Number	Description	Referenca		Impact	Organizational Unit
1.	C. Tassel, ..., **G. Močnik, K. Džepina** et al	***Nature*** 647, 109-114 (2025)	Oxidative potential of atmospheric particles in Europe and exposure scenarios	Oxidative potential is a new legislative parameter in the determination of air pollution - our campaigns determined the 3 out of 4 highest values among 43 sites in Europe, showing that in addition to traffic and wood burning, the insdutrial emissions also impact health.	Center for Atmospheric Research
2.	J. Morgan, ... **G. De Ninno** et al.	***Nature Photonics*** 19, 946–951 (2025)	Poincaré beams from a free electron laser	Complex polarization states of light can be generated directly at an extreme-ultraviolet free-electron laser, without the need for additional optics.	Laboratory of Organic Matter Physics
3.	A. Semerci, ..., **E. Saim, M. Fanetti** et al	***Advance Functional Materials 35***, 2423109 (2025)	The Role of Fluorine-Functionalized Organic Spacers for Defect Passivation and Low-Dimensional Phase Formation in 3D MAPI Perovskite	This study demonstrates that fluorine-containing molecules in combination with the formamidinium cation effectively passivate perovskite materials, improving the efficiency and long-term stability of perovskite solar cells.	Materials Research Laboratory
4.	Y. Liu,... A. **Mavrič, I. Arčon, M. Valant** et al.	**ACS energy letters** 10, 1911-1920 (2025)	Lattice-matched Ta3N5/Nb5N6 interface enables a bulk charge separation efficiency of close to 100%	The system achieved nearly perfect charge separation and record performance, highlighting the crucial role of fabrication strategy and interface control.	Materials Research Laboratory
5.	**K. Klemenčič,..., N Zabukovec Logar**, et al.	***Angewandte Chemie***, 64, e202424747 (2025)	Amine-Functionalized Triazolate-Based Metal–Organic Frameworks for Enhanced Diluted CO2 Capture Performance	New MOF material (NICS-24) significantly outperforms the compositionally related benchmark MOF CALF-20 in low concentration CO2 capture.	School of Science

6.	A. J. Levan,... **A. Gomboc** et al	***Nature astronomy*** 9, 1375-1386 (2025)	Fast X-ray transient EP240315A from a Lyman-continuum-leaking galaxy at z ≈ 5	The study shows that fast X-ray transients can serve as a new and powerful probe of massive star deaths, GRB physics, and ionizing-photon-leaking galaxies during the epoch of reionization, significantly expanding the role of X-ray transient surveys in early-universe astrophysics.	Center for Astrophysics and Cosmology
7.	M. Fanculli, ..., **G. De Ninno** et al	**Physical Review Letters** 134, 156701 (2025)	Magnetic Vortex Dynamics Probed by Time-Resolved Magnetic Helicoidal Dichroism	By revealing how complex magnetic patterns can be optically created and manipulated, it opens new perspectives for future magnetic devices and data storage technologies.	Laboratory of Quantum Optics
8.	A. A. Halim,..., **A. Filipčič, J.P. Lundquist, S. U. Shivashankara, S. Stanič, S. Vorobiov, D. Zavrtanik, M. Zavrtanik** et al	**Physical review letters** 134, 021001 (2025)	Inference of the mass composition of cosmic rays with energies from 1018.5 to 1020 eV using the Pierre Auger Observatory and deep learning	A novel approach to the study of the highest-energy particles in the universe and their origins using machine learning.	Center for Astrophysics and Cosmology
9.	**I. Cikajlo** et al.	***Annals of medicine*** 57, 1-9 (2025)	The effect of weight-bearing training with visual feedback on balance and prosthetic loading in trans-tibial amputees following vascular disease: a pilot randomized control trial	A pilot randomized controlled trial demonstrated that weight-bearing training with real-time visual feedback may significantly improve balance and prosthetic loading, increse gait speed and reduce reliance on walking aids in trans-tibial amputees with vascular disease.	Centre for Information Technologies and Applied Mathematics
10.	**M. Okorn, ..., N. Novak Tušar, P. Djinović**	***Carbon Energy***, e70102 (2025)	Simultaneous Photoactivation of Copper and Ti-Doped CeO2−x Enables Optimal Acceleration of the RWGS Reaction	We studied the effect of visible light on kinetics of CO2 reduction in to CO and confirmed that a change in the	School of Science

				reaction mechanism occurs at an almost 60-fold higher reaction rate.	