1. **Name:** Yong Zhang **Academic Rank:** Professor

2. **Degrees:**

BS	Xiamen University	1982
MS	Xiamen University	1985
PhD	Dartmouth College	1994

3. **UNC Charlotte (number of years = 6.5)**
   - Bissell Distinguished Professor, 2009 – present;
   - Adjunct Professor, Department of Physics and Optical Science, 2012-present.

4. **Other related experience:**
   - Senior Scientist II, National Renewable Energy Laboratory (NREL), 2006-2009
   - Senior Scientist I, NREL, 1997-2005
   - Postdoctoral Researcher, NREL, 1994-1997
   - Visiting Researcher, Physics Department, Dartmouth College, 1989 -1990
   - Researcher, Physics Department, Xiamen University, 1987-1989
   - Engineer, Xiamen United Development Co. Ltd., 1985-1987
   - Guest Professor, Institute of Semiconductors, Chinese Academy of Sciences
   - Guest Professor, School of Physics and Engineering, Xiamen University
   - "Chaires d'excellence", Nanosciences Foundation (France), NPSC team of CEA-CNRS-UJF, Grenoble, France, 2009-2012 (two months/year).

5. **Certifications or professional registrations**: Professional Engineer, NC

6. **Current membership in professional organizations**
   - IEEE, MRS, APS

7. **Honors and awards:**
   - 2005 NREL Outstanding Performance Award
   - 2003 NREL Director's award

8. **Institutional and professional service in the last five years:**
   - UNC Charlotte ECE Department Review Committee, 2010 - 2011.
   - UNC Charlotte College Review Committee, 2011- 2012.
   - UNC Charlotte ECE Department Graduate Committee, 2011 - 2015.
   - Technical Advisory Committee, State Key Laboratory of Photovoltaic Science and Technology, China, 2010 - 2014.
   - Oversee Review Committee Member, Chinese Academy of Sciences, 2015 – present.
   - Editorial Board member of "Acta Physica Sinica", "Chinese Physics B", 2014 – present; and "Chinese Optics", 2012 - present.

9. **Principal publications of last five years (total 36 journal publications since 2011):**
   - L. Q. Su and **Y. Zhang**, Temperature coefficients of phonon frequencies and thermal conductivity in thin black phosphorus layers, **Appl. Phys. Lett.** 107, 071905 (2015).
   - J. W. Wang, **Y. Zhang**, and Lin-Wang Wang, Systematic approach for simultaneously correcting the band-gap and p−d separation errors of common cation III-V or II-VI binaries in density functional theory calculations within a local density approximation, **Phys. Rev. B** 92, 045211 (2015).

- Y. Lin, **Y. Zhang**, Z. G. Guo, J. H. Zhang, W. L. Huang, Y. J. Lu, Z. H. Deng, Z, G. Liu, and Y. G. Cao, Defects dynamics during ageing cycles of InGaN blue light-emitting diodes revealed by evolution of external quantum efficiency – current dependence, **Opt. Ex.** 23, a979 (2015).
- H. N. Liu, N. L. Yue, **Y. Zhang**, P. F. Qiao, D. Zuo, B. Kesler, S. L. Chuang, J. H. Ryou, J. D. Justice, and R. Dupuis, Lattice vibration modes in type-II superlattice InAs/GaSb with no-common-atom interface and overlapping vibration spectra, **Phys. Rev. B** 91, 235317 (2015).
- B. P. Zhang, P. Lu, H. N. Liu, L. Jiao, Z. Y. Ye, M. Jaime, F.F. Balakirev, H. Q. Yuan, H. Z. Wu, W. Pan, and **Y. Zhang**, Quantum Oscillations in a Two-Dimensional Electron Gas at the Rocksalt/Zincblende Interface of PbTe/CdTe (111) Heterostructures, **Nano Lett.** (2015).
- L. Q. Su, Y. F.Yu, L. Y. Cao, and **Y. Zhang**, Effects of substrate type and material-substrate bonding on high-temperature behavior of monolayer WS2, **Nano Research** 8, 2686 (2015).
- F. X. Chen, **Y. Zhang**, T. H. Gfroerer, A. N. Finger, and M. W. Wanlass, Spatial resolution verse data acquisition efficiency in mapping an inhomogeneous system with species diffusion, **Sci. Reps.** 5, 10542 (2015).
- J. W. Wang and **Y. Zhang**, Band-gap corrected density functional theory calculations for InAs/GaSb type II superlattices, **J. Appl. Phys.** 116, 214301 (2014).
- **Y. Zhang** and J. W. Wang, Bound exciton model for an acceptors in a semiconductor, **Phys. Rev. B** 90, 155201 (2014).
- H. N. Liu, **Y. Zhang**, Yuanping Chen and Priyalal S. Wijewarnasuriya, Confocal micro-PL mapping of defects in CdTe epilayers grown on Si (211) substrates with different annealing cycles, **J. Electron. Mat.** 43, 2854 (2014).
- L. Q. Su, **Y. Zhang**, Y. F. Yu, and L. Y. Cao, Dependence of coupling of quasi 2-D MoS2 with substrates on substrate types, probed by temperature dependent Raman scattering, **Nanoscale** 6, 4920 (2014).
- Y. Lin, **Y. Zhang**, Z. Q. Liu, L. Q. Su, J. H. Zhang, T. B. Wei, and Z. Chen, Interplay of point defects, extended defects, and carrier localization in the efficiency droop of InGaN quantum wells light-emitting diodes investigated using spatially resolved electroluminescence and photoluminescence, **J. Appl. Phys.** 115, 023103 (2014).
- Q. Chen and **Y. Zhang**, The reversal of the laser-beam-induced-current contrast with varying illumination density in a Cu2ZnSnSe4 thin-film solar cell, **Appl. Phys. Lett.** 103, 242104 (2013).
- N. L. Yue, **Y. Zhang**, and R. Tsu, Ambient condition laser writing of graphene structures on polycrystalline SiC thin film deposited on Si wafer, **Appl. Phys. Lett.** 102, 071912 (2013).
- T. H. Gfroerer, **Y. Zhang**, and M. W. Wanlass, An extended defect as a sensor for free carrier diffusion in a semiconductor, **Appl. Phys. Lett.** 102, 012114 (2013).
- Y. Lin, **Y. Zhang**, Z. Q. Liu, L. Q. Su, J. H. Zhang, T. B. Wei, and Z. Chen, Spatially resolved study of quantum efficiency droop in InGaN light-emitting diodes, **Appl. Phys. Lett.** 101, 252103 (2012).

10. Professional development activities in the last five years: