C. N. Hsiao, C. S. Chiou and J. R. Yang, "Aging Reactions in a 17-4 PH Stainless Steel", 2002, Materials Chemistry and Physics, 74(2002) 134-142.
208. M. C. Tsai, C. S. Chiou, J. S. Du and J. R. Yang, "Phase Transformation in AISI 410 Stainless Steel" ,2002, Materials Science and Engineering A, A232(2002)1-10.
209. T. H. Chen and J. R. Yang, "Microstructural characterization of simulated heat affected zone in a nitrogen-containing 2205 duplex stainless steel", 2002, Materials Science and Engineering A,A338(2002) 166-181.

210. T. H. Chen, K. L. Weng and J. R. Yang, " The effect of high-temperature exposure on the microstructural stability and toughness property in a 2205 duplex stainless steel", 2002, Materials Science and Engineering A, A338(2002)259 –270.
211. C. S. Chiou, J. R. Yang and C.Y. Huang, " The Effect of Prior Compressive Deformation of Austenite on Toughness Property in an Ultra-Low Carbon Bainitic Steel", 2001, Materials Chemistry and Physics, 69(2001)113-124.
212. T. H. Chen and J. R. Yang, "Effects of Solution Treatment and Continuous Cooling on σ-phase Precipitation in a 2205 Duplex Stainless Steel" 2001, Materials Science and Engineering A, A311(2001)28-41.
213. R. H. Larn and J. R. Yang, " The Effect of Compressive Deformation of Austenite on the Bainitic Ferrite Transformation in Fe-Mn-Si-C steels" , 2000, Materials Science and Engineering, A278(2000)278-291.
214. C. N. Hsiao and J. R. Yang, " Age Hardening in Martensitic / Bainitic Matrices in a Copper-Bearing Steels" , 2000, Materials Transactions, JIM, Vol.41 (2000)1312-1321.
215. J. R. Yang , C.Y. Huang and C. S. Chiou, 1999, " Microstructures of Heat-Affected Zone in Niobium Containing Steels, " Materials Transactions , JIM , Vol.40 (1999), pp.199-208.
216. R. H. Larn and J. R. Yang, 1999, " The Effect of Compressive Deformation of Austenite on Widmanstatten Ferrite Transformation in Fe-Mn-Si-C Steel," Materials Science and Engineering , A264 (1999), pp.139-150 .
217. J. R. Yang and L. C. Chang, 1997, "The Effect of Stress on the Widmanstätten Ferrite Transforamtion," Materials Science and Engineering, A223(1997), pp.158-167.
218. J. R. Yang and S. H. Liou, 1997, "Microstructural Evolution in the Simulated HAZ in ASTM A533 Type B Steel Plates," Science and Technology of Welding and Joinging, Vol.2(1997), pp.119-127.
219. J. R. Yang, C.Y. Huang, W. H. Shieh and C. S. Chiou, 1996, "Mechanical Stabilization of Austenite against Bainitic Reaction in a Fe-Mn-Si-C Bainitic Steel," Materials Transaction, JIM, 4(1996), pp. 579-585
220. J. R. Yang, C. Y. Huang and C. F. Huang, "Acicular Ferrite Transformation in Deformed Austentite of an Alloy Steel Weld Metal," Journal of Materials Science, 30(1995), pp.5036-5041.
221. J. R. Yang, C. Y. Huang amd C. S. Chiou, 1995, "The Influence of Plastic Deformation and Coolimg Rates on the Microstructural Constituents of an Ultra-Low Carbon Bainitic Steels," ISIJ Interational, Vol.35(1995), pp.1013-1019.
222. J. R. Yang, C.Y. Huang, W. H. Shieh and C. S. Chiou, 1995, "Mechanical Stabilization for Bainitic Reaction in a Fe-Mn-Si-C Bainitic Steel," Journal de Physique IV, 5(1995) Colloque C8, pp. 497-502.
223. J. R. Yang, C. Y. Huang, C. N. Yang and J. L. Horng, 1993, "Microstructural Examination of 2.25Cr- 1Mo Steel Steam Pipes after extended Service," Materials Characterization, Vol.30, pp.75-88.
224. J.R. Yang, C.Y. Haung and C.F Haung, 1993, "Inflluence of Acicular Ferrite and Bainite Microstructures on Toughness for an Ultra-Low-Carbon Alloy Steel Weld Metal," Journal of Materials Science Letters, V.12, pp.1290-1293.
225. J. R. Yang and C. Y. Huang, 1993, "Formation of Austenite from a Mixture of Bainitic Ferrite and Austenite," Materials Chemistry and Physics, Vol.35, pp.168-175.
226. C. Y. Huang, J. R. Yang and S. C. Wang, 1993, "The Effect of Compressive Deformation on the Transformation Behavior of an Ultra-Low-Carbon Bainitic Steel," Materials Transsactions, JIM, Vol.34, pp.658-668.
227. S. C. Wang and J. R. Yang, 1992, "The effects of Chemical Composition, Rolling, and Cooling Conditions on the Amount of M/A Constituent Formation in Low Carbon Bainite Steels," Materials Science and Engineering, Vol. A154, pp.43-49.
228. J.R. Yang, C.C. Huang and C.Y. Huang,1992,The Coexistence of Acicular Ferrite and Bainite in An Alloy-Steel Weld Metal, Journal of Materials Science Letters, Vol.11, pp.1145-1146.
229. S. C. Wang, R. I. Hsieh, H. Y. Liou and J. R. Yang, 1992, "The Effects of Rolling Processes on the Microstructure and Mechanical Properties of Ultra Low Carbon Bainitic Steels," Materials Science and Engineering, Vol.A157, pp.29-36.
230. J. R. Yang, C. Y. Huang and S. C. Wang, 1992, "The Development of Ultra-Low-Carbon Bainitic Steels," Materials & Design, Vol.13, pp.335-338.
231. J. R Yang and H.K.D.H. Bhadeshia, 1991, "Continuous Heating Transformation of Bainite to Austenite", Materials Science and Enginerring ,Vol. A131, pp.99-113.
232. J. R Yang and H.K.D.H. Bhadeshia, 1991, "Acicular Ferrite Transformation in Alloy-Steel Weld Metals", Journal of Materials Science, Vol.26, pp.839-845.
233. J. R. Yang and L.J Chen ,1991, Dual Ferrite-Martensite Treatments of a High Strength Low Alloy ASTM A588 Steel, Journal of Materials Science, Vol.26, pp.889-899.
234. S. L. I. Chan, H. L. Lee, and J. R. Yang, 1991, "Effect of Ratained Austenite on the Hydrogen Occlusivity and Effective Diffusivity of Martensitic Structure," Metallurgy Transaction A, Vol.22 A, pp.2579-2586.
235. J.R Yang and H.K.D.H. Bhadeshia, 1990, "The Dislocation Density of Acicular Ferrite", American Welding Journal, Vol. 69, pp.305S-307S.
236. J. R Yang and H.K.D.H. Bhadeshia, 1989, "Orientation Relationships between Adjacent Plates of Acicular Ferrite

in Steel Weld Deposits", Materials Science and Technology, Vol.5, pp.93-97.

237. J. R Yang and H.K.D.H. Bhadeshia, 1989, "Reaustenitisation Experiment on Some High -Strength Steel Weld Deposits", Materials Science and Engineering, Vol. A118, pp.155-170.

國內外研討會論文：

1. J. R. Yang "Coalesced martensite and bainite", THERMEC'2021 Conference, Graz University of Technology 2021, Austria. Invited speaker.
2. J. R. Yang, "Microstructural Characterization of Massive Ferrite in the Interstitial-Free Steel. Asia Steel" 2021 Conference , Gyeongiu, Korea. Keynote speech.
3. C. G. Chen, J. R. Yang, "Sub-structure and Precipitation Behavior ofLenticular Martensite in AISI-440C Steel. Asia Steel 2021 Conference, Gyeongiu, Korea C.L. Tai, J. R. Yang. Effect of adding trace amounts of Ag on precipitates evolution in high strength Al-Cu-Mg-Ag aluminium alloys. Taiwan Society of Microscopy conference(2021), Taipei, Taiwan.
4. H. Chang, J. R. Yang "An Investigation of 465 Maraging Stainless Steel", Taiwan Society of Microscopy conference (2021), Taipei, Taiwan..
5. J. J. Chen, J. R. Yang, "Defect structure and morphology of carbide in lenticulat martensite of AISI440C stainless steel". Taiwan Society of Microscopy conference (2021), Taipei, Taiwan..
6. Jia-Jun Chen, J. R. Yang, Analysis of Defect Structure and Tempering Behavior of Lenticular Martensite in AISI 440C Stainless Steel. 2021 MRS-T International Conference, Taipei, Taiwan.
7. P.J. Tai, J. R. Yang, An Investigation of natural aging in 7075 aluminium alloy. Taiwan Society of Microscopy conference (2021), Taipei, Taiwan.
8. S. W. Lu, J. R. Yang, " Deformed Structure of Massive Ferrite in an Interstitial Free Steel under Uniaxial Tensile Test. Asia Steel 2021 Conference, Gyeongiu, Korea.
9. S. Y. Lu, J. R. Yang, "Dislocation structure of massive ferrite in an interstitial-free steel",. Taiwan Society of Microscopy conference (2021), Taipei, Taiwan.
10. T. C. Tsao, J. R. Yang, Investigation of Strain-induced Precipitation of Niobium Carbide in Niobium Micro-alloyed Steels at Elevated Temperature, Asia Steel 2021 Conference, Gyeongiu, Korea..
11. T. J. Hsiao, J. R. Yang,"Nano-scale TEM study of strengthening phase in AA7075 aluminum with different artificial aging treatment. Taiwan Society of Microscopy conference (2021), Taipei, Taiwan.
12. Tsai -Fu Chung, Jer -Ren Yang and Makoto Shiojiri, (2021). Review of Our Recent STEM Investigations on Precipitates in Al -Mg -Zn -Cu Alloys. 15th International Conference on the Physical Properties and Application of Advanced Materials (ICPMAT) expanded to Geo-Eerth Science & Civil Design/Engineering (ES&CDE), the Czech Academy of Sciences, Czech Republic.
13. Tsai-Fu Chung, J. R. Yang (2021). Hierarchical Nanotwins in the Fe27Co24Ni23Cr26 High Entropy Steel Alloys. Asia Steel 2021 Conference, Gyeongiu, Korea.
14. Tsai-Fu Chung, Jer-Ren Yang (2021). Atomic STEM on the structural evolution of precipitates in Al-Zn-Mg-Cu and Al-Cu-Li-Mg aluminium alloy. 2021 MRS-T, International Conference, Taipei, Taiwan.
15. Y. W. Lai, J. R. Yang (2021). Effects of Low Temperature Austempering on the Microstructure Evolution and Mechanical Properties of Carbide-Free Bainite, Asia Steel 2021 Conference, Gyeongiu, Korea.
16. Y. X. Lin, P. H. Chiu, J. R. Yang (2021). Annealing twin and grain growth in AISI 316L stainless steel. Taiwan Society of Microscopy, Taipei, Taiwan.
17. J.R. Yang, "HAADF STEM Investigation of atomic scale structures of η precipitates in AA7050 aluminium alloy", 12th Asia-Pacific Microscopy Conference, 3-7 February, 2020 Hyderabad, India, Keynote speech.
18. Jer-Ren Yang, "The hierarchical structures of nanotwins in fcc-based high entropy alloys", in High-Entropy Forum in MRS-Taiwan Annual Meeting 2020, New Taipei City. Invited speech.
19. T. F. Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, J. R. Yang, "The nucleation mechanisms of precipitates in AA2050 aluminium alloy", Annual Meeting of Taiwan Heat-treatment Society, 2020, Dec., Kaohsiung, Taiwan.
20. T. F. Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, J. R. Yang, "The nucleation mechanisms of precipitates in AA2050 aluminium alloy", Taiwan Society of Microscopy conference, 2020, Nov., Taipei, Taiwan.
21. T. F.Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, J. R. Yang, " Atomic lattice defects in η12 precipitates of Al-Zn-Mg-Cu aluminium alloy", Taiwan Society of Microscopy conference, 2020, Nov., Taipei, Taiwan.
22. T. F. Chung, C. L. Tai, Y. S. Lin, C. N. Hsiao, W. C. li, J. W. Yeh, W. S. Lee, J. R. Yang, "Hierarchical structure of bulletprppf FeCoNiCrMn high entropy alloys under the cryogenic environment", Taiwan Society of Microscopy conference, 2020, Nov., Taipei, Taiwan.

