

Publikacje ICHB PAN indeksowane w bazie Web of Science 2025

1. Małgorzata Józkowiak, **Dariusz Wawrzyniak**, Alicja Kawczyńska, Paulina Skupin-Mrugalska, Mikołaj Czajkowski, Paul Mozdziak, Marta Podralska, Marek Żywicki, Bartosz Kempisty, Robert Z. Spaczyński, Hanna Piotrowska-Kempisty, "The Effect of Liposomal DMU-212 on the Differentiation of Human Ovarian Granulosa Cells in a Primary 3D Culture Model", *Pharmaceuticals*, 18, art. nr 1460, 2025. [DOI: 10.3390/ph18101460](https://doi.org/10.3390/ph18101460)
2. Jakub Bizan, Shayan Sarkar, Arpan Kumar Basak, Subhankar Bera, Shino Goto-Yamada, Kaichiro Endo, Katarzyna Tarnawska-Glatt, Rituraj Batth, Kritika Bhardwaj, Mohamadreza Mirzaei, Paweł Czerniawski, **Paweł Bednarek**, Kenji Yamada, "Arabidopsis MYB47 and MYB95 transcription factors regulate jasmonate-inducible ER-body formation", *Communications biology*, 8, art. nr 1377, 2025. [DOI: 10.1038/s42003-025-08863-6](https://doi.org/10.1038/s42003-025-08863-6)
3. Murphy Angelo, Yash Bhargava, **Elżbieta Kierzek**, **Ryszard Kierzek**, Ryan L. Hayes, Wen Zhang, Jonah Z. Vilseck, Scott Takeo Aoki, "Accurate in silico predictions of modified RNA interactions to a prototypical RNA-binding protein with λ -dynamics", *RNA*, 31, 1460-1471, 2025. [DOI: 10.1261/rna.080367.124](https://doi.org/10.1261/rna.080367.124)
4. Sylwia Ostrowska, Monika Szukowska, Shinik Kimn, Yeonho Kim, **Dariusz Wawrzyniak**, Radosław Mrówczyński, "Doxorubicin and sorafenib release from mesoporous silica nanoparticles coated with polydopamine – influence of mechanical and chemical stimuli on the process", *Frontiers in Coatings, Dyes and Interface Engineering*, 3, art. nr 1531144, 2025. [DOI: 10.3389/frcdi.2025.1531144](https://doi.org/10.3389/frcdi.2025.1531144)
5. **Katarzyna Klonowska**, John Lee, **Marcin Drzewiecki**, Joannes M. Grevelink, Barbara Boeszoermyenyi, **Piotr Kozłowski**, John Hanna, Alvaro C. Laga, David J. Kwiatkowski, "TSC angiofibroma and ungual fibroma have different mutation signatures, with recurrent mutations in *KMT2C*", *Genetics in Medicine*, 27, art. nr 101538, 2025. [DOI: 10.1016/j.gim.2025.101538](https://doi.org/10.1016/j.gim.2025.101538)

6. **Marzena Wojciechowska, Piotr Kozłowski**, "Implications of circular transcripts in DM1 pathomechanism", *Molecular Therapy Nucleic Acids*, 36, art. nr 102661, 2025. [DOI: 10.1016/j.omtn.2025.102661](https://doi.org/10.1016/j.omtn.2025.102661)
7. **Kinga Pokrywka, Marta Grzechowiak, Joanna Śliwiak, Paulina Worsztynowicz, Joanna I. Loch, Miłosz Ruszkowski, Mirosław Gilski, Mariusz Jaskólski**, "Probing the Active Site of Class 3 L-Asparaginase by Mutagenesis: Mutations of the Ser-Lys Tandems of ReAV", *Biomolecules*, 15, art. nr 944, 2025. [DOI: 10.3390/biom15070944](https://doi.org/10.3390/biom15070944)
8. Adam Chyzy, Przemysław Gnatowski, Edyta Piłat, Maciej Sienkiewicz, Katarzyna Woźniak, Marta Wojnicka, **Krzysztof Brzeziński**, Marta E. Płońska-Brzezińska, "Formation and characterization of xylitol-modified glycidyl methacrylate-co-ethyl methacrylate matrices for controlled release of antimicrobial compounds", *Molecules*, 30, art. nr 3083, 2025. [DOI: 10.3390/molecules30153083](https://doi.org/10.3390/molecules30153083)
9. **Martyna Mateja-Pluta, Leszek Błaszczuk, Magdalena Bejger**, Kazuhiko Nakatani, **Agnieszka Kiliszek**, "Naphthyridine carbamate dimer ligand induces formation of Z-RNA-like fold of disease-related RNA and exhibits a molecular glue characteristics in crystal lattice formation", *Nucleic Acids Research*, 53, art. nr gkaf924, 2025. [DOI: doi.org/10.1093/nar/gkaf924](https://doi.org/10.1093/nar/gkaf924)
10. Mohit K. Tiwari, Małgorzata Kucińska, Agnieszka Zgoła-Grześkowiak, Marziyeh Raeispour, Marek Murias, Philippe Grellier, **Łukasz Marczak**, Tomasz Gośliński, "Design, synthesis and in vitro assessment of di-/tri-methoxy-aryl-substituted mono-spiro-1,2,4,5-tetraoxanes for antiparasmodial and anticancer use", *European Journal of Medicinal Chemistry*, 300, art. nr 118159, 2025. [DOI: 10.1016/j.ejmech.2025.118159](https://doi.org/10.1016/j.ejmech.2025.118159)
11. **Kinga Maziec, Agnieszka Balaga-Gil, Elżbieta Kierzek**, "Delivery strategies for RNA-targeting therapeutic nucleic acids and RNA-based vaccines against respiratory RNA viruses: IAV, SARS-CoV-2, RSV", *Molecular Therapy Nucleic Acids*, 36, art. nr 102572, 2025. [DOI: 10.1016/j.omtn.2025.102572](https://doi.org/10.1016/j.omtn.2025.102572)

