

AI systems to ensure cyber security in space

Pelin Manti, Nebile; **Carlo, Antonio**; Markova, Rada; Jha, Devanshu; Breda, Paola; Abdin, Adam; Boschetti, Nicolo IAC 2022 congress proceedings 2022 / art. 70423 <https://dl.iafastro.directory/event/IAC-2022/paper/70423/> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Anharmonic vibrational spectrum and experimental matrix isolation study of thioformic acid conformers-potential candidates for molecular cloud and solar system observations?

Lignell, A.; **Osadchuk, Irina**; Rasanen, M.; Lundell, J. The astrophysical journal 2021 / 7 p. : ill <https://doi.org/10.3847/1538-4357/ac06d0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A bayesian estimation of the Milky Way's circular velocity curve using Gaia DR3

Pöder, Sven; Benito, María; Pata, Joosep; Kipper, Rain; Ramler, Heleri; Hütsi, Gert; Kolka, Indrek; Thomas, Guillaume F. Astronomy and Astrophysics 2023 / art. A134 <https://doi.org/10.1051/0004-6361/202346474> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cartography of the Apollo 12 landing site from photogrammetric analysis of surface imagery

Pustönski, Vladislav-Veniamin Planetary and space science 2021 / art. 105133, 13 p. : ill <https://doi.org/10.1016/j.pss.2020.105133> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Consistency of JWST black hole observations with NANOGrav gravitational wave measurements

Ellis, John; Fairbairn, Malcolm; Hütsi, Gert; **Urrutia, Juan**; Vaskonen, Ville; Veermäe, Hardi Astronomy and astrophysics 2024 / art. A270 <https://doi.org/10.1051/0004-6361/202450846> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cyber range and digital twin technologies for space resiliency and security

Carlo, Antonio; Manti, Nebile Pelin; Edl, András; Bintang Alam Semesta Wisran, A.M.; Breda, Paola 57th IAA Symposium on Safety, Quality and Knowledge Management in Space Activities : held at the 75th International Astronautical Congress (IAC 2024) : Milan, Italy, 14-18 October 2024 2024 / p. 322-332 <https://doi.org/10.52202/078376-0032> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Cyber vulnerabilities and risks of AI technologies in space applications

Breda, Paola; Abdin, Adam; Markova, Rada; Jha, Devanshu; **Carlo, Antonio**; Pelin Manti, Nebile IAC 2022 congress proceedings 2022 / art. 70380 <https://dl.iafastro.directory/event/IAC-2022/paper/70380/> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Development of quality and knowledge management system for the first satellite mission in an educational institution based on ECSS standards

Vihmand, Mart; **Dihuliya, Divya**; **Ehrminger, Robin** 66th International Astronautical Congress 2015 (IAC 2015) : Space - The Gateway for Mankind's Future, Jerusalem, Israel, 12-16 October 2015 2015 / p. 9717-9719 <https://iafastro.directory/iac/paper/id/31145/summary/> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Diagenetic Mg-calcite overgrowths on foraminiferal tests in the vicinity of methane seeps

Panieri, Giuliana; **Lepland, Aivo**; Whitehouse, Martin J.; Wirth, Richard Earth and planetary science letters 2017 / p. 203-212 : ill <https://doi.org/10.1016/j.epsl.2016.10.024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eccentricity effects on the supermassive black hole gravitational wave background

Raidal, Juhan; **Urrutia, Juan**; Vaskonen, Ville; Veermäe, Hardi Astronomy and astrophysics 2024 / art. A212 <https://doi.org/10.1051/0004-6361/202451345> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of glacial drainage water on the CO2 system and ocean acidification state in an Arctic tidewater-glacier fjord during two contrasting years

Fransson, Agneta; Chierici, Melissa; Nomura, Daiki; Granskog, Mats A.; Kristiansen, Svein; **Martma, Tõnu**; Nehrke, Gernot Journal of Geophysical Research: Oceans 2015 / p. 2413 - 2429 <https://doi.org/10.1002/2014JC010320> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enhanced turbulence driven by mesoscale motions and flow-topography interaction in the Denmark Strait Overflow plume

Schaffer, Janin; Kanzow, Torsten; **Zhubas, Victor** Journal of geophysical research. Oceans 2016 / p. 7650-7672 : ill <https://doi.org/10.1002/2016JC011653> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

ESTCube-1 in-orbit experience and lessons learned

Slavinskis, Andris; Pajusalu, Mihkel; Kuuste, Henri; Ilbis, Erik; Eenmäe, Tõnis; Sunter, Indrek; Laizans, Kaspars; **Ehrpais, Hendrik**; **Liias, Paul**; Kulu, Erik IEEE aerospace and electronic systems magazine 2015 / art. 7286959, p. 12-22 : ill <https://doi.org/10.1109/MAES.2015.150034> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

