

- **International Conferences**

1. **Li-Chun Chang**, Yu-Zhe Zheng, Chen-En Wu, Hual-Wum He, "The tribological behavior and oxidation resistance of Ta-Si-N coatings by high power impulse magnetron sputtering," ISPlasma2018/IC-PLANTS2018, (4-8 Mar. 2018, Nagoya, Japan).
2. Yung-I Chen, Jia-Wei Jhang, **Li-Chun Chang**, "Oxidation behavior of RuAlZr multilayer coatings," ISPlasma2018/IC-PLANTS2018, (4-8 Mar. 2018, Nagoya, Japan).
3. **Li-Chun Chang**, Ya-Wen You, Yu-Zhe Zheng, Hual-Wum He, "Study on the diffusion barrier of Ta-Si-N thin films prepared by high power impulse magnetron sputtering," TACT 2017 International Thin Films Conference, TACT 2017, (15-18 Oct. 2017, Hualien, Taiwan).
4. Yung-I Chena, Yu-Xiang Gao, **Li-Chun Chang**, Yi-En Ke, "Mechanical properties and bonding characteristics of Nb-Si-N coatings with cyclical gradient concentration," TACT 2017 International Thin Films Conference, TACT 2017, (15-18 Oct. 2017, Hualien, Taiwan).
5. **Li-Chun Chang**, Yu-Zhe Zheng, Yu-Xiang Gao, Yung-I Chen, "Tribological behavior and oxidation resistance of sputtered Cr-W-N coatings," The 8th International Conference on Technological Advances of Thin Films & Surface Coatings, THINFILMS2016, (12-15 Jul. 2016, Singapore).
6. **Li-Chun Chang**, Ya-Wen You, Yu-Zhe Zheng, Bo-Wei Liu, "The oxidation resistance of Ta-Si-N coatings by high power impulse magnetron sputtering," The 8th International Conference on Technological Advances of Thin Films & Surface Coatings, THINFILMS2016, (12-15 Jul. 2016, Singapore)
7. **Li-Chun Chang**, Szu-Chin Wang, "Resistive Switching Characteristics of Titanium Oxynitride Thin Films by High power impulse magnetron sputtering," The 8th International Conference on Technological Advances of Thin Films & Surface Coatings, THINFILMS2016, (12-15 Jul. 2016, Singapore)
8. Y.I. Chen, S.C. Chang, **L.C. Chang**, (2016, Jul), "Mechanical and tribological properties of Zr-Si-N coatings", ThinFilms2016, (12-15 Jul. 2016, Singapore)
9. Cheng-Lin Cho, Hsuan-Ling Kao, **Li-Chun Chang**, Yung-Hsien Wu, "Fully inkjet-printing of metal-polymer-metal multilayer on a flexible liquid crystal polymer substrate," The 8th International Conference on Technological Advances of Thin Films & Surface Coatings, THINFILMS2016, (12-15 Jul. 2016, Singapore)
10. **Li-Chun Chang**, Ching-Yen Chang, Yung-I Chen, Ya-Wen You, "The mechanical properties and oxidation resistance of $Ta_{1-x}Zr_xN_y$ thin films by high power impulse magnetron sputtering," TACT 2015 International Thin Films Conference, TACT 2015, (15-18 Nov. 2015, Tainan, Taiwan).
11. Hsuan-ling Kao, Cheng-Lin Chob, **Li-Chun Chang**, and Bo-Wen Wang, "A Single-Balanced Down-Conversion Mixer Fabricate in GaN-on-Si HEMT Technology," The Annual Conference on Engineering and Technology, ACEAT 2015, (5-6 Nov. 2015, Nagoya, Japan).
12. **Li-Chun Chang**, Yung-I Chen, Ching-Yen Chang, and Hsuan-ling Kao, "The mechanical properties and oxidation resistance of Zr_xN thin films by high power impulse magnetron sputtering," The 13th International Symposium on Sputtering & Plasma Processes, ISSP 2015, (8-10 Jul. 2015, Kyoto, Japan).

