## • International Journals

- <u>Li-Chun Chang</u>\*, Yu-Zhe Zheng, Yung-I Chen, "Mechanical Properties of Zr–Si–N Films Fabricated through HiPIMS/RFMS Co-Sputtering," *Coatings* 8 (2018, Aug) 263. (SCIE, 2017 IF: 2.350, 5/19 in Materials Science, Coatings & Films)
- Cheng-Lin Cho, Hsuan-Ling Kao, Yung-Hsien Wu, Hsien-Chin Chiu, <u>Li-Chun Chang</u>, "Fully Inkjet-Printed Dual-Mode Ring Bandpass Filter Using a Cross-Bridge Structure Embedded With a Metal–Insulator–Metal Capacitor," *IEEE Transactions on Components, Packaging and Manufacturing Technology* (2018, Jun accepted). (SCI, 2017 IF: 1.66, 142/260 in Engineering, Electrical & Electronic)
- Yung-I Chen, Yu-Xiang Gao, <u>Li-Chun Chang</u>, Yi-En Ke, Bo-Wei Liu, "Mechanical properties, bonding characteristics, and oxidation behaviors of Nb–Si–N coatings," *Surface and Coatings Technology*, DOI: 10.1016 /j.surfcoat.2018.04.042Article accepted for publication 11 Apr 2018.
- Li-Chun Chang, Cheng-Lin Cho, Sameer Bachani, Hsuan-Ling Kao "Inkjet-Printed Interdigital Bandpass Filter with Wide Stopband using Multilayer Liquid Crystal Polymer Technique," *International Journal of Antennas and Propagation*, 2018 (2018, May) 6161427. (SCIE, 2017 IF: 1.378, 168/260 in Engineering Electrical & Electronic)
- <u>Li-Chun Chang</u>, Yu-Zhe Zheng, Yung-I Chen, Shan-Chun Chang, Bo-Wei Liu, "Bonding Characteristics and Chemical Inertness of Zr–Si–N Coatings with a High Si Content in Glass Molding, " *Coatings* 8(050, (2018, May) 181. (SCIE, 2017 IF: 2.350, 5/19 in Materials Science, Coatings & Films)
- Cheng-Lin Cho, Hsuan-ling Kao, Yung-Hsien Wu, <u>Li-Chun Chang</u>, Chun-Hu Cheng "Direct Fabrication of Inkjet-Printed Dielectric Film for Metal–Insulator–Metal Capacitors," *Journal of Electronic Materials*, 47 (2018, Jan) 677-683. (SCIE, 2017 IF: 1.566, 150/260 in Engineering Electrical & Electronic).
- Yung-I Chen, Yu-Xiang Gao, and <u>Li-Chun Chang</u>, "Oxidation behavior of Ta–Si–N coatings," *Surface & Coatings Technology* 332 (2017, Dec) 72–79. (SCI, 2017 IF: 2.906, 4/19 in Materials Science, Coatings & Films)
- Li-Chun Chang\*, Ching-Yen Chang, and Ya-Wen You, "Ta–Zr–N Thin Films Fabricated through HIPIMS/RFMS Co-Sputtering," *Coatings* 7(11) (2017, Nov) 189. (SCI, 2017 IF: 2.350, 5/19 in Materials Science, Coatings & Films)
- Cheng-Lin Cho, Hsuan-ling Kao, <u>Li-Chun Chang</u>, Yung-Hsien Wu, and Hsien-Chin Chiu "Fully inkjet-printing of metal-polymer-metal multilayer on a flexible liquid crystal polymer substrate," *Surface and Coatings Technology* 320 (2017, Jun) 568–573. (SCI, 2017 IF: 2.906, 4/19 in Materials Science, Coatings & Films)
- <u>Li-Chun Chang</u>\*, Yu-Zhe Zheng, Yu-Xiang Gao, and Yung-I Chen, "Mechanical properties and oxidation resistance of sputtered Cr–W–N coatings," *Surface & Coatings Technology* 320 (2017, Jun) 196–200. (SCI, 2017 IF: 2.906, 4/19 in Materials Science, Coatings & Films)
