

MSA H2020 COFUND : NUMERICS (800945-2)

List of articles in journals

1. Porro A., Duguet T., Ebran J.P., Frosini M., Roth R., Somà V.
[Ab initio description of monopole resonances in light- and medium-mass nuclei: I. Technical aspects and uncertainties of ab initio PGCM calculations](#)
The European physical journal. A (2024), 60 (6), art. no. 133
[DOI: 10.1140/epja/s10050-024-01340-4](#)
2. Porro A., Duguet T., Ebran J.-P., Frosini M., Roth R., Somà V.
[Ab initio description of monopole resonances in light- and medium-mass nuclei: II. Ab initio PGCM calculations in \$^{46}\text{Ti}\$, \$^{28}\text{Si}\$ and \$^{24}\text{Mg}\$](#)
The European physical journal. A (2024), 60 (6), art. no. 134
[DOI: 10.1140/epja/s10050-024-01341-3](#)
3. Porro A., Duguet T., Ebran J.-P., Frosini M., Roth R., Somà V.
[Ab initio description of monopole resonances in light- and medium-mass nuclei: III. Moments evaluation in ab initio PGCM calculations](#)
The European physical journal. A (2024), 60 (7), art. no. 155
[DOI: 10.1140/epja/s10050-024-01377-5](#)
4. Porro A., Duguet T., Ebran J.-P., Frosini M., Roth R., Somà V.
[Ab initio description of monopole resonances in light- and medium-mass nuclei: IV. Angular momentum projection and rotation-vibration coupling](#)
The European physical journal. A (2024), 60 (11), art. no. 233
[DOI: 10.1140/epja/s10050-024-01448-7](#)
5. Zeitler L., André K., Alberti A., Denby Wilkes C. , Soutourina J., Goldar A.
[A genome-wide comprehensive analysis of nucleosome positioning in yeast](#)
PLoS Computational Biology (2024), 20 (1), art no. e1011799
[DOI: 10.1371/journal.pcbi.1011799](#)
6. Assogba K., Allaire G., Bourhrara L.
[Analysis of a Combined Spherical Harmonics and Discontinuous Galerkin Discretization for the Boltzmann Transport Equation](#)
(2025), 25 (2), pp. 287 - 311
[DOI: 10.1515/cmam-2024-0021](#)
7. Zeitler L., Wilkes C.D., Goldar A., Soutourina J.
[A quantitative modelling approach for DNA repair on a population scale](#)
PLoS Computational Biology (2022), 18 (9), art. no. e1010488
[DOI: 10.1371/journal.pcbi.1010488](#)
8. G. Fausti, E. Tjhung, M. E. Cates, C. Nardini.
[Capillary Interfacial Tension in Active Phase Separation.](#)
Physical Review Letters, 2021, 127, art. no. 6
[DOI: 10.1103/PhysRevLett.127.068001](#)
9. Gunasekaran H., Azizi L., van Wassenhove V., Herbst S.K.

[Characterizing endogenous delta oscillations in human MEG](#)

Scientific Reports (2023), 13 (1), art. no. 11031

[DOI: 10.1038/s41598-023-37514-1](#)