23. T. F. Chung, C. L. Tai, Y. S. Lin, C. N. Hsiao, W. C. li, J. W. Yeh, W. S. Lee, J. R. Yang, "The investigation of deformation nano-twins forming in annealing nano-twins in Fe-Co-Cr-Mn high entropy alloys", Taiwan Society of Microscopy conference, 2020, Nov., Taipei, Taiwan.
24. Y. M. Pua, T. F. Chung, J. R. Yang, "An investigation of different ageing treatments in AA7050 aluminium alloy", Taiwan Society of Microscopy conference, 2020, Nov., Taipei, Taiwan.
25. S. Y. Lu, J. R. Yang, "Microstructural characterization of martensite and bainite in an ultra-low carbon steel", Taiwan Society of Microscopy conference, 2020, Nov., Taipei, Taiwan.
26. Y. L. Li, J. R. Yang, "Microstructure evolution of FeCoNiCr high entropy alloy", Taiwan Society of Microscopy conference, 2020, Nov., Taipei, Taiwan
27. Po-Han Chiu, Jer-Ren Yang, "Nano Scale Microstructural Development under -150°C of CoCrFeMnNi High Entropy Alloy", MRS-Taiwan Annual Meeting 2020, New Taipei City.
28. Jia-Jun Chen, Jer-Ren Yang, The Influence of Austenitization Temperature to the Microstructure of High Carbon High Alloy Tool steel, MRS-Taiwan Annual Meeting 2020, New Taipei City.
29. Ming-Yi Cheng, Jer-Ren Yang, Structures of Lath Martensite In 22MnB5, MRS-Taiwan Annual Meeting 2020, New Taipei City.
30. Y.M . Pua, T.F. Chung J.R. Yang, An investigation of different ageing treatment in 7075 Al alloys, MRS-Taiwan Annual Meeting 2020, New Taipei City.
31. Tulustia Japanesa, Po-Han Chiu, Tzu-Ching Tsao, Jer-ren Yang, Effect of Cryo-rolling on the Evolution of Microstructure and Mechanical Behavior of CoCrNi Medium Entropy Alloy, MRS-Taiwan Annual Meeting, New Taipei City.
32. Cheng-Ling Tai, Yow-Shiuan Liaw, Tsai-Fu Chung, Wayne Hong, Chan-Tung Chen, Chien-Nan Hsiao, Wei-Chih Li, Cheng-Si Tsao, Jer-Ren Yang*, Influence of extreme dynamic intrusion/extrusion cycles on precipitates in high Zn containing 7xxx series aluminium alloys, MRS-Taiwan Annual Meeting 2020, New Taipei City.
33. Y.L. Li, J.R. Yang, Room Temperature and High strain rate Compressive Deformation in the FeCoNiCr High entropy Alloy, MRS-Taiwan Annual Meeting 2020, New Taipei City.
34. Shih-Yuan Lu, Jer-Ren Yang, Differences in Microstructure between Martensite and Bainite in an Ultra-low carbon steel, MRS-Taiwan Annual Meeting 2020, New Taipei City.
35. J.R. Yang, "Investigation of ultrahigh-heat-input Weld HAZ in Nb-Ti-B bearing steel", The 9th International Conference on Phisical and Numerical Simulation of Materials Processing, October 2019, Moscow (organized by The Great St. Pertersburg Polytechnic University, Russia), Plenary Speech.
36. Tsai-Fu Chung, Yo-Lun Yang, Makoto Shiojiri, Chien-Nan Hsiao, Wei-Chih Li, Jer-Ren Yang, "Intrinsic twin boundary of η-$MgZn_2$ precipitate in the AA7050 aluminium alloy, The 9th International Conference on Phisical and Numerical Simulation of Materials Processing", October 2019, Moscow (organized by The Great St. Pertersburg Polytechnic University, St Pertersburg Russia)
37. Jer-Ren Yang, "Interphase-precipitated carbides strengthened dual-phase steels", EUROMAT, Stockholm, Sweden, 2019, Invited speech.
38. Tsai-Fu Chung, Yo-Lun Yang, Chien-Nan Hsiao, Wei-Chih Li, Jer-Ren Yang, "Nucleation mechanisms of η precipitates in the AA7050 aluminium alloy by atomic-scale investigations", EUROMAT, Stockholm, Sweden, 2019.
39. Jer-Ren Yang, "Massive Ferrite transformation in an interstitial-free steel", 4th Osaka Univ-JWRI/NTU-MSE Workshop, Taipei, 2019. Invited speech.
40. Tsai-Fu Chung, Yo-Lun Yang, Chien-Nan Hsiao, Wei-Chih Li, Jer-Ren Yang, Precipitation on grain boundaries of the AA7050 (Al-Zn-Mg-Cu) aluminum alloy, 4th Osaka Univ-JWRI/NTU-MSE Workshop, Taipei, 2019.
41. Tsai-Fu Chung, Yo-Lun Yang, Makoto Shiojiri, Chien-Nan Hsiao, Wei-Chih Li, Jer-Ren Yang, The interaction of T1 and θ' precipitates with respect to dislocations in the AA2050 aluminium alloy, 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
42. Tsai-Fu Chung, Yo-Lun Yang, Makoto Shiojiri, Chien-Nan Hsiao, Wei-Chih Li, Jer-Ren Yang, "Twin relationship in between the variant-pair of η precipitates in the Al-Zn-Mg-Cu aluminium alloy", Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
43. Yo-Shiuan Lin, Jer-Ren Yang, "Observing the growth and distribution of annealing twins at low annealing temprature in FeCoNiCr high entropy alloy", The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
44. P.J. Chen, J.R. Yang, "Cryogenic Temperature and High-stain-rate Compressive Deformation in the FeCoNiCrMn High-entropy Alloy", The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
45. Ching-Chien Chen, J.R. Yang, "Study on Annealing Twins of Co-Cr-Fe-Mn-Ni High Entropy Alloy", The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.

46. Shih-Yu Chen, J.R. Yang, “Annealing-induced abnormal hardening in cold rolled CoCrNi medium entropy alloy”, The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
47. P.H. Chiu, J.R. Yang, “Effects of Different Mn Contents on Annealing and Deformation Twins in CoCrFeMnXNi (X= 0~1) High Entropy Alloy”, The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
48. Tzu-Ching Tsao, J-R. Yang, “Auto-tempered martensite and Interpenetrating twin in lath martensite", The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
49. Tzu-Ching Tsao, J-R. Yang, “Investigation of Strain-induced Precipitation Behavior of Niobium Micro-alloyed Steels at High Temperature”, The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
50. Tin- Mu Chuang, Yu-Ting Tsai , J-R. Yang, “Two-step isothermal transformation in carbide-free bainitic steels”, The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
51. Shih-Yu Chen , Jer-Ren Yang, “Annealing-induced abnormal hardening in cold rolled CoCrNi medium entropy alloy”, The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
52. Yo-Ming Pua, Tsai-Fu Chung, Jer-Ren Yang, “An investigation of different ageing treatment in AA7050 Al alloys”, The 39th Taiwan Society of Microscopy conference, 2019, Aug., Taipei, Taiwan.
53. Tzu-Ching Tsao, J-R. Yang, “Auto-tempered martensite and Interpenetrating twin in lath martensite”, Annual meeting of Materials Society of Taiwan (2019, Nov), Tainan, Taiwan.
54. Tin- Mu Chuang, Yu-Ting Tsai , J-R. Yang, “Two-step isothermal transformation in carbide-free bainitic steels”, Annual meeting of Materials Society of Taiwan (2019, Nov), Tainan, Taiwan.
55. Ching-Chien Chen, J.R. Yang, “Study on Annealing Twins of Co-Cr-Fe-Mn-Ni High Entropy Alloy”, Annual meeting of Materials Society of Taiwan (2019, Nov), Tainan, Taiwan.
56. Yo-Shiuan Lin, Jer-Ren Yang, “The research on the Quaternary FeCoNiCr High-entropy Alloy”, Annual meeting of Materials Society of Taiwan (2019, Nov), Tainan, Taiwan.
57. Shih-Yu Chen, J.R. Yang, “Annealing-induced abnormal hardening in cold rolled CoCrNi medium entropy alloy”, Annual meeting of Materials Society of Taiwan (2019, Nov), Tainan, Taiwan.
58. P.H. Chiu, J.R. Yang, “Mechanical Propert y and Microstructure of Cryogenic Temperature and High -stain-rate Compressive Deformation in the FeCoNiCrMn High-entropy Alloy”, Annual meeting of Chinese Metallurgical and Moning Society (2019, Nov), Tainan, Taiwan.
59. Pin-Rong Chen, Po-Han Chiu, J.R. Yang, Mechanical Propert y and Microstructure of Cryogenic Temperature and High -stain-rate Compressive Deformation in the FeCoNiCrMn High-entropy Alloy, Chinese Institute of Mining and Metallurgical Engineers, Tainan, 2019.
60. J.R. Yang, “Microstructure characterization of nanostructured bainite after high-strain rate deformations”, the 35th Microscopy Society of Thailand (MST) International Conference, (February 2018, Chiang Mai, Thailand) Plenary Speech.
61. J. R. Yang, “interphase-precipitated carbides strengthening in dual-phase steels and secondary hardening in low-carbon Nb-Mo-bearing bainitic steels”, The Asia Steel Conference (February 2018, Bhubaneswar, India) Keynote Speech.
62. J.R. Yang, “Transmission electron microscopy investigation of separated nucleation and in-situ nucleation in AA7050 aluminium alloy”, International Conference on Lightweight Materials and Manufacture 2018, Beijing 2018 (organized by Imperial College London, UK). Keynote Speech.
63. J.R. Yang, “In-situ nanoindentation coupled with TEM investigation of deformation behavior of spinodal nanostructured δ-ferrite nanopillars in a duplex stainless steel”, International Indentation Workshop (Organized by NIMS), July 2018, Sapporo, Japan. Keynote Speech.
64. J.R. Yang, “ Secondary hardening in low-carbon Nb-Mo-bearing bainitic steels”, THERMEC'2018: International Conference on Processing & Manufacturing of Advanced Materials Processing, Fabrication, Properties, Applications (July 2018, Paris, France), Organized by University of Lille and University of Tours, France. Keynote Speech.
65. P. H. Chiu, S. P. Tsai, Y. T. Tsai, Y. W. Chen, P. J. Chen, W. S. Lee, J. R. Yang, “High entropy CoCrFeMnNi alloy subjected to high-strain-rate compressive deformation”, Annual meeting of Materials Society of Taiwan (2018, Nov), Taichung, Taiwan.
66. P.H. Liu, Y.C. Yu, J.R. Yang, “Phase Transformation by Continuous Cooling in Interstitial-Free steel”, Annual meeting of Materials Society of Taiwan (2018, Nov), Taichung, Taiwan.
67. T. F. Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, T. Ohmura, J. R. Yang, “Cutting mechanism of precipitates in the AA2050 aluminium alloy”, Annual meeting of Materials Society of Taiwan (2018, Nov), Taichung, Taiwan.
68. T.M. Chuang, Y.T. Tsai, J.R. Yang (2018, Nov), “Two-step isothermal transformation in carbide-free bainite”, Annual meeting of Materials Society of Taiwan (2018, Nov), Taichung, Taiwan.
69. J. R. Yang, “TEM investigation of nanostructured bainite subject to high-strain rate deformations”, The 19th International Microscopy Congress (IMC19), 2018, Sep., Sydney, Australia.