12. **Marta Sztachera, Weronika Wendlandt-Stanek, Monika Piwecka**, “Protocol for mouse brain tissue processing and downstream analysis of circRNA-protein interactions *in vivo*”, *Star Protocols*, 6, art. nr 104036, 2025. [DOI: 10.1016/j.xpro.2025.104036](https://doi.org/10.1016/j.xpro.2025.104036)
13. Yi Pan, **Elżbieta Kierzek, Ryszard Kierzek**, David H. Mathews, Yi-Tao Yu, “A Ψ – Ψ codon–anticodon pairing in nonsense suppression and translational recoding”, *Nature Chemical Biology*, 2025. [DOI: 10.1038/s41589-025-02025-9](https://doi.org/10.1038/s41589-025-02025-9)
14. **Paulina Gałka-Marciniak, Martyna Olga Urbanek-Trzeciak, Daniel Kuźnicki, Natalia Szostak, Adrian Tire, Paulina Maria Nawrocka-Muszyńska, Katarzyna Chojnacka, Malwina Suszynska, Katarzyna Klonowska, Karol Czubak, Magdalena Machowska, Anna Philips**, Konstantin Maksin, Laura Susok, Michael Sand, Janusz Rys, Jolanta Jura, Magdalena Ratajska, Hanna Dams-Kozłowska, Janusz Kowalewski, Marzena Anna Lewandowska, **Piotr Kozłowski**, “Whole-miRNome sequencing: a panel for the targeted sequencing of all human miRNA genes”, *Nucleic Acids Research*, 53, art. nr gkaf812, 2025. [DOI: 10.1093/nar/gkaf812](https://doi.org/10.1093/nar/gkaf812)
15. Sebastian Dorawa, **Katarzyna Biniek-Antosiak, Magdalena Bejger**, Anna-Karina Kaczorowska, Karol Ciuchciński, Agnieszka Godlewska, Magdalena Płotka, Gudmundur O. Hreggvidsson, Łukasz Dziewit, Tadeusz Kaczorowski, **Wojciech Rypniewski**, “Crystal structure, enzymatic and thermodynamic properties of the *Thermus thermophilus* phage Tt72 lytic endopeptidase with unique structural signatures of thermal adaptation”, *Journal of Structural Biology*, 217, art. nr 108230, 2025. [DOI: DOI10.1016/j.jsb.2025.108230](https://doi.org/10.1016/j.jsb.2025.108230)
16. **Annasha Dutta, Anastasiia Zaremba, Paulina Jackowiak**, “Ribonucleases in Mendelian disease: Characterization and insight from model organisms”, *Genes & Diseases*, 12, art. nr 101613. [DOI: 10.1016/j.gendis.2025.101613](https://doi.org/10.1016/j.gendis.2025.101613)
17. **Natalia Bartyś, Anna Pasternak, Jolanta Lisowiec-Wąchnicka**, “Modified Nucleotides in Bifunctional Antisense Oligonucleotides: Exploring their Anticancer Potential”, *ChemMedChem*, art. nr 202500220, 2025. [DOI: 10.1002/cmdc.202500220](https://doi.org/10.1002/cmdc.202500220)

18. Björn Sabelleck, Matthias Freh, Meltem Lammertz, Jennifer Browatzki, Anna-Maria Vllaho, **Mariola Piślewska-Bednarek, Paweł Bednarek**, Ralph Panstruga, "Thiamine is a vitamin for plant-pathogenic powdery mildew fungi", *iScience*, 28, art. nr 113123, 2025. [DOI: 10.1016/j.isci.2025.113123](https://doi.org/10.1016/j.isci.2025.113123)
19. Agnieszka Szuba, Weronika B. Żukowska, Joanna Mucha, **Aleksander Strugała, Łukasz Marczak**, "Low Temperature Enhances N-Metabolism in *Paxillus involutus* Mycelia In Vitro: Evidence From an Untargeted Metabolomic Study", *Environmental Microbiology*, 27, art. nr e70162, 2025. [DOI: 10.1111/1462-2920.70162](https://doi.org/10.1111/1462-2920.70162)
20. Krzysztof Mularski, Dawid Makalowski, Marcin Okonek, Daria Glebowska, Mateusz Świercz, **Karol Kamel, Jacek Błazewicz, Maciej Antczak, Aleksandra Świercz**, "ProProtein: A platform for fully automated identification of 3D structure fluctuations in MD simulation trajectories", *Plos ONE*, 20, art. nr e0329314, 2025. [DOI: 10.1371/journal.pone.0329314](https://doi.org/10.1371/journal.pone.0329314)
21. **Lucyna Budźko**, Aleksandra Mierzwa, **Marek Figlerowicz**, "AID/APOBEC: an expanding repertoire of targets and functions", *Trends in Biochemical Sciences*, 50, 642-645, 2025. [DOI: 10.1016/j.tibs.2025.02.006](https://doi.org/10.1016/j.tibs.2025.02.006)
22. Elena Molokanova, Teng Zhou, Pragna Vasupal, **Volodymyr P. Cherkas**, Prashant Narute, Mariana S. A. Ferraz, Michael Reiss, Angels Almenar-Queralt, Georgia Chaldaopoulou, Janaina Sena de Souza, Honieh Hemati, Francisco Downey, Omowuyi O. Olajide, Carolina Thörn Perez, Francesca Puppo, Pinar Mesci, Samuel L. Pfaff, Dmitry Kireev, Alysson R. Muotri, Alex Savchenko, "Non-genetic neuromodulation with graphene optoelectronic actuators for disease models, stem cell maturation, and biohybrid robotics", *Nature Communications*, 16, art. nr 7499, 2025. [DOI: 10.1038/s41467-025-62637-6](https://doi.org/10.1038/s41467-025-62637-6)
23. Jacek Kujawski, Beata Drabińska, Katarzyna Dettlaff, Marcin Skotnicki, Agata Olszewska, Tomasz Ratajczak, Marianna Napierała, **Marcin K. Chmielewski**, Milena Kasprzak, Radosław Kujawski, Aleksandra Gostyńska-Stawna, Maciej Stawny, "Structural and Spectroscopic Properties of Magnolol and Honokiol—Experimental and Theoretical