10. Wang Y., Li K., Soisson F., Becquart C.S.
[Combining DFT and CALPHAD for the development of on-lattice interaction models: The case of Fe-Ni system](#)
Physical Review Materials (2020), 4 (11), art. no. 113801
[DOI: 10.1103/PhysRevMaterials.4.113801](#)
11. Cueto O., Trabelsi A., Cagli C., Cyrille M.C.
[Coupling a phase field model with an electro-thermal solver to simulate PCM intermediate resistance states for neuromorphic computing](#)
Solid-State Electronics (2023), 200, art. no. 108542
[DOI: 10.1016/j.sse.2022.108542](#)
12. Śliwowski M., Martin M., Souloumiac A., Blanchart P., Aksenova T.
[Decoding ECoG signal into 3D hand translation using deep learning](#)
Journal of Neural Engineering (2022), 19 (2), art. no. 026023
[DOI: 10.1088/1741-2552/ac5d69](#)
13. Daniel G., Yahiaoui M.-B., Comtat C., Jan S., Kochebina O., Martinez J.-M., Sergeyeva V., Sharyy V., Sung C.-H., Yvon D.
[Deep learning reconstruction with uncertainty estimation for \$\gamma\$ photon interaction in fast scintillator detectors](#)
Engineering Applications of Artificial Intelligence (2024), 131, art. no. 107876
[DOI: 10.1016/j.engappai.2024.107876](#)
14. Simkina P.
[Deep learning techniques for energy clustering in the CMS electromagnetic calorimeter](#)
Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, (2023), 1049, art. no. 168082
[DOI: 10.1016/j.nima.2023.168082](#)
15. Scalesi A., Duguet T., Frosini M., Somà V.
[Deformed natural orbitals for ab initio calculations](#)
Phys. Rev. D (2025), 61 (1), art. no. 1
[DOI: 10.1140/epja/s10050-024-01466-5](#)
16. Sung C.-H., Cappellugola L., Follin M., Curtoni S., Dupont M., Morel C., Galindo-Tellez A., Chyzh R., Breton D., Maalmi J., Yvon D., Sharyy V.
[Detailed simulation for the ClearMind prototype detection module and event reconstruction using artificial intelligence](#)
Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment (2023), 1053, art. no. 168357
[DOI: 10.1016/j.nima.2023.168357](#)
17. Braccio S., Le Pierrès N., Tauveron N., Chandez B., Phan H.T.

[Development of a cooling and power generation prototype integrating an axial micro-turbine in an absorption chiller](#)

Applied Thermal Engineering (2023), 232, art. no. 121026

[DOI: 10.1016/j.applthermaleng.2023.121026](#)

18. Zhang X., Nikolayev V.S.
[Dewetting acceleration by evaporation](#)
Journal of Fluid Mechanics (2022), 948, art. no. A49
[DOI: 10.1017/jfm.2022.725](#)
19. Vojáček L., Chshiev M., Li J.
[Domain Wall Migration-Mediated Ferroelectric Switching and Rashba Effect Tuning in GeTe Thin Films](#)
ACS Applied Electronic Materials (2024), 6 (5), pp. 3754 - 3758
[DOI: 10.1021/acsaelm.4c00392](#)
20. Grangeat P., Duval Comsa M.-P., Koenig A., Phlypo R.
[Dynamic Modeling of Carbon Dioxide Transport through the Skin Using a Capnometry Wristband](#)
Sensors (2023), 23 (13), art. no. 6096
[DOI: 10.3390/s23136096](#)
21. Gondová A., Neumane S., Arichi T., Dubois J.
[Early Development and Co-Evolution of Microstructural and Functional Brain Connectomes: A Multi-Modal MRI Study in Preterm and Full-Term Infants](#)
Human Brain Mapping (2025), 46 (5), art. no. e70186
[DOI: 10.1002/hbm.70186](#)
22. Neumane S., Gondova A., Leprince Y., Hertz-Pannier L., Arichi T., Dubois J.
[Early structural connectivity within the sensorimotor network: Deviations related to prematurity and association to neurodevelopmental outcome](#)
Frontiers in Neuroscience (2022), 16, art. no. 932386
[DOI: 10.3389/fnins.2022.932386](#)
23. Quadri V., Tamain P., Marandet Y., Bufferand H., Rivals N., Ciraolo G., Falchetto G.L., Düll R., Sureshkumar S., Varadarajan N., Yang H., Reimerdes H., Oliveira D.S., Mancini D.
[Edge plasma turbulence simulations in detached regimes with the SOLEDGE3X code](#)
Nuclear Materials and Energy (2024), 41, art. no. 101756
[DOI: 10.1016/j.nme.2024.101756](#)
24. Nguyen H.C., Tran Q.T., Besanger Y.
[Effectiveness of BESS in Improving Frequency Stability of an Island Grid](#)
IEEE Transactions on Industry Applications (2024), 60 (6), pp. 8203 - 8212
[DOI: 10.1109/TIA.2024.3443241](#)
25. Li K., Fu C.-C., Schneider A.
[Effects of magnetic excitations and transitions on vacancy formation: Cases of fcc Fe and Ni compared to bcc Fe](#)
Phys. Rev. B (2021), 104 (10), art. no. 104406