70. T. F. Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, C. S. Tsao, J. R. Yang, “Sympathetic nucleation of GP zones of θ' precipitates in an Al-3.6Cu-0.9Li aluminium alloy”, The 19th International Microscopy Congress (IMC19), 2018, Sep. Sydney, Australia .
71. J. R. Yang, “TEM Investigation of the Structure for Nano-Steels,” The 38th Taiwan Society of Microscopy conference, 2018, Aug., Taichung, Taiwan. Plenary Speech
72. T. F. Chung, J. S. Bow, C. N. Hsiao, J. R. Yang, “Atomic resolution structural characterization of Nephrite by aberration-corrected STEM. The 38th Taiwan Society of Microscopy conference, 2018, Aug., Taichung, Taiwan.
73. T. F. Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, J. R. Yang, “Nucleation mechanisms of precipitates in the AA7050 aluminium alloy by HRTEM and HAADF-STEM investigations”, The 38th Taiwan Society of Microscopy conference, 2018, Aug., Taichung, Taiwan.
74. J. R. Yang, Y. C. Hsieh, Ling Zhang, T. F. Chung, T. Ohmura, “In-situ nanoindentation (coupled with TEM) investigation of deformation behavior of spinodal nanostructured theta-ferrite nanopillars in a duplex stainless steel. The 6th International Indentation Workshop (IIW6), July 2018, Sapporo, Japan.
75. T. F. Chung, Y. L. Yang, C. N. Hsiao, W. C. Li, T. Ohmura, J. R. Yang, “The interaction between dislocations and precipitates in the AA2050 aluminium alloy”, The 6th International Indentation Workshop (IIW6), July 2018, Sapporo, Japan.
76. J. R. Yang, Y. T. Tsai and Y. W. Chen, “Severe deformation of nanostructured bainitic steel”, 12th International Conference on Technology of Plasticity (Cambridge, UK 2017), Invited speech.
77. J. R. Yang, “In-situ transmission electron microscopy investigation of deformation behavior of single-crystal nanopillars of aluminium alloys and high-strength ferritic steels”, Taiwan-Japan Bilateral Materials Science Conference & Smart Center Workshop (Kaohsiung, 2017), Invited speech.
78. J. R. Yang, “Interphase-precipitated carbides strengthening in dual-phase steels and secondary hardening in low-carbon Nb-Mo-bearing bainitic steels”, in 1st Materials Engineering Center Saarland and CBMM workshop (Saarland University, Germany, 2017), Keynoted speech.
79. J. R. Yang, “Case studies for the recent development of nano-steels”, in Cross-Strait Taiwan-China Metal Heat Treatment Conference (2017, Taipei), Plenary speech.
80. J. R. Yang, “TEM investigation of Interphase-precipitated carbides strengthening in dual-phase steels”, in the 3rd East-Asia Microscopy Conference (Busan, Korea 2017), invited speech.
81. T. F. Chung, B. M. Huang and J. R. Yang, “The effect of creep-age forming on the growth of T1 precipitates in AA2050 aluminium alloy”, in the 3rd East-Asia Microscopy Conference (Busan, Korea 2017).
82. C. Y. Chen, C. H. Lee and J. R. Yang, “High-strength steel hardened by nano-sized carbides and copper particles”, in the 3rd East-Asia Microscopy Conference (Busan, Korea 2017), invited speech.
83. S. P. Tsai, S. N. Tsai, P. Y. Tung and J. R. Yang, “The application of convergent beam electron diffraction Analysis on transformation induced plasticity steels”, in the 3rd East-Asia Microscopy Conference (Busan, Korea 2017).
84. Y. W. Chen, Y. T. Tsai and J. R. Yang, “A new method of phase quantification in complex-phase low-carbon steels”, in the 3rd East-Asia Microscopy Conference (Busan, Korea 2017).
85. B. P. H. Liu, Y. C. Yu and J. R. Yang, “Investigation of high-speed quenched product in interstial free steels”, in the 3rd East-Asia Microscopy Conference (Busan, Korea 2017).
86. Y. T. Tsai and J. R. Yang, “Defect imaging by low-angle-annular dark-field scanning transmission electron microscope”, in the 3rd East-Asia Microscopy Conference (Busan, Korea 2017).
87. C. Y. Chen, C. H. Lee, J. R. Yang, “Dual Precipitation of Nano-Sized Carbide and Copper Particles in a Low Carbon HSLA steel”, in IUMRS-ICA, Taipei, 2017.
88. S. P, Tsai, J. R. Yang, C. Y. Chen and C. Y. Huang, “Effect of isothermal holding temperatures on microstructures and corresponding mechanical properties of interphase precipitation strengthened dual-phase (ferrite + martensite) Ti and Ti-Mo-bearing steels”, in IUMRS-ICA, Taipei, 2017.
89. Y. T. Tsai and R. J. Yang, “Investigation on the Accommodation Strain due to Lenticular Martensite Formation", IUMRS-ICA, Taipei, 2017.
90. Y. W. Chen, Y. T. Tsai, P. Y. Tung and J. R. Yang, “Microstructure evolution and mechanical property of 18Mn-0.4C TWIP steels after high temperature tempering”, IUMRS-ICA, Taipei, 2017.
91. S. H. Wang, J. R. Yang, and C. H. Hsueh, “Microstructures related fatigue and nanomechanical behavior of duplex stainless steel weld metal under vibration-assisted welding”, IUMRS-ICA, Taipei, 2017.
92. M. J. Liao, S. H. Wang and C. H. Hsueh, “Nanoindentation Induced V-Double Twin and DFZ at the DSS Weld Metal by Vibration Imposed on Welding”, IUMRS-ICA, Taipei, 2017.
93. B. P. H. Liu, Y. C. Yu and J. R. Yang, “The microstructure of quenched product in interstitial-free (IF) Steels”, IUMRS-ICA, Taipei, 2017.
94. T. F. Chung, B. M. Huang and J. R. Yang, “The nucleation mechanisms of precipitates in the AA7050 aluminium alloy by in-situ HRTEM investigation”, IUMRS-ICA, Taipei, 2017.

95. Y. Wu, B. P. H. Liu, Y. C. Yu, J. R. Yang, “Effects of austenite grain size on microstructure obtained by different cooling process in an interstitial free steel”, IUMRS-ICA, Taipei, 2017.
96. Y. T. Tsai, J. R. Yang and C. Y. Huang, “A Study on the Tempering Response of Si-Containing Bainite”, IUMRS-ICA, Taipei, 2017.
97. C. L. Lin, S. P. Tsai, J. R. Yang, “The effect of ferrite volume fraction on retained austenite in TRIP-assisted steels”, IUMRS-ICA, Taipei, 2017.
98. Y. C. Yu, B. P. H. Liu, Y. Wu, J. R. Yang, “Microstructure of the ultralow-carbon steels under rapid cooling process”, IUMRS-ICA, Taipei, 2017.
99. M. Y. Gao, S. P. Tsai, Y. L. Chang, T. F. Chung and J. R. Yang, “In-situ transmission electron microscopy investigation of the deformation behavior of α-ferrite nanopillars in an interphase-precipitation strengthened dual phase steel”, IUMRS-ICA, Taipei, 2017.
100. S. P. Tsai, S. N. Tsai, J. R. Yang, Y. T. Wang, C. Y. Huang, “Effect of Bainite Transformation Temperatures on A Low-carbon TRIP–Assisted Steel and The Application of Convergent Beam Electron Diffraction (CBED)”, IUMRS-ICA, Taipei, 2017.
101. S. N. Tsai, S. P. Tsai and J. R. Yang, “Influence of austempering temperature on morphology and stability of retained austenite in interphase precipitation strengthened multi-phase TRIP steels”, in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2017) A-5.
102. Y. W. Chen, T. P. Yen, Y. T. Tsai and J. R. Yang, “A new method of phase qualification in complex steels by EBSD”, in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2017) A-10.
103. P. Y. Tung, Y. T. Tsai and J. R. Yang, “Effect of low-temperature ausforming on the microstructural evolution in Fe-0.6C-2.0Si-2.0Mn nanostructured bainitic steel”, in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2017) A-11.
104. S. P. Tsai, Y. T. Wang, C. Y. Huang and J. R. Yang, “Effect of isothermal holding temperatures on microstructures and properties of interphase precipitation strengthened dual-phase steels”, in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2017) A-13.
105. Y. T. Tsai and J. R. Yang, “Visualization of electron channeling pattern”, in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2017) A-17.
106. S. W. Lai and J. R. Yang, “Microstructural characterization of typical lenticular martensite in Fe-0.7C-13Cr stainless steel”, in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2017) A-18.
107. S. P, Tsai, J. R. Yang, C. Y. Chen and C. Y. Huang, “Effect of isothermal holding temperatures on microstructures and corresponding mechanical properties of interphase precipitation strengthened dual-phase Ti /Ti-Mo-bearing steels”, in Proc. of 2017 Annual Conf. of Taiwan Metallurgy and Mining Society, Kaohsiung, 2017.
108. S. P, Tsai, J. R. Yang, C. Y. Chen and C. Y. Huang, “The effect of low-temperature isothermal transformation on microstructural evolution and mechanical properties”, in Proc. of 2017 Annual Conf. of Taiwan Heat Treatment Society, Tainan, 2017.
109. Y. T. Tsai, J. R. Yang and C. Y. Huang, “Pearlitic transformation in superbainitic steel”, in Proc. of 2017 Annual Conf. of Taiwan Heat Treatment Society, Tainan, 2017.
110. J. R. Yang, “Substructures of lenticular martensite in high-carbon high-chrimim stainless steel”, 11th Asia-Pacific Microscopy Conference, (Phuket, Thailand 2016), Keynote speech
111. C. H. Li, S. P. Tsai and J. R. Yang, “Aging strengthening of interphase-precipitated strengthened copper-bearing dual-phase steel”. 11th Asia-Pacific Microscopy Conference, (Phuket, Thailand 2016).
112. T. F. Chung, B. M. Huang, J. R. Yang and T. Ohmura, “The effect of aging treatment on the in-situ transformation of precipitates in AA7050 aluminum alloys”, 11th Asia-Pacific Microscopy Conference, (Phuket, Thailand 2016).
113. J. R. Yang, “Mechanical behavior and microstructural evolution of nanostructured bainite under high-strain rate deformation”, International Conference on physical and numerical simulation of materials processing (Seattle, Washington, USA 2016), invited speech.
114. J. R. Yang,“Microstructural evolution of Super bainite under high-strain rate deformation by split Hopkinson Pressure Bar”, MOST-NIMS Workshop: Innovatiove Materials for Safe and Sustainable Society, (Tainan, Taiwan 2016), Invited speech.
115. J. R. Yang, “Synergistic effort of Nb-Mo addition on the microstructure development in hot rolled low-carbon bainitic steels”, Oulu university-CBMM Workshop on Niobium-Bearing Steels (Oulu, Finland, 2016), Keynote speech.
116. B. M. Huang, Y. T. Tsai, M. Woydt and J. R. Yang, “ Determination of crystallography and carbon vacancy concentration for Nb carbides in NbC-12Co sintered power using convergent beam electron diffraction”, in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2016), A-01.