ESTCube-1 nanosatellite for electric solar wind sail demonstration in low Earth Orbit

Kulu, Erik; Slavinskis, Andris; Kvell, Urmas; Pajusalu, Mihkel; Kuuste, Henri; Sünter, Indrek; Ilbis, Erik; Eenmäe, Tõnis; Laizāns, Kaspars; **Vahter, Andres**; Eilonen, Elo; Kalde, Jaanus; **Liias, Paul**; Sisask, Andreas; Kimmel, Lauri; Allik, Viljo; Latt, Silver; Noorma,

Mart 64th International Astronautical Congress 2013 (IAC 2013) : Beijing, China, 23 - 27 September 2013 / p. 3898 - 3902
https://www.researchgate.net/publication/289349984_ESTCube-1_nanosatellite_for_electric_solar_wind_sail_demonstration_in_low_Earth_Orbit
[Conference Proceedings at Scopus](#) [Article at Scopus](#)

Feature article: Firmware updating systems for nanosatellites

Sünter, Indrek; Slavinskis, Andris; Kvell, Urmas; **Vahter, Andres**; Kuuste, Henri; Noorma, Mart; Kutt, Johan; Vendt, Riho; Tarbe, Karl; Pajusalu, Mihkel; Veske, Mihkel; Ilves, Taavi IEEE Aerospace and Electronic Systems Magazine 2016 / p. 36 - 44
<https://doi.org/10.1109/MAES.2016.150162> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

First ice core records of NO₃– stable isotopes from Lomonosovfonna, Svalbard

Vega, Carmen Paulina; Pohjola, Veijo Allan; Samyn, Denis; Pettersson, Rickard; Isaksson, Elisabeth; Björkman, Mats P.; **Martma, Tõnu**; Marca, Alina D.; Kaiser, Jan Journal of Geophysical Research 2015 / p. 313 - 330 <https://doi.org/10.1002/2013JD020930> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Going digital, staying secure : cyber ERM activities in a post-pandemic setup

Carlo, Antonio; Casamassima, Francesca IAC 2022 congress proceedings 2022 / art. 70417
<https://iafastro.directory/iac/paper/id/70417/summary/> [Conference proceedings at Scopus](#) [Article at Scopus](#)

High-energy sources at low radio frequency : the Murchison Widefield Array view of Fermi blazars

Gioletti, M.; Massaro, F.; D'Abrusco, R.; **Kudryavtseva, Nadezhda** Astronomy and astrophysics 2016 / p. 1-9 : ill
<https://doi.org/10.1051/0004-6361/201527817> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hydrothermal regeneration of ammonium as a basin-scale driver of primary productivity

Stüeken, Eva E.; Kirsimäe, Kalle; **Lepland, Aivo**; Prave, Anthony R. Astrobiology 2023 / p. 195-212
<https://doi.org/10.1089/ast.2021.0203> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In search of the biggest bangs since the big bang

Ellis, John; **Urrutia, Juan**; Fairbairn, Malcolm; **Vaskonen, Ville** International Journal of Modern Physics D 2024 / art. 2440004
<https://doi.org/10.1142/S0218271824400042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Latest Ordovician jawed polychaetes, chitinozoans and depositional environments of the Levín section, Prague Basin, Czech Republic

Tonarová, Petra; Vodrážková, Stanislava; **Hints, Olle**; **Nõlvak, Jaak**; Kubajko, Michal; Čáp, Pavel Geobios 2023 / p. 179-198 : ill
<https://doi.org/10.1016/j.geobios.2023.01.008> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A matched filter technique for slow radio transient detection and first demonstration with the Murchison Widefield Array

Feng, L.; Vaulin, R.; Hewitt, J. N.; Remillard, R.; **Kudryavtseva, Nadezhda** The astronomical journal 2017 / art. 98
<https://doi.org/10.3847/1538-3881/153/3/98> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Monograin layer solar cell for future lunar outpost

Kristmann, Katriin; **Altosaar, Mare**; **Raudoja, Jaan**; **Grossberg, Maarja**; **Krustok, Jüri**; **Raadi, Taavi** IAC 2020 congress proceedings Proceedings of the International Astronautical Congress, IAC 2020 / 7 p. : ill [Monograin layer solar cell for future lunar outpost](#) <https://dl.iafastro.directory/event/IAC-2020/paper/56905/> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Multiple Palaeoproterozoic carbon burial episodes and excursions

Martin, Adam P.; Prave, Anthony R.; Condon, Dan J.; **Lepland, Aivo**; Fallick, Anthony Edward; Romashkin, Alexander E.; Medvedev, Pavel V.; Rychanchik, Dmitry V. Earth and Planetary Science Letters 2015 / p. 226 - 236 <https://doi.org/10.1016/j.epsl.2015.05.023> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The Ordovician bioclaustration revolution

