

Associate Professor LIU Hongfei

College	College of Physical Science and Technology
Current Position	Associate Professor
Types of Tutor	Master Tutor
Language	Chinese/English
Education	<ul style="list-style-type: none">● Ph.D., Materials Science, Jiangsu University, SEP 2006-JUN 2009;● M.Sc., Materials Science, Jiangsu University, SEP 2004- JUN 2006; B.Sc., Inorganic Materials Science and Engineering, Wuhan Institute of Technology, SEP 2000-JUN 2004.
Research Interests	Negative thermal expansion materials
Selected Publications	<ol style="list-style-type: none">1) Weikang Sun, Zhiping Zhang, Hongfei Liu*, Wei Wang, Xianghua Zeng, Tailored phase transition temperature and negative thermal expansion of Sc-substituted $\text{Fe}_2\text{Mo}_3\text{O}_{12}$ synthesized by the co-precipitation method, Journal of Alloys and Compounds, 794:1-7, 2019.2) Hongfei Liu , Weikang Sun, Zhiping Zhang*, Xiuyun Zhang, Yuxue Zhou, Jun Zhu, Xianghua Zeng, Tailored phase transition temperature and negative thermal expansion of Sc-substituted $\text{Al}_2\text{Mo}_3\text{O}_{12}$ synthesized by a co-precipitation method, Inorganic Chemistry Frontiers, 6:1842-1850, 2019.3) Zhiping Zhang, Weikang Sun, Hongfei Liu*, Baotong Xiao, Xianghua Zeng, Xiaobing Chen, Densification and negative thermal expansion property of $\text{In}_{0.5}\text{Sc}_{1.5}(\text{MoO}_4)_3$ ceramics, Journal of Alloys and Compounds, 783:77-83, 2019.4) Hongfei Liu, Weikang Sun, Xiang Xie, Lu Yang, Zhiping Zhang, Min Zhou, Xianghua Zeng, Xiaobing Chen, Adjustable thermal expansion properties in $\text{Zr}_2\text{MoP}_2\text{O}_{12}/\text{ZrO}_2$ ceramic composites, Front. Chem.

	<p>6:347, 2018.</p> <p>5) Zhiping Zhang, Weikang Sun, Qian Zheng, Hongfei Liu*, Min Zhou, Wei Wang, Xiaobing Chen, Tuning the phase transition temperature of $\text{Cr}_2(\text{MoO}_4)_3$ by A-site substitution of scandium, <i>Ceramics International</i>, 44:22165-22171, 2018.</p> <p>6) Hongfei Liu*, Weikang Sun, Zhiping Zhang, Min Zhou, Xiangdong Meng, Xianghua Zeng, Tailorable thermal expansion and hygroscopic properties of cerium-substituted $\text{Y}_2\text{W}_3\text{O}_{12}$, <i>Ceramics International</i>, 751:49-55, 2018.</p> <p>7) Zhiping Zhang, Weikang Sun, Hongfei Liu*, Guanhua Xie, Xiaobing Chen, Xianghua Zeng, Synthesis of $\text{Zr}_2\text{WP}_2\text{O}_{12}/\text{ZrO}_2$ composites with adjustable thermal expansion, <i>Front. Chem.</i> 5:105, 2017.</p> <p>8) Zhiping Zhang, Lu Yang, Qinyi zhu, Qian Zheng, Hongfei Liu*, Min Zhou, Xianghua Zeng, Xiaobing Chen, Phase transition and negative thermal expansion properties in isovalently substituted $\text{In}_{2-x}\text{Sc}_x(\text{MoO}_4)_3$ ceramics, <i>Ceramics International</i>, 43:12013-12017, 2017.</p> <p>9) Hongfei Liu*, Lu Yang, Zhiping Zhang, Kunmin Pan, Fang Zhang, Honghui Cheng, Xianghua Zeng, Xiaobing Chen, Preparation and optical, nanomechanical, negative thermal expansion properties of $\text{Sc}_2\text{W}_3\text{O}_{12}$ thin film grown by pulsed laser deposition, <i>Ceramics International</i>, 42:8809-8814, 2016.</p> <p>10) Zhiping Zhang, Lu Yang, Hongfei Liu*, Kunmin Pan, Wei Wang, Xianghua Zeng, Xiaobing Chen, Preparation and negative thermal expansion properties of $\text{Y}_2\text{W}_3\text{O}_{12}$ thin films grown by pulsed laser deposition, <i>Ceramics International</i>, 42:18902-18906, 2016.</p> <p>11) Lindsay Young, Pablo Torrico Alvarez, Hongfei Liu, Cora Lind*, Extremely low temperature crystallization in the $\text{A}_2\text{M}_3\text{O}_{12}$ family of negative thermal expansion materials, <i>European Journal of Inorganic Chemistry</i>, 8:1251-1256, 2016.</p> <p>12) Hongfei Liu*, Zhiping Zhang, Jian Ma, Zhu Jun, Xianghua Zeng, Effect of isovalent substitution on phase transition and negative thermal expansion of $\text{In}_{2-x}\text{Sc}_x\text{W}_3\text{O}_{12}$ ceramics, <i>Ceramics International</i>,</p>
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41:9873-9877, 2015.

