

ZHENGWEI PAN

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Shandong University of Technology, Jinan, China	Mater. Sci. & Eng.	B.S.	1990
Shandong University of Technology, Jinan, China	Mater. Sci. & Eng.	M.S.	1993
Northwestern Polytechnic University, Xi'an, China	Mater. Sci. & Eng.	Ph.D.	1997
Institute of Physics, Chinese Academy of Sciences	Condensed Matter	Postdoctor	1997-1999

Research and Professional Experience

2010 –	Associate Professor, College of Engineering & Department of Physics and Astronomy, University of Georgia
2006 – 2010	Assistant Professor, College of Engineering & Department of Physics and Astronomy, University of Georgia.
2005 – 2006	Research Staff Scientist (III), Chemical Science Division & Center for Nanophase Materials Sciences, Oak Ridge National Laboratory.
2003 – 2005	Research Assistant Professor, Department of Materials Science and Engineering, University of Tennessee, Knoxville; and Guest Scientist, Chemical Science Division & Center for Nanophase Materials Sciences, Oak Ridge National Laboratory.
2002 – 2003	Research Associate, Chemical Science Division, Oak Ridge National Laboratory.
2000 – 2002	Research Associate, Department of Materials Science and Engineering, Georgia Institute of Technology.
1999 – 2000	Senior Research Associate, Department of Physics and Materials Science, City University of Hong Kong

Research Interests

- Development of novel near-infrared persistent phosphors and near-infrared photostimulable storage phosphors for defense and security, solar energy utilization, bio-imaging and optical information storage.
- Fabrication of new classes of rare-earth activated multicomponent nanowires and nanoparticles for advanced nanophotonics and warm-white LEDs.
- Homo-epitaxial growth of graphene and fabrication of complex 3D graphene networks.
- Synthesis of nanowires by developing new synthetic approaches and new catalysts.
- Growth of carbon nanotubes and carbon nanotube-reinforced ceramic matrix composites for light-weight, high-strength and high-temperature applications.

Selected Publications (106 papers with total citations >11,000 times; 3 book chapters; 5 patents)

1. K.Y. Li, G. Eres, J. Howe, Y.J. Chuang, X.F. Li, Z.J. Gu, L.T. Zhang, S.S. Xie & Z.W. Pan, "Self-assembly of graphene on carbon nanotube surfaces", *Scientific Reports* **3**, 2353 (2013), DOI: 10.1038/srep02353 (a Nature Publishing Group journal).
2. F. Liu, W.Z. Yan, Y.J. Chuang, Z.P. Zhen, J. Xie & Z.W. Pan, "Photostimulated near-infrared persistent luminescence as a new optical read-out from Cr³⁺-doped LiGa₅O₈", *Scientific Reports* **3**: 1554 (2013), DOI: 10.1038/srep01554 (a Nature Publishing Group journal).
3. X.F. Li, J.D. Budai, F. Liu, J.Y. Howe, J.H. Zhang, X.J. Wang, Z.J. Gu, C.J. Sun, R.S. Meltzer, and Z.W. Pan, "New yellow Ba_{0.93}Eu_{0.07}Al₂O₄ phosphor for warm-white light-emitting diodes through single-

- emitting-center-conversion”, *Light: Science & Application*, **2**, e50 (2013). DOI: 10.1038/lisa.2013.6 (a Nature Publishing Group journal).
4. F. Liu, J. D. Budai, X.F. Li, J.Z. Tischler, J. Y. Howe, C.J. Sun, R.S. Meltzer, Z.W. Pan, “New ternary europium aluminate luminescent nanoribbons for advanced photonics”, *Adv. Func. Mater.* **23**, 1998-2006 (2013) (Cover Art).
 5. Z.W. Pan, Y.Y. Lu and F. Liu, “Sunlight-activated near-infrared long-persistent luminescence from Cr³⁺-doped zinc gallogermanates”, *Nature Materials* **11**, 58-63 (2012) (Cover Art).
 6. Z.W. Pan, F. Liu and X.F. Li, “Eu²⁺-activated aluminates nanobelts, whiskers, and powders, methods of making the same, and uses thereof”, International Application No. PCT/US11/24268.
 7. Z.W. Pan and Y.Y. Lu, “Near infrared doped zinc, gallium, germanium oxide phosphors”, International Application No. PCT/US2010/049625.
 8. Z.W. Pan, J.D. Budai, Z.R. Dai, W.J. Liu, M.P. Paranthaman and S. Dai, “Zinc oxide microtowers by vapor phase homoepitaxial regrowth”, *Adv. Mater.* **21**, 890-896 (2009) (Cover Art).
 9. Z.W. Pan, Z.R. Dai and Z.L. Wang, "Nanobelts of semiconducting oxides", *Science* **291**, 1947-1949 (2001) (Citations: >4,000 times).
 10. Z.W. Pan, S.S. Xie, B.H. Chang, C.Y. Wang, L. Lu, W. Liu, W.Y. Zhou, W.Z. Li and L.X. Qian, “Very long carbon nanotubes”, *Nature* **394**, 631-632 (1998).

Synergistic Activities

- Referee for : *Nature Materials*, *Journal of the American Chemical Society*, *Angewandte Chememie International Edition*, *Applied Physics Letters*, *Nano Letters*, *Advanced Materials*, *Advanced Functional Materials*, *Small*, *Journal of Crystal Growth*, *Nanotechnology*, *Journal of Nanoscience and Nanotechnology*, *Journal of Physical Chemistry of Solid*, *Journal of Colloid Interface Science*, *Journal of Applied Physics*, *Carbon*, *Journal of Materials Chemistry*, *Chemistry of Materials*, *IEEE Transaction on Nanotechnology*, *Talanta*, *ACS Nano*, *Optical Letters*, etc.
- Reviewer for *NSF*, *DOE*, *PRF*, *US Army ERDC*, *Greece NSF*, *Greece Ministry of Education* proposals.
- Vice-Chair of the ShaRE User Committee at the Oak Ridge National Laboratory (ORNL); Member of proposal review committee of ShaRE User program at ORNL; Member of proposal review committee of the Center for Nanophase Materials Science at ORNL.
- Organized two Nano Art shows at the University of Georgia for nanotechnology education.

Awards and Honors

- *Applied Spectroscopy William F. Meggers Award* (2011).
- *NSF Early Career Award* (2010).
- Honored “*the most cited paper in chemistry*” in 2001-2003 (ISI, Science Watch) for the 2001 *Science* report (*Science* **291**, 1947, 2001) about the discovery of nanobelt morphology.
- *Second Class Award in Natural Science in China* (2003) for the significant contribution in carbon nanotube research.

