

## Qualifications

Master's degree, Natural Sciences, University of Jyväskylä  
Award Date: 27 Sept 2017

## Employment

### Postdoctoral Researcher

Postdoctoral Researcher  
Department of Bioproducts and Biosystems  
Aalto University  
25 Nov 2024 → present

### Postdoctoral Researcher

Postdoctoral Researcher  
Wood Material Science  
Aalto University  
25 Nov 2024 → present

### Teaching Assistant

University of Bordeaux  
Bordeaux, France  
1 Jan 2021 → 1 Jan 2022

## Research outputs

### Long-sought isomer turns out to be the ground state of $^{76}\text{Cu}$

Canete, L., Giraud, S., Kankainen, A., Bastin, B., Nowacki, F., Ascher, P., Eronen, T., Girard Alcindor, V., Jokinen, A., Khanam, A., Moore, I. D., Nesterenko, D., De Oliveira, F., Penttilä, H., Petrone, C., Pohjalainen, I., De Roubin, A., Rubchenya, V., Vilen, M. & Äystö, J., Jun 2024, In: Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics. 853, p. 1-6 6 p., 138663.

### Further Evidence for Shape Coexistence in $^{79}\text{Zn}^m$ near Doubly Magic $^{78}\text{Ni}$

Nies, L., Canete, L., Dao, D. D., Giraud, S., Kankainen, A., Lunney, D., Nowacki, F., Bastin, B., Stryjczyk, M., Ascher, P., Blaum, K., Cakirli, R. B., Eronen, T., Fischer, P., Flayol, M., Girard Alcindor, V., Herlert, A., Jokinen, A., Khanam, A. & Köster, U. & 14 others, Lange, D., Moore, I. D., Müller, M., Mougeot, M., Nesterenko, D. A., Penttilä, H., Petrone, C., Pohjalainen, I., de Roubin, A., Rubchenya, V., Schweiger, C., Schweikhard, L., Vilen, M. & Äystö, J., 1 Dec 2023, In: Physical Review Letters. 131, 22, p. 1-7 7 p., 222503.

### Defect analysis of Germanium and $\text{TiO}_2$ by means of Positron annihilation spectroscopy

Khanam, A., 2023, Aalto University. 100 p.

### Mass measurements towards doubly magic $^{78}\text{Ni}$ : Hydrodynamics versus nuclear mass contribution in core-collapse supernovae

Giraud, S., Canete, L., Bastin, B., Kankainen, A., Fantina, A. F., Gulminelli, F., Ascher, P., Eronen, T., Alcindor, V. G., Jokinen, A., Khanam, A., Moore, I. D., Nesterenko, D. A., Santos, F. D. O., Penttilä, H., Petrone, C., Pohjalainen, I., de Roubin, A., Rubchenya, V. A. & Vilen, M. & 1 others, Äystö, J., 16 Jul 2022, In: Physics Letters B. 833, p. 1-6 6 p., 137309.

### Open volume defects in ultra-thin $\text{TiO}_2$ layers embedded in VMCO-like samples studied with positron annihilation spectroscopy

Khanam, A., Slotte, J., Tuomisto, F., Subhechha, S., Popovici, M. & Kar, G. S., 24 Jun 2022, In: Journal of Applied Physics. 131, 24, 6 p., 245301.

### Defect-mediated metastability and carrier lifetimes in polycrystalline $(\text{Ag,Cu})(\text{In,Ga})\text{Se}_2$ absorber materials

Ferguson, A., Farshchi, R., Paul, P. K., Dippo, P., Bailey, J., Poplavskyy, D., Khanam, A., Tuomisto, F., Arehart, A. & Kuciauskas, D., 7 Jun 2020, In: Journal of Applied Physics. 127, 21, 11 p., 215702.