117. T. F. Chung, B. M. Huang, C. S. Tsao and J. R. Yang, "Influence of creep aging forming on T1 precipitates in AA2050 aluminium alloy", in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2016) A-15.
118. P. Y. Chen, Y. L. Chang and J. R. Yang, "Microstructural study of dendritic α-Fe in Fe80Si 8.5 B11C0.5 amorphous ribbons", in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2016) A-21.
119. Y. L. Chang, S. P. Tsai, P. Y. Chen and J. R. Yang, "Microstructural characterization of ausformed lath martensite", in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2016) A-24.
120. S. P. Tsai, J. R. Yang, Y. T. Wang and C. Y. Huang, "Effect of deformation on ferrite transformation and precipitation behavior in Ti and V-bearing high-strength steels", in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2016) A-25.
121. Y. W. Chen, B. M. Huang, and J. R. Yang, "The effect of Mo addition on changing lattice parameter of Nb carbides after high-temperature long-time tempering", in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2016) A-28.
122. C. H. Li, S. P. Tsai, and J. R. Yang, "Dual precipitation behavior of nanometer-sized carbides and copper precipitates in copper-bearing dual-phase steels", in Proceedings of the 36th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2016) A-32.
123. J. R. Yang, "The ultra-high nanostructured bainite in engineering steels", in 2016 annual meeting of Chinese Materials Society (Hsinchu, 2016), invited speech.
124. J. R. Yang, "From Kurdjumov-Sachs Orientation Relationship to Microstructural Characterization of Steels", in 2016 annual meeting of Chinese Materials Society (Hsinchu, 2016), invited speech.
125. T. F. Chung, B. M. Huang, C. S. Tsao and J. R. Yang, "The effect of stress orientation on nano-mechanical behavior of AA2050 aluminium alloy", in 2016 annual meeting of Chinese Materials Society (Hsinchu, 2016), P-09-039.
126. S. P. Tsai, J. R. Yang, Y. T. Wang and C. Y. Huang, "Effect of deformation on ferrite transformation and precipitation behavior in Ti and V-bearing high-strength steels", in 2016 annual meeting of Chinese Materials Society (Hsinchu, 2016), P09-062.
127. C. H. Li, S. P. Tsai, and J. R. Yang, "Aging behavior of interphase-precipitated copper-bearing dual-phase steels", in 2016 annual meeting of Chinese Materials Society (Hsinchu, 2016), P09-63.
128. B. C. Lin, S. H. Wang and J. R. Yang, "Microstructural evolution in a duplex stainless steel during high-temperature heat treatment" in 2016 annual meeting of Chinese Materials Society (Hsinchu, 2016), P09-94.
129. T. F. Chung and J. R. Yang " The interaction between dislocations and precipitates during aging in AA2050 aluminium alloy", in Proc. of 2016 Annual Conf. of Taiwan Heat Treatment Society, Taipei, 2016.
130. S. P. Tsai and J. R. Yang, "TiC carbides strengthened dual-phase steels", in Proc. of 2016 Annual Conf. of Taiwan Heat Treatment Society, Taipei, 2016.
131. B. C. Lin, S. H. Wang and J. R. Yang, "Phase transformation in a duplex stainless steel", in Proc. of 2016 Annual Conf. of Taiwan Heat Treatment Society, Taipei, 2016.
132. J. R. Yang, "Microstructural evolution of ultrahigh-heat-input weld HAZ in Nb-Ti bearing steels", HSLA 2015, Microalloying 2015 & Offshore Engineering Steels 2015 (Hangzhou, China), invited speech.
133. J. R. Yang, "TEM investigation of the transition from interphase-precipitated carbides to fibrous carbides in Fe-V-C steels", International Conference on Solid-Solid Phase Transformation in inorganic materials (Whistler, Canada 2015), invited speech.
134. J. R. Yang, "Microstructural characterization of steels", in the 4th Cross-Strait Taiwan-China Symposium on Green Materials and Green Processes (Beijing 2015), keynote speech.
135. J. R. Yang, "Nanostructural analysis of GaN-based violet diodes", in the 12th Cross-Strait Taiwan-China TEM Symposium (2015), invited speech.
136. Y. L. Chang, P. Y. Chen, Y. T. Tsai and J. R. Yang, "TEM investigation of nanostructure of lenticular martensite of AISI 440C steel", in Proc. of 2015 Annual Conf. of Taiwan Heat Treatment Society, Taichung, 2015.
137. T. F. Chung and J. R. Yang " TEM investigation of precipitation phase transition in AA7050 aluminium alloy", in Proc. of 2015 Annual Conf. of Taiwan Heat Treatment Society, Taichung, 2015
138. Y. L. Chang, P. Y. Chen, Y. T. Tsai, S.W. Lai and J. R. Yang, "Coupling twinning/slip in lenticular martensite of AISI 440C steel", in Proc. of 2015 Annual Conf. of Materials Research Society-Taiwan, Kaoshiung, 2015.
139. P. Y. Chen, Y. L. Chang, J. R. Yang, S. Y. Lee and M. C. Tsai, "A study of crystallization behavior of an amorphous FeSiBC ribbon", in Proc. of 2015 Annual Conf. of Materials Research Society-Taiwan, Kaoshiung, 2015.
140. Y. T. Tsai and J. R. Yang, "The carbon concentration dtermination of bainitic ferrite by CBED", in Proc. of 2015 Annual Conf. of Materials Research Society-Taiwan, Kaoshiung, 2015
141. Y. C. Hsieh, Y. T. Tsai and J. R. Yang, " Nanoindentation with cross-sectional TEM analysis of the deformation behavior of spinodal nanostructured δ-ferrite in a 2205 duplex stainless steel", in Proceedings of the 35th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2015), M-P-04.

142. P. Y. Tung, Y. T. Tsai and J. R. Yang, “Effects of low-temperature ausforming on the microstructural evolution in Fe-0.6C-2Si-xMn(x= 1 and 2, wt%)”, in Proceedings of the 35th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2015), M-P-05.
143. C. H. Jen, S. P. Tsai Y. T. Tsai and J. R. Yang, “Effects of nanometer-sized interphase precipitated carbides on deformation behavior in steels”, in Proceedings of the 35th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2015), M-P-07.
144. Y. L. Chang, P. Y. Chen, S.W. Lai and J. R. Yang, “The coupling behavior in lenticular martensite”, in Proceedings of the 35th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2015), M-P-08.
145. Y. W. Chen, B. M. Huang and J. R. Yang, “The effect of Mo in Nb-containing low carbon steel”, in Proceedings of the 35th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2015), M-P-09.
146. S. P. C. H. Li, Y. T. Wang, C. Y. Huang and J. R. Yang, “Effect of Si on interphase precipitation strengthened dual-phase steels”, in Proceedings of the 35th Annual Meeting of Microscopy Society of Taiwan (Taipei, Taiwan, 2015), M-P-10.
147. P. C. Lin, Y. T. Tsai, R. Wu, S. H. Wang, J. R. Yang and H. R. Chen, “The Growth of χ phase in SAF 2507 duplex stainless steel”, in Proceedings of the 35th Annual Meeting of Microscopy Society of Taiwan (Taipei, Taiwan, 2015), M-P-11.
148. Y. L. Chang, P. Y. Chen, Y. T. Tsai, S. P. Tsai, S.W. Lai and J. R. Yang, “Coupling of lenticular martensite in the Fe-C-Cr steel”, in Proceedings of the Annual Meeting of Mining and Metallurgy Society of Taiwan, Kaohsiung, 2015.
149. J. R. Yang, “Transmission electron microscopy investigation of nanostructures in steels and in GaN-based violet laser diodes”, in The 8th International Conference on Advanced materials Processing, Gold Coast, Australia, 2014 (keynote speech).
150. B. M. Huang and J. R. Yang, “Qualification of granular bainite in Nb-Mo containing low carbon bainitic hot rolled strips” in The 8th International Conference on Advanced materials Processing, Gold Coast, Australia, 2014.
151. J. R. Yang, “Microstructural evolution of ultrahigh-heat-input weld HAZ in Nb-Ti_B bearing steels”, in IUMRS-ICA 2014, Fukuoka, Japan, 2014 (invited speech).
152. J. R. Yang, “TEM investigation of nanostructures in advanced high-strength low-alloy steels”, in IUMRS-ICEM 2014, Taipei, 2014 (invited speech).
153. Y. C. Hsieh, Y. T. Tsai, Y. L. Chang, C.H. Hsu and J. R. Yang, “Ferrite to austenite transformation in 2205 duplex stainless steel”, in IUMRS-ICEM 2014, Taipei, 2014.
154. T. Y. Tsai, Y.W. Chen, S.P. Tsai, C. Y. Huang and J. R. Yang, “Misorientation measurement of bainitic ferrite using convergent beam electron diffraction”, in IUMRS-ICEM 2014, Taipei, 2014.
155. B. M. Huang, Y. L. Chang, Y. C. Chien and J. R. Yang, “The investigation in yield strength of Nb-Mo low carbon baintic strip with aging process”, in IUMRS-ICEM 2014, Taipei, 2014.
156. P. Y. Chen, Y. L. Chang and J. R. Yang, “The influence of the inhomogeneity in individual sides on the crystallization of Fe-Si-B-C alloy amorphous ribbon”, in IUMRS-ICEM 2014, Taipei, 2014.
157. Y. L. Chang, P. Y. Chen and J. R. Yang, “The growth of lenticular martensite in AISI 440C stainless steel”, in IUMRS-ICEM 2014, Taipei, 2014.
158. J. R. Yang and M.Y. Chen, “TEM investigation of nanosized interphase-precipitated carbides and fibrous carbides in a Fe-V-C steel”, in 18th International Microscopy Congress, Prague 2014.
159. Y. T. Tsai, S. P. Tsai, C. Y. Huang and J. R. Yang, “Simultaneous determination of carbon concentration and misorientation angle in bainitic ferrite laths via convergent beam electron diffraction” in 18th International Microscopy Congress, Prague 2014.
160. B.M. Huang, Y. L. Chang, Y.C. Chien and J. R. Yang, “Application of electron backscattering diffraction: Qualification of granular bainite in Nb-Mo containing low carbon bainitic hot rolled strips”, in 18th International Microscopy Congress, Prague 2014.
161. Y. Y. Chen, J. R. Yang, S. L. Cheng and M. Shiojiri, “Structural investigation of ZnO: Al deposited on Si substrates by radio frequency magnetron sputtering”, in Proceedings of the 34th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2014), M-P-06.
162. C. P. Chang, M. W. Chu, J. G. Lin, S. UL. Cheng, J. R. Yang and C. H. Chen, “Atomic-scale probing of the charge distribution characteristics at the oxide interface”, in Proceedings of the 34th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2014), M-P-08.
163. Y. L. Chang, Y. T. Tsai, P. Y. Chen and J. R. Yang, “The growth of lenticular martensite in AISI 440C stainless steel”, in Proceedings of the 34th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2014), M-P-12.
164. C. H. Li, S. P. Tsai, C. H. Jen, Y. T. Wang, C. Y. Huang and J. R. Yang, “Effect of martensite volume fraction and plasticity of the mechanical properties of dual-phase steel”, in Proceedings of the 34th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2014), M-P-16.