13. Yung-I Chen, Yu-Ren Huang, and Li-Chun Chang, "Internal oxidation behavior of laminated Hf--Ru coatings," The 13th International Symposium on Sputtering & Plasma Processes, ISSP 2015, (8-10 Jul. 2015, Kyoto, Japan).
14. Yung-I Chen, Shan-Chun Chang, and Li-Chun Chang, "Characterization of Zr-Si-N coatings prepared using direct current magnetron co-sputtering," The 13th International Symposium on Sputtering & Plasma Processes, ISSP 2015, (8-10 Jul. 2015, Kyoto, Japan).
15. K.P. Chang, C.H. Liao, J.C. Wang, C.S. Lai, R.D. Chang, and L.C. Chang, "Low damage ammonia plasma treatment on nonvolatile memory with chemically-synthesized gold nanoparticles," The 13th International Symposium on Sputtering & Plasma Processes, ISSP 2015, (8-10 Jul. 2015, Kyoto, Japan).
16. Hsuan-ling Kao, Cheng-Lin Cho, Li-Chun Chang, and Yung-Hsien Wu, "Inkjet-Printed Trisection Bandpass Filter on Multilayer Liquid Crystal Polymer Substrate," Microwave Symposium (IMS), 2015 IEEE MTT-S International, (17-22 May 2015, Phoenix, USA) pp.1 - 4.
17. Hsuan-ling Kao, Chia-Ming Kuo, Cheng-Lin Cho, Li-Chun Chang, "Inkjet Printing RF Bandpass Filters on Liquid Crystal Polymer Substrates," 2014 International Symposium on Fundamental and Applied Science (ISFAS, 28-30 Mar. 2014, Tokyo, Japan).
18. Li-Chun Chang, "Reactive deposition of Al-doped zinc oxides by high power impulsed magnetron sputtering," The 10th Cross-strait Seminar on Thin-Film Science and Technology (29-31 Oct. 2014, Wuhan, China)
19. Li-Chun Chang, Yung-I Chen, Ching-Yen Chang, Hsiu-Hui Wang, "Effects of the Zr content on the mechanical properties and oxidation resistance of reactively sputtered $Ta_{1-x}Zr_xN$ thin films," ThinFilms2014 The 7th International Conference on Technological Advances of Thin films & Surface Coatings(15-18 July. 2014, Chongqing, China)
20. Yung-I Chen, Yu-Ru Cheng, Li-Chun Chang, Yung-Hsing Chen, Tso-Shen Lu, "The chemical inertness of TaSiN coatings in glass molding processes," ThinFilms2014 The 7th International Conference on Technological Advances of Thin films & Surface Coatings(15-18 July. 2014, Chongqing, China)
21. Yung-I Chen, Yu-Ru Cheng, Li-Chun Chang, Yung-Hsing Chen, "Chemical Inertness of Ta-Si-N Coatings with Lanthanum Borosilicate Glasses," International Conference on Metallurgical Coatings and Thin Films (ICMCTF 2014) (April 28 -May 2, 2014, in San Diego, CA, USA)
22. Li-Chun Chang, Ching-Kuang Chang, and Szu-Chin Wang, "Characteristics of ZnO:Al thin films deposited by high power impulse magnetron sputtering," TACT 2013 International Thin Films Conference, TACT 2013(5-9 Oct. 2013, Taipei, Taiwan)
23. Li-Chun Chang, Szu-Chin Wang, and Ching-Kuang Chang, "Reactive deposition of Al-doped zinc oxides by high power impulse magnetron sputtering," The 12th International Symposium on Sputtering & Plasma Processes, ISSP 2013, (10-12 Jul. 2013, Kyoto, Japan).
24. Li-Chun Chang, Keng-Hao Liu, and Hsuan-ling Kao, "The effect of annealing treatment on the electrical characteristics of Pt/ZnO/Cr/ZnO/Pt RRAM device," The 12th International Symposium on Sputtering & Plasma Processes, ISSP 2013, (10-12 Jul. 2013, Kyoto, Japan).
