

## 著作目錄：

1. C.N. Huang\*, W.K. Guo, Y.S. Cao, and P. Shen (2024): “On the van der Waals Heteroepitaxy and Hydroxylation/Oxidation States of Au@Muscovite by Pulsed Laser Ablation in Water and Recovery in Aqueous KOH Solution,” *Cryst. Growth Des.* **24**, pp. 4707-4716.
2. C.N. Huang\*, J.Y. Chen, Y.X. Lin, and P. Shen (2024): “Rock-salt  $Ti_{1-x}O \rightarrow$  rutile  $TiO_{2-x}$  transformation twinning via pulsed laser deposition – implications for the dense (hkl)-specific phase change and optoelectronic properties,” *CrystEngComm* **26**, pp. 1924-1939.
3. C.N. Huang\*, J.Y. Lee, and C.C. Wang (2022): “On the 2H to 3C-type transformation and growth mechanism of SiC nanowires upon carbothermal reduction of rice straws,” *ACS OMEGA* **7**, pp. 5039-5052.
4. C.N. Huang\* and J.C. Wu (2021): “P-doped  $\alpha$ -Ca<sub>2</sub>SiO<sub>4</sub> and (Si, P)-codoped CaO with special defect microstructures and luminescence due to an enhanced solid solution by a pulsed laser ablation condensation route,” *Cryst. Growth Des.* **21**, pp. 3316-3327.
5. C.F. Chen, C.N. Huang\*, and P.W. Kao (2020): “Nanometer-sized  $\delta$ \*-Al<sub>2</sub>O<sub>3</sub>-reinforced aluminum composites using the friction stir process: A TEM study,” *Materials Characterization* **170**, pp. 110704.
6. 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.
7. J.J. Huang and C.N. Huang\* (2016): “Microstructure and Phase Changes of Polycrystalline  $\alpha$ -Ti by Pulse Laser Ablation in Water, Air and Vacuum under Specified Power Density,” *Journal of Southern Taiwan University of Science and Technology* **1**(1), pp. 62-74.
8. 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.
9. 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.
10. 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.
11. E. Dimakis, M. Ramsteiner, C.N. Huang, A. Trampert, A. Davydok, A. Biermann, 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.
12. 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.
13. C.H. Wu, C.N. Huang, P. Shen and S.Y. Chen\* (2011): “Surface modification, martensitic transformation, and optical properties of hydrogenated ZrO<sub>2</sub> nanocondensates via pulsed laser ablation in water,” *J. Nanoparticle Res.* **13**, pp. 6633-6648.
14. C.H. Chen, C.N. Huang, S.Y. Chen and P. Shen\* (2011): “Crystallographic Shear of Polymorphic TiO<sub>2</sub> Nanocondensates with Enhanced Cr<sub>2</sub>O<sub>3</sub> Dissolution via Pulsed Laser Ablation,” *J. Nanoparticle Res.* **13**, pp. 3683-3692.
15. 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.

16. 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.
17. 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  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> by pulsed laser ablation and/or electron irradiation,” *J. Phys. Chem. C* **113**, pp. 19112-19118.
18. C.N. Huang, S.Y. Chen and P. Shen\* (2009): “Mesomorphic lamella rolling of Au,” *Nanoscale Res. Lett.* **4**, pp. 1286-1296.
19. 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.
20. 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.
21. C.N. Huang, P. Shen\* and K.Y. Hsieh (2007): “On the surface morphology of solution annealed Co<sub>1-x</sub>O-MgO - effects of directional dislocation exposure and Co<sub>1-x</sub>O condensation,” *J. European Ceramic Society* **27**, pp. 4685-4695.
22. C.N. Huang, S.Y. Chen, M.H. Tsai and P. Shen\* (2007): “Laser ablation condensation and phase change of Ni<sub>1-x</sub>Co<sub>x</sub>O nanoparticles,” *J. Crystal Growth* **305**, pp. 285-295.
23. C.N. Huang, P. Shen\* and S.Y. Chen (2007): “On the relaxation/transformation of NiO-dissolved TiO<sub>2</sub> condensates with fluorite-type derived structures,” *J. Solid State Chem.* **180**, pp. 688-694.
24. 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.