- Studies", *International Journal of Molecular Sciences*, 26, art. nr 6085, 2025. [DOI: 10.3390/ijms26136085](https://doi.org/10.3390/ijms26136085)
24. Ziyu Huang, Yunyun Liu, **Anna Philips**, Fen Zhang, Tao Zuo, "Varied prevalence and asymptomatic carriage of *Cryptococcus gattii* in the gut of Chinese populations", *The Lancet Microbe*, 6, art. nr 101086, 2025. [DOI: https://doi.org/10.1016/j.lanmic.2025.101086](https://doi.org/10.1016/j.lanmic.2025.101086)
25. Sandra Przybysz, Anna Łojko–Dankowska, **Magdalena Rakoczy**, **Małgorzata Marcinkowska-Swojak**, Michał Zeńczak, Kinga Gwóźdź–Bąk, **Luiza Handschuh**, Krzysztof Lewandowski, "Genetic background of Richter transformation of atypical chronic lymphocytic leukemia to diffuse large B-cell lymphoma - a case study", *Journal of Applied Genetics*, 2025. [DOI: 10.1007/s13353-025-00999-9](https://doi.org/10.1007/s13353-025-00999-9)
26. **Weronika Kotkowiak**, **Natalia Bartyś**, **Anna Pasternak**, "Towards improved anticancer properties of the G-quadruplex-forming T40231 aptamer through increased flexibility of nucleoside residues", *Scientific Reports*, 15, art. nr 25159, 2025. DOI: [10.1038/s41598-025-09934-8](https://doi.org/10.1038/s41598-025-09934-8)
27. **Emilia Kozłowska**, **Agata Ciołak**, **Grażyna Adamek**, **Julia Szczesniak**, **Agnieszka Fiszer**, "HTT loss-of-function contributes to RNA deregulation in developing Huntington's disease neurons", *Cell & Bioscience*, 15, art. nr 100, 2025. [DOI: 10.1186/s13578-025-01443-5](https://doi.org/10.1186/s13578-025-01443-5)
28. Kaja Jaskot, Angelika Mielcarek, Łukasz Popena, Ahmet Kertmen, Bartosz F. Grześkowiak, **Jan Barciszewski**, Patrick M. Perrigue, "Species-selective activation of a β -galactosidase fluorogenic probe", *Scientific Reports*, 15, art. nr 23657, 2025. [DOI: 10.1038/s41598-025-08443-y](https://doi.org/10.1038/s41598-025-08443-y)
29. Jan Badura, Agnieszka Rybarczyk, **Tomasz Zok**, "Comprehensive datasets for RNA design, machine learning, and beyond", *Scientific Reports*, 15, art. nr 21417, 2025. [DOI: 10.1038/s41598-025-07041-2](https://doi.org/10.1038/s41598-025-07041-2)

30. Jacek Kujawski, Beata Drabińska, Katarzyna Dettlaff, Marcin Skotnicki, Agata Olszewska, Tomasz Ratajczak, Marianna Napierała, **Marcin K. Chmielewski**, Milena Kasprzak, Radosław Kujawski, Aleksandra Gostyńska-Stawna, Maciej Stawny, "Structural and Spectroscopic Properties of Magnolol and Honokiol—Experimental and Theoretical Studies", *International Journal of Molecular Sciences*, 26, art. nr 6085, 2025. DOI: [10.3390/ijms26136085](https://doi.org/10.3390/ijms26136085)
31. Yao-Wen Sang, Jun-Qiang Wang, Yumei Huo, Małgorzata Sterna, **Jacek Błażewicz**, "Minimizing the maximum late work for a single-machine scheduling problem with flexible maintenance activities", *Journal of Scheduling*, 2025. DOI: [10.1007/s10951-025-00846-z](https://doi.org/10.1007/s10951-025-00846-z)
32. Dagmara Pietkiewicz, **Mikołaj P. Zaborowski**, Szymon Plewa, Michał Potograbski, Cezary Miedziarek, Tomasz Kluz, Ewa Nowak-Markwitz, Jan Matysiak, "Targeted Metabolomic Serum Analysis of Patients with High and Low Risk of Endometrial Cancer Recurrence and Positive and Negative Lymph Node Status", *Metabolites*, 15, art. nr 422, 2025. DOI: [10.3390/metabo15070422](https://doi.org/10.3390/metabo15070422)
33. **Angelika Andrzejewska-Romanowska**, Ewa Tykwińska, Paweł Śledziński, Katarzyna **Pachulska-Wieczorek**, "A comparative analysis of mRNA enrichment strategies and guidance for improving their efficiency", *Scientific Reports*, 15, Art. nr 17890, 2025. DOI: [10.1038/s41598-025-02082-z](https://doi.org/10.1038/s41598-025-02082-z)
34. **Borys Olifirov**, **Oleksandra Fedchenko**, Alexandr Dovgan, Daria Babets, Volodymyr Krotov, **Volodymyr Cherkas**, Pavel Belan, "Local Iontophoretic Application for Pharmacological Induction of Long-Term Synaptic Depression", *Bio-Protocol*, art. nr e5338, 2025. DOI: [10.21769/BioProtoc.5338](https://doi.org/10.21769/BioProtoc.5338)
35. Jian Xia, Alexandra Siffert, Oldays Torres, Francesca Iacobini, **Joanna Banasiak**, **Konrad Pakuła**, Jörg Ziegler, Sabine Rosahl, Noel Ferro, **Michał Jasiński**, Tamás Hegedűs, Markus M. Geisler, "A key residue of the extracellular gate provides quality control contributing to ABCG substrate specificity", *Nature Communications*, 16, art. nr 4177, 2025. DOI: [10.1038/s41467-025-59518-3](https://doi.org/10.1038/s41467-025-59518-3)