165. C. H. Jen, S. P. Tsai, Y. T. Tsai, B. M. Huang, Y. T. Wang, C. Y. Huang and J. R. Yang, "Dislocation substructure evolution in ferrite of DP steels under deformation", in Proceedings of the 34th Annual Meeting of Microscopy of Taiwan (Taipei, Taiwan, 2014), M-P-17.
166. J. R. Yang, "TEM investigation of interphase precipitated nanometer-sized carbides in the advanced low-alloy steels", in the 11th Cross-Strait Taiwan-China TEM Symposium (2014), M-O-18.
167. C. P. Chang, M. W. Chu, H. T. Jeng, J. G. Lin, S. L. Cheng, J. R. Yang, C. H. Chen, "Condensation of two-dimensional oxide-interfacial charges into one-dimensional electron chains by the misfit-dislocation strain field", in the 11th Cross-Strait Taiwan-China TEM Symposium (2014), M-O-2.
168. J. R. Yang, "Secondary hardened bainite", in Adventure in the Physical Metallurgy of Steels, Cambridge, UK, 2013 (invited speech).
169. J. R. Yang, H. W. Yen, C. Y. Chen and C. Y. Huang, "The development of interphase precipitated nano-sized carbides in advanced low-alloy", in 7th international Conference on Physical and Numerical Simulation of Materials Processing, Oulu, Finland, 2013 (keynote speech).
170. J. R. Yang, "Effext of Mo additions on the development of microstructure in hot rolled low carbon Nb-containing bainotic steels", in 2nd International Symposium on Nb and Mo Alloying in high performance Steels, Jeju Island, Korea, 2013, (invited speech).
171. Ya-Lin Chang, Hsin-Yi Lee and Jer-Ren Yang, "Tempered lenticular martensite in AISI 440C stainless steel", IUMRS-ICAM 2013 (Qingdao), Paper B4-02 (keynote speech).
172. B. M. Huang, J. R. Yang, H. W. Yen and C. Y. Huang and H. Mohrbacher, "The effect of Mo addition on the evolution of granular bainite in low carbon Nb containing steel strips", IUMRS-ICAM 2013 (Qingdao), Paper B4-p9.
173. P. Y. Chen and J. R. Yang, "The embrittlement of annealed amorphous Fe81Si2B17 alloy ribbon", IUMRS-ICAM 2013 (Qingdao), Paper B6-20.
174. Yu-Ting Tsai, Ching-Yuan Huang and Jer-Ren Yang, "Quenching and Partitioning Processing of 3Mn-2Si steel", IUMRS-ICAM 2013 (Qingdao), Paper B4-19.
175. J. R. Yang, "TEM characterization of interphase-precipitated nanometer-sized carbides in Ti-Mo-containing steels", The 1st East-Asia Microscopy Conference, 2013 (Chongqing), Paper b2402.
176. Y. Y. Chen and J. R. Yang, "Structural analysis of Si0.9Ge0.1/Si epitaxial layers by convergent beam electron diffraction", The 1st East-Asia Microscopy Conference, 2013 (Chongqing), Paper b2302.
177. Y. T. Tsai and J. R. Yang, "Structure Analysis of Baintic Ferrite by Convergent Beam Electron Diffraction", The 1st East-Asia Microscopy Conference, 2013 (Chongqing), Paper b24p05.
178. P. Y. Chen and J. R. Yang, "Influence of annealing on microstructure of Fe-Si-B amorphous ribbons", The 1st East-Asia Microscopy Conference, 2013 (Chongqing), Paper b24p07.
179. Y. L. Chang and J. R. Yang, "The lenticular martensite in the AISI 440C stainless steel", The 1st East-Asia Microscopy Conference, 2013 (Chongqing), Paper b24p08.
180. Yi-Chieh Hsieh, Y. T. Tsai, C. Y. Huang and J. R. Yang, "Isothermal Pearlitic Transformation in Superbainite Steels", in Proc. of 2013 Annual Conf. of Chinese Soc. For Materials Science, Taoyuan (2013).
181. Y. T. Tsai and J. R. Yang, "One-Stage Quenching and Partitioning Processing of 3Mn-2Si steels", in Proc. of 2013 Annual Conf. of Chinese Soc. For Materials Science, Taoyuan (2013).
182. Y. Y. Chen and J. R. Yang, "Structural investigation of Si0.9Ge0.1/Si epitaxial layers by convergent beam electron diffraction", in Proc. of 2013 Annual Conf. of Chinese Soc. For Materials Science, Taoyuan (2013).
183. Y. T. Tsai and J. R. Yang, "Accelerated transformation for superbainite", in Proceedings of the 35th Annual Meeting of Taiwan Heat treatment Society (Taipei, Taiwan, 2013).
184. P. Y. Chen and J. R. Yang, "The effect of annealing treatment of Fe81Si2B16.6C0.4amorphous ribbon on its structure and property", in Proceedings of the 35th Annual Meeting of Taiwan Heat treatment Society (Taipei, Taiwan, 2013).
185. P. Y. Chen, H. Y. Lee and J. R. Yang, "The influence of annealing treatments on microstructure and property of amorphous Fe80Si8.5B11 ribbon, in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-4.
186. Y. Y. Chen, T. Y. Wang, H. T. Chang, J. R. Yang, S. W. Lee and M. Shiojiri, "Structural analysis of Si0.9Ge0.1/Si epitaxial layers by convergent beam electron diffraction" in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-5.
187. T. C. Su, B.M. Huang, H. W. Yen C. Y. Huang and J. R. Yang, "The study of interphase precipitation mechanism and related mechanical properties in nanometer-sized carbides strengthened dual-phase steel", in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-6.
188. Y. L. Chang and J. R. Yang, "The micro-morphology and nano-morphology of lenticular martensite in SISI 440C stainless steel" in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-7.

189. B. M. Huang, H. W. Yen and J. R. Yang, “The TEM investigation of Nb-Mo containing low-carbon bainitic steel strips” in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-8.
190. S. P. Tsai, T. C. Su, C. H. Cheng, C. Y. Huang, J. R. Yang, “Effect of alloying addition on interphase precipitation of nano-sized carbides in dual-phase steel”, in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-10.
191. P. Y. Chen, H. Y. Lee and J. R. Yang, “The embrittlement of annealed amorphous Fe81Si2B17 ribbon”, in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-11.
192. C. P. chang, J. G. Lin, S. l. cheng, J. R. Yang, M. W. Chu, C. H. Chen, “Atomic-scale probing of interdiffusion and localized two-dimensional electron density at an insulating oxide interface”, in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-12.
193. Y. T. Tsai, C. Y. Huang and J. R. Yang, “Acceleration of nano-structured bainite by two-step heat treatment”, in Proceedings of the 33th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2013), M-P-16.
194. J. R. Yang, “Interphase precipitation of nanometer-sized carbides in low-carbon low-alloy steels”, IUMRS-ICA, 2012, Busan, Korea (invited speaker).
195. B. M. Huang, J. R. Yang, H. W. Yen and C. Y. Huang, “The effect of Mo addution on transformation in low carbon Nb-bearing bainitic strips”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
196. Y. T. Tsai, H. T. Chang and J. R. Yang, “Investigation on the structure of a superbainitic steel after Charpy impact test”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
197. Z. C. Feng, T. W. Kuo, F. F. Cheng, S. Yao, H. L. Tsai and J. R. Yang, “Comprehensive investigation of dual wavelength InGaN/GaN multiple quantum well light emitting diodes with charge asymmetric resonance tunneling”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Electronic and optoelectronic materials).
198. H. W. Yen, M. Huang, C. Y. Huang, J. R. Yang and S. P. Ringer, “Review: Nanometer-sized MC Carbides in Advanced Steels for automotive Uses”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
199. Y. Y. Chen, T. Y. Wang, H. T. Chang, J. R. Yang and S. W. Lee, “The critical thickness measurement of strain relaxation of SiGe epitaxial layer by convergent-beam electron diffraction”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Materials Characterization).
200. C. P. Chang, S.S. Li, C.C. Lin, C.W. Chen, M. W. Chu and J. R. Yang, “Three-dimensional morphologies of polymer/TiO2 bulk heterojunction solar cells by scanning transmission electron microscope tomography”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Materials Characterization).
201. Y. Y. Hsu, S. H. Wang, H. R. Chen, C. P. Hung, J. R. Yang, J. K. Wu and C. H. Kao, “Creep properties of aged beta titanium alloy”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Materials Characterization).
202. P. Y. Chen, H. Y. Lee, T. Y. Wang, C. Y. Wu, M. C. Tsai, J. F. Tu and J. R. Yang, “ Influence of annealing on microstructures and properties of amorphous Fe81-Si2-B16 ribbon”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Materials Characterization).
203. Y. L. Yang, Q. X. Lin, S. H. Wang, Y. M. Jen, H. C. Liu, J. R. Yang and C. Y. Huang, “Local creep strain field of interface nano-precipitate arrays in Ti-microalloyed steels”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
204. C. N. Yen, B. S. Tsai, S. H. Wang, Y. M. Jen, H. C. Liu, J. R. Yang and C. Y. Huang, “Local fatigue stress field of interface nano-precipitate arrays in Ti-microalloyed steels”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
205. Y. L. Chang, H. Y. Lee and J. R. Yang, “The micro-morphology and nano-morphology of lenticular martensite in AISI 440C stainless steel”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
206. C. W. Chu and J. R. Yang, “Studies on transformation twin in lenticular martensite and its tempered structure of AISI 440C steel”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
207. Y. L. Yang, S. H. Wang, J. R. Yang, H. R. Chen, H. Y. Chang and C. Y. Huang, “The effect of nano-carbide particles on creep properties in microalloyed steels”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
208. C. N. Hsiao and J. R. Yang, “HRTEM imaging and chemical mapping of SixGe1-x superlattice interface”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Materials Characterization).

209. W. C. Li, M. J. Chen, M. Shiojiri and J. R. Yang, “Effects of high temperature annealing on magnesium zinc oxide thin films”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Electronic and optoelectronic materials).
210. H. C. Wang and J. R. Yang, “The study of microstructure of deformation twin on different grain size in TWIP steels”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Advanced steels for energy saving).
211. I. C. Chang and J. R. Yang, “The study of the microstructure of annealing twin and deformation twin in α-brass”, in the 7th International Conference on Advanced materials Processing (ICAMP 2012, Session: Matallic materials).
212. W. C. Li, H. L. Tsai, H.C. Chen, M. K. Wu, M. J. Chen, J. R. Yang and M. Shiojiri, “Structure and opto-electrical properties of n-ZnO/p-GaN heterojunction light-emitting diodes grown by atomic layer deposition,” Symposium Honouring Prof. Makoto Shiojiri, the 10th Asia-Pacific Microscopy Conference (APMC10, Perth, WA Australia) , Feb 5-9, 2012. (Invited speaker)
213. J. R. Yang, “The Effect of Niobium Addition on the Microstructural Morphology in the Heat-affected Zone of Low-carbon Steels” in 1st Taiwan International Symposium of undamentals and Applications of Mo and Nb Alloying in High Performance Steel. (Invited talk, 2011)
214. J. R. Yang, “Strengthening by nanometered-sized carbides in ferrite matrixin Ti-Mo containing steels”, THERMEC’2011 (Invited talk in Steel Session).
215. W. C. Li, W. Banerjee, S. Maikap and J. R. Yang, “The effect of post annealing temperature on the size and density of core-shell IrOx-based nanocrystals of a nonvolatile memory device,” 220th Meeting of the Electrochemical Society Meeting and Electrochemical Energy Summit (220th ECS Meeting, Boston, USA), Abs. E4-1406, October 9 - 14, 2011.
216. W. C. Li, T. Y. Wang, W. Banerjee, S. Maikap and J. R. Yang, “The effect of annealing temperature on the size and density of core-shell IrOx-based nanocrystals of a nonvolatile memory device,” IUMRS-12th International Conference in Asia (IUMRS-ICA 2011, Taipei, Taiwan), September 19-22, Abs. D-06, 2011.
217. Hung-Wei Yen, Po-Yu Chen, Ching-Yuan Huang and Jer-Ren Yang, “Interphase Precipitation in low carbon steels”, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, D3 Steel Session).
218. Chun-Yuan, Hsin-Yi Lee and Jer-Ren Yang, “ Substructure of martensite in high carbon and high silicon steel”, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, D3 Steel Session).
219. Hsiao-Tzu, Hung-Wei Yen and Jer-Ren Yang, “Evolution of tempered microstructure in a super bainitic steel”, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, D3 Steel Session).
220. H. W. Yen, C. Y. Huang and J. R. Yang, “The crystallography and morphology og TiC precipitates in Ti-containing HSLA steels”, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, D3 Steel Session).
221. Hsin-Yi Lee, Ming-Chin Tsai and J. R. Yang, “The evolution of embrittlement in annealed Fe-Si-B amorphous ribbons”, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, D3 Steel Session).
222. M. J. Chen, J. R. Yang and M. Shiojiri, “Structural investigation of ZnO-based ultraviolet light-emitting diodes fabricated by atomic layer deposition”, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, F4 ALD Session.)
223. B. M. Huang, H. W. Yen and J. R. Yang, “The effect of Widmanstatten ferrite on yield plateau of stress-strain curves in Nb-containing steel bars”, in IUMRS-ICA 2011 (12th IUMRS International Conference in Asia, D3 Steel Session.)
224. J. R. Yang, “Interphase precipitation of nanometer-sized carbides in a titanium-molybdenum-bearing low-carbon steel”, Strait Conference on Electron Microscopy 2011, Taiwan Electron Microscopy Society, Tainan. (Invited talk in Materials Session) (2011)
225. J. R. Yang, “The role of nanometer-sized carbidesin high-strength low-alloy steels”, in The 6th International Conference of Physical and Numerical Simulation of Materials Processing, Guilin (2010). (Invited talk in Nano-Materials Session)
226. H. T. Chang and J. R. Yang, “The heat treatment of superbainitic steels”, in Proceedings of the 32st Annual Meeting of Taiwan Heat treatment Society (Tainan, Taiwan, 2010), paper no. 10. (Invited talk)
227. H. Y. Lee and J. R. Yang, “Nano-structure of tempered martensite in an Fe-1C-17Crstainless steel”, in Proc. Of 2010 Annual Conf. of Chinese Soc. For Materials Science, Kaohsiung (2010).
228. H. T. Chang and J. R. Yang, “TEM investigation of nano-structure of superbainitic steels”, in Proc. Of 2010 Annual Conf. of Chinese Soc. For Materials Science, Kaohsiung (2010).
229. M. Y. Chen and J. R. Yang,“Effects of Prior Austenite Grain Size on Precipitation Behaviors of Vanadium-Containing Steels”, in Proc. Of 2010 Annual Conf. of Chinese Soc. For Materials Science, Kaohsiung (2010).
230. P. Y. Chen, H. W. Yen, C. Y. Huang and J. R. Yang, “The effect of Si addition on the interphase precipitation in low-carbon low-alloy steels”, in Proc. Of 2010 Annual Conf. of Chinese Soc. For Materials Science, Kaohsiung (2010).

