

主要著作目錄

(A) 期刊論文: (*: Corresponding Author)

1. C.N. Huang, S.Y. Chen and P. Shen* (2007): “Condensation and decomposition of NiO-dissolved rutile nanospheres,” *J. Phys. Chem. C* **111**, pp. 3322-3327. (SCI, IF 4.484, 54/284 Materials Science, Multidisciplinary)
2. C.N. Huang, P. Shen* and S.Y. Chen (2007): “On the relaxation/transformation of NiO-dissolved TiO₂ condensates with fluorite-type derived structures,” *J. Solid State Chem.* **180**, pp. 688-694. (SCI, IF 2.179, 17/45 Chemistry, Inorganic and nuclear)
3. C.N. Huang, S.Y. Chen, M.H. Tsai and P. Shen* (2007): “Laser ablation condensation and phase change of Ni_{1-x}Co_xO nanoparticles,” *J. Crystal Growth* **305**, pp. 285-295. (SCI, IF 1.742, 75/146 Physics, Applied)
4. C.N. Huang, P. Shen* and K.Y. Hsieh (2007): “On the surface morphology of solution annealed Co_{1-x}O-MgO – effects of directional dislocation exposure and Co_{1-x}O condensation,” *J. European Ceramic Society* **27**, pp. 4685-4695. (SCI, IF 3.794, 1/27 Materials Science, Ceramics)
5. C.N. Huang, S.Y. Chen, Y. Zheng and P. Shen* (2008): “Structure and phase behavior of gold nanocondensates: effects of laser ablation parameters and carbon catalysis,” *J. Phys. Chem. C* **112**, pp. 14965-14972. (SCI, IF 4.484, 54/284 Materials Science, Multidisciplinary)
6. C.N. Huang, S.Y. Chen, Y. Zheng and P. Shen* (2009): “Water-driven assembly of laser ablation-induced Au condensates as mesomorphic nano- and micro-tubes,” *Nanoscale Res. Lett.* **4**, pp. 1064-1072. (SCI, IF 3.125, 80/284 Materials Science, Multidisciplinary)
7. C.N. Huang, S.Y. Chen and P. Shen* (2009): “Mesomorphic lamella rolling of Au,” *Nanoscale Res. Lett.* **4**, pp. 1286-1296. (SCI, IF 3.125, 80/284 Materials Science, Multidisciplinary)
8. C.H. Lin, C.N. Huang, S.Y. Chen, Y. Zheng and P. Shen* (2009): “On the solute content, shape, defect microstructures and optical properties of Ti-doped γ -Al₂O₃ by pulsed laser ablation and/or electron irradiation,” *J. Phys. Chem. C*

- 113**, pp. 19112-19118. (SCI, IF 4.484, 54/284 Materials Science, Multidisciplinary)
9. C.N. Huang, J.S. Bow, Y. Zheng, S.Y. Chen, N.J. Ho and P. Shen* (2010): “Nonstoichiometric titanium oxides via pulsed laser ablation in water,” *Nanoscale Res. Lett.* **5**, pp. 972-985. (SCI, IF 3.125, 80/284 Materials Science, Multidisciplinary)
10. C.H. Wu, C.N. Huang, C. Sun, C. Kuan and P. Shen* (2011): “Directional diffusion-controlled development of spinel interlayer between zinc-orthosilicate glaze and alumina,” *Ceram. Int.* **37**, pp. 1801-1811. (SCI, IF 3.057, 2/27 Materials Science, Ceramics)
11. C.H. Chen, C.N. Huang, S.Y. Chen and P. Shen* (2011): “Crystallographic Shear of Polymorphic TiO₂ Nanocondensates with Enhanced Cr₂O₃ Dissolution via Pulsed Laser Ablation,” *J. Nanoparticle Res.* **13**, pp. 3683-3692. (SCI, IF 2.127, 137/284 Materials Science, Multidisciplinary)
12. C.H. Wu, C.N. Huang, P. Shen and S.Y. Chen* (2011): “Surface modification, martensitic transformation, and optical properties of hydrogenated ZrO₂ nanocondensates via pulsed laser ablation in water,” *J. Nanoparticle Res.* **13**, pp. 6633-6648. (SCI, IF 2.127, 137/284 Materials Science, Multidisciplinary)
13. M. Wölz*, J. Lähnemann, O. Brandt, V. M. Kaganer, M. Ramsteiner, C. Pfüller, C. Hauswald, C. N. Huang, L. Geelhaar and H. Riechert (2012): “Correlation of In content and emission wavelength of InGaN/GaN nanowire heterostructures,” *Nanotechnology* **23**, pp. 455203. (SCI, IF 3.404, 30/146 Physics, Applied)
14. E. Dimakis, M. Ramsteiner, C.N. Huang, A. Trampert, A. Davydok, A. Biermanns, U. Pietsch, H. Riechert, and L. Geelhaar (2013): “In situ doping of catalyst-free InAs nanowires with Si: Growth, polytypism, and local vibrational modes of Si,” *Appl. Phys. Lett.* **103**, pp. 143121. (SCI, IF 3.495, 29/146 Physics, Applied)
15. C.N. Huang*, P.A. Shields, D.W.E. Allsopp and A. Trampert (2013): “Coalescence-induced planar defects in GaN layers grown on ordered arrays of nanorods by metal–organic vapour phase epitaxy,” *Philosophical Magazine* **93**, pp. 3154-3166. (SCI, IF 1.632, 82/146 Physics, Applied)

