

List of publications and conferences

A) List of publications (last 5 years)

Kouřil, L.; Pechoušek, J.; **Kohout, P.**; Jiruš, M.; Vondrášek, R. (2022) Improvement of gasproportional counter performance by registration krypton and argon escape peaks in Mössbauer spectroscopy, *Nuclear Instruments and Methods in Physics Research Section B*, 511, 75–83, <http://doi.org/10.1016/j.nimb.2021.11.017>

E.V. Chernysheva, A.M. Rodin, V.Yu. Vedeneev, A.V. Gulyaev, A.V. Gulyaeva, M. Holik, S.N. Dmitriev, D. Kamas, J. Kliman, A.B. Komarov, L. Krupa, **P. Kohout**, A. Kohoutova, A.S. Novoselov, Yu. Ts. Oganessian, A. Opichal, J. Pechousek, A.V. Podshibyakin, V.S. Salamatin, S.V. Stepantsov, S.A. Yukhimchuk (2022). Cross Sections of the Production of Mercury and Radon Isotopes in Complete Fusion Reactions with $^{36,40}\text{Ar}$ and $^{40,48}\text{Ca}$ Projectiles. *Bulletin of the Russian Academy of Sciences: Physics* 86(8), 883-888, ISSN 1062-8738. <https://doi.org/10.3103/S1062873822080044>

Pavel Kohout, Lukáš Kouřil, Antonín Opichal, Alena Kohoutová and Jiří Pechoušek (2021). Mössbauer spectrometer with advanced modulation of gamma ray energy utilizing real-time industrial computer. *IEEE Transactions on Nuclear Physics.*, 68(8)1869–1875, <https://doi.org/10.1109/TNS.2021.3086486>

Pavel Kohout, Jiří Pechoušek and Lukáš Kouřil (2019). Evaluation of Mössbauer spectra linearization methods. *Hyperfine interactions*. <https://doi.org/10.1007/s10751-019-1667-7>

Pavel Kohout, Tomas Frank, Jiří Pechoušek and Lukáš Kouřil. (2018). Mössbauer spectra linearity improvement by sine velocity waveform followed by linearization process. *Measurement Science and Technology*, 29(5), 57001. <https://doi.org/10.1088/1361-6501/aaacf0>

Lukas Kouril, Jiri Pechousek, Petr Novak, Jakub Navarik and **Pavel Kohout**. (2018) Toroidal proportional gas flow counter for conversion X-ray Mössbauer spectroscopy, *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, vol. 432, pp. 55–59, <https://doi.org/10.1016/j.nimb.2018.07.020>

B) Participation in Conferences and Workshops (last 5 years)

AYSS seminar at JINR House of Scientists, Dubna (10th November 2022, in person, 1-hour oral talk: Mass spectroscopy of superheavy atoms)

ISIAME2022, Olomouc, Czech Republic, (in person, oral contribution: SURFACE CHANGES INVESTIGATION OF “MASHA” STEEL COMPONENTS BY MÖSSBAUER SPECTROSCOPY)

AYSS2022, Dubna, Russia (online, poster) SIMULATIONS OF RADIOFREQUENCY ION FUNNEL OF CRYOGENIC GAS STOPPING CHAMBER OF MULTIPLE-REFLECTION TIME-OF-FLIGHT MASS SPECTROMETER

ESAS-CSSC2022, Brno, Czech Republic (in person, poster: SIMULATIONS OF RADIOFREQUENCY ION FUNNEL OF MULTIPLE-REFLECTION TIME-OF-FLIGHT MASS SPECTROMETER

Hyperfine 2021, Brasov, Romania (online, oral contribution: PXI-COMPATIBLE PREAMPLIFIER AND AMPLIFIER FOR MÖSSBAUER SPECTROSCOPY)

AYSS-Lipnya 2021, Lipnya island, Ivankovo reservoir, Russia (summer school, without contribution)

IEEE RT2020, Quy Nhon, Vietnam (online, oral contribution: Mössbauer spectrometer with high channel resolution utilizing real-time industrial computer)

ICAME2019, Dalian, China (in person, oral contribution: EVALUATION OF MÖSSBAUER SPECTRA LINEARIZATION METHODS)

JINR-ISU Baikal SSPEPA2019, Bolshie Koty, Russia (in person, oral contribution: INVESTIGATION OF HEAVY ION RADIATION INTERACTION WITH STEEL COMPONENTS OF PARTICLE ACCELERATORS)

AYSS2018, Dubna, Russia (in person, oral contribution: Mössbauer spectrometer with intelligent modulation of gamma ray energy)