25. Yung-I Chen, Hsiu-Nuan Chu, Li-Chun Chang, and Jyh-Wei Lee, "Internal oxidation and mechanical

properties of Ru based alloy coatings,” The 12th International Symposium on Sputtering & Plasma Processes, ISSP 2013, (10-12 Jul. 2013, Kyoto, Japan).

26. Jer-Chyi Wang, Wei-Cheng Chang, Chao-Sung Lai, **Li-Chun Chang**, Chi-Fong Ai, and Wen-Fa Tsai, “Oxygen plasma immersion ion implantation treatment to enhance data retention of tungsten nanocrystal nonvolatile memory,” The 12th International Symposium on Sputtering & Plasma Processes, ISSP 2013, (10-12 Jul. 2013, Kyoto, Japan).
27. **Li-Chun Chang**, Szu-Chin Wang, and Ching-Kuang Chang, “High power impulse magnetron sputtering of transparent conducting oxides,” Proceeding of ICMCTF 2013 conference, (April 29-May 3, 2013, San Diego, California, USA)
28. **Li-Chun Chang**, Keng-Hao Liu, and Hsuan-Ling Kao, “Switching mechanism transition induced by annealing treatment in Pt/ZnO/Cr/ZnO/Pt resistive memory,” 6th International Conference on Technological Advances of Thin Films & Surface Coatings ThinFilms2012, (14-17 Jul. 2012, Singapore).
29. **Li-Chun Chang**, Yu-Hsuan Wei, Shu-Chuan Liao, and Cheng-Lin Cho, “Resistive Switching Behavior of Printed Ag/ZnO/Ag,” 6th International Conference on Technological Advances of Thin Films & Surface Coatings ThinFilms2012, (14-17 Jul. 2012, Singapore)
30. Hsuan-Ling Kao, Cheng-Lin Cho, Bo-Wen Wange, and **Li-Chun Chang**, “Inkjet Printing RF Bandpass Filter on LCP Substrate,” 6th International Conference on Technological Advances of Thin Films & Surface Coatings ThinFilms2012, (14-17 Jul. 2012, Singapore).
31. Yung-I Chen, Sin-Min Chen, and **Li-Chun Chang**, “XPS and TEM studies on internally oxidized Nb-Ru coatings,” 6th International Conference on Technological Advances of Thin Films & Surface Coatings ThinFilms2012, (14-17 Jul. 2012, Singapore).
32. Jer-Chyi Wang, Yu-Ren Ye, Chao-Sung Lai, De-Yuan Jian, Wei-Ping Lee, **Li-Chun Chang**, Hsin-Chun Lu, Chih-I Wu, and Po-Sheng Wang, “Highly Reliable Gadolinium Oxide Resistive Switching Memory with Pt-Al Alloy Electrode and Optimized Post-Metallization Annealing,” 6th International Conference on Technological Advances of Thin Films & Surface Coatings ThinFilms2012, (14-17 Jul. 2012, Singapore).
33. **Li-Chun Chang**, K.H. Liu, and Hsuan-Ling Kao, “Switching mechanism transition induced by annealing treatment in ZnO/Ru/ZnO resistive memory,” Proceeding of ICMCTF 2012 conference, (April 29-May 3, 2012, San Diego, California, USA)
34. **Li-Chun Chang** and Yung-I Chen, “Oxidation Study of Nanocrystalline Cr-Ta Hard Coatings,” TACT 2011, International Thin Films Conference (20-23 Nov. 2011, Kenting, Taiwan).
35. **Li-Chun Chang**, Keng-Hao Liu, Cheng-Han He, and Hsuan-Ling Kao, “Switching mechanism transition induced by annealing treatment in Ru/ZnO/Ru/ZnO/Ru resistive memory,” TACT 2011, International Thin Films Conference (20-23 Nov. 2011, Kenting, Taiwan).