[DOI: 10.1103/PhysRevB.104.104406](https://doi.org/10.1103/PhysRevB.104.104406)

26. Marini S., Grech M., Kleij P.S., Raynaud M., Riconda C.
[Electron acceleration by laser plasma wedge interaction](#)
Physical Review Research (2023), 5 (1), art. no. 013115
[DOI: 10.1103/PhysRevResearch.5.013115](https://doi.org/10.1103/PhysRevResearch.5.013115)
27. Braccio S., Phan H.T., Tauveron N., Le Pierrès N., Arteconi A.
[Energy, exergy and exergoeconomic analysis and optimisation of the scale-up of a combined ammonia-water absorption pilot plant producing electricity and refrigeration](#)
Energy Conversion and Management (2023), 278, art. no. 116686
[DOI: 10.1016/j.enconman.2023.116686](https://doi.org/10.1016/j.enconman.2023.116686)
28. Guillet Q., Vojáček L., Dosenovic D., Ibrahim F., Boukari H., Li J., Choueikani F., Ohresser P., Ouerghi A., Mesple F., Renard V., Jacquot J.-F., Jalabert D., Okuno H., Chshiev M., Vergnaud C., Bonell F., Marty A., Jamet M.
[Epitaxial van der Waals heterostructures of Cr₂Te₃ on two-dimensional materials](#)
Physical Review Materials (2023), 7 (5), art. no. 054005
[DOI: 10.1103/PhysRevMaterials.7.054005](https://doi.org/10.1103/PhysRevMaterials.7.054005)
29. Wittig S., Berchet A., Pison I., Saunois M., Thanwerdas J., Martinez A., Paris J.-D., Machida T., Sasakawa M., Worthy D.E.J., Lan X., Thompson R.L., Sollum E., Arshinov M.
[Estimating methane emissions in the Arctic nations using surface observations from 2008 to 2019](#)
Atmospheric Chemistry and Physics (2023), 23 (11), pp. 6457 - 6485
[DOI: 10.5194/acp-23-6457-2023](https://doi.org/10.5194/acp-23-6457-2023)
30. Scalesi A., Barbieri C., Vigezzi E.
[Expansion of one-, two- and three-body matrix elements on a generic spherical basis for nuclear ab initio calculations](#)
Annals of Physics (2024), 467, art. no. 169688
[DOI: 10.1016/j.aop.2024.169688](https://doi.org/10.1016/j.aop.2024.169688)
31. Vojáček L., Medina Dueñas J., Li J., Ibrahim F., Manchon A., Roche S., Chshiev M., García J.H.
[Field-Free Spin-Orbit Torque Switching in Janus Chromium Dichalcogenides](#)
Nano Letters (2024), 24 (38), pp. 11889 - 11894
[DOI: 10.1021/acs.nanolett.4c03029](https://doi.org/10.1021/acs.nanolett.4c03029)
32. Galazo García R., Brax P., Valageas P.
[Formation of solitons and their transitions in scalar-field dark matter models with a nonpolynomial self-interaction potential](#)
(2025), 111 (6), art. no. 063511
[DOI: 10.1103/PhysRevD.111.063511](https://doi.org/10.1103/PhysRevD.111.063511)
33. André K.M., Giordanengo Aiach N., Martinez-Fernandez V., Zeitler L., Alberti A., Goldar A., Werner M., Denby Wilkes C., Soutourina J.
[Functional interplay between Mediator and RSC chromatin remodeling complex controls nucleosome-depleted region maintenance at promoters](#)

