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Education:

- Ph. D., Energy Science, Graduate School of Energy Science, Kyoto University, Japan, March 2013. Thesis title: Constitutive Modeling of Irradiation Effects on Mechanical Properties of Silicon Carbide Composites
- M. S., Graduate School of Energy Science, Kyoto University, March 2010.
- B. Sc., School of Engineering Science, Faculty of Engineering, Kyoto University, March 2008.

Experience:

- March 2016-present, Research associate, Materials Science & Technology Division, Oak Ridge National Laboratory.
- July 2013-February 2016, Postdoctoral fellow, Materials Science & Technology Division, Oak Ridge National Laboratory.
 - Microstructure analysis to evaluate material properties.
 - Development and characterization of ceramics and composites for high-temperature and severe-environment applications; effects of irradiation on mechanical properties and microstructure.
 - Development of joining technology for ceramics and composites; processing, mechanical testing, and non-destructive evaluation of joints.
 - Characterization and evaluation of plasma facing materials under the US-Japan Fusion Research Collaboration.
- April-June 2013, Postdoctoral fellow, Graduate School of Energy Science, Kyoto University, Japan. Research Fellow of the Japan Society for the Promotion of Science.

- Evaluated effects of neutron irradiation on mechanical properties of silicon carbide (SiC) fiber reinforced SiC matrix composites.

Recent Publications:

1. Takaaki Koyanagi, Yutai Katoh, Kazumi Ozawa, Kazuya Shimoda, Tatsuya Hinoki, Lance L. Snead, "Neutron-irradiation creep of silicon carbide materials beyond the initial transient", Journal of Nuclear Materials 478 (2016) 97-111
2. T. Koyanagi, K. Shimoda, S. Kondo, T. Hinoki, K. Ozawa, Y. Katoh, "Irradiation creep of nano-powder sintered silicon carbide at low neutron fluences", Journal of Nuclear Materials, 455 (2014) 73-80.
3. T. Koyanagi, K. Ozawa, T. Hinoki, K. Shimoda, Yutai Katoh, "Effects of neutron irradiation on mechanical properties of silicon carbide composites fabricated by nano-infiltration and transient eutectic-phase process", Journal of Nuclear Materials, 448 (2014) 478-486.
4. Y. Katoh, L.L. Snead, T. Cheng, C. Shih, W.D. Lewis, T. Koyanagi, T. Hinoki, C.H. Henager Jr., M. Ferraris, "Radiation-tolerant joining technologies for silicon carbide ceramics and composites", Journal of Nuclear Materials, 448 (2014) 497-511.
5. T. Koyanagi, J. Kiggans, C. Shih, Y. Katoh, "PROCESSING AND CHARACTERIZATION OF DIFFUSION-BONDED SILICON CARBIDE JOINTS USING MOLYBDENUM AND TITANIUM INTERLAYERS", Ceramic Engineering and Science Proceedings, 34 [7] (2014) ID 6-14.
6. C. Shih, Y. Katoh, J. Kiggans, T. Koyanagi, H. Khalifa, C.A. Back, T. Hinoki, M. Ferraris, "COMPARISON OF SHEAR STRENGTH OF CERAMIC JOINTS DETERMINED BY VARIOUS TEST METHODS WITH SMALL SPECIMENS", Ceramic Engineering and Science Proceedings, 34 [7] (2014) ID 6-13.