Lian, Shuang-Shii（連雙喜）

Professor

B.S. in National Cheng Kung University, 1970

M.S. in Imperial College of Science, 1974

Dr. Ing. in Technical University Berlin,1981

Research and Professional Interests

1. Alloy designs
2. Thermodynamics
3. High-temperature alloys and extractive metallurgy
4. Biomedical alloy
5. Process simulation
6. Solar Silicon process development

SCI Papers

1. Feng-Min Chu, Yi-Cheng Lin, **Shuang-Shii Lian**, Yen-Jen Sung, Hsin-Yang Li, "Property and biocompatibility of plasma melted high nitrogen nickel-free stainless steel", *Biomedical Materials* (2011) (submitting)
2. Wei Heng Liang, Shuang Shii Lian, Kun-Chao Tsai Wei Ja Shong, Ruey Yi Lee "Study of the high-temperature properties of the metallic interconnector of solid oxide fuel cells", *CSME Journal* (2009) (to be published)

Non-SCI Papers

1. **Lian Shuang-Shii**, Lin You Yu, Zhang Guling and Lu Mu Rong, "A Fast Method for Determining Physical Properties of Slags with ContactAngle", *Advanced Materials Research*, 306-307, pp. 467-470 (EI) (2011)
2. W. C. Luo, Y. L. Ke, **S. S. Lian**, F. M. Chu, "Effects of Surface Active Element on Biocompatibility of High Nitrogen Stainless Steel", *Key Engineering Materials*, 479, pp. 1-7.(EI) (2011)
3. K. L. Lian, **S.S. Lian** and Shen Tsao, "Modelling the effects of material property and dimension on the heating of silicon with Induction directional casting furnace", *Key Engineering Materials*, 479, pp.132-142. (EI) (2011)
4. W. S. Wang, **S. S. Lian**, C. Chen, K. C. Tsai, W. J. Shong and R. Y. Lee, "Improving the Oxidation Resistance of Fe-Cr-Mn Interconnector of Solid Oxide Electrolyte Fuel Cell with the Addition of Trace Elements", *Advances in Science and Technology,* 72 pp. 243-248 (EI) (2010)
5. **S. S. Lian**, K. L. Lian, S. Cheng, and S. Tsao, "Numerical simulation of the effects of different coatings on graphite susceptor for the induction process of polycrystalline silicon", *ICPNS Guilin, China* Nov 16-19 (to be published) (EI) (2010)

6. Wei Hsin Tien, **S. S. Lian,** Chia Ying Li, Wei Ja Shong, Ruey Yi Lee, "A New Method of Fabricating the Anode Powder for the Application of Solid Oxide Fuel Cells", *Advanced Materials Research* ,51, 79-84,(2008)
7. **S. S. Lian,** Wang I.-Hsuan, Jen-Jen. Ke, "The simulation of thermal field in induction melting with cold-crucible and dual frequencies", *Materials Science Forum*, 575-578, PART 1, (2008)
8. Chen Ian-Bo, **Lian Shuang-shii**, Li Chia-Ying, Shong,Wei-Ja,Lee R.Y., "The alloy design of metallic interconnector of solid oxide electrolyte fuel cell (SOFC)", *Materials Science Forum*, v 561-565, n PART 2, p 1617-1620 (EI) (2007)

International Conference Papers

1. Liu Tzu-hao, **Lian Shuang-Shii**, Shong Wei-Ja and Lee R.Y, "A new way of fabricating Anode substrate of SOFC with rotating electrode powder", Invite talk S.F.D 2011 Second Joint Sino−French–Dutch Workshop on Composites Materials & Structures South China University of Technology, Guangzhou, China. (2011/5/11-13)
2. Liu Tzu-hao, **Lian Shuang-Shii**, Shong Wei-Ja and Lee R.Y, "A new way of fabricating Anode substrate of SOFC with rotating electrode powder**",** Invite talk in 8th ICT- Asia Regional Conference, ICT – Asia, Sun Yat-sen University (SYSU),Guangzhou, China. (2011/6/1-3)
3. Yen-Ting Liu, **Shuang-Shii LIAN** (Nat. Taiwan U., Taipei), Wei-Ja Shong, R.Y. Lee, "The Improvement Of Oxidation Behavior Of Powder Metallurgy Made Fe-Cr Alloys", ICCE-19, July 24-30, 2011 Shanghai, China. (2011/7/24-30)
4. Y.H. Chen, S.C. Chu, K.L. Lian, **S.-S. Lian,** S. Tsao, "Investigation of the Effects of Parameters of Graphite Susceptor and Base Plate for Melting Process of Polycrystalline Silicon", 25 th EU PVSEC Proceeding, pp.1554-1557, Valencia, Spain. (2010/9/6-10)
5. Lai-Hsu FAN, **Shuang-Shii LIAN**, "The influence of Al and temperature on the phase structure of high entropy alloys $Al_xCoCrCuFeNi$", ICCE-17, in Honolulu, Hawaii, USA. (2009/7/26-8/1)
6. Chu, Feng-Min; **Lian, Shuang-Shii**; Sung, Yen-Jen, "Particulate joint replacement materials induce apoptosis of rabbit synoviocytes cell line HIG-82 through c-jun N-terminal kinase (JNK) pathway",Proceedings of the 2009 2nd International Conference on Biomedical Engineering and Informatics, BMEI 2009 (2009)
7. **Lian, S. S.** Wang, IH; Ke, JJ, "The simulation of thermal field in induction melting with cold-crucible and dual frequencies", Physical and Numerical