34. Granados G.E., Gatti F., Miorelli R., Robert S., Clouteau D.
[Generative domain-adapted adversarial auto-encoder model for enhanced ultrasonic imaging applications](#)
IUTAM Symposium (2024), 148, art. no. 103234
[DOI: 10.1016/j.ndteint.2024.103234](https://doi.org/10.1016/j.ndteint.2024.103234)
35. Li K., Fu C.-C.
[Ground-state properties and lattice-vibration effects of disordered Fe-Ni systems for phase stability predictions](#)
Phys. Rev. Mat. (2020), 4 (2), art. no. 023606
[DOI: 10.1103/PhysRevMaterials.4.023606](https://doi.org/10.1103/PhysRevMaterials.4.023606)
36. Amor Z., Le Ster C., Chaithya G.R., Daval-Frérot G., Boulant N., Mauconduit F., Thirion B., Ciuciu P., Vignaud A.
[Impact of B0 field imperfections correction on BOLD sensitivity in 3D-SPARKLING fMRI data](#)
Magnetic Resonance in Medicine (2024), 91 (4), pp. 1434 - 1448
[DOI: 10.1002/mrm.29943](https://doi.org/10.1002/mrm.29943)
37. Scalesi A., Duguet T., Demol P., Frosini M., Somà V., Tichai A.
[Impact of correlations on nuclear binding energies: Ab initio calculations of singly and doubly open-shell nuclei](#)
The European Physical Journal A (2024), 60 (10), art. no. 209
[DOI: 10.1140/epja/s10050-024-01424-1](https://doi.org/10.1140/epja/s10050-024-01424-1)
38. Śliwowski M., Martin M., Souloumiac A., Blanchart P., Aksanova T.
[Impact of dataset size and long-term ECoG-based BCI usage on deep learning decoders performance](#)
Frontiers in Human Neuroscience (2023), 17, art. no. 1111645
[DOI: 10.3389/fnhum.2023.1111645](https://doi.org/10.3389/fnhum.2023.1111645)
39. Porro A., Somà V., Tichai A., Duguet T.
[Importance truncation in non-perturbative many-body techniques: Gorkov self-consistent Green's function calculations](#)
Eur.Phys.J.A (2021), 57 (10), art. no. 297
[DOI: 10.1140/epja/s10050-021-00606-5](https://doi.org/10.1140/epja/s10050-021-00606-5)
40. Giliyar Radhakrishna C., Daval-Frérot G., Massire A., Vignaud A., Ciuciu P.
[Improving spreading projection algorithm for rapid k-space sampling trajectories through minimized off-resonance effects and gridding of low frequencies](#)
Magnetic Resonance in Medicine (2023), 90 (3), pp. 1069 - 1085
[DOI: 10.1002/mrm.29702](https://doi.org/10.1002/mrm.29702)
41. Besse M., Fausti G., Cates M.E., Delamotte B., Nardini C.
[Interface Roughening in Nonequilibrium Phase-Separated Systems](#)
Phys. Rev. Lett. (2023), 130 (18), art. no. 187102

[DOI: 10.1103/PhysRevLett.130.187102](https://doi.org/10.1103/PhysRevLett.130.187102)