231. S. L. Chen, H. W. Yen and J. R. Yang, "The effect of Co addition on the microstructural development of superbainitic steels", in Proc. Of 2010 Annual Conf. of Chinese Soc. For Materials Science, Kaohsiung (2010).
232. H. W. Yen, C. Y. Huang and J. R. Yang, "TEM investigation on interphase-precipitated nanometer-sized carbides in a Ti-Mo-bearing steel", International Conference on Electron Microscopy 2010, Chinese Electron Microscopy Society, Hangzhou (2010). (Invited talk in Materials Session)
233. J. R. Yang, H. S. Wang, R.C. Wei, Y. L.Yang and S. H.Wang, "Nanostructure of ultra-fine wires of AISI 316L stainless steel", in The 6th International Conference on Advanced Materials Processing, Lijiang, Yunnan (2010). (Invited talk in Materials Processing Session)
234. R. S.Chen, Y. L.Yang, F. H.Kao, S. H. Wang, J. R. Yang, C. Y. Huang, "Low cycle fatigue property and microstructure variation of nano-precipitated steels", in The 6th International Conference on Advanced Materials Processing, Lijiang, Yunnan (2010).
235. J. R. Yang, "The heat treatment of superbaintic ferrite" in 4th International Conference on Thermal Process Modeling and Computer Simulation, Shanghai (2010), paper B20 (Keynote speaker).
236. M. J. Chen, J. R. yang, F. Mika and M. Shiojiri, "Investigations of ZnO ultraviolet light emitting diodes and photonic crystal butterfly scales", in The 8th Japanese-Polish joint Seminar on Micro and Nano Analysis, Kyoto, Japan (2010), P.6-01.
237. W.C. Li, J. R. Yang, W. Banerjee and S. Maikap, "Particle size and morphology of iridium oxide nanocrystals in non-volatile memory device", in The 8th Japanese-Polish joint Seminar on Micro and Nano Analysis, Kyoto, Japan (2010), P.6-010.
238. W. C. Li, M. Shiojiri, J. R. Yang, "Structural investigation of n-ZnO/p-GaN ultraviolet light-emitting diodes grown by atomic layer deposition", in The 8th Japanese-Polish joint Seminar on Micro and Nano Analysis, Kyoto, Japan (2010), P.6-011.
239. W. C. Li, W. Banerjee, S. Maikap, J. W. Liao, and J. R. Yang, "Density and grain size of the IrOx metal nanocrystals in n-Si/SiO2/Al2O3/IrOx/Al2O3 memory capacitors," the 218th Meeting of the Electrochemical Society Meeting (Nevada, USA, October 10 - 15, 2010), Abs. 1545.
240. W.C. Li, S. Maikap, A. Das, L. B. Chang, and J. R. Yang, "Characteristics of ALD high-κ HfAlOx nanocrystals in memory capacitors annealed at high temperatures," the 218th Meeting of the Electrochemical Society Meeting (Nevada, USA, October 10 - 15, 2010), Abs. 1550.
241. H. L. Tsai, W. C. Li, J. W. Liao, E. Sun, M. J. Chen, and J. R. Yang, "Microstructural observation of an efficient Si light-emitting diode based on an n-ZnO/SiO2-Si nanocrystals-SiO2/p-Si heterostructure," the 218th Meeting of the Electrochemical Society Meeting (Nevada, USA, October 10 - 15, 2010), Abs. 1410.
242. H. L. Tsai, W. C. Li, M. J. Chen, M. Shiojiri, and J. R. Yang, "The structure and ultraviolet electroluminescence of n-ZnO-SiO2-ZnO nanocomposite/p-GaN heterojunction LED," the 218th Meeting of the Electrochemical Society Meeting (Nevada, USA, October 10 - 15, 2010), Abs. 1545.
243. H. Y. Lee, H. W. Yen and J. R. Yang, "Martensite Midrib in an Fe-1C-17Crstainless steel", PTM 2010 International Conference (Solid-Solid Phase Transformation in Inorganic Materials), Avignon, France (2010). Talk in Displacive transformations session.
244. H. W. Yen, H.T. Chang, H. Y. Lee and J. R. Yang, "Nano twins formed by plastic accommodation in nano bainite", PTM 2010 International Conference (Solid-Solid Phase Transformation in Inorganic Materials), Avignon, France (2010). Talk in Displacive transformations session.
245. H. W. Yen, C. Y. Huang and J. R. Yang, "TEM characterizations of interphase-precipitated nanometer-sized carbides in low carbon steels", in Proceedings of the 2nd International Symposium on Steel Science", The Iron and Steel Institute of Japan, Tokyo, 2009.
246. Y. H. Tzeng, H. L. Tsai, W.C. Li and J. R. Yang, "Nanostructure analysis of ALD_ZnO thin films grown on various substrates", in Proc. Of 2009 Annual Conf. of Chinese Soc. For Materials Science, Hualien (2009), P. 268.
247. Y. Chen, J. R. Yang, "Microstructural investigation on high heat input HAZ of Ti_B-Nb containing steels" , in Proc. of 2009 Annual Conf. of Chinese Soc. For Materials Science, Hualien (2009), P. 300.
248. M. Y. Chen and J. R. Yang, "An investigation on ultra-high strength steel bars", in Proc. Of 2009 Annual Conf. of Chinese Soc. For Materials Science, Hualien (2009), P. 313.
249. H. T. Huang, H. W. Yen and J. R. Yang, "The effect of prior austenite size on superbainite transformation", in Proc. Of 2009 Annual Conf. of Chinese Soc. For Materials Science, Hualien (2009), P. 313.
250. J. R. Yang, W. T. Lin and H. W. Yen, "The effect of boron addition on microstructural and transformational characteristics of superbainitic steels", International Conference on Processing and Manufacturing of Advanced Materials, (THERMEC'2009, Berlin, Germany), Session 2. (invited Speaker).
251. H. W. Yen, C. Y. Huang and J. R. Yang, "The Nano Carbide Control: Design of Super Ferrite", International Conference on Processing and Manufacturing of Advanced Materials, (THERMEC'2009, Berlin, Germany)

252. W. C. Li, W. banerjee, S. Maikap and J. R. Yang, "Structural Characteristic of HfAlOx Metal Nanocrystals Prepared at High Temperatures", The 3rd International Symposium on Functional Materials, (ISFM 2009, Jinju, Korea), paper T0412.
253. J. R. Yang, W. C. Li, H. L. Tsai, M. J. Chen and M. Shiojiri, "Interface observation of n-ZnO/p-GaN heterojunction light-emitting diodes grown by atomic layer deposition", The 3rd International Symposium on Functional Materials, (ISFM 2009, Jinju, Korea), paper T0415.
254. W. C. Li, S. Maikap and J. R. Yang, "High-k HfAlOx single layer nanocrystal memory capacitors for nanoscale NAND application", The 215th Meeting of the Electrochemical Society, San Francisco, California, May24-29, 2009, paper 0764.
255. S. Maikap, W. Banerjee, W. C. Li and J. R. Yang, "Memory characteristics of IrOx metal nanocrystals with IrOx metal gate", The 215th Meeting of the Electrochemical Society, San Francisco, California, May24-29, 2009, paper 1192.
256. J. R. Yang, W. C. Li and H. W. Yen, "Electron microscopy observation of defects in InGaN/GaN multiple quantum wells and AlGaN/GaN strain –layer superlattices", International Conference on Electron materials 2008, (IUMRS-ICEM 2008, Sydney, Australia), N4-S2.3.
257. H. W. Yen, C. Y. Chen, C. Y. Huang and J. R. Yang, "Nanometer-sized carbides in high-strength low-alloy steels', in Taiwan 2008 International Steel Technologies Conference (Koashiung, Taiwan), paper A16.
258. F. H. Kao, C. Y. Chen, W. C. Li and J. R. Yang, "TEM investigation of interface precipitation of particles in a copper-bearing high-strength low-alloy steel", in Proceedings of the 28th R.O.C. Symposium on Microscopy (Taichung, Taiwan, 2008), M-P-1.
259. W. C. Li, Y.K. Tseng, J. W. Liao and J. R. Yang, "STEM observation on chemically sensitive precipitates in an Inconel 718 alloy", in Proceedings of the 28th R.O.C. Symposium on Microscopy (Taichung, Taiwan, 2008), M-P-14.
260. W. C. Li, S. Maikap and J. R. Yang, "Design an new non-volatile memory device using copper nan0bridging in tantalum oxide films", in Proceedings of the 28th R.O.C. Symposium on Microscopy (Taichung, Taiwan, 2008), M-P-15
261. H. W. Yen, B. Y. Chen and J. R. Yang, "TEM and HAADF-STEM investigation on nanometer-sized carbides in ultrahigh-strength steels", in Proceedings of the 28th R.O.C. Symposium on Microscopy (Taichung, Taiwan, 2008), M-P-22.
262. F. H. Kao, H. R. Chen and J. R. Yang, 'The precipitation of nano-sized copper particles in a copper containing steel", in Proceedings of the 30th Annual Meeting of Taiwan Heat treatment Society (Taichung, Taiwan, 2008), P-46
263. B. M. Huang and J. R. Yang, "The effect of different microstructures on the yield point in niobium-containing steels", in Proc. of 2008 Annual Conf. of the Chinese Soc. For Materials Sci., P08-009, Taipei (2008).
264. H. T. Chang and J. R. Yang, "Microstructural investigation on low-temperature bainite", in Proc. of 2008 Annual Conf. of the Chinese Soc. For Materials Sci., P08-035, Taipei (2008).
265. H. C. Hsu, Y. C. Lin, S.H. Wang, W. C. Lee, F. S. Kao and J. R. Yang, "High strain rate induces bainite and carbide transformation from retained austenite", in Proc. of 2008 Annual Conf. of the Chinese Soc. For Materials Sci., P08-055, Taipei (2008).
266. S.Y. Li and J. R. Yang, "Microstructural investigation on martensitic transformation in an AISI 440C steel", in Proc. of 2008Annual Conf. of the Chinese Soc. For Materials Sci., P08-080, Taipei (2008).
267. F. H. Kao, H. R. Chen and J. R. Yang, 'The precipitation behavior in a copper-bearing HSLA during isothermal aging", in Proc. of 2008 Annual Conf. of the Chinese Soc. For Materials Sci., P08-061, Taipei (2008).
268. Y. K. Tseng, W. C. Li, J. W. Liao and J. R. Yang, "The effect of δ-phase precipitation on the grain-refinement in an Inconel 718 alloy", in Proc. of 2008 Annual Conf. of the Chinese Soc. For Materials Sci., P08-059, Taipei (2008).
269. J. Matějková-Plskova, S. Shiojiri, M.J. Chen, J.R. Yang and M. Shiojiri, "PURPLE AND ULTRAVIOLET ARTS – To the Millennium of 'The Tale of Genji' written by Murasaki-Shikibu" 7 Polish-Japanese Joint Seminar on Micro and Nano Analysis, Warsaw, Poland (2008), Paper A1.1.
270. J. Matějková-Plskova, S. Shiojiri, M.J. Chen, J.R. Yang and M. Shiojiri, "The fine structure of wing scales of Sasakia charonda butterfly and ZnO-based ultra-violet light emitting diodes" 9th Asia-Pacific Microscopy Conference, Jeju. Korea (2008).
271. Z.S. Lee, Z.C. Feng, A.G. Li and J. R. Yang, "Photoluminescence dynamics and structural investigation of InGaN/GaN multiple quantum well light emitting diodes grown by metalorganic chemical vapor deposition" - 7th International Conference on Solid State Lighting, AUG 27-29, 2007 San Diego, CA, art. no. 666901,
272. J. R. Yang, C. Y. Chen, H. W. Yen, , W. C. Li , S. H. Wang, "Precipitation Hardening of nanometer-sized carbides in high-strength low-alloy steels", the International Conference on Physical and Numericaql Simulation of Materials Processing, M-119 (Zheng-Zhou, China, 2007). (Invited speech)