16. B.C. Lin, C.N. Huang, P. Shen and S.Y. Chen* (2014): “On the twinning and special grain boundaries of bimetallic particles via pulsed laser ablation of bulk AuCu in a vacuum,” *CrystEngComm* **16**, pp. 1532-1539. (SCI, IF 3.304, 8/26 Crystallography)
17. C.N. Huang*, S.Y. Chen, Y. Zheng and P. Shen (2015): “Solubility enhancement and epitaxial core–shell structure of Si-doped ZnO via a specific pulsed laser ablation route,” *Appl. Phys. A* **120**, pp. 1033-1045. (SCI, IF 1.604, 83/146 Physics, Applied)
18. C.N. Huang*, Y. Zheng, S.Y. Chen and P. Shen (2018): “Pulsed laser condensation of dense cubic ZnO with unique luminescence, vibrations and interphase interfaces,” *Cryst. Growth Des.* **18**, pp. 4428-4437. (SCI, IF 3.972, 60/284 Materials Science Multidisciplinary)

(B) 研討會論文:

(a) 邀請演講

1. C.N. Huang, S.Y. Chen and P. Shen (2009): “Structure and phase behavior of gold nanocondensates: effects of laser ablation parameters and carbon catalysis,” The 7th Two Straits Workshop on Microscopy and Annual Meeting of Taiwan Microscopy Society 海峽兩岸顯微鏡研討會暨台灣顯微鏡學會年會, Hualien, Taiwan, Aug. 28-30, *invited speaker*.
2. C.N. Huang, S.Y. Chen and P. Shen (2013): “Mesomorphic gold nanocondensates fabricated by laser ablation in water,” Symposium on New Direction of Particle Fabrication by Laser Irradiation into Liquid Phase-From Basic to Application, 產業技術總合研究所 AIST, Tokyo, Japan, Aug. 8-9, *invited speaker*.
3. C.N. Huang (2014): “HRTEM study of basal-prismatic stacking fault combinations in coalesced GaN layers,” 2014 台灣顯微鏡學會學術研討會暨海峽兩岸電子顯微鏡會議, 台灣大學, Jun. 23-24, *invited speaker*.
4. C.N. Huang (2014): “Structural properties of planar defects in GaN layers grown on ordered arrays of nanorods by metal–organic vapour phase epitaxy,” 2014

International Symposium on Nano Science and Technology, Tainan, Taiwan, Oct. 17-18, *invited speaker*.

5. C.N. Huang (2014): “Interfacial structure of coalesced GaN layers grown on ordered arrays of nanorods by MOVPE,” 13th International Symposium on Advanced Technology (ISAT-13), Danang University of Science and Technology, Danang, Vietnam, Nov. 13-15, *invited speaker*.
6. C.N. Huang (2015): “AEM study of zinc blende and wurtzite competition on <111>B-oriented InGaN/GaN nanowires,” 104 年中國材料科學學會年會, Kaohsiung, Taiwan, Nov. 20-21, *invited speaker*.
7. C.N. Huang (2016): “Zinc blende and wurtzite competition on <111>B-oriented InGaN/GaN nanowires,” 2016 International Symposium on Novel and Sustainable Technology (2016 ISNST), Tainan, Taiwan, Oct. 6-7, *invited speaker*.

(b) 海報

1. C.N. Huang, S.Y. Chen and P. Shen* (2006): “AEM study of NiO-dissolved TiO₂ condensate with baddeleyite-type structure,” 16th International Microscopy Congress, Sapporo, Japan, Sep. 2-9, poster.
2. 黃常寧*, 陳水源, 沈博彥 (2009): “Nano- and Micro-tubular Au,” MRS-Taiwan Conference 中國材料科學學會年會, Hualien, Taiwan, Nov. 26-28, poster.
3. 黃常寧*, 陳水源, 沈博彥 (2013): “雷射剝蝕於真空與水中合成金奈米凝聚物之解析式電子顯微鏡研究,” MRS-Taiwan Conference 中國材料科學學會年會, National Central University, Taiwan, Oct. 18-19, poster.
4. C.N. Huang*, P.A. Shields, D.W.E. Allsopp, and Achim Trampert (2014): “AEM study of planar defects in GaN layers grown on ordered arrays of nanorods by metal-organic vapour phase epitaxy,” 國際電子材料年會(IUMRS-ICEM 2014) 暨 103 年中國材料科學學會年會, Jun. 10-14, poster.
5. C.W. Liang, C.R. Cheng, J.H. Lai and C.N. Huang*(2014): “Synthesis and phase transformation of nano-meter sized zinc orthosilicate,” 2014 International