- Yung-I Chen, Shan-Chun Chang, and <u>Li-Chun Chang</u>, "Oxidation resistance and mechanical properties of Zr–Si–N coatings with cyclic gradient concentration," *Surface & Coatings Technology* 320 (2017, Jun) 168–173. (SCI, 2017 IF: 2.906, 4/19 in Materials Science, Coatings & Films)

- Jer-Chyi Wang, Kai-Ping Chang, Chin-Hsiang Liao, Ruey-Dar Chang, Chao-Sung Lai, and <u>Li-Chun</u> <u>Chang</u>, "Low-damage NH<sub>3</sub> plasma treatment on SiO<sub>2</sub> tunneling oxide of chemically-synthesized gold nanoparticle nonvolatile memory," *Current Applied Physics* 16 (2016, May) 605–610. (SCI, 2016 IF: 1.971, 129/275 in Materials Science, Multidisciplinary)
- Cheng-Lin Cho, Hsuan-Ling Kao, <u>Li-Chun Chang</u>, Yung-Hsien Wu, and Hsien-Chin Chiu, "Inkjet-Printed Multilayer Bandpass Filter Using Liquid Crystal Polymer System-on-Package Technology," *IEEE Transactions on Components, Packaging and Manufacturing Technology* 6(4) (2016, Apr) 622–629. (SCI, 2016 IF: 1.581, 139/262 in Engineering, Electrical & Electronic)
- Li-Chun Chang\*, Ching-Yen Chang, Yung-I Chen, and Hsuan-Ling Kao, "Mechanical properties and oxidation behaviors of ZrN<sub>x</sub> thin films fabricated through high-power impulse magnetron sputtering deposition," *Journal of Vacuum Science & Technology A* 34 [2] (2016, Mar) 02D107. (SCI, 2016 IF: 1.374, 9/19 in Materials Science, Coatings & Films)
- Yung-I Chen, Yu-Ren Huang, and <u>Li-Chun Chang</u>, "Internal oxidation of laminated Hf–Ru coatings", Journal of Vacuum Science & Technology A 34 [2] (2016, Mar) 02D103. (SCI, 2016 IF: 1.374, 9/19 in Materials Science, Coatings & Films)
- Yung-I Chen, Yu-Ren Huang, and <u>Li-Chun Chang</u>, "Oxidation behavior and mechanical properties of laminated Hf–Ta coatings," *Applied Surface Science* 354 (2015, Nov) 179–186. (SCI, 2015 IF: 3.150, 1/18 in Materials Science, Coatings & Films)
- <u>Li-Chun Chang</u>\*, Ching-Yen Chang, and Yung-I Chen, "Mechanical properties and oxidation resistance of reactively sputtered Ta<sub>1-x</sub>Zr<sub>x</sub>N<sub>y</sub> thin films," *Surface and Coatings Technology* 280 (2015, Oct) 27–36. (SCI, 2015 IF: 2.139, 4/18 in Materials Science, Coatings & Films)
- Yung-I Chen, Yu-Ru Cheng, and Li-Chun Chang, and Jyh-Wei Lee, "Chemical inertness of Cr–W–N coatings in glass molding," *Thin Solid Films* 593 (2015, Oct) 102–109. (SCI, 2015 IF: 1.761, 6/18 in Materials Science, Coatings & Films)
- Hsuan-ling Kao, Cheng-Lin Cho, <u>Li-Chun Chang</u>, and Yung-Hsien Wu, "Inkjet-Printed Silver Film on Multilayer Liquid Crystal Polymer for Fabricating a Miniature Stub-Loaded Bandpass Filter," *Thin Solid Films* 584 (2015, Jun) 198–203. (SCI, 2015 IF: 1.761, 6/18 in Materials Science, Coatings & Films)
- Yung-I Chen, Yu-Ru Cheng, <u>Li-Chun Chang</u>, and Tso-Shen Lu, "Chemical inertness of Ta–Si–N coatings in glass molding," *Thin Solid Films* 584 (2015, Jun) 66–71. (SCI, 2015 IF: 1.761, 6/18 in Materials Science, Coatings & Films)