273. F. S. Kao, C.Y. Chen, W. C. Li, C. R. Yang, "Cross-sectional electron microscopy of the interfaces in a Galvannealed dual-phase steel", the International Conference on Physical and Numericaql Simulation of Materials Processing, M-117 (Zheng-Zhou, China, 2007).
274. J. R. Yang, "Nanostructures in steels", in Proceedings of Materials and Austceram 2007 (Sydney, Australia), P. 195. (Invited speech, 2007)
275. J. R. Yang, "Nanostructural analysis of GaN-based violet laser diodes", in 2007 Taiwan-Russian Joint Symposium on Nanostructures for Photonics and Optoelectronics Applications", in Nano-photonics (II) Section. (Invited speech)
276. J. R. Yang and M. Shiojiri, "Electron Microscopy Studies of GaN-Based violet laser diodes", the 24th MST conference of the Microscopy Society of Thailand, (Bangkok, 2007). (Plenary lecture)
277. F. S. Kao, C. Y. Chen, W. C. Li , H. T. Chang and J. R. Yang, "Microstroctural evolution of a Ti-Mo containing steel", in Proceedings of the 27th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2007), M-P-18.
278. F. S. Kao, C. Y. Chen and J. R. Yang, "TEM investigation on a galvanealled dual phase steel", in Proceedings of the 27th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2007), M-P-19.
279. C. Y. Chen, F. S. Kao and J. R. Yang, "The effect of interruptrd cooling temperature on precipitation behavior in novel HSLA steels", in Proceedings of the 27th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2007), M-P-20.
280. T. Y. Wang, S. Maikap and J. R. Yang, "Effect of nanocrystal on the memory characteristics of high-k HfAlO charge trapping layers for nano-scale non-volatile memory device applications", in Proceedings of the 27th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2007), M-P-21.
281. Z. C. Feng, H. L. Tsai and J. R. Yang, "New challenges on transmission electron microscopy for new generation GaN-based lighting devices, in Proceedings of the 27th R.O.C. Symposium on Microscopy (Taipei, Taiwan, 2007), M-P-22.
282. J. R. Yang , H. L. Tsai, T.Y. Wang, H.W. Yen, H. R. Chen, T. C. Wang and J. T. Hsu, "Nanostructural analysis of a GaN-based violet laser diode", the 2nd International Symposium on Functional Materials" (Hangzhou, 2007), Conf. 378.
283. C. Y. Chen, H. W. Yen and J. R. Yang, "Investigation on the nanostructures of a temperature super bainitic steel", in Proceedings of the 1st International Symposium on Steel Science", The Iron and Steel Institute of Japan, Tokyo, 2007, pp. 123-126.
284. J. R. Yang, "Nanostructures in steels" in Proc. of 2007 Annual Conf. of the Chinese Soc. For Materials Sci., 2007, Hsinchu, F-15. (Invited speech)
285. C. C. Yang, S. H. wang, C. Y. Chen and J. R. Yang, "Comparison of fatigue behavior and microstructure of Ti64 to SP700 duplex titanium alloy", in Proc. of 2007 Annual Conf. of the Chinese Soc. For Materials Sci., 2007, Hsinchu, P-381.
286. H. H. Lee, S. H. Wang, C. Y. Chen and J. R. Yang, "The creep and stress-drop incubation behavior of titanium alloys Ti-6Al-4V and SP700"", in Proc. of 2007 Annual Conf. of the Chinese Soc. For Materials Sci., 2007, Hsinchu, P-385.
287. W. C. Li, C. Y. Chen F. S. Kao and J. R. Yang, "Precipitation of carbides in Cr-Mo steels", in Proc. of 2007 Annual Conf. of the Chinese Soc. For Materials Sci., 2007, Hsinchu, P-403.
288. H. T. Chang, W. T. Lin and J. R. Yang, "Microstructural investigation on low-temperature bainite", in Proc. of 2007 Annual Conf. of the Chinese Soc. For Materials Sci., 2007, Hsinchu, P-404.
289. C.Y. Chen, C. Y. huang, F. S. Kao, W. C. Li and J. R. Yang, "The effects of different austenitization temperatures and different amounts of deformation on the precipitation strengthening in HSLA steels", in Proc. of 2007 Annual Conf. of the Chinese Soc. For Materials Sci., 2007, Hsinchu, P-413.
290. F. H. Kao, W.C. Li, C.Y. Chen and J. R. Yang, "Study on the precipitation behavior of nano-sized carbide in the novel tempered martensitic steel."in Proc. of 2007 Annual Conf. of Taiwan Heat Treatment Soc., 2007, Taipei.
291. F. H. Kao, W. C. Li, C. Y. Chen and J.R. Yang,"Study on the intermetallic phases of coated Zn layer in the galvannealed steel", in Proc. of 2007 Annual Conf. of Taiwan Heat Treatment Soc., 2007, Taipei.
292. C. Y. Chen, F. H. Kao, W. C. Li and J.R. Yang,"Study on the thermal stability characteristic of nano-sized carbide in the novel HSLA steel.", in Proc. of 2007 Annual Conf. of Taiwan Heat Treatment Soc., 2007, Taipei.
293. H. W. Yen, C. Y. Chen and J. R. Yang, "Orientation of nanometer-sized interphase-precipitated TiC carbides in a Ti-containing steel", in Proceedings of the 26th R.O.C. Symposium on Microscopy (Hsinchu, Taiwan, 2006), P.48.
294. T. Y. Wang, J. R. Yang and S. Maikap, "Extremely low voltage and large memory window in multilayer HfO2/TiO2 Quantum well charge storge devices for high-speed flash memory", in Proceedings of the 26th R.O.C. Symposium on Microscopy (Hsinchu, Taiwan, 2006), P.82.
295. C. Y. Chen, H. Y. Yen and J. R. Yang, "Microstructural evolution of tempered super-martensite", in Proceedings of the 26th R.O.C. Symposium on Microscopy (Hsinchu, Taiwan, 2006), P.92.

296. H. L. Tsai, T. Y. Wang, J. R. Yang and Z. C. Feng, “Transmission electron microscopy observation of V-defects in multiple InGaN/GaN quantum well layers”, in Proceedings of the 26th R.O.C. Symposium on Microscopy (Hsinchu, Taiwan, 2006), P.96.
297. H. W. Yen, C.Y. Chen, T. H. Yu and J. R. Yang, “Intragranularly nucleated austenite in a 2205 duplex stainless steel”,Thermec-2006 : International Conference on Processing & Manufacturing of Advanced Materials, Vancouver, Candad, 2006, Abstracts, P.489.
298. H. W. Yen, C.Y. Chen, C. Y. Huang and J. R. Yang, “TEM investigation of Nanometer-sized interphase-precipitated TiC carbides in a Ti-containing HSLA steel”, the 3rd International Conference on Advanced Structural Steels, 2006, Gyeongiu, Korea, Paper 24P-8.
299. C. Y. Chen, H. W. Yen, J. R. Yang, “Microstructure Evolution of Tempered Super-Bainite” Proc. of 2006 Annual Conf. of the Chinese Soc. For Materials Sci., P.381, 2006, Tainan.
300. H. W. Yen, C. Y. Chen, J. R. Yang, “Transition of Orientation Relationships: Behavior of Nanometer-Sized Interface Precipitated TiC Carbides in a Ti-Bearing Steel” Proc. of 2006 Annual Conf. of the Chinese Soc. For Materials Sci., P.381, 2006, Tainan.
301. C. Y. Chen, J. R. Yang, “Nano-Carbide Precipitation strengthening in a Newly-Developed HSLA Steel.” Proc. of 2006 Annual Conf. of the Taiwan Soc. For Metal Heat Treatment, P.44, 2006, Tainan.
302. H. W. Yen, C. Y. Chen, J. R. Yang, “Heat Treatment Induced Orientation Change of Nanometer-Sized Interface Precipitated TiC in a Ti-bearing Steel” Proc. of 2006 Annual Conf. of the Taiwan Soc. For Metal Heat Treatment, P.57, 2006, Tainan.
303. J, R. Yang, “The application of high angle annual dark-field scanning-transmission electron microscopy on the analysis of nanostructure”, Pohang University of Science and Technology, Graduate Institute of Ferrous Technolog, August 25, 2006. (Invited speech)
304. J. R. Yang, “Nanostructural analysis of AlGaN/GaN strained-layer superlattice”, in International Workshop on Microscopy and Spectroscopy of Nanomaterials, organized by CCMS, National Taiwan University, Nov. 27, 2006. (Invited speech)
305. J. R. Yang, H. S. Wang and R.C. Wei, “TEM observation of strain-induced nanoscale martensite in ultra-fine 316L stainless steel”, Asia-Pacific Advanced Microscopy Symposium, 2005, Hualien, Taiwan, oral paper No. 15. (Invited speech)
306. Shiojiri, J. T. Hsu, J. R. Yang and H. Saijo, “HAADF-STEM and its application to structural analysis of GaN-based vilot laser diodes”, Asia-Pacific Advanced Microscopy Symposium, 2005, Hualien, Taiwan, oral paper No. 31.
307. T. Y. Wang, H. L. Tsai and J. R. Yang, “A Novel Approach to grow silicon-germanium thin film on silicon substrate”, Asia-Pacific Advanced Microscopy Symposium, 2005, Hualien, Taiwan, poster paper No. 6.
308. L. Tsai, T.Y. Tsai, J. R. Yang, J. R. Yang and Z. C. Feng, “HAADF- STEM Imaging on V-defect and superlattice of GaN-based semiconductor”, Asia-Pacific Advanced Microscopy Symposium, 2005, Hualien, Taiwan, poster paper No. 7.
309. Y. Chen, T.Y. Wang, H.R. Chen and J. R. Yang, “Nanoprecipitates in a new HSLA steel”. Asia-Pacific Advanced Microscopy Symposium, 2005, Hualien, Taiwan, poster paper No.8.
310. J. R. Yang, T. H. Yu and C.H. Wang, “Martensitic Transformations in AISI 440C Stainless Steel”, International Conference on Martensitic Transformations, 2005, Shanghai, Paper E22. (Invited speech)
311. T. H. Yu, R. C. Wei, H. R. Chen and J. R. Yang, “The Decomposition of Retained Austenite in a High-Speed Steel”, The 4th international Conference on Physical and Numerical Simulation of Materials Proceesing”, 2004, Shanghai, Page 11.
312. J. R. Yang, K. L. Weng, H. R. Chen and Y. J. Lin, “475°C Aging Embrittlement in a 2205 Duplex Stainless Steel”, The 4th international Conference on Physical and Numerical Simulation of Materials Proceesing”, 2004, Shanghai, Page 18. (Invited speech)
313. N. Nakanishi, T. Yamazaki, J. T. Hsu, J. R. Yang, K. Inoke, K. Watanabe, M. Shiojiri, " Ordering and phase separation in multiple quantum wells in InGaN / GaN" , 2004, in 8th Asia-Pacific Conference on Electron Microscopy (Japan), Paper No. 11021.
314. J. R. Yang, K. L. Weng, H. R. Chen and M. Shiojiri, " Spinodal structures of a 2205 duplex stainless steel" , 2004, in 8th Asia-Pacific Conference on Electron Microscopy (Japan), Paper No. 15009.
315. H. Saijo, J. T. Hsu, M. Yamada, M. Nakagawa, J. R. Yang and M. Shiojiri, " High-resolution SEM imaging of InGaN / GaN multiple-quantum-wells layers and V-defects in the GaN-based violet laser diodes" , 2004, in 8th Asia-Pacific Conference on Electron Microscopy (Japan), Paper No. 48027.
316. H. Saijo, M. Yamada, M. Nakagawa, J. T. Hsu, J. R. Yang and M. Shiojiri, " High-resolution SEM imaging of AlGaN / GaN multiple-quantum-wells layers and V-defects in the GaN-based violet laser diodes" , 2004, in 8th Asia-Pacific Conference on Electron Microscopy (Japan), Paper No. 48028.