36. **Li-Chun Chang**, Kang-Hua Chang, Keng-Hao Liu, and Hsin-Jung Tsai, “Investigation of the electroforming process in resistively switching TiON films,” 12th International Conference and Exhibition of the European Ceramic Society (19-23 Jun. 2011, Stockholm, Sweden).
37. **Li-Chun Chang**, Kang-Hua Chang, Keng-Hao Liu, and Hsin-Jung Tsai, “Effects of nitrogen partial

pressure on resistive switching characteristics of titanium oxynitride thin films by DC reactive magnetron sputtering," Proceeding of ICMCTF 2011 conference, (May 2-6, 2011, San Diego, California, USA).

38. **Li-Chun Chang**, Cheng-Huan Yang, and Hsuan-Ling Kao, "Influence of carrier injection on resistive switching of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ thin films with Ni electrode," The 5th International Conference on Technological Advances of Thin Films & Coatings (ThinFilms2010), (July 11-14, 2010, Harbin, China).
39. Shih-Tien Chang, Jyh-Wei Lee, Chi-Hong Chien, **Li-Chun Chang**, Chaur-Jeng Wang, "Corrosion resistance evaluations of pulsed DC reactive magnetron sputtered nanocomposite Cr-Zr-Si-N thin films," (The 5th International Conference on Technological Advances of Thin Films & Coatings (ThinFilms2010), (July 11-14, 2010, Harbin, China).
40. **L.C. Chang**, K.H. Chang, W.Z. Wang, and G.R. Liao, "Switching Characteristics of Titanium Oxynitride resistive random access memory," The 10th Asia Pacific Conference on Plasma Science and Technology and the 23rd Symposium on Plasma Science for Materials, (July 4-8, 2010, Jeju, Korea).
41. **L.C. Chang**, C.H. Yang, and H.L. Kao, "Effect of Top Electrode Material on Resistive Switching Properties of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ Film Memory Device," The 10th Asia Pacific Conference on Plasma Science and Technology and the 23rd Symposium on Plasma Science for Materials, (July 4-8, 2010, Jeju, Korea).
42. J.W. Lee, Y.B. Lin, **L.C. Chang**, F.B. Wu, "Resistive Switching in transparent ITO/ Cu_2O / TiO_2 /ITO Stacked Structure," 2010 Proceeding of ICMCTF 2010 conference, (April 26-31, 2010, San Diego, California, USA).
43. **L.C. Chang**, Y.C. Peng, J.H. Lu, and Y.C. Kuo, "A Study of High Temperature Oxidation Behaviors of Zr-Si-N Nanocomposite Thin Films at 900°C," 2010 Proceeding of ICMCTF 2010 conference, (April 26-31, 2010, San Diego, California, USA).
44. C.L. Li, H.M. Lin, J.W. Lee, J.G. Duh, and **L.C. Chang**, "Influences of Annealing on the Microstructures and Mechanical Properties of $\text{Cr}_2\text{N}/\text{Cu}$ Multilayered Thin Films," 2010 Proceeding of ICMCTF 2010 conference, (April 26-31, 2010, San Diego, California, USA).
45. S.T. Chang, J.W. Lee, C.H. Chien, J.J. Chen, S.S. Ting, **L.C. Chang**, and C.J. Wang, "Characteristics of Pulsed DC Reactive Magnetron Sputtered Nanocomposite Cr-Zr-N and Cr-Zr-Si-N Thin Films," 2010 Proceeding of ICMCTF 2010 conference, (April 26-31, 2010, San Diego, California, USA).
46. J.M. Kao, J.W. Lee, **L.C. Chang**, "Microstructures and Mechanical Properties Evaluation of TiAlN/ CrSiN Multilayered Thin Films with Different Bilayer Thickness," 2010 Proceeding of ICMCTF 2010 conference, (April 26-31, 2010, San Diego, California, USA).
47. **Li-Chun Chang**, Yu-Chun Peng and Jong-Hong Lu, "Switching characteristics of ITO/ Cu_2O /ITO transparent resistive random access memory," TACT2009 International Thin Films, (14-16 Dec. 2009, Taipei, Taiwan).