- Jer-Chyi Wang, Chin-Hsiang Liao, Chih-Ting Lin, Ruey-Dar Chang, <u>Li-Chun Chang</u>, Chih-I Wu, and Jung-Hung Chang, "Charge storage characteristics of nonvolatile memories with chemically-synthesized and vacuum-deposited gold nanoparticles," *Current Applied Physics* 15 (2015, Apr) 535–540. (SCI, 2015 IF: 2.144, 94/271 in Materials Science, Multidisciplinary)
- 22. Hsuan-Ling Kao, Chih-Sheng Yeh, Xiu Yin Zhang, Cheng-Lin Cho, Xin Dai, Bai-Hong Wei, <u>Li-Chun</u> <u>Chang</u>, and Hsien-Chin Chiu, "Inkjet Printed Series-Fed Two-Dipole Antenna Comprising a Balun Filter on Liquid Crystal Polymer Substrate" *IEEE Transactions on Components, Packaging and Manufacturing Technology* 4 (2014, Jul) 1228–1236. (SCI, 2014 IF: 1.180, 131/249 in Engineering,

Electrical & Electronic)

- Hsuan-Ling Kao, Cheng-Lin Cho, Xiu Yin Zhang, <u>Li-Chun Chang</u>, Bai-Hong Wei, Xin Dai, and Hsien-Chin Chiu, "Bending Effect of an Inkjet-Printed Series-Fed Two-Dipole Antenna on a Liquid Crystal Polymer Substrate," *IEEE Antennas and Wireless Propagation Letters* 13 (2014, Jun) 1172– 1175. (SCI, 2014 IF: 1.579, 22/77 in Telecommunications)
- Li-Chun Chang\*, Hsuan-ling Kao, and Keng-Hao Liu, "Effect of annealing treatment on the electrical characteristics of Pt/Cr-embedded ZnO/Pt resistance random access memory devices," *Journal of Vacuum Science and Technology A* 32 (2014, Mar) 02B119. (SCI, 2014 IF: 2.322, 4/17 in Materials Science, Coatings & Films)
- 25. Jer-Chyi Wang, Wei-Cheng Chang, Chao-Sung Lai, <u>Li-Chun Chang</u>, Chi-Fong Ai, and Wen-Fa Tsai, "Oxygen plasma immersion ion implantation treatment to enhance data retention of tungsten nanocrystal nonvolatile memory," *Journal of Vacuum Science and Technology A* 32 (2014, Mar) 02B112. (SCI, 2014 IF: 2.322, 4/17 in Materials Science, Coatings & Films)
- Yung-I Chen, Hsiu-Nuan Chu, <u>Li-Chun Chang</u>, and Jyh-Wei Lee, "Internal oxidation and mechanical properties of Ru based alloy coatings," *Journal of Vacuum Science and Technology A* 32 (2014, Mar) 02B101. (SCI, 2014 IF: 2.322, 4/17 in Materials Science, Coatings & Films)
- Hsuan-ling Kao, Cheng-Lin Cho, and Li-Chun Chang "Inkjet-Printed Interdigital Coupled Line Filter on Liquid Crystal Polymer Substrate," *IEEE Electron Device Letters* 34 (2013, Dec) 1584–1586. (SCI, 2013 IF: 3.023, 29/248 in Engineering, Electrical & Electronic)
- Hsuan-ling Kao, Cheng-Lin Cho, Li-Chun Chang, Chih-Sheng Yeh, Bo-Wen Wang, and Hsien-Chin Chiu "Inkjet printing RF bandpass filters on liquid crystal polymer substrates," *Thin Solid Films* 544 (2013, Oct) 64–68. (SCI, 2013 IF: 1.867, 6/18 in Materials Science, Coatings & Films)
- Yung-I Chen, Sin-Min Chen, <u>Li-Chun Chang</u>, and Hsiu-Nuan Chu, "X-ray photoelectron spectroscopy and transmission electron microscopy study of internally oxidized Nb–Ru coatings," *Thin Solid Films* 544 (2013, Oct) 491–495. (SCI, 2013 IF: 1.867, 6/18 in Materials Science, Coatings & Films)
- Jer-Chyi Wang, De-Yuan Jian, Yu-Ren Ye, and Li-Chun Chang, "Platinum–aluminum alloy electrode for retention improvement of gadolinium oxide resistive switching memory," *Applied Physics A: Materials Science & Processing* 113 (2013, Oct) 37–40. (SCI, 2013 IF: 1.694, 96/251 in Materials Science, Multidisciplinary)