**A demonstration of donor passivation through direct formation of V-As<sub>i</sub> complexes in As-doped Ge<sub>1-x</sub>Sn<sub>x</sub>**

Khanam, A., Vohra, A., Slotte, J., Makkonen, I., Loo, R. & Pourtois, G., 21 May 2020, In: Journal of Applied Physics. 127, 9, 6 p., 195703.

**Source/Drain Materials for Ge nMOS Devices: Phosphorus Activation in Epitaxial Si, Ge, Ge<sub>1-x</sub>Sn<sub>x</sub> and Si<sub>y</sub>Ge<sub>1-x-y</sub>Sn<sub>x</sub>**

Vohra, A., Makkonen, I., Pourtois, G., Slotte, J., Porret, C., Rosseel, E., Khanam, A., Tirrito, M., Douhard, B., Loo, R. & Vandervorst, W., 7 May 2020, In: ECS Journal of Solid State Science and Technology. 9, 4, p. 1-13 13 p., 044010.

**Precision mass measurements of Fe 67 and Co 69,70: Nuclear structure toward N=40 and impact on r -process reaction rates**

Canete, L., Giraud, S., Kankainen, A., Bastin, B., Nowacki, F., Poves, A., Ascher, P., Eronen, T., Alcindor, V. G., Jokinen, A., Khanam, A., Moore, I. D., Nesterenko, D. A., Santos, F. D. O., Penttilä, H., Petrone, C., Pohjalainen, T., de Roubin, A., Rubchenya, V. A. & Vilen, M. & 1 others, Äystö, J., 20 Apr 2020, In: PHYSICAL REVIEW C. 101, 4, 7 p., 041304.

**Measurement of the 2<sup>+</sup>→0<sup>+</sup> ground-state transition in the β decay of F 20**

Kirsebom, O. S., Hukkanen, M., Kankainen, A., Trzaska, W. H., Stroemberg, D. F., Martinez-Pined, G., Andersen, K., Bodewits, E., Brown, B. A., Canete, L., Cederkall, J., Enqvist, T., Eronen, T., Fynbo, H. O. U., Geldhof, S., de Groot, R., Jenkins, D. G., Jokinen, A., Joshi, P. & Khanam, A. & 21 others, Kostensalo, J., Kuusiniemi, P., Langanke, K., Moore, I., Munch, M., Nesterenko, D. A., Ovejas, J. D., Penttilä, H., Pohjalainen, T., Reponen, M., Rinta-Antila, S., Riisager, K., de Roubin, A., Schotanus, P., Srivastava, P. C., Suhonen, J., Swartz, J. A., Tengblad, O., Vilen, M., Vinals, S. & Aysto, J., 24 Dec 2019, In: PHYSICAL REVIEW C. 100, 6, p. 1-12 12 p., 065805.

**Heavily phosphorus doped germanium: Strong interaction of phosphorus with vacancies and impact of tin alloying on doping activation**

Vohra, A., Khanam, A., Slotte, J., Makkonen, I., Pourtois, G., Porret, C., Loo, R. & Vandervorst, W., 14 Jun 2019, In: Journal of Applied Physics. 125, 22, p. 1-7 7 p., 225703.

**Control of Vacancy Defects in Reactively Sputtered (Ag,Cu)(In,Ga)Se<sub>2</sub> Solar Cells**

Farshchi, R., Bailey, J., Poplavskyy, D., Hickey, B., Spaulding, D., Kuān, E. T., Khanam, A. & Tuomisto, F., 1 Jun 2019, *2019 IEEE 46th Photovoltaic Specialists Conference, PVSC 2019*. IEEE, p. 3198-3200 3 p. 8980772. (Conference Record of the IEEE Photovoltaic Specialists Conference).

**Evolution of phosphorus-vacancy clusters in epitaxial germanium**

Vohra, A., Khanam, A., Slotte, J., Makkonen, I., Pourtois, G., Loo, R. & Vandervorst, W., 14 Jan 2019, In: Journal of Applied Physics. 125, 2, 6 p., 025701.