42. Radhakrishna C.G., Ciuciu P.
[Jointly Learning Non-Cartesian k-Space Trajectories and Reconstruction Networks for 2D and 3D MR Imaging through Projection](#)
Bioengineering (2023), 10 (2), art. no. 158
[DOI: 10.3390/bioengineering10020158](https://doi.org/10.3390/bioengineering10020158)
43. Marini S., Kleij P.S., Amiranoff F., Grech M., Riconda C., Raynaud M.
[Key parameters for surface plasma wave excitation in the ultra-high intensity regime](#)
Physics of Plasmas (2021), 28 (7), art. no. 073104
[DOI: 10.1063/5.0052599](https://doi.org/10.1063/5.0052599)
44. Zhang X., Nikolayev V.S.
[Liquid film dynamics with immobile contact line during meniscus oscillation](#)
Journal of Fluid Mechanics (2021), 923, art. no. A4
[DOI: 10.1017/jfm.2021.540](https://doi.org/10.1017/jfm.2021.540)
45. Simkina P.
[Machine Learning Techniques for Calorimetry](#)
Instruments (2022), 6 (4), art. no. 47
[DOI: 10.3390/instruments6040047](https://doi.org/10.3390/instruments6040047)
46. Mirebeau I., Pierron-Bohnes V., Decorse C., Rivière E., Fu C.-C., Li K., Parette G., Martin N.
[Magnetic and atomic short range order in Fe_{1-x}Cr_x alloys](#)
Phys. Rev. B (2019), 100 (22), art. no. 224406
[DOI: 10.1103/PhysRevB.100.224406](https://doi.org/10.1103/PhysRevB.100.224406)
47. Li K., Fu C.-C., Nastar M., Soisson F., Lavrentiev M.Y.
[Magnetochemical effects on phase stability and vacancy formation in fcc Fe-Ni alloys](#)
Applied Thermal Engineering (2022), 106 (2), art. no. 024106
[DOI: 10.1103/PhysRevB.106.024106](https://doi.org/10.1103/PhysRevB.106.024106)
48. Braccio S., Guillou N., Le Pierrès N., Tauveron N., Phan H.T.
[Mass-flowrate-maximization thermodynamic model and simulation of supersonic real-gas ejectors used in refrigeration systems](#)
Thermal Science and Engineering Progress (2023), 37, art. no. 101615
[DOI: 10.1016/j.tsep.2022.101615](https://doi.org/10.1016/j.tsep.2022.101615)
49. Schuler T., Camilos P., Magnifouet G., Soisson F., Meslin E., Vallet M., Pierron-Bohnes V., Nastar M.
[Measuring interdiffusion coefficient from XRD spectra of thermally annealed superlattices: A combined modeling and experimental study in Fe-Cr nanometric multilayers](#)
Acta Materialica (2025), 287, art. no. 120765
[DOI: 10.1016/j.actamat.2025.120765](https://doi.org/10.1016/j.actamat.2025.120765)
50. Tecchio C., Zhang X., Cariteau B., Zalczer G., Roca i Cabarrocas P., Bulkin P., Charliac J., Vassant S., Nikolayev V.S.

[Microlayer in nucleate boiling seen as Landau–Levich film with dewetting and evaporation](#)

Journal of Fluid Mechanics (2024), 989, art. no. A4

[DOI: 10.1017/jfm.2024.488](#)

51. Atintoh A., Kpobie W., Bonfoh N., Fendler M., Addiego F., Lipinski P.
[Multiscale characterization of the mechanical behavior of a printed circuit board \(PCB\)](#)
Materials Today Communications (2023), 34, art. no. 104968
[DOI: 10.1016/j.mtcomm.2022.104968](#)
52. Amor Z., Ciuciu P., Chaithya G.R., Daval-Frérot G., Mauconduit F., Thirion B., Vignaud A.
[Non-Cartesian 3D-SPARKLING vs Cartesian 3D-EPI encoding schemes for functional Magnetic Resonance Imaging at 7 Tesla](#)
PLOS ONE (2024), 19 (5), art. no. e0299925
[DOI: 10.1371/journal.pone.0299925](#)
53. Bourne E., Munsch Y., Grandgirard V., Mehrenberger M., Ghendrih P.
[Non-uniform splines for semi-Lagrangian kinetic simulations of the plasma sheath](#)
Journal of Computational Physics (2023), 488, art. no. 112229
[DOI: 10.1016/j.jcp.2023.112229](#)
54. Porro A., Duguet T.
[On the off-diagonal Wick's theorem and Onishi formula: Alternative and consistent approach to off-diagonal operator and norm kernels](#)
Eur.Phys.J.A (2022), 58 (10), art. no. 197
[DOI: 10.1140/epja/s10050-022-00843-2](#)
55. Chaithya G.R., Weiss P., Daval-Frerot G., Massire A., Vignaud A., Ciuciu P.
[Optimizing Full 3D SPARKLING Trajectories for High-Resolution Magnetic Resonance Imaging](#)
(2022), 41 (8), pp. 2105 - 2117
[DOI: 10.1109/TMI.2022.3157269](#)
56. Braccio S., Di Nardo A., Calchetti G., Phan H.T., Le Pierrès N., Tauveron N.
[Performance evaluation of a micro partial admission impulse axial turbine in a combined ammonia-water cooling and electricity absorption cycle](#)
Energy (2023), 278, art. no. 127838
[DOI: 10.1016/j.energy.2023.127838](#)
57. Kleij P.S., Marini S., Caetano de Sousa M., Grech M., Riconda C., Raynaud M.
[Photon emission and radiation reaction effects in surface plasma waves in ultra-high intensities](#)
Physics of Plasmas (2024), 31 (7), art. no. 072111
[DOI: 10.1063/5.0209316](#)
58. Zhang X., Nikolayev V.S.
[Physics and modeling of liquid films in pulsating heat pipes](#)
Physical Review Fluids (2023), 8 (8), art. no. 084002