36. Xi Liu, Xin Chen, Vincent Chau, Jędrzej Musiał, **Jacek Błażewicz**, “Flexible Job Shop Scheduling Problem using graph neural networks and reinforcement learning”, *Computers & Operations Research*, 182, 107139, 2025. [DOI: 10.1016/j.cor.2025.107139](https://doi.org/10.1016/j.cor.2025.107139)
37. Sylwester Swat, Maciej Antczak, Tomasz Zok, **Jacek Błażewicz**, Jędrzej Musiał, “Exact Algorithms for the Satellite Image Selection Problem”, *International Journal of Applied Mathematics and Computer Science*, 35, 293-309, 2025. [DOI: 10.61822/amcs-2025-0021](https://doi.org/10.61822/amcs-2025-0021)
38. **Wanda Biała-Leonhard**, Aleksandra Bigos, Jan Brezovsky, **Michał Jasiński**, “Message hidden in α -helices—toward a better understanding of plant ABCG transporters’ multispecificity”, *Plant Physiology*, 198, art. nr kiaf146, 2025. [DOI: 10.1093/plphys/](https://doi.org/10.1093/plphys/)
39. Sadaf Farsinejad, Daniel Centeno, Jan Savas-Carstens, Teagan Polotaye, Tonja Pavlovič, Pouria Babvey, Taru Muranen, Cezary Miedziarek, Piotr Jasiński, Elżbieta Dziobaszewska, **Piotr Mikołaj Zaborowski**, Pek Yee Lum, “Suppression of Ovarian Cancer Cell Proliferation Is Associated with Upregulation of Cell-Matrix Adhesion Programs and Integrin- β 4-Induced Cell Protection from Cisplatin”, *Cancers*, 17, art. nr 1472, 2025. [DOI: 10.3390/cancers17091472](https://doi.org/10.3390/cancers17091472)
40. **Ayça Olcay**, “Circular RNAs as a novel player in synaptic transmission and neuropsychiatric disorders”, *Neuropsychopharmacology*, 2025. [DOI: 10.1038/s41386-025-02121-3](https://doi.org/10.1038/s41386-025-02121-3)
41. **Dagny Lorent**, **Rafał Nowak**, **Monika Gazecka**, **Paweł Zmora**, **Elżbieta Lenartowicz Onyekaa**, “The effect of the PKR inhibitor, 2-aminopurine, on the replication of influenza A virus, and segment 8 mRNA splicing”, *Open Life Sciences*, 20, art. nr 20251098, 2025. [DOI: 10.1515/biol-2025-1098](https://doi.org/10.1515/biol-2025-1098)
42. Adam S. Hirschfeld, **Julia O. Misiorek**, **Magdalena Dąbrowska**, Jakub Muszyński, Brandon J. Gerhart, **Michał Zeńczak**, **Magdalena Rakoczy**, **Katarzyna Rolle**, **Paweł M. Świtoński**, Jill S. Napierała, **Luiza Handschuh**, Marek Napierała, Magdalena Badura-Stronka,

“Spinocerebellar ataxia 27B (SCA27B)—a systematic review and a case report of a Polish family”, *Journal of Applied Genetics*, 2025. [DOI: 10.1007/s13353-025-00967-3](https://doi.org/10.1007/s13353-025-00967-3)

43. **Magdalena Rakoczy, Jan Podkowiński, Marek Figlerowicz**, “Overexpression of UGPase and SPP genes in *Nicotiana tabacum* leaves causes accelerated plant development and increased biomass”, *BioTechnologia*, 106, 31-48, 2025. [DOI: 10.5114/bta/201460](https://doi.org/10.5114/bta/201460)
44. Irene Petracci, Sonia Bellini, Katarzyna Goljanek-Whysall, Leo R. Quinlan, **Agnieszka Fiszer**, Ali Cakmak, Cyrille Mesue Njume, Barbara Borroni, Roberta Ghidoni, “Exploring the Role of microRNAs as Blood Biomarkers in Alzheimer’s Disease and Frontotemporal Dementia”, *International Journal of Molecular Sciences*, 26, art. nr 3399, 2025. [DOI: DOI10.3390/ijms26073399](https://doi.org/10.3390/ijms26073399)
45. Zhiyang Feng , Elke Burgermeister , **Anna Philips** , Tao Zuo , Weijie Wen, “The gut virome in association with the bacteriome in gastrointestinal diseases and beyond: roles, mechanisms, and clinical applications”, *Precision Clinical Medicine*, 8, art. nr pbaf010, 2025. [DOI: 10.1093/pcmedi/pbaf010](https://doi.org/10.1093/pcmedi/pbaf010)
46. Alexander Wlodawer, Zbigniew Dauter, Paweł Rubach, Władek Minor, **Mariusz Jaskólski**, Ziqiu Jiang, William Jeffcott, Olga Anosovag, Vitaliy Kurlin, “Duplicate entries in the Protein Data Bank: how to detect and handle them”, *Acta Crystallographica Section D- Structural Biology*, 81, 170-180, 2025. [DOI: 10.1107/S2059798325001883](https://doi.org/10.1107/S2059798325001883)
47. Piotr Michałowski, **Dorota Jakubczyk**, Katarzyna Bielicka-Daszkiewicz, “Optimisation of Synthesis and Effects of Chemical Conditions on Antithyroid Drugs in Model Organiodine Systems”, *Letters in Organic Chemistry*, 2025. [DOI: 10.2174/0115701786342781250317081636](https://doi.org/10.2174/0115701786342781250317081636)
48. Tomasz Laskowski, Michał Kosno, **Witold Andrałojć**, Julia Pakuła, Rafał Stojałowski, Julia Borzyszkowska-Bukowska, Ewa Paluszkievicz, Zofia Mazerska, “The interactions of Pu22 G-quadruplex, derived from *c-MYC* promoter sequence, with antitumor acridine