48. **Li-Chun Chang**, Yu-Chun Peng and Jong-Hong Lu, "Switching characteristics of ITO/ Cu_2O /ITO transparent resistive random access memory," TACT2009 International Thin Films, (14-16 Dec. 2009, Taipei, Taiwan).
49. Chuan-Yeh Wang, Jyh-Wei Lee, **Li-Chun Chang**, "Effects of bilayer periods on the microstructures

and mechanical properties of CrN/Cr multilayered thin films”, TACT2009 International Thin Films Conference (14-16 Dec. 2009, Taipei, Taiwan).

50. Yi-Bin Lin, Jyh-Wei Lee, Fan-Bin Wu, **Li-Chun Chang**, “The influence of Si contents on the microstructures and corrosion properties of Zr-Si-N thin films,” TACT2009 International Thin Films Conference (14-16 Dec. 2009, Taipei, Taiwan).
51. **Li-Chun Chang**, Yu-Chun Peng and Jong-Hong Lu, “Structure Effects on Optical Properties in ITO/Cu₂O/ITO Devices for TRRAM Applications,” 11th International Conference and Exhibition of the European Ceramic Society (21-25 Jun. 2009, Krakow, Poland).
52. **Li-Chun Chang**, Cheng-Huan Yang, Hsuan-Ling Kao and Fan-Bean Wu, “Using High Work Function Ni Metal to Improve the Stress Reliability of CaCu₃Ti₄O₁₂ MIM Capacitors,” (April 26- May 1, 2009 ICMCTF, San Diego, USA).
53. C.L. Li, J.W. Lee, **L.C. Chang**, “Characteristics of Cr₂N/Cu Multilayered Thin Films with Different Bilayer Thickness,” Proceeding of ICMCTF 2009 conference (April 26- May 1, 2009, San Diego, California, USA).
54. Y.B. Lin, J.W. Lee, **L.C. Chang**, “Microstructures and Corrosion Resistance of Pulsed DC Reactive Magnetron Sputtered nanocomposite Zr-Si-N Thin Films,” Proceeding of ICMCTF 2009 conference (April 26- May 1, 2009, San Diego, California, USA).
55. Y.C. Chang, H.L. Kao, C.H. Kao, C.H. Yang, Jeffrey S. Fu, Nemaï C. Karmakar, and **L.C. Chang**, “A 0.18 μm CMOS UWB LNA with New Feedback Configuration for Optimization Low Noise, High Gain and Small Area,” 12th IEEE Symposium on Design and Diagnostics of Electronic Systems , pp. 194-197. (April 15-17, 2009, Liberec, Czech Republic).
56. **Li-Chun Chang** and Fan-Bean Wu, “Electric-Pulse-Induced Resistance Switching in CaCu₃Ti₄O₁₂ Films Grown by RF-Sputter,” Proceeding of ICMCTF 2008 conference (April 27- May 2, 2008 ICMCTF, San Diego, USA).
57. Y.I. Chen, **Li-Chun Chang**, Jyh-Wei Lee, Yu-Chu Kuo, and Chaur-Jeng Wang, “Annealing Study of Mo-Ru Hard Coatings on Tungsten Carbide,” Proceeding of ICMCTF 2008 conference (April 27- May 2, 2008 ICMCTF, San Diego, USA).
58. Y.C. Kao, Jyh-Wei Lee, **Li-Chun Chang**, and C.J. Wang,. “Effects of substrate bias frequencies on the characteristics of chromium nitride coatings deposited by pulsed DC reactive magnetron sputtering,” Proceeding of ICMCTF 2008 conference (April 27- May 2, 2008 ICMCTF, San Diego, USA).
59. Jyh-Wei Lee, J.S. Yang, and **Li-Chun Chang**, “Deposition Process Analysis of Chromium Nitride Thin Films Using Taguchi Experimental Design Method,” Proceeding of ICMCTF 2008 conference (April 27- May 2, 2008 ICMCTF, San Diego, USA).