- 13) **Hongfei Liu***, Zhiping Zhang, Kunmin Pan, Jian Ma, Lu Yang, Xianghua Zeng, Effects of substrate temperature and oxygen pressure in pulsed laser deposited $ZrW_{1.5}Mo_{0.5}O_8$ thin films, *Ceramics International*, 41:11918-11921, 2015.
- 14) **Hongfei Liu**, Gang Wang, Zhiping Zhang, Kunmin Pan, Xianghua Zeng. Synthesis of negative thermal expansion HfW_2O_8 thin film using pulsed laser deposition, *Ceramics International*, 2014 40:13855-13859.
- 15) **Hongfei Liu**, et al, Phase transition and negative thermal expansion in $In_2W_3O_{12}$ ceramics, *Journal of the Chinese Ceramic Society*, 2014 , 42 (9) :1116-1120.
- 16) **Hongfei Liu**, Kunmin Pan, Qu Jin, et al. Negative thermal expansion and shift in phase transition temperature in Mo-substituted ZrW_2O_8 thin films prepared by pulsed laser deposition , *Ceramics International*, 2014 40:3873–3878.
- 17) **Hongfei Liu**, Zhiping Zhang, Wei Zhang, et al. Synthesis and negative thermal expansion properties of $Yb_{2-x}La_xW_3O_{12}(0 \leq x \leq 2)$, *Ceramics International*, 2013 39:2781-2786.
- 18) **Hongfei Liu**, Xiaocen Wang, Zhiping Zhang, et al, Synthesis and thermal expansion properties of $Y_{2-x}La_xMo_3O_{12}(x=0,0.5,2)$, *Ceramics International*, 2012 38(8):6349-6352.
- 19) **Hongfei Liu**, Wei Zhang, Zhiping Zhang, et al. Synthesis and negative thermal expansion properties of solid solutions $Yb_{2-x}La_xW_3O_{12}(0 \leq x \leq 2)$, *Ceramics International*, 2012 38(4):2951-2956.
- 20) **Hongfei Liu**, Zhiping Zhang, Wei Zhang, et al. Effects of HCl concentration on the growth and negative thermal expansion property of the ZrW_2O_8 nanorods, *Ceramics International*, 2012 38(2):1341-1345.
- 21) **Hongfei Liu**, Zhiping Zhang, Wei Zhang, et al. Negative thermal expansion ZrW_2O_8 thin films prepared by pulsed laser deposition , *Surface & Coatings Technology*, 2011, 205:5073-5076.
- 22) **Hongfei Liu**, Xiaonong Cheng, Zhiping Zhang, et al. Preparation and properties of negative thermal expansion ZrW_2O_8 thin films deposited by radio

	<p>frequency magnetron sputtering. <i>Physica Status Solidi B</i>, 2008, 245(11):2509-2513.</p> <p>23) Hongfei Liu, Zhiping Zhang, Xiaonong Cheng, et al. Thermal expansion of ZrO_2-ZrW_2O_8 composites prepared using co-precipitation route, <i>International Journal of Modern Physics B</i>, 2009, 23(6):1449-1454.</p>
Email	liuhf@yzu.edu.cn