derivatives—An NMR/MD combined study”, *Molecular Therapy Nucleic Acids*, 36, art. nr 102513, 2025. [DOI: 10.1016/j.omtn.2025.102513](https://doi.org/10.1016/j.omtn.2025.102513)

49. Karolina Kułak, **Anna Samelak-Czajka**, **Małgorzata Marszałek-Zeńczak**, Kornel M. Michalak, **Magdalena Trybus**, Julia Minicka, **Paulina Jackowiak**, Agnieszka Bagniewska-Zadworna “Identification of phloem-specific proteinase structure heterogeneity in sieve element of *Populus trichocarpa*”, *BMC Plant Biology*, 2025. [DOI: 10.1186/s12870-025-06439-4](https://doi.org/10.1186/s12870-025-06439-4)
50. Joanna I. Loch, Izabela Pieróg, **Barbara Imiołczyk**, **Jakub Barciszewski**, Frédéric Marsolais, **Mirostaw Gilski**, **Mariusz Jaskólski**, “Unique double-helical packing of protein molecules in the crystal of potassium-independent L-asparaginase from common bean”, *Acta Crystallographica. Section D: Structural Biology*, 81, 252-264, 2025. [DOI: 10.1107/S205979832500292X](https://doi.org/10.1107/S205979832500292X)
51. **Magdalena Surdyka**, Żaneta Kalinowska-Pośka, Anna Niewiadomska-Cimicka, **Ewelina Jesion**, **Agnieszka Fiszer**, Elisabeth Singer-Mikosch, Lorraine Fievet, **Łukasz Przybył**, Nicholas S. Caron, Michael R. Hayden, Huu Phuc Nguyen, Yvon Trottier, **Maciej Figiel**, “CAG-targeted brain-permeable therapy tested in biallelic humanized polyQ mouse models”, *Molecular Therapy Nucleic Acids*, 36, art. nr 102496, 2025. [DOI: 10.1016/j.omtn.2025.102496](https://doi.org/10.1016/j.omtn.2025.102496)
52. Olgierd Ludwiczak, **Maciej Antczak**, **Marta Szachniuk**, “Assessing interface accuracy in macromolecular complexes”, *PLOS One*, 20, art. nr e0319917, 2025. [DOI: 10.1371/journal.pone.0319917](https://doi.org/10.1371/journal.pone.0319917)
53. **Natalia Bartyś**, **Jolanta Lisowiec-Wąchnicka**, **Anna Pasternak**, “Thermodynamic control of mismatch discrimination for extensive splicing regulation of PKM pre-mRNA”, *RNA*, 31, 475-485, 2025. [DOI: 10.1261/rna.080212.124](https://doi.org/10.1261/rna.080212.124)

54. Yushan Wu, Rui Cheng, Hao Lin, Lili Li, Yongbin Jia, **Anna Philips**, Tao Zuo, Hu Zhang, "Gut virome and its implications in the pathogenesis and therapeutics of inflammatory bowel disease", *BMC Medicine*, 23, art. nr 183, 2025. [DOI: 10.1186/s12916-025-04016-y](https://doi.org/10.1186/s12916-025-04016-y)
55. **Klaudia Wójcik**, **Paulina Krzemińska**, **Anna Kurzyńska-Kokorniak**, "Possible role of human ribonuclease dicer in the regulation of R loops", *FEBS Open Bio*, 2025. [DOI: 10.1002/2211-5463.70026](https://doi.org/10.1002/2211-5463.70026)
56. Weidong Li, Yaru Yang, Man Xiao, Xin Chen, Małgorzata Sterna, **Jacek Błażewicz**, "Scheduling with a discounted profit criterion on identical machines", *Discrete Applied Mathematics*, 367, 195-209, 2025. [DOI: 10.1016/j.dam.2025.02.015](https://doi.org/10.1016/j.dam.2025.02.015)
57. Ielizaveta Gorodetska, Vasyl Lukiyanchuk, Marta Gawin, Myroslava Sliusar, Annett Linge, Fabian Lohaus, Tobias Hölscher, Kati Erdmann, Susanne Fuessel, Angelika Borkowetz, Anna Wojakowska, Daniel Fochtman, Mark Reardon, Ananya Choudhury, Yasmin Antonelli, Aldo Leal-Egaña, Ayse Sedef Köseer, Uğur Kahya, Jakob Püschel, Andrea Petzold, Daria Klusa, Claudia Peitzsch, Romy Kronstein-Wiedemann, Torsten Tonn, **Łukasz Marczak**, Christian Thomas, Piotr Widłak, Monika Pietrowska, Mechthild Krause, Anna Dubrovskaya, "Blood-based detection of MMP11 as a marker of prostate cancer progression regulated by the ALDH1A1-TGF- β 1 signaling mechanism", *Journal of Experimental & Clinical Cancer Research*, 44, art. nr 105, 2025. [DOI: 10.1186/s13046-025-03299-6](https://doi.org/10.1186/s13046-025-03299-6)
58. Runping Su, Weijie Wen, Yufeng Jin, Zhirui Cao, Zhiyang Feng, Jie Chen, Yu Lu, Guicheng Zhou, Chao Dong, Shanshan Gao, Xue Li, Hu Zhang, Kang Chao, Ping Lan, Xiaojian Wu, Anna Philips, Kun Li, Xiang Gao, Fen Zhang, Tao Zuo, "Dietary whey protein protects against Crohn's disease by orchestrating cross-kingdom interaction between the gut phageome and bacteriome", *GUT*, 2025. [DOI: 10.1136/gutjnl-2024-334516](https://doi.org/10.1136/gutjnl-2024-334516)
59. Alva Abrahamsson, Andreas Berner, **Justyna Gołębiewska-Pikuła**, Namrata Chaudhari, Emelie Keskitalo, Cecilia Lindgren, **Marcin K. Chmielewski**, Sjoerd Wanrooij, Erik Chorell, "Linker Design Principles for the Precision Targeting of Oncogenic G-Quadruplex DNA with