60. Jyh-Wei Lee, C.M. Chen, J.C. Huang, **Li-Chun Chang**, and J.S. Yang, “Investigation of Nanostructured CrN/Amorphous-Si₃N₄ Multilayer Thin Film,” Proceeding of ICMCTF 2008 conference (April 27- May 2, 2008 ICMCTF, San Diego, USA).
61. Y.S. Shen, Chia-Cheng Ho, **Li-Chun Chang**, and Bi-Shiou Chiou, “Effects of Post-Annealing Temperature on Electrical Behavior of CCTO Thin Films for Resistance Random Access Memory Application,” Proceeding of ICMCTF 2007 conference (23-27 Apr. 2007 ICMCTF, San Diego, USA).

62. Tsai-Sheng Pan, **Li-Chun Chang**, Chia-Cheng Ho, and Bi-Shiou Chiou, "Study on the voltage-controlled-oscillator circuit implemented with Al/HfO₂/Si capacitors," Proceeding of IMPACT 2007 conference (1-3 Oct. 2007 IMPACT, Taipei, Taiwan).
63. **Li-Chun Chang**, Dai-Ying Lee, Chia-Cheng Ho, and Bi-Shiou Chiou, "Thickness-dependent microstructures and electrical properties of CaCu₃Ti₄O₁₂ films derived from sol-gel process," Proceeding of ICMCTF 2007 conference (23-27 Apr. 2007 ICMCTF, San Diego, USA).
64. **Li-Chun Chang**, Yung-I Chen, Jhy-Wei Lee, and Hung-Yi Lin, "Detaching mechanism for Mo-Ru hard coating on tungsten carbide," Proceeding of ICMCTF 2007 conference (23-27 Apr. 2007 ICMCTF, San Diego, USA).
65. Dai-Ying Lee, **Li-Chun Chang**, Chia-Cheng Ho, and Bi-Shiou Chiou, "Low temperature processing of sol-gel derived CaCu₃Ti₄O₁₂ dielectric thin film using KrF laser annealing," Proceeding of ICMCTF 2007 conference (23-27 Apr. 2007 ICMCTF, San Diego, USA).
66. Chia-Cheng Ho, Bi-Shiou Chiou, and **Li-Chun Chang**, "Microstructure Evolution and Dielectric Properties of Ba_{0.7}Sr_{0.3}TiO₃ Parallel Plate Capacitor with Cr Interlayer," Proceeding of ICMCTF 2007 conference (23-27 Apr. 2007 ICMCTF, San Diego, USA).
67. Yung-Chan Chen, **Li-Chun Chang**, and Bi-Shiou Chiou, "Properties of CaCu₃Ti₄O₁₂ (CCTO) Thin Film Fabricated by Sol-Gel Process," Proceeding of ICMCTF 2006 conference, (1-5 May, 2006, San Diego, California, USA).
68. Chia-Cheng Ho, Bi-Shiou Chiou, **Li-Chun Chang**, Chen-Chia Chou, Bo-Heng Liou, and Chin-Chieh Yu, "Thermal Stability and Electric Properties of Ba_{0.7}Sr_{0.3}TiO₃ Parallel Plate Capacitor with Nano-Cr Interlayer," Proceeding of ICMCTF 2006 conference, (1-5 May, 2006, San Diego, California, USA).
69. **L.C. Chang** and B.S. Chiou, "Effect of nano-coating on the sintering behavior and dielectrical microwave properties of Ba(Nd_{2-x}Sm_x)Ti₄O₁₂ ceramics," International Conference on Electroceramics, MIT, USA, 3-7 August 2003 abstract book, p.186.
70. **L.C. Chang** and B.S. Chiou, "Electrical behavior of BaO-Nd₂O₃-Sm₂O₃-TiO₂ with glass/oxide additives analyzed by impedance spectroscopy," International Conference on Electroceramics, MIT, USA, 3-7 August 2003 abstract book, p.232.