List of publications

2022 **P. Grigorev**, A. M. Goryaeva, M.-C. Marinica, J. R. Kermode, and T. D. Swinburne. *Synergistic coupling in ab initio-machine learning simulations of dislocations*. Mar. 2022. arXiv: `2111.11262 [under review in Acta Materialia]`.

V. Grigorev, M. Filianina, Y. Lytvynenko, S. Sobolev, A. R. Pokharel, A. P. Lanz, A. Sapozhnik, A. Kleibert, S. Bodnar, **P. Grigorev**, Y. Skourski, M. Kläui, H.-J. Elmers, M. Jourdan, and J. Demsar. "Optically Triggered Néel Vector Manipulation of a Metallic Antiferromagnet Mn2Au under Strain". In: *ACS Nano* 16.12 (2022), pp. 20589–20597.

2021 A. M. Goryaeva, J. Dérès, C. Lapointe, **P. Grigorev**, T. D. Swinburne, J. R. Kermode, L. Ventelon, J. Baima, and M.-C. Marinica. "Efficient and transferable machine learning potentials for the simulation of crystal defects in bcc Fe and W". In: *Phys. Rev. Materials* 5 (10 Oct. 2021), p. 103803.

2020 **P. Grigorev**, T. D. Swinburne, and J. R. Kermode. "Hybrid quantum/classical study of hydrogen-decorated screw dislocations in tungsten: Ultrafast pipe diffusion, core reconstruction, and effects on glide mechanism". In: *Phys. Rev. Materials* 4 (2 Feb. 2020), p. 023601.

2018 **P. Grigorev**, A. Zinovev, D. Terentyev, G. Bonny, E. E. Zhurkin, G. V. Oost, and J.-M. Noterdaeme. "Molecular dynamics simulation of hydrogen and helium trapping in tungsten". In: *Journal of Nuclear Materials* 508 (2018), pp. 451–458.

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P. Grigorev, A. Bakaev, D. Terentyev, G. V. Oost, J.-M. Noterdaeme, and E. E. Zhurkin. "Interaction of hydrogen and helium with nanometric dislocation loops in tungsten assessed by atomistic calculations". In: *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms* 393 (2017), pp. 164–168.

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