- Jer-Chyi Wang, De-Yuan Jian, Yu-Ren Ye, <u>Li-Chun Chang</u> and Chao-Sung Lai, "Characteristics of gadolinium oxide resistive switching memory with Pt–Al alloy top electrode and post-metallization annealing," *Journal of Physics D: Applied Physics* 46 (2013, Jul) 275103. (SCI, 2013 IF: 2.521, 30/136 in Physics, Applied)
- Chih-Ting Lin, Jer-Chyi Wang, Po-Wei Huang, Yu-Yen Chen, and Li-Chun Chang, "Performance Revelation and Optimization of Gold Nanocrystal for Future Nonvolatile Memory Application," *Japanese Journal of Applied Physics* 52 (2013, Apr) 04CJ09. (SCI, 2013 IF: 1.057, 90/136 in Physics, Applied)
- 33. Jer-Chyi Wang, Chih-Ting Lin, Po-Wei Huang, Chao-Sung Lai, <u>Li-Chun Chang</u>, Chih-I Wu, and Jung-Hung Chang, "Hybrid polarity and carrier injection of gold and gadolinium oxide binanocrystals

structure," Applied Physics Letters 102 (2013, Feb) 083507. (SCI, 2013 IF: 3.515, 20/136 in Physics, Applied)

- 34. Hsuan-Ling Kao, Chih-Sheng Yeh, Meng-Ting Chen, Hsien-Chin Chiu, and <u>Li-Chun Chang</u>, "Characteristics and Reliabilities on the Dicing before Grinding (DBG) Process in nMOSFETs," *Solid-State Electronics* 79 (2013, Jan) 111–116. (SCI, 2013 IF: 1.514, 96/248 in Engineering, Electrical & Electronic)
- 35. Chao-Sung Lai, Jer-Chyi Wang, <u>Li-Chun Chang</u>, Yi-Kai Liao, Pai-Chi Chou, Wei-Cheng Chang, Chi-Fong Ai, and Wen-Fa Tsai. "Characteristics of Plasma Immersion Ion Implantation Treatment on Tungsten Nanocrystal Nonvolatile Memory," *Solid-State Electronics* 77 (2012, Nov) 31–34. (SCI, 2012 IF: 1.482, 88/243 in Engineering, Electrical & Electronic)
- L.C. Chang\*, Y.I. Chen, and H.L. Kao, "Annealing of sputter-deposited nanocrystalline Cr–Ta coatings in a low-oxygen-containing atmosphere," *Thin Solid Films* 520 (2012, Sep) 6929–6934. (SCI, 2012 IF: 1.604, 5/17 in Materials Science, Coatings & Films)
- H.L. Kao, C.S. Yeh, M.T. Chen, H.C. Chiu, and <u>L.C. Chang</u>, "Characterization and Reliability of nMOSFETs on Flexible Substrates under Mechanical Strain," *Microelectronics Reliability* 52 (2012, Jun) 999–1004. (SCI, 2012 IF: 1.137, 119/243 in Engineering, Electrical & Electronic)
- Y.I. Chen, Y.T. Lin, <u>L.C. Chang</u>, and J.W. Lee, "Preparation and annealing study of CrTaN coatings on WC-Co," *Surface & Coatings Technology* 206 (2011, Dec) 1640–1647. (SCI, 2011 IF: 1.867, 5/18 in Materials Science, Coatings & Films)
- 39. Hsuan-Ling Kao, C.S. Yeh , <u>Li-Chun Chang</u>, Jeffrey S. Fu, and Hsien-Chin Chiu, "Improvement of the Q-factor, for an adjustable inductor using a 90-µm silicon substrate on plastic," *International Journal of Electronics* 98 (2011, Nov) 1597–1602. (SCI, 2011 IF: 0.440, 197/245 in Engineering, Electrical & Electronic)