[DOI: 10.1103/PhysRevFluids.8.084002](https://doi.org/10.1103/PhysRevFluids.8.084002)

59. Li K., Fu C.-C., Nastar M., Soisson F.
[Predicting atomic diffusion in concentrated magnetic alloys: The case of paramagnetic Fe-Ni](#)
Phys. Rev. B (2023), 107 (9), art. no. 094103
[DOI: 10.1103/PhysRevB.107.094103](https://doi.org/10.1103/PhysRevB.107.094103)
60. Tran V.-T., Fu C.-C., Li K.
[Predicting magnetization of ferromagnetic binary Fe alloys from chemical short range order](#)
Computational Materials Science (2020), 172, art. no. 109344
[DOI: 10.1016/j.commatsci.2019.109344](https://doi.org/10.1016/j.commatsci.2019.109344)
61. Gondová A., Neumane S., Leprince Y., Mangin J.-F., Arichi T., Dubois J.
[Predicting neurodevelopmental outcomes from neonatal cortical microstructure: A conceptual replication study](#)
Neuroimage: Reports (2023), 3 (2), art. no. 100170
[DOI: 10.1016/j.ynirp.2023.100170](https://doi.org/10.1016/j.ynirp.2023.100170)
62. Simkina P., Couderc F., Malclès J., Sahin M.Ö.
[Reconstruction of electromagnetic showers in calorimeters using Deep Learning](#)
The European Physical Journal C (2024), 84 (6), art. no. 639
[DOI: 10.1140/epjc/s10052-024-12978-1](https://doi.org/10.1140/epjc/s10052-024-12978-1)
63. Lykiardopoulou E.M., Walls C., Bergmann J., Brodeur M., Brown C., Cardona J., Czihaly A., Dickel T., Duguet T., Ebran J.-P., Frosini M., Hockenberry Z., Holt J.D., Jacobs A., Kakkar S., Kootte B., Miyagi T., Mollaebrahimi A., Murboeck T., Navratil P., Otsuka T., Plaß W.R., Paul S., Porter W.S., Reiter M.P., Scalesi A., Scheidenberger C., Somà V., Shimizu N., Wang Y., Lunney D., Dilling J., Kwiatkowski A.A.
[Refined Topology of the N=20 Island of Inversion with High Precision Mass Measurements of Na 31-33 and Mg 31-35](#)
Phys. Rev. Lett. (2025), 134 (5), art. no. 052503
[DOI: 10.1103/PhysRevLett.134.052503](https://doi.org/10.1103/PhysRevLett.134.052503)
64. Quadri V., Tamain P., Marandet Y., Bufferand H., Rivals N., Ciraolo G., Falchetto G., Düll R., Yang H.
[Self-organization of plasma edge turbulence in interaction with recycling neutrals](#)
Contributions to Plasma Physics (2024), 64 (7-8), art. no. e202300146
[DOI: 10.1002/ctpp.202300146](https://doi.org/10.1002/ctpp.202300146)
65. Shi X.-Q., Fausti G., Chaté H., Nardini C., Solon A.
[Self-Organized Critical Coexistence Phase in Repulsive Active Particles](#)
Physical Review Letters (2020), 125 (16), art. no. 168001
[DOI: 10.1103/PhysRevLett.125.168001](https://doi.org/10.1103/PhysRevLett.125.168001)
66. Braccio S., Phan H.T., Wirtz M., Tauveron N., Le Pierrès N.
[Simulation of an ammonia-water absorption cycle using exchanger effectiveness](#)
(2022), 213, art. no. 118712