Simulation of Materials Processing, PTS 1 AND 2 Volume:575-578 Pages: 141-146 (2008)

8. **Lian Shuang-Shii**, Wang Yi-Shan, and Tsao Shen, "Simulation of melting process of silicon in a vacuum induction polycrystal growth melting furnace", 23rd European Photovoltaic Solar Energy Conference, Valencia, Spain pp.385-389 (2008/9/1-5)
9. H.C. Chu , **S.S. Lian**, "The 3-D Numerical Simulation of Plasma Arc Melting of Metal with Cold Crucible", Proceedings of the 2007 International Symposium on Liquid Metal Processing and Casting Ed. P.D.Lee, A. Mitchell J-P Bellot and A.Jardy, 261 (2007)
10. **S. S. Lian**, Y.S. Wang, and J. J. Ke, "Simulation of Induction Melting with Cold-Crucible and Dual Frequencies", IPMM-2007(The Sixth International Conference on Intelligent Processing and Manufacturing of Materials) Salerno, Italy. (2007/6/24-29)
11. I. B. Chen, **S. S. Lian**, C. Y. Li, W. J. Shong and R.Y. Lee, "The alloy design of metallic interconnector of solid oxide electrolyte fuel cell(SOFC)", PRICM 6: Sixth pacific rim international conference on advanced materials and processing, PTS 1-3 Volume**:** 561-565 Pages**:** 1617-1620, Jeju Korea (2007)
12. **S. S. Lian,** Y.S. Wang and J. J. Ke, "The simulation of thermal field in induction melting with cold-crucible and dual frequencies", ICPNS 2007 Zhengzhou, China (2007/10/ 23-27)

Domestic Conference Papers

1. **連雙喜**，劉彥廷，熊惟甲，李瑞益，"SOFC 燃料電池粉末冶金連接板之高溫氧化研究"，中華民國粉末冶金協會 100 年度會員大會.南投(2011/8/19-20)
2. K. L. Chao, Y. L. Ke, **S. S. Lian**, "Corrosion Behavior of High Nitrogen Nickel-free Austenitic Stainless Steels Fe-16Cr-2Co-Mn-Mo-N alloy"，IUMRS 2011 Nangang Taiwan(2011)
3. 連雙喜，馮天榮，張顧齡，林冠儒，吳崇勇，"鐵-矽-硼鋼清淨度之評估"，鑛冶工程年會(2011)
4. 林佑俞，連雙喜，"轉爐煉鋼爐渣的成份和析出固相對黏度行為的影響"，鑛冶工程年會(2010)
5. 林佑俞，連雙喜，"轉爐煉鋼爐渣的成份和析出固相對黏度行為的影響"，礦冶工程年會(2010/10/22)
6. 羅偉誠，柯宇倫，連雙喜，朱峰民，"冶煉高氮不鏽鋼表面活性元素對於生物相容性的影響"，2010 年中國材料科學學會年會大會 鋼鐵材料論壇 義守大學(2010/11/19-20)

7. 梁韋勝，**連雙喜**，蔡坤釗，熊惟甲，李瑞益，”燃料電池連接板金屬 Fe20Cr-Mn 合金錳含量與電渣精煉製程對高溫性質的影響”，97 年度行政院原能會委託研究計畫暨國科會與原能會科技學術合作研究計畫成果發表會，98 年 3 月 20 日(既將發表) (2008)
8. 梁韋勝，蔡坤釗，李瑞益，**連雙喜**，”添加錳元素對 SOFC 燃料電池中金屬連接板高溫性質之影響”，第三屆全國氫能與燃料電池學術研討會論文集，台南(2008/11/14-15)

Reports

1. **連雙喜**、籃仲億，多元高性能合金清淨化研究，NSC94-S-A63
2. **連雙喜**、張智寬，電漿熔煉發泡廢渣可行性研究，NSC94-NU-7-002-002 (2006).

Patents

1. **連雙喜**，石明倫，”雙自熔旋轉電極合金粉末的製造方法”，中華民國發明專利第 1221101 號