- Hsuan-ling Kao, <u>Li-Chun Chang</u>, and Jeffrey S. Fu, "A Wide Tuning Range and Low Phase Noise 20 GHz 0.18 um CMOS Voltage Controlled Oscillator," *International Journal of Electronics and Communications* 65 (2011, Sep) 763–766. (SCI, 2011 IF: 0.588, 55/79 in Telecommunications)
- H.H. Huang, F.B. Wu, J.W. Lee, and <u>L.C. Chang</u>, "Microstructure and Corrosion Behavior of Ni-Alloy/CrN Nanolayered Coatings," *Journal of Nanomaterials* 2011 (2011, Aug) 137498. (SCI, 2011 IF: 1.376, 104/232 in Materials Science, Multidisciplinary)
- L.C. Chang\*, C.H. Yang, and H.L. Kao, "Influence of carrier injection on resistive switching of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> thin films with Ni electrode," *Thin Solid Films* 519 (2011, May) 5095–5098. (SCI, 2011 IF: 1.890, 4/18 in Materials Science, Coatings & Films)
- Y.I. Chen, B.L. Lin, Y.C. Kuo, J.C. Huang, and <u>L.C. Chang</u>, Y.T. Lin, "Preparation and annealing study of TaNx coatings on WC-Co substrates," *Applied Surface Science* 257 (2011, May) 6741–6749. (SCI, 2011 IF: 2.103, 2/18 in Materials Science, Coatings & Films)
- 44. Yu-Jie Chang, Chia-Lin Li, Jyh-Wei Lee, Fan-Bin Wu, and Li-Chun Chang, "Evaluation of antimicrobial abilities of Cr<sub>2</sub>N/Cu multilayered thin films," *Thin Solid Films* 518 (2010, Oct) 7551–7556. (SCI, 2010 IF: 1.935, 3/18 in Materials Science, Coatings & Films)

- 45. Y.I. Chen, <u>L.C. Chang</u>, R.T. Huang, B.N. Tsai, and Y.C. Kuo, "Internal Oxidation of Mo–Ru Coatings," *Thin Solid Films* 518 (2010, May) 3819–3824. (SCI, 2010 IF: 1.935, 3/18 in Materials Science, Coatings & Films)
- 46. Chia-Lin Li, Fan-Bean Wu, Jyh-Wei Lee, Yan-Zuo Tsai, and <u>Li-Chun Chang</u>, "Characteristics of Cr<sub>2</sub>N/Cu multilayered thin films with different bilayer thickness," *Surface & Coatings Technology* 204 (2009, Dec) 941–946. (SCI, 2009 IF: 1.793, 3/17 in Materials Science, Coatings & Films)
- 47. Yung-I Chen, <u>Li-Chun Chang</u>, Jyh-Wei Lee, and Chih-Hsiung Lin, "Annealing and oxidation study of Mo–Ru hard coatings on tungsten carbide," *Thin Solid Films* 518 (2009, Nov) 194–200. (SCI, 2009 IF: 1.727, 4/17 in Materials Science, Coatings & Films)
- 48. Jyh-Wei Lee, Yu-Chu Kuo, Chaur-Jeng Wang, <u>Li-Chun Chang</u>, and Kuan-Ting Liu, "Effects of substrate bias frequencies on the characteristics of chromium nitride coatings deposited by pulsed DC reactive magnetron sputtering," *Surface & Coatings Technology* 203 (2008, Dec) 721–725. (SCI, 2008 IF: 1.860, 3/16 in Materials Science, Coatings & Films)
- Chia-Cheng Ho, Bi-Shiou Chiou, and <u>Li-Chun Chang</u>, "Improvement of Electrical Properties of Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> Capacitor With an Inserted Nano-Cr Interlayer," *IEEE Transactions on Nanotechnology* 7(4) (2008, Jul) 412–417. (SCI, 2008 IF: 2.154, 38/192 in Materials Science, Multidisciplinary)
- 50. <u>Li-Chun Chang</u>, Dai-Ying Lee, Chia-Cheng Ho, and Bi-Shiou Chiou, "Thickness-dependent microstructures and electrical properties of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> films derived from sol-gel process," *Thin Solid Films* 516 (2007, Dec) 454–459. (SCI, 2007 IF: 1.693, 3/18 in Materials Science, Coatings & Films)
