

# Curriculum vitae: Hannah Yanhua Zong

Assistant Professor of Practice, Purdue University  
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## Summary

Passionate educator and web development expert with a strong background in front and back-end technologies. Currently teaching and mentoring the next generation of developers, with a focus on interactive learning, innovative web technologies, and fostering critical thinking. Dedicated to enhancing the educational experience through practical applications and emerging tech.

## Work Experience

Assistant Professor of Practice, Purdue University – West Lafayette, IN	07/2023 – Present
Senior Web Developer, Purdue University – West Lafayette, IN	07/2023 – 07/2024
Web Developer, Purdue University – West Lafayette, IN	02/2019 – 07/2023
Global Leadership Research Fellow, Kyoto University – Kyoto, Japan	10/ 2010 – 09/2011

## Education

M.S. in Computer Graphics Technology, Purdue University, USA	05/2017 – 05/2019
Ph.D. in Materials Chemistry, Kyoto University, Japan	10/2007 – 09/2010
M.S. in Materials Science, Shanghai Institute of Optics and Fine Mechanics, China	09/2004 – 07/2007
B.S. in Physics, East China Normal University, China	09/2000 – 07/2004

## Awards

Global Leadership Research Fellowship	10/2010
Japanese Government (MEXT) Scholarship	10/2007

## Publications

1. **Yanhua Zong**, X. Meng, K. Fujita, K. Tanaka. *Multicolor light emissions from mesoporous silica particles embedded with Ga<sub>2</sub>O<sub>3</sub> nanocrystals*. Optical Materials Express, 4, 518 (2014).
2. X. Meng, K. Fujita, Y. Moriguchi, **Y. Zong**, K. Tanaka. *Metal-Dielectric Core-Shell Nanoparticles: Advanced Plasmonic Architectures Towards Multiple Control of Random Lasers*. Advanced Optical Materials, 1, 573 (2013).

3. K. Tanaka, K. Fujita, Y. Maruyama, Y. Kususe, H. Murakami, H. Akamatsu, **Y. Zong**, S. Murai. *Ferromagnetic induced by lattice volume expansion and amorphization in EuTiO<sub>3</sub> thin films*. Journal of Materials Research, 28, 1031 (2013).
4. H. Akamatsu, K. Fujita, H. Hayashi, T. Kawamoto, Y. Kumagai, **Y. Zong**, et al. *Crystal and Electronic Structure and Magnetic Properties of Divalent Europium Perovskite Oxides EuMO<sub>3</sub> (M = Ti, Zr, Hf): Experimental and First-Principles Approaches*. Inorganic Chemistry, 51, 4560 (2012).
5. **Y. Zong**, K. Fujita, H. Akamatsu, S. Nakashima, S. Murai, K. Tanaka. *Local structure of amorphous EuO-TiO<sub>2</sub> thin films probed by X-ray absorption fine structure*. Journal of the American Ceramic Society, 95, 716 (2011).
6. **Y. Zong**, K. Fujita, H. Akamatsu, S. Murai, K. Tanaka. *Ferromagnetic amorphous EuZrO<sub>3</sub> thin films with reentrant spin glass transition*. Physica Status Solidi (c), 8, 3051 (2011).
7. H. Akamatsu, K. Fujita, **Y. Zong**, N. Takemoto, S. Murai, K. Tanaka. *Impact of amorphization on the magnetic properties of EuO-TiO<sub>2</sub> system*. Physical Review B, 82, 224403 (2010).
8. T. Kolodiaznyi, K. Fujita, L. Wang, **Y. Zong**, et al. *Magnetodielectric effect in EuZrO<sub>3</sub>*. Applied Physics Letters, 96, 252901 (2010).
9. **Y. Zong**, K. Fujita, H. Akamatsu, S. Murai, K. Tanaka. *Preparation and magnetic properties of amorphous EuTiO<sub>3</sub> thin films*. Journal of Non-Crystalline Solids, 356, 2389 (2010).
10. **Y. Zong**, K. Fujita, H. Akamatsu, S. Murai, K. Tanaka. *Antiferromagnetism of perovskite EuZrO<sub>3</sub>*. Journal of Solid State Chemistry, 183, 168 (2010).
11. K. Fujita, N. Wakasugi, S. Murai, **Y. Zong**, K. Tanaka. *High-quality antiferromagnetic EuTiO<sub>3</sub> epitaxial thin films on SrTiO<sub>3</sub> prepared by pulsed laser deposition and postannealing*. Applied Physics Letters, 94, 062512 (2009).
12. X. Meng, K. Fujita, S. Murai, **Y. Zong**, et al. *Random lasers from highly transparent polymer films containing superfine silver nanoparticles*. Physica Status Solidi (c), 6, S102 (2009).
13. X. Meng, K. Fujita, **Y. Zong**, S. Murai, K. Tanaka. *Random lasers with coherent feedback from highly transparent polymer films embedded with silver nanoparticles*. Applied Physics Letters, 92, 201112 (2008).
14. X. Xu, G. Zhao, F. Wu, W. Xu, **Y. Zong**, et al. *Growth and spectral properties of Er:Gd<sub>2</sub>SiO<sub>5</sub> crystal*. Journal of Crystal Growth, 310, 156 (2008).
15. S.S. Cai, J. Kong, B. Wu, **Y. Zong**, et al. *Room-temperature cw and pulsed operation of a diode-end-pumped Tm:YAP laser*. Applied Physics B, 90, 133 (2008).
16. X. Xu, F. Wu, W. Xu, **Y. Zong**, et al. *Growth and spectral properties of Yb,Tm:YAG crystal*. Journal of Alloys and Compounds, 462, 347 (2008).
17. H. Akamatsu, **Y. Zong**, Y. Fujiki, K. Kamiya, K. Fujita, S. Murai, K. Tanaka. *Structural and Magnetic Properties of CdFe<sub>2</sub>O<sub>4</sub> Thin Films Fabricated via Sputtering Method*. IEEE Transactions on Magnetics, 44, 2796 (2008).
18. B. Yao, L. Zheng, G. Zhao, **Y. Zong**. *Judd-Ofelt Analysis of Spectroscopic Properties of Tm<sup>3+</sup> Doped Lu<sub>2</sub>SiO<sub>5</sub> Crystals*. Chinese Journal of Lasers, 35, 601 (2008).
19. B. Yao, Y. Li, Y. Wang, X. Duan, G. Zhao, **Y. Zong**, et al. *Efficient diode-pumped Tm:YAP laser with a pump recycling scheme*. Chinese Physics Letters, 24, 2597 (2007).

20. Y. Li, B. Yao, Y. Wang, **Y. Zong**, et al. *High efficient diode-pumped Tm:YAP laser at room temperature.* Chinese Optics Letters, 5, 286 (2007).
21. B. Yao, Y. Li, Y. Wang, **Y. Zong**, et al. *Tm:YAP laser pumped by fiber-coupled diode.* High Power and Particle Beams, 19, 1632 (2007).
22. D. Cao, G. Zhao, **Y. Zong**, J. Xu. *Properties of Ce:YAP crystals with different dopant concentration.* Journal of Chinese Rare Earth Society, 25, 509 (2007).
23. **Y. Zong**, G. Zhao, J. Zhu, J. Xu. *Growth and its spectroscopic properties of Sm:YAP crystal.* Journal of Crystal Growth, 291, 468 (2006).
24. **Y. Zong**, G. Zhao, C. Yan, X. Xu, L. Su, J. Xu. *Growth and spectral properties of  $Gd_2SiO_5$  crystal codoped with Er and Yb.* Journal of Crystal Growth, 294, 416 (2006).