G4-Ligand-Conjugated Oligonucleotides”, *Bioconjugate Chemistry*, 2025. DOI: [10.1021/acs.bioconjchem.5c00008](https://doi.org/10.1021/acs.bioconjchem.5c00008)

60. Sebastian Szubert, Magdalena Nadolna, Paweł Wawrzynowicz, Agnieszka Horata, Julia Kołodziejczyk, Łukasz Koberling, Paweł Caputa, **Mikołaj Piotr Zaborowski**, Ewa Nowak-Markwitz, “Surgical Techniques for Radical Trachelectomy”, *Cancers*, 17, art. nr 985, 2025. DOI: [10.3390/cancers17060985](https://doi.org/10.3390/cancers17060985)
61. **Justyna Gołębiewska-Pikuła**, Alva Abrahamsson, Erik Chorell, “Phosphate triester-based multifunctional handles for post-synthetic oligonucleotide functionalization”, *Bioorganic Chemistry*, 157, art. nr 108259, 2025. DOI: [10.1016/j.bioorg.2025.108259](https://doi.org/10.1016/j.bioorg.2025.108259)
62. **Mirosław Gilski**, Mannar R. Maurya, Bogusław Nocek, **Krzysztof Brzeziński**, “Editorial: The influence of metal ions and their complexes on the function and structure of biological macromolecules”, *Frontiers in Chemistry*, 13, art. nr 1563537, 2025. DOI: [10.3389/fchem.2025.1563537](https://doi.org/10.3389/fchem.2025.1563537)
63. Jessica C. Gardner, Katarina Jovanovic, Daniele Ottaviani, Uirá Souto Melo, Joshua Jackson, Rosellina Guarascio, Kalliopi Ziaka, Kwan-Leong Hau, Amelia Lane, Rachel L. Taylor, Niuzheng Chai, Christina Gkertsou, Owen Fernando, **Monika Piwecka**, Michalis Georgiou, Stefan Mundlos, Graeme C. Black, Anthony T. Moore, Michel Michaelides, Michael E. Cheetham, Alison J. Hardcastle, “Inter-chromosomal insertions at Xq27.1 associated with retinal dystrophy induce dysregulation of *LINC00632* and *CDR1as/ciRS-7*”, *American Journal of Human Genetic*, 112, 523-536, 2025. DOI: [10.1016/j.ajhg.2025.01.007](https://doi.org/10.1016/j.ajhg.2025.01.007)
64. Simón Poblete, Mikołaj Młynarczyk, **Marta Szachniuk**, “Unknotting RNA: A method to resolve computational artifacts”, *Plos Computational Biology*, 21, art. nr e1012843, 2025. DOI: [10.1371/journal.pcbi.1012843](https://doi.org/10.1371/journal.pcbi.1012843)
65. Zbigniew Dauter, **Mariusz Jaskólski**, “Honeycombs - their variety, topology and symmetry”, *Acta Crystallographica A- Foundation and Advances*, 81, 159-166, 2025. DOI: [10.1107/S2053273325000889](https://doi.org/10.1107/S2053273325000889)

