

张凯锋

工学博士

金属精密热加工国家级重点实验室主任

教授；博士生导师

+86-451-86413911

kfzhang@hit.edu.cn

主要研究方向

纳米陶瓷材料和纳米颗粒增强金属基复合材料的制备与超塑成形技术, 塑料和超细粉体微零件注射成形技术, 先进金属材料超塑成形技术, 自阻电加热成形技术, 难熔合金制备与成形技术。

社会兼职

国际超塑性顾问委员会常委；第九届国际超塑性系列会议主席；中国微米纳米技术学会理事；全国塑性工程学会副理事长；中国机械工程学会微纳制造技术分会理事；全国塑性工程学会超塑性学术委员会副主任；塑性工程学会国际交流工作委员会委员；塑性工程学会塑性理论学术委员会委员；黑龙江省锻压学会副理事长；塑性工程学报、锻压技术、材料科学与工艺等 3 杂志编委。

主要学术成果

- [1] Chan KC, Wang CL, Zhang KF. Superplastic deformation behavior of the electrocodeposited Ni/SiC composite. *Scripta Mater.* 2004, (51),605-609 (SCI, 他引12次, IF2.887)
- [2] Guoqing Chen, Kaifeng Zhang, Guofeng WANG, Wenbo Han. The superplastic deep drawing of a fine-grained alumina-zirconia ceramic composite and its cavitation behavior. *Ceramics International*, 2004(30), 2157-2162. (SCI, 他引3次, IF1.369)
- [3] Yin, D.L.; Zhang, K.F.; Wang, G.F.; Han, W.B. Warm deformation behavior of hot-rolled AZ31 Mg alloy. *Materials Science and Engineering A*, 2005,392(1): 320-325. (SCI他引49次, IF1.806)
- [4] Chan, K.C., Wang, G.F., Wang, C.L. and Zhang, K.F. Low temperature and high strain rate superplasticity of the electrodeposited Ni/ Si₃N₄ (w) composite. *Scripta Mater.* 2005 (53), 1285-1290. (SCI, 他引2次, IF2.887)
- [5] Chan, K.C., Wang, G.F., Wang, C.L. and Zhang, K.F. Low temperature superplastic gas pressure forming of electrodeposited Ni/SiCp nanocomposites. *Materials Science & Engineering A*, 2005(404), 108-116. (SCI, IF1.806)
- [6] D.L. Yin, K.F. Zhang, G.F. Wang and W.B. Han. Superplasticity and cavitation in AZ31 Mg alloy at elevated temperatures. *Materials Letters*, 2005, 59(14) :1714-1718. (SCI, IF1.748)
- [7] Wang, G.F., Chan, K.C., and Zhang, K.F. Low temperature superplasticity of nanocrystalline electrodeposited Ni-Co alloy. *Scripta Material* 2006 (54), 765-770. (SCI, 他引9次, IF2.887)
- [8] Kaifeng Zhang, Guofeng Wang. Fabrication and superplasticity of Al₂O₃/3Y-TZP laminated composite. *J Europ Ceram Soc.* 2006 (26), 253-257(SCI, IF1.58)
- [9] X.F. Li, K.F. Zhang, G.F. Wang. Preparation and tensile properties of amorphous Fe₇₈Si₉B₁₃/nano-Ni laminated composite. *Materials letters*. 2007(61), 4901-4905. (SCI, IF1.748)
- [10] Wang F, Zhang KF, Wang GF. Texture in superplastically deformed alumina-zirconia composites. *Materials Science & Engineering A*, 2008(491), 476-482. (SCI, IF1.806)
- [11] Zhang, Kaifeng, Ding Shui, Wang, Guofeng. Different superplastic deformation behavior of nanocrystalline Ni and ZrO₂/Ni nanocomposite. *Materials letters*. 2008(62), 719-722. (SCI, 他引1次, IF1.748)
- [12] Li XF, Zhang KF. Improved tensile ductility of amorphous Fe₇₈Si₉B₁₃ alloy using electrodeposited nano-Ni. *J Non-cryst. Solids*, 2008, 354(26): 3088-3092 (SCI, 他引1次, IF1.449)
- [13] X.F. Li, K.F. Zhang, G.F. Wang, W.B. Han. Plastic deformation behavior of amorphous Fe₇₈Si₉B₁₃ alloy at elevated temperature. *Journal of Non-Crystalline Solids* 354 (2008) 1061–1065. (SCI, 他引1次, IF1.449)