Vinn, Olev; Wilson, Mark A.; Ernst, Andrej; **Toom, Ursula** Geobios 2023 / p. 145-151 <https://doi.org/10.1016/j.geobios.2022.10.007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Palatini F(R,X): a new framework for inflationary attractors

Dioguardi, Christian; Racioppi, Antonio Physics of the Dark Universe 2024 / art. 101509, 8 p. : ill
<https://doi.org/10.1016/j.dark.2024.101509> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photogrammetry of Apollo 11 surface imagery

Pustönski, Vladislav-Veniamin; Jones, Eric M. Journal of the British Interplanetary Society 2014 / p. 390-398 : ill <https://bis-space.com/shop/product/photogrammetry-of-apollo-11-surface-imagery/> [Journal metrics at Scopus](#) [Article at Scopus](#)

Probing supermassive black hole seed scenarios with gravitational-wave measurements

Ellis, John; Fairbairn, Malcolm; **Urrutia, Juan**; **Vaskonen, Ville** The astrophysical journal 2024 / 7 p <https://doi.org/10.3847/1538-4357/ad27d5> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Producing pyrite based solar panels for the future lunar habitat

Kristmann, Katriin; Raadik, Taavi; Heemskerk, Marc Vincent; Woods, Arthur; Vogel, Andreas; Collins, Patrick; Gasperovics, Dimitrijis; Makaya, Advenit IAF Space Power Symposium : held at the 75th International Astronautical Congress (IAC 2024) : Milan, Italy, 14-18 October 2024 / p. 312 - 317 <https://doi.org/10.52202/078370-0035> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Prospects for future binary black hole gravitational wave studies in light of PTA measurements

Ellis, John; Fairbairn, Malcolm; Hütsi, Gert; Raidal, Martti; **Urrutia Perez, Juan;** Vaskonen, Ville; Veermäe, Hardi Astronomy and astrophysics 2023 / art. A38 <https://doi.org/10.1051/0004-6361/202346268> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pyrite as prospective monograin layer solar cell absorber material for in-situ solar cell fabrication on the Moon

Kristmann, Katriin; Raadik, Taavi; Altosaar, Mare; Grossberg, Maarja; Krustok, Jüri; Pilvet, Maris; Mikli, Valdek; Kauk-Kuusik, Marit IAC 2021 congress proceedings 2021 / p. 1-6 : ill <https://deepzone3.ttu.ee/~juri.krustok/PDF-s/IAC-21.C3.4.7.x64087.pdf> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Pyrite based solar panel in-situ production on the Moon for space-based solar power

Raadik, Taavi; Kristmann, Katriin; Ciazela, J.; Jozefowicz, M.; Kowalinski, M.; Sniadkowski, A.; Bakala, J.; Steslicki, M.; Zalewska, N.; Pieterek, B.; Ciazela, M.; Marciniak, D. IAC 2023 congress proceedings 2023 / 9 p. : ill <https://iafastro.directory/iac/paper/id/79277/abstract-pdf/IAC-23.D3.2B.6.x79277.brief.pdf?2023-03-30.12:16:44> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Pyrite FeS₂ solar cells fabrication for lunar base energy production

Kristmann, Katriin; Raadik, Taavi; Altosaar, Mare; Grossberg-Kuusik, Maarja; Krustok, Jüri; Pilvet, Maris; Mikli, Valdek; Kauk-Kuusik, Marit; Makaya, Advenit IAC 2022 congress proceedings 2022 / art. 190266 [Pyrite FeS₂ solar cells fabrication for lunar base energy production](#) [Conference proceedings at Scopus](#) [Article at Scopus](#)

Recent climate tendencies on an East Antarctic ice shelf inferred from a shallow firn core network

Schlosser, Elisabeth; Anshütz, H.; Divine, Dmitry V.; **Martma, Tõnu;** Sinisalo, A.; Altnau, S.; Isaksson, Elisabeth Journal of geophysical research 2014 / p. 6549-6562 : ill <https://doi.org/10.1002/2013JD020818> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Recently accelerated oxygen consumption rates amplify deoxygenation in the Baltic Sea

Meier, H. E. Markus; **Väli, Germa;** Naumann, Michael; Eilola, Kari; Frauen, Claudia Journal of geophysical research : oceans 2018 / p. 3227-3240 : ill <https://doi.org/10.1029/2017JC013686> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Regulatory frameworks for lunar resources exploitation and insights from deep sea mining practices