66. **Linh. H. Tan, Miłosz Ruszkowski**, “ARR1 and AHP interactions in the multi-step phosphorelay system”, 16, 2025. *Frontiers in Plant Science*, [DOI: 10.3389/fpls.2025.1537021](https://doi.org/10.3389/fpls.2025.1537021)
67. **Julia Latowska-Łysiak, Żaneta Zarębska**, Marcin P. Sajek, Adriana Grabowska, Alessia Buratin, **Paweł Głodowicz, Julia O. Misiorek**, Konrad Kuczyński, Stefania Bortoluzzi, Marek Żywicki, Jan G. Kosiński, Agnieszka Rybak-Wolf, Rafał Piestrzeniewicz, Anna M. Barciszewska, **Katarzyna Rolle**, “Transcriptome-wide analysis of circRNA and RBP profiles and their molecular relevance for GBM”, *Molecular Oncology*, 2025. [DOI: 10.1002/1878-0261.70005](https://doi.org/10.1002/1878-0261.70005)
68. **Natalia Szóstak, Michał Budnik, Katarzyna Tomela, Luiza Handschuh, Anna Samelak-Czajka**, Bernadeta Pietrzak, Marcin Schmidt, Mariusz Kaczmarek, Łukasz Galus, Jacek Mackiewicz, Andrzej Mackiewicz, **Piotr Kozłowski, Anna Philips**, “Exploring correlations between gut mycobiome and lymphocytes in melanoma patients undergoing anti-PD-1 therapy”, *Cancer Immunology, Immunotherapy*, 74, art. nr 110, 2025. [DOI: 10.1007/s00262-024-03918-9](https://doi.org/10.1007/s00262-024-03918-9)
69. María J. Esteban-Amo, Amaia Telleria, Dino Gobelli, Pablo Serrano-Lorenzo, Juan J. Tellería, María T. Pérez-García, **Piotr Kozłowski**, Miguel Á. de la Fuente, María Simarro, “Identification of a novel transcript of mouse Sdha”, *BMC Research Notes*, 18, art. nr 83, 2025. [DOI: 10.1186/s13104-025-07149-8](https://doi.org/10.1186/s13104-025-07149-8)
70. **Kamilla Bąkowska-Żywicka, Alicja Rzepczak, Kinga Plawgo, Daria Sobańska, Agata Tyczewska**, “tRNA-Derived Fragments in Age-Related Diseases: A Systematic Review”, *Wiley Interdisciplinary Reviews-RNA*, 16, art. nr e70013, 2025. [DOI: 10.1002/wrna.70013](https://doi.org/10.1002/wrna.70013)
71. Jimmy Erkens, Christian Gagnon, **Anna Jasińska**, Nelson Freimer, Paul J. Grobler, Trudy Turner, Christopher Schmitt, “Evidence of differential selection on CCR5 in African green monkeys (*Chlorocebus sabaeus*), a natural host of SIV, following transplantation to the Caribbean”, *American Journal of Biological Anthropology*, 186, 48, 2025.

72. Arvind Srinivasan, **Dorota Magner, Piotr Kozłowski, Anna Philips**, Arkadiusz Kajdasz, Paweł Wojciechowski, **Marzena Wojciechowska**, "Global dysregulation of circular RNAs in frontal cortex and whole blood from DM1 and DM2", *Human Genetics*, 2025. [DOI: 10.1007/s00439-025-02729-x](https://doi.org/10.1007/s00439-025-02729-x)
73. **Tomasz Mądry**, Jadwiga Gajewy, Marcin Gwit, "Dynamic Point-to-Helical and Point-to-Axial Chirality Transmission and Induction of Optical Activity in Multichromophoric Systems: Basic Principles and Relevant Applications in Chirality Sensing", *Symmetry-Basel*, 17, art. nr 293, 2025. [DOI: 10.3390/sym17020293](https://doi.org/10.3390/sym17020293)
74. Piotr J. Pietras, Monika Chaszczewska-Markowska, Daniel Ghete, **Agata Tyczewska, Kamilla Bąkowska-Żywicka**, "*Saccharomyces cerevisiae* recovery from various mild abiotic stresses: Viability, fitness, and high resolution three-dimensional morphology imaging", *Fungal Genetics and Biology*, 178, art. nr 103975, 2025. [DOI: 10.1016/j.fgb.2025.103975](https://doi.org/10.1016/j.fgb.2025.103975)
75. Mateusz Twardawa, **Piotr Formanowicz**, Dorota Formanowicz, "The Interplay Between Carotid Intima-Media Thickness and Selected Serum Biomarkers in Various Stages of Chronic Kidney Disease", *Biomedicines*, 13, art. nr 335, 2025. [DOI: 10.3390/biomedicines13020335](https://doi.org/10.3390/biomedicines13020335)
76. **Agata Tyczewska, Kamilla Bąkowska-Żywicka**, "Stress-induced ribosomal heterogeneity in *Saccharomyces cerevisiae*: from protein paralogs to regulatory noncoding RNAs", *FEMS Yeast Research*, 25, art. nr foaf050, 2025. [DOI: 10.1093/femsyr/foaf050](https://doi.org/10.1093/femsyr/foaf050)
77. **Marta Sztachera, Weronika Wendlandt-Stanek**, Remigiusz A. Serwa, Luiza Stanaszek, Michał Smuszkiewicz, **Dorota Wronka, Monika Piwecka**, "Interrogation of RNA-bound proteome with XRNAX illuminates molecular alterations in the mouse brain affected with dysmyelination", *Cell Reports*, 44, art. nr 115095, 2025. [DOI: 10.1016/j.celrep.2024.115095](https://doi.org/10.1016/j.celrep.2024.115095)
78. Tatyana Platonova, Oleksii Hrabovskyi, Volodymyr Chernyshenko, Yevhenii Stohnii, Yevhenii Kucheriavyi, Kateryna Baidakova, Daria Korolova, **Anna Urbanowicz**, Serhiy

Komisarenko, "Alternative Role of B/b Knob–Hole Interactions in the Fibrin Assembly", *Biochemistry*, 2025. DOI: [10.1021/acs.biochem.4c00695](https://doi.org/10.1021/acs.biochem.4c00695)