- Symposium on Nano Science and Technology, Tainan, Taiwan, Oct. 17-18, poster.
6. C.N. Huang* (2014): “Laser ablation condensation of Si-doped ZnO nanoparticles,” 2014 International Symposium on Nano Science and Technology, Tainan, Taiwan, Oct. 17-18, poster.
 7. C.N. Huang* (2014): “Structural properties of <111>B-oriented InGaN/GaN nanowires,” 2014 International Symposium on Nano Science and Technology, Tainan, Taiwan, Oct. 17-18, poster.
 8. J.Y. Li, Y.D. Lin, Y.C. Wen, J.R. Chen and C.N. Huang* (2015): “Gold/silica/polyyne hybrid nanostructure formation via pulse laser ablation in tetraethyl orthosilicate,” 2015 International Symposium on Nano Science and Technology, Tainan, Taiwan, Oct. 30-31, poster.
 9. M.J. Peng, Y.R. Chen, Y.T. Liu, H.C. Chou and C.N. Huang* (2015): “Synthesis and optical properties of nano-meter sized zinc orthosilicate,” 2015 International Symposium on Nano Science and Technology, Tainan, Taiwan, Oct. 30-31, poster.
 10. 李仲燁、林育德、溫御成、陳軍任、黃常寧* (2016): “脈衝雷射剝蝕凝聚金/二氧化矽/聚炔煙奈米核殼結構在四乙氧基矽烷溶液環境中之研究,” 2016 年功能性材料研討會暨科技部專題研究計畫成果發表會, 南臺科技大學, Jun. 3, poster.
 11. 彭孟君、陳宇仁、劉晏婷、周宣呈、黃常寧* (2016): “ α 與 β 矽酸鋅奈米顆粒之合成與其螢光性質之研究” 2016 年功能性材料研討會暨科技部專題研究計畫成果發表會, 南臺科技大學, Jun. 3, poster.
 12. 李仲燁, 王振乾, 黃常寧* (2017): “碳化矽晶鬚之解析式電子顯微鏡研究” 2017 年功能性材料研討會暨科技部專題研究計畫成果發表會, 南臺科技大學, Jun. 9, poster.
 13. 黃俊傑、黃常寧* (2017): “於大氣、水溶液與真空環境下以脈衝雷射剝蝕純鈦金屬所產生剝蝕坑之微結構研究” 2017 年功能性材料研討會暨科技部專題

- 研究計畫成果發表會，南臺科技大學，Jun. 9, poster.
14. 黃常寧* (2017): “高密度岩鹽態氧化鋅合成、X 光繞射與解析式電子顯微鏡之研究” 2017 年功能性材料研討會暨科技部專題研究計畫成果發表會，南臺科技大學，Jun. 9, poster.
 15. C.N. Huang* (2017): “AEM study of Zn-terminated (0001) and O-terminated (000-1) polar surfaces on dense wurtzite-type ZnO nanoparticle by laser ablation condensation,” 2017 International Symposium on Novel and Sustainable Technology, Tainan, Taiwan, Oct. 19-20, poster.
 16. J.Y. Lee, C.N. Huang*, C.C. Wang, C.P. Li, Y.S. Lin, M.T. Tsai, and Y.L. Tu (2017): “Large-scale synthesis of β -SiC nanowhiskers from rice straws by carbothermal reduction,” 2017 International Symposium on Novel and Sustainable Technology, Tainan, Taiwan, Oct. 19-20, poster.
 17. 李仲燁、葉庭維、潘彥霖、蔡承佑、曾裕明、黃常寧* (2018): “以鎳離子摻雜氧化鋅燒結固溶體之結構鑑定與光學性質研究” 2017 年功能性材料研討會暨科技部專題研究計畫成果發表會，南臺科技大學，Jun. 8, poster.
 18. 李仲燁、黃國祐、汪育聖、林家緯、劉峻銘、黃常寧* (2018): “以鈷離子摻雜氧化鋅燒結固溶體之結構鑑定與光學性質研究” 2017 年功能性材料研討會暨科技部專題研究計畫成果發表會，南臺科技大學，Jun. 8, poster.
 19. 李仲燁，王振乾，黃常寧* (2018): “以農業廢棄物稻稈燒製 β -碳化矽奈米晶鬚其光學性質與轉化機制之研究” 2017 年功能性材料研討會暨科技部專題研究計畫成果發表會，南臺科技大學，Jun. 8, poster.