Bruseghello, Ilenia; **Carlo, Antonio;** Pessôa-Lopes, Isabel 22nd IAA Symposium on Visions and Strategies for the Future : held at the 75th International Astronautical Congress (IAC 2024) : Milan, Italy, 14-18 October 2024 / p. 374-381 <https://doi.org/10.52202/078375-0046> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Securing outer space through cyber : risks and countermeasures

Carlo, Antonio; Casamassima, Francesca IAC 2021 congress proceedings 2021 / art. 64939 <https://dl.iafastro.directory/event/IAC-2021/paper/64939/> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Silurian records of carbon and sulfur cycling from Estonia : The importance of depositional environment on isotopic trends

Richardson, Jocelyn A.; Keating, Colin; **Lepland, Aivo; Hints, Olle** Earth and planetary science letters 2019 / p. 71-82 : ill <https://doi.org/10.1016/j.epsl.2019.01.055> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Simulated halocline variability in the Baltic Sea and its impact on hypoxia during 1961-2007

Väli, Germa; Meier, H. E. Markus; **Elken, Jüri** Journal of Geophysical Research: Oceans 2013 / p. 6982 - 7000 <https://doi.org/10.1002/2013JC009192> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A snapshot of internal waves and hydrodynamic instabilities in the southern Bay of Bengal

Lozovatsky, Iossif; Wijesekera, Hemantha; Jarosz, Ewa; **Lilover, Madis-Jaak** Journal of geophysical research. Oceans 2016 / p. 5898-5915 : ill <https://doi.org/10.1002/2016JC011697> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Snow contribution to first-year and second-year Arctic sea ice mass balance north of Svalbard

Granskog, Mats A.; Rösel, Anja; Dodd, Paul A.; Divine, Dmitry V.; Gerland, Sebastian; **Martma, Tõnu;** Leng, Melanie J. Journal of geophysical research : oceans 2017 / p. 2539-2549 : ill <https://doi.org/10.1002/2016JC012398> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Space industry : applications and implications of digital transformation

Carlo, Antonio; Casamassima, Francesca IAC 2021 congress proceedings 2021 / art. 65506 <https://dl.iafastro.directory/event/IAC-2021/paper/65506/>

[2021/paper/65506/ Conference Proceedings at Scopus Article at Scopus](#)

The geology of the Malingen structure : a probable doublet to the Lockne marine-target impact crater, central Sweden

Ormö, J.; Sturkell, Erik; **Nölvak, Jaak** Meteoritics & planetary science 2014 / p. 313-327 : ill <https://doi.org/10.1111/maps.12251> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

Time-varying ionosonde trend : case study of Sodankylä hmF2 data 1957-2014

Roininen, Lassi; Laine, Marko; Ulich, Thomas Journal of geophysical research. Space physics 2015 / p. 6851-6859 : ill <https://doi.org/10.1002/2015JA021176> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

Towards a resilient cyber architecture for space infrastructures : mitigating the new attack vectors

Carlo, Antonio; Pelin Manti, Nebile; Breda, Paola; Rollinde de Beaumont, Maelys; Jha, Devanshu IAC 2022 congress proceedings Proceedings of the International Astronautical Congress, IAC 2023 / art. 78079 <https://dl.iafastro.directory/event/IAC-2023/paper/78079/> [Towards a resilient cyber architecture for space infrastructures: mitigating the new attack vectors Conference at Scopus Article at Scopus](#)

Understanding space vulnerabilities : developing technical and legal frameworks for AI and cybersecurity in the spatial field

Carlo, Antonio; Pelin Manti, Nebile; A.S.W.A.M., Bintang; Casamassima, Francesca; Boschetti, Nicolo; Breda, Paola; Rahloff, Tobias IAC 2022 congress proceedings 2022 / art. 70406 <https://dl.iafastro.directory/event/IAC-2022/paper/70406/> [Conference proceedings at Scopus Article at Scopus](#)

The (un)predictable challenges and opportunities in a changing world

Carlo, Antonio; Pessôa-Lopes, Isabel; Bruseghello, Ilenia IAF Businesses and Innovation Symposium held at the 75th International Astronautical Congress (IAC 2024) : Milan, Italy, 14-18 October 2024 2024 / p. 354 - 362 <https://doi.org/10.52202/078383-0026> [Conference proceedings at Scopus Article at Scopus](#)

Workforce management in small student run satellite program

Dihuliya, Divya; **Vihmand, Mart**; **Ehrminger, Robin** 66th International Astronautical Congress 2015 (IAC 2015) : Space - The Gateway for Mankind's Future, Jerusalem, Israel, 12-16 October 2015 2015 / p. 10135-10137 <https://dl.iafastro.directory/event/IAC-2015/paper/31126/> [Conference proceedings at Scopus Article at Scopus](#)