79. Aleksandra Antonczyk, Katarzyna Kluzek, Natalia Herbich, Mahdi Eskandarian Boroujeni, Bart Krist, **Dorota Wronka**, **Anna Karlik**, **Łukasz Przybył**, Adam Plewiński, Joanna Wesoly, Hans A. R. Bluysen, "Identification of ALEKSIN as a novel multi-IRF inhibitor of IRF- and STAT-mediated transcription in vascular inflammation and atherosclerosis", *Frontiers in Pharmacology*, 15, 2025. DOI: [10.3389/fphar.2024.1471182](https://doi.org/10.3389/fphar.2024.1471182)
80. Nivedita Dutta, Indrajit Deb, **Joanna Sarzyńska**, Ansuman Lahiri, "Structural and Thermodynamic Consequences of Base Pairs Containing Pseudouridine and N1-methylpseudouridine in RNA Duplexes", *Chemistry Select*, 10, art. nr e202400006, 2025. DOI: [10.1002/slct.202400006](https://doi.org/10.1002/slct.202400006)
81. Jonathan M. Mudge, Sílvia Carbonell-Sala, Mark Diekhans, Jose Gonzalez Martinez, Toby Hunt, Irwin Jungreis, Jane E. Loveland, Carme Arnan, If Barnes, Ruth Bennett, Andrew Berry, Alexandra Bignell, Daniel Cerdán-Vélez, Kelly Cochran, Lucas T Cortés, Claire Davidson, Sarah Donaldson, Cagatay Dursun, Reham Fatima, Matthew Hardy, Prajna Hebbar, Zoe Hollis, Benjamin T. James, Yunzhe Jiang, Rory Johnson, Gazaldeep Kaur, Mike Kay, Riley J Mangan, Miguel Maquedano, Laura Martínez Gómez, Nourhen Mathlouthi, Ryan Merritt, Pengyu Ni, Emilio Palumbo, Tamara Perteghella, Fernando Pozo, Shriya Raj, Cristina Sisu, Emily Steed, Dulika Sumathipala, Marie-Marthe Suner, **Barbara Uszczyńska-Ratajczak**, Elizabeth Wass, Yucheng T Yang, Dingyao Zhang, Robert D. Finn, Mark Gerstein, Roderic Guigó, Tim J. P. Hubbard, Manolis Kellis, Anshul Kundaje, Benedict Paten, Michael L. Tress, Ewan Birney, Fergal J. Martin, Adam Frankish, "GENCODE 2025: reference gene annotation for human and mouse", *Nucleic Acids Research*, 53, D966-D975, 2025. DOI: [10.1093/nar/gkae1078](https://doi.org/10.1093/nar/gkae1078)
82. Karolina Ciesielska, **Dariusz Wawrzyniak**, Grzegorz Dutkiewicz, Maciej Kubicki, Wojciech Jankowski, Marcin Hoffmann, **Karol Kamel**, **Katarzyna Rolle**, Donata Pluskota-Karwatka, "Diastereoselective synthesis and biological evaluation of new fluorine-containing α -aminophosphonates as anticancer agents and scaffold to human urokinase plasminogen

activator inhibitors”, *European Journal of Medicinal Chemistry*, 283, art. nr 117116, 2025.
[DOI: 10.1016/j.ejmech.2024.117116](https://doi.org/10.1016/j.ejmech.2024.117116)

83. **Carolina Roxo, Anna Pasternak**, “Switching off cancer – An overview of G-quadruplex and i-motif functional role in oncogene expression”, *Bioorganic & Medicinal Chemistry Letters*, 116, art. nr 130038, 2025. [DOI: 10.1016/j.bmcl.2024.130038](https://doi.org/10.1016/j.bmcl.2024.130038)
84. Tatyana Platonova, Oleksii Hrabovskyi, Volodymyr Chernyshenko, Yevhenii Stohnii, Yevhenii Kucheriavyi, Kateryna Baidakova, Daria Korolova, **Anna Urbanowicz**, Serhiy Komisarenko, “Alternative Role of B/b Knob–Hole Interactions in the Fibrin Assembly”, *Biochemistry*, 64, 791–800, 2025. [DOI: 10.1021/acs.biochem.4c00695](https://doi.org/10.1021/acs.biochem.4c00695)
85. Bartosz Naskręcki, Jakub Malinowski, Zbigniew Dauter, **Mariusz Jaskólski**, “Growth functions of periodic space tessellations”, *Acta Crystallographica a- Foundation and Advances*, 81, 64-81, 2025. [DOI: 10.1107/S2053273324010763](https://doi.org/10.1107/S2053273324010763)
86. **Arvind Srinivasan, Emilia Mroczko-Młotek, Marzena Wojciechowska**, “Circular RNA Formation and Degradation Are Not Directed by Universal Pathways”, *International Journal of Molecular Sciences*, 26, art. nr 726, 2025. [DOI: 10.3390/ijms26020726](https://doi.org/10.3390/ijms26020726)
87. **Kinga Pokrywka, Marta Grzechowiak, Joanna Śliwiak, Paulina Worsztynowicz, Joanna I. Loch, Miłosz Ruszkowski, Mirosław Gilski, Mariusz Jaskólski**, “Controlling enzyme activity by mutagenesis and metal exchange to obtain crystal structures of stable substrate complexes of Class 3 l-asparaginase”, *FEBS Journal*, 2025. [DOI: 10.1111/febs.17388](https://doi.org/10.1111/febs.17388)
88. **Aleksandra Jarmołowicz, Nivedita Dutta, Witold Andrałojć, Joanna Sarzyńska, Grzegorz Framski, Daniel Baranowski, Jerzy Boryski, Ansuman Lahiri, Zofia Gdaniec, Elżbieta Kierzek, Ryszard Kierzek**, “The oligonucleotides containing N7-regioisomer of guanosine: influence on thermodynamic properties and structure of RNA duplexes”, *RNA*, 31, 86-99, 2025. [DOI: 10.1261/rna.080106.124](https://doi.org/10.1261/rna.080106.124)