- <u>Li-Chun Chang</u>\*, Yung-I Chen, Jhy-Wei Lee, Hung-Yi Lin, Yu-Chu Kuo, and Chaur-Jeng Wang, "Detaching mechanism for Mo–Ru hard coating on tungsten carbide," *Surface & Coatings Technology* 202 (2007, Dec) 967–972. (SCI, 2007 IF: 1.678, 4/18 in Materials Science, Coatings & Films)
- 52. Chia-Cheng Ho, Bi-Shiou Chiou, and <u>Li-Chun Chang</u>, "Microstructure Evolution and Dielectric Properties of Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> Parallel Plate Capacitor with Cr Interlayer," *Surface & Coatings Technology* 202 (2007, Dec) 768–773. (SCI, 2007 IF: 1.678, 4/18 in Materials Science, Coatings & Films)
- 53. Chia-Cheng Ho, Bi-Shiou Chiou, and <u>Li-Chun Chang</u>, "Thickness effects on the electrical characteristics of Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> capacitors with nano-Cr interlayer," *Applied Physics Letters* 90 (2007, Mar) 132906. (SCI, 2007 IF: 3.596, 8/94 in Physics, Applied)
- 54. Chia-Cheng Ho, Bi-Shiou Chiou, <u>Li-Chun Chang</u>, Chen-Chia Chou, Bo-Heng Liou, and Chin-Chieh Yu, "Thermal Stability and Electric Properties of Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> Parallel Plate Capacitor with Nano-Cr Interlayer," *Surface & Coatings Technology* 201 (2006, Dec) 4163–4167. (SCI, 2006 IF: 1.559, 5/16 in Materials Science, Coatings & Films)
- <u>Li-Chun Chang</u> and Bi-Shiou Chiou, "Electrical Behavior of BaO-Nd<sub>2</sub>O<sub>3</sub>- Sm<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> with Glass/Oxide Additives Analyzed by Impedance Spectroscopy," *Journal of Electroceramics* 15 (2005, Sep) 75–81. (SCI, 2005 IF: 0.816, 5/28 in Materials Science, Ceramics)
- 56. Li-Chun Chang and Bi-Shiou Chiou, "Effect of B2O3 Nano-coating on the Sintering Behaviors and

Electrical Microwave Properties of Ba(Nd<sub>2-x</sub>Sm<sub>x</sub>)Ti<sub>4</sub>O<sub>12</sub> Ceramics," *Journal of Electroceramics* 13 (2004, Jul) 829–837. (SCI, 2004 IF: 1.124, 5/25 in Materials Science, Ceramics)

- 57. <u>Li-Chun Chang</u>, Bi-Shiou Chiou, and Wen-His Lee, "Effect of glass additions on the sintering behaviors and electrical microwave properties of BaO-Nd<sub>2</sub>O<sub>3</sub>-Sm<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> ceramics," *Journal of Materials Science-Materials in Electronics* 15 (2004, Mar) 153–158. (SCI, 1997 IF: 0.622, 61/193 in Engineering, Electrical & Electronic)
- 58. J.L. He, M.H. Hon, and L.C. Chang, "Properties of amorphous silicon carbide film deposited by PECVD on glass," *Materials Chemistry and Physics* 45 [1] (1996, Jul) 43–49. (SCI, 1997 IF: 0.516, 62/111 in Materials Science)
- J.L. He, <u>L.C. Chang</u>, and M.H. Hon, "Effect of the PECVD-a-SiC top coating on the passivation resistance of titanium-nitride-coated steel in 3.5% NaCl solution," *Materials Chemistry and Physics* 37 [2] (1994, Mar) 170–174. (SCI, 1997 IF: 0.516, 62/111 in Materials Science)