317. M. Ceh, S. Sturm, H. Saijo, J. T. Hsu, J. T. Hsu, J. R. Yang and M. Shiojiri, " HAADF-STEM imaging of AlGaN / GaN strained layers superstructures in the GaN-based violet laser diodes" , 2004, in 8th Asia-Pacific Conference on Electron Microscopy (Japan), Paper No. 48076.
318. K. L. Weng and H. R. Chen J. R. Yang, " Aging embrittlement and corresponding phase transformation in a 2205 duplex stainless steel aged at 475 ℃" , 2003, in Proc. of the 23rd ROC symposium on Microscopy, M-O-1.
319. K. L. Weng and J. R. Yang, " The effect of low-temperature exposure on the embrittlement in a 2205 duplex stainless steel" , in Proc. of the 2002 Annual Conf. of the Chinese Soc. for Mat. Sci., OA-5.
320. H. S. Wang, C. N. Shiao and J. R. Yang, " TEM observation of Microstructure in 17-4 PH stainless steel" , in Proc. of the 2002 Annual Conf. of the Chinese Soc. for Mat. Sci., PA-5.
321. K. Inoke, E. Kobayashi, J. R. Yang and M. Shiojir, " HAADF STEM observation of MQW In GaN" , 2001, in Proc. of 57th Annual Meeting of the Japanese Society of Electron Microscopy, Vol.36, Supplement 1, 2001, PP.64-65.
322. T. H. Chen and J. R. Yang, " Effect of high-temperature aging on impact toughness and precipitation of 2205 duplex stainless steel" , 2001, in 2001 International Workshop on Advanced Microscopy, M-P-73.
323. M. C. Tsai and J. R. Yang, " The Application of FEG-TEM on Microstrual Investigation of Modified 9Cr-1Mo Steel" , 2001, in 2001 International Workshop on Advanced Microscopy, M-P-75.
324. J. R. Yang, S.Y. Huang, K. Watanabe and M. Shiojiri, " High-Resolution HAADF Observation of MQW InGaW" , 2001, in 2001 International Workshop on Advanced Microscopy, M-O-15.
325. C. N. Hsiao and J. R. Yang, " Micro-twinning Structure in a Martensitic Matrix 17-4 PH Steel" , 2000, in Proc. of the 21th ROC symposium on Microscopy, M-P-49.
326. T. H. Chen and J. R. Yang, " Precipitation Behavior of Sigma Phase under Continuous Colling in 2205 Duplex Stainless Steel", 2000, in Proc. of the 21th ROC symposium on Microscopy, M-P-55.
327. M. C. Tsai and J. R. Yang, " Carbide Precipitation Sequence in Bainitic Matrix in 2.25Cr-1Mo Steel" , 2000, in Proc. of the 21th ROC symposium on Microscopy, M-P-57.
328. M. C. Tsai and J. R. Yang, " Carbide Transformations in Simulated Heat-Affected Zone in 2.25Cr-1Mo Steel Plate during High-Temperature Exposure", 2000, in Proc. of the 7th Asia-Pacific Electron Microscopy Conference, Physical Science, PP.l94-95..
329. C.N. Hsiao and J.R. Yang, “Microstructure of Copper Precipitation in a Copper Contained Steel after Aging Treatment”, 1999 in Proc. of the 20th ROC Symposium on Microscopy., pp.58-59.
330. M.C. Tsai and J.R. Yang, “Transformation in Simulated Heat-Affected Zone in 2.25Cr-1Mo Steel Plates during High Temperature Long-Term Exposure”, 1999 in Proc. of the 20th ROC Symposium on Microscopy, pp.64-65.
331. J.S. Du, M.C. Tsai and J.R. Yang, “A Study on Phase Transformations in AISI 410 Stainless Steel”, in Proc. of the 1998 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.1-6.
332. J.R. Yang, J.S. Du and M.C. Tsai, ”Phase Transformations in AISI 410 Stainless Steel”, in International Conference on Solid-Solid Phase Transformations ’99, May24-28, Kyoto, Japan.
333. C.N. Hsiao, C.S. Chiou and J.R. Yang, “Continuous Cooling Transformation in Copper Containing NAK80 Steel”, in Proc. of the 1998 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.19-22.
334. R.H. Larn and J.R. Yang, “The Effect of Different Heat Treatments on the Amounts of Retained Austenite/Carbides and Mechanical Properties for A30 P/M High Speed Steel”, in Proc. of the 1998 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.23-26.
335. J.R. Yang, C.S. Chiou and C.Y. Huang, ”The Effect of Prior Deformation of Austenite of Toughness Property in Ultra-Low Carbon Bainitic Steel:, in THERMC’97 (International Conference on Thermomechanical Procession of Steel & Other Materials”, July 7-11, 1997, Australia, Wollongong.
336. R.H. Larn and J.R. Yang, “The Effect of Mechanical Stabilization on the Bainitic Transformation in Fe-C-Si-Mn Alloy –Steel”, in Proc. of the 1996 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.215-218.
337. C.S. Chiou, J.R. Yang, “The Effects of Thermo-mechanical Treatment on the Low-Temperature Toughness of Ultra-Low Carbon Bainitic Alloy Steel”, in Proc. of the 1996 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.219-222.
338. T.H. Chen and J.R. Yang, “Effect of Boron Content on the Continuous Transformation in Some Ultra-low Carbon Bainitic Steels”, in Proc. of the 1996 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.223-226.
339. T.M. Guo and J.R. Yang, “Prior Deformation Induces Acicular Ferrite Transformation in Ultra-Low Carbon Bainitic Steel”. in Proc. of the 1996 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.304-307.
340. J.C. Hwang and J.R. Yang, “Massive Ferrite Transformation in Ultra-Low Carbon Steels”, in Proc. of the 1996 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.308-311.
341. C.Y. Cuo and J.R. Yang, “Microstructural Evolution of Simulated Heat Affected Zone in TMCP Steel Plates”, in Proc. of the 1996 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.300-303.
342. P.K. Wu and J.R. Yang, “Ausformed Bainite in a Ti-Killed Steel”, in Proc. of the 1995 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.6-7.

343. C.S. Chiou, C.Y. Huang and J.R. Yang, “The Effect of Manganese Content on the Recrystallization of Ultra-Low Carbon Bainitic Steels”, in Proc. of the 1995 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.12-13.
344. R.H. Larn and J.R. Yang, “The Studies on Ausformed Bainite and Widmanstatten Ferrite in a Low-Carbon Alloy Steel”, in Proc. of the 1995 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.20-21.
345. M.Y. Wu and J. R. Yang, “The Effect of Prior Deformation of Austenite on the Morphology of Subsequent Bainitic Structure”, in Proc. of the 1995 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.138-139.
346. J.R. Yang, C.Y. Huang, W.H. Hsieh, C.S. Chiou, ”Mechanical Stabilization for Bainitic Reaction in Fe-C-Si-Mn Bainitic Steel”, 1995 International Conference on Martensitic Transformation ICOMAT’95, Lausanne Switzerland.
347. C.Y. Huang, J.R. Yang and H.R. Chen, “the Effect of Solid-Solution and Precipitation of Niobium on Bainitic Hardenability”, in Proc. of the 1994 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.450-451.
348. W.H. Hsieh and J.R. Yang, “The Effect of Different Amounts of Prior Deformation on Bainite Transformation”, in Proc. of the 1994 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.452-453.
349. Y.H. Liou and J.R. Yang, “The Effect of Deformation on Acicular Ferrite Transformation in an Alloy Steel Weld Metal”, in Proc. of the 1994 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.456-457.
350. C.S. Chiou, W.H. Hsieh and J.R. Yang, “The Role of Deformation Band on the High Temperature Ferrite Phase Transformation”, in Proc. of the 1994 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.494-495.
351. J.R. Yang, C.Y. Huang and S.C. Chiou, ”The Influence of Plastic Deformation and Cooling Rate on the Microstructural Constituents of an Ultra-Low Carbon Bainitic Steel”, International Symposium on New Aspects of Microstructures in Modern Low Carbon High Strength, 1994, Tokyo.
352. C.S. Chiou, W.H. Hsieh, C.Y. Huang and J.R. Yang, “The Effect of Compressive Deformation on the Austenite Ferrite Formation of an Oxygen Containing Plain Carbon Steel”, in Proc. of the 1993 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.63-64.
353. J.R. Yang, C.Y. Huang and S.C. Wang, ”The Effect of Compressive Deformation on the Transformation Behavior of an Low-Carbon Bainitic Steel”, in International Symposium on Low-Carbon Steels for the 90’s, 1993, Pittsburgh.
354. S.S. Tzeng, C.T. Huang, J.R. Yang, 1992, “Microstructural Examination of 1Cr-0.5Mo Steel Superheater Steam Outlet Header after 30 years Service”, in Proc. of the 1992 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.2-3.
355. C.Y. Huang, J.R. Yang and S.C. Wang, “Microstructural Evolution of 0.03C-1.39Mn Ultra-Low Carbon Bainitic Steel”, in Proc. of the 1992 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.4-5.
356. C.F. Huang, C.Y. Huang, J.R. Yang, “Austenite Grain Size Effect on Microstructural Development in a Ultra-Low Carbon High-Strength Steel Weld Metal”, in Proc. of the 1992 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.6-7.
357. J.M. Ting and J.R. Yang, 1991, “Austenite Transformation in a Si-Mn Steel”, in Proc. of the 1990 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.18-19.
358. C.N. Yang and J.R. Yang, 1991, “The Study of Carbides in a 2.25Cr-1Mo Steel Using Carbon Extraction Replica Technique”, in Proc. of 1991 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.526-527.
359. K.C. Lin and J.R. Yang, 1990, ”The Relation between Creep Properties and Microstructure in Cr-Mo Steels,” in Proc. Of the 1990 Annual Conf. of the Chinese Soc. for Mat. Sci., pp.133-138.
360. C.C. Yang and J.R. Yang, 1990 annual Conf. of the Half Bead for A533 Steel,” in Proc. of the Chinese Soc. for Mat. Sci., pp.255-258.
361. C.Y. Huang and J.R. Yang, 1990, ”Microstructure of the Heat Affected Zone in Nb Steels ”, in Proc. The 1990 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.259-263.
362. H.L. Lee, S.L.I. Chan and J.R. Yang, 1990, “Effect of Retains Austenite on the Behavior of Hydrogen in Martensite”, in Proc. of the 1990 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.1228-1231.
363. J.R. Yang and C.Y. Huang, 1990,”Gleeble Thermal Simulation for Heat-Affected Zone of Niobium Containing Steels”, in Session 6 of The First European East-West Symposium on Materials and Processes, June 1990, Finland.
364. J.R. Yang, 1989, “The Microstructure of High-Strength Alloy-Steel Weld Deposits”, in Proc. Of the 1989 ANNUAL Conf. of the Chinese Soc. For Mat. Sci., pp.407-410.
365. S.L.I. Chan, H.L. Lee and J.R. Yang, 1989, “Effect of Carbon Content and Martensitic Morphology on Hydrogen Occlusivity and Effective Hydrogen Diffusivity”, Accepted and to be published in the Proc. 4th Int. Conference on Hydrogen Effects on Material Behavior, September, Wyoming, U.S.A.
366. J.R. Yang and H.K.D.H. Bhadeshia, 1988, “Reaustenitisation from Bainite,” in ”Phase Transformation ”87”, Edited by G. W. Lorimer, Institute of Metals, London, U.K., pp.203-206.
367. J.R. Yang, 1988, ”The Dislocation Density of Acicular Ferrite in Steel Weld Deposits,” in Proc. Of the 1988 Annual Conf. of the Chinese Soc. For Mat. Sci., pp.749754.

368. J.R. Yang and H.K.D.H. Bhadeshia, 1987, “Thermodynamics of the Acicular Ferrite Transformation in Alloy-Steel Weld Deposits,” in Advances in welding Technology and Science Edited by S. A. David, ASM, Metals Park, Ohio, U. S. A. pp.187-191.
369. J.R. Yang and H.K.D.H. Bhadeshia, 1987, ”Reaustenitisation in Steel Weld Deposits,” in ”Welding Metallurgy of Structural Steel”, Edited by J.Y. Koo, The Metallurgical Society of the AIME, Warrendale, Pennsylvania, U.S.A. pp.549-563.
370. L. J Chen. W. T. Lin and J.R. Yang, 1982, ”Thermal Cycling and Dual Phase Treatments of HSLA Steel,” in Proc. Of 3rd R.O.C. Symposium of Electron microscopy, pp.63-64.
371. 371. L. J Chen and J.R. Yang, 1981, ”Dual Ferritr-Martensite Treatments of an ASTM A588 HSLA Steel,” in 39th Ann. Proc. Electron Microscopy Soc. Amer., Atlanta, Georgia, Edited by G. W. Bailey, pp.318-319.