- [14] Yu, J.L. Zhang, K.F.; Wang, G.F. Superplasticity of multiphase fine-grained Nb-16Si-2Fe refractory alloy. *Intermetallics*, 2008v 16, n 10, p 1167-1170. (SCI, IF2.034)
- [15] Yu, J.L. Zhang, K.F. Tensile properties of multiphase refractory Nb-16Si-2Fe in situ composite. *Scripta Materialia*, 2008v 59, n 7, p 714-717. (SCI, IF2.887)
- [16] Zhang, Chunping, Zhang, Kaifeng; Wang, Guofeng. Superplasticity of fine grained γ -TiAl based alloy synthesized by pulse current auxiliary sintering. *Materials Letters*, 2009v 63, n 24-25, p 2153-2156. (SCI, IF1.748)
- [17] Lu, Zhen, Zhang, K.F. Crystal distribution and molecule orientation of micro injection molded polypropylene microstructured parts. *Polymer Engineering and Science*, 2009 v 49, n 8, p 1661-1665 (SCI, IF1.245)
- [18] Zhang, ChunPing, Zhang, KaiFeng. Tensile behaviors of fine-grained γ -TiAl based alloys synthesized by pulse current auxiliary sintering. *Materials Science and Engineering A*, 2009v 520, n 1-2, p 101-104. (SCI, IF1.806)
- [19] Yu, J.L. Zhang, K.F.; Li, Z.K.; Zheng, X.; Wang, G.F.; Bai, R. Fracture toughness of a hot-extruded multiphase Nb-10Si-2Fe in situ composite. *Scripta Materialia*, 2009v 61, n 6, p 620-623. (SCI, IF2.887)
- [20] Zhang, K.F.; Kun, L. Classification of size effects and similarity evaluating method in micro forming. *Journal of Materials Processing Technology*, 2009v 209, n 11, p 4949-4953. (SCI, IF1.1)
- [21] Li, Xifeng; Chen, Jun; Zhang, Kaifeng. High temperature deformation behavior of amorphous Fe₇₈Si₉B₁₃/nano-Ni laminated composite. *Materials and Design*, 2009v 30, n 7, p 2665-2669. (SCI, IF1.107)
- [22] Zhang, Chunping, Zhang, Kaifeng. Superplasticity of a γ -TiAl alloy and its microstructure and cavity evolution in deformation. *Journal of Alloys and Compounds*, 2010, v 492, n 1-2, p 236-240. (SCI, IF1.51)
- [23] Wang, X.L., Zhang, K.F. Mechanical alloying, microstructure and properties of Nb-16Si alloy. *Journal of Alloys and Compounds*, 2010 v 490, n 1-2, p 677-683. (SCI, IF1.51)
- [24] Yan, H.H., Zhang, K.F. Processing of multi-sheet structures of an aluminum alloy by laser welding/superplastic forming. *Materials and Design*, 2010v 31, n 4, p 2220-2223. (SCI, IF1.107)
- [25]. 专利情况
张凯锋。陶瓷手术刀的装夹装置。公开号：200410044047.4
张凯锋。一种变摩擦条件的正反向超塑胀形方法。申请号：200810063861.9
张凯锋。一种制造 GH4169 高温合金多层板结构的方法。申请号：200810209590.3
张凯锋。线膨胀系数可调 ZrO₂ 和 TiO₂ 超塑陶瓷模具的制备方法。申请号：200810137554.0
张凯锋。纺织喷印用氧化锆陶瓷喷嘴的制造方法。申请号：200910071923.5
张凯锋。一种铌硅铁合金发动机部件及其制备方法。申请号：200910308608x
- [26]. 专著情况
(1) 张凯锋, 魏艳红, 魏尊杰, 闫牧夫. 《材料热加工过程的数值模拟》. 2001, 哈尔滨工业大学出版社
(2) 张凯锋. 2008, 《微成形制造技术》, 北京: 化学工业出版社
(3) 王仲仁, 张凯锋. 《锻压手册》, 2008, 北京: 机械工业出版社
(4) KF Zhang. Superplasticity in advanced materials. ICSAM2006. TTP