[DOI: 10.1016/j.applthermaleng.2022.118712](https://doi.org/10.1016/j.applthermaleng.2022.118712)

67. Galazo García R., Brax P., Valageas P.
[Solitons and halos for self-interacting scalar dark matter](#)
Physical Review D (2024), 109 (4), art. no. 043516
[DOI: 10.1103/PhysRevD.109.043516](https://doi.org/10.1103/PhysRevD.109.043516)
68. Bourne E., Leleux P., Kormann K., Kruse C., Grandgirard V., Güçlü Y., Kühn M.J., Rüde U., Sonnendrücker E., Zoni E.
[Solver comparison for Poisson-like equations on tokamak geometries](#)
Journal of Computational Physics (2023), 488, art. no. 112249
[DOI: 10.1016/j.jcp.2023.112249](https://doi.org/10.1016/j.jcp.2023.112249)
69. Fausti G., Cates M.E., Nardini C.
[Statistical properties of microphase and bubbly phase-separated active fluids](#)
Phys. Rev. E. (2024), 110 (4), art. no. L042103
[DOI: 10.1103/PhysRevE.110.L042103](https://doi.org/10.1103/PhysRevE.110.L042103)
70. Haber M., Azaïs P., Genies S., Raccourt O.
[Stress factor identification and Risk Probabilistic Number \(RPN\) analysis of Li-ion batteries based on worldwide electric vehicle usage](#)
Applied Energy (2023), 343, art. no. 121250
[DOI: 10.1016/j.apenergy.2023.121250](https://doi.org/10.1016/j.apenergy.2023.121250)
71. Wittig S., Berchet A., Pison I., Saunois M., Paris J.-D.
[Surface networks in the Arctic may miss a future methane bomb](#)
EGUsphere [preprint] (2024), 24 (10), pp. 6359 - 6373
[DOI: 10.5194/acp-24-6359-2024](https://doi.org/10.5194/acp-24-6359-2024)
72. Porro A., Colò G., Duguet T., Gambacurta D., Somà V.
[Symmetry-restored Skyrme-random-phase-approximation calculations of the monopole strength in deformed nuclei](#)
Physical Review C (2024), 109 (4), art. no. 044315
[DOI: 10.1103/PhysRevC.109.044315](https://doi.org/10.1103/PhysRevC.109.044315)
73. Zhang X., Nikolayev V.S.
[Time-averaged approach to the dewetting problem at evaporation](#)
Europhysics Letters (2023), 142 (3), art. no. 33002
[DOI: 10.1209/0295-5075/accec6](https://doi.org/10.1209/0295-5075/accec6)
74. Simkina P.
[The DAQ and clock distribution system of CMS MIP Timing Detector](#)
Nucl. Instrum. Methods Phys. Res. A (2023), 1047, art. no. 167802
[DOI: 10.1016/j.nima.2022.167802](https://doi.org/10.1016/j.nima.2022.167802)
75. Zeitler L., Goldar A., Wilkes C.D., Soutourina J.
[The next-generation sequencing—chess problem](#)
NAR Genomics and Bioinformatics (2024), 6 (4), art. no. lqae144
[DOI: 10.1093/nargab/lqae144](https://doi.org/10.1093/nargab/lqae144)

76. El-Sahili A., Sottile F., Reining L.
[Total Energy beyond GW: Exact Results and Guidelines for Approximations](#)
Journal of Chemical Theory and Computation (2024), 20 (5), pp. 1972 - 1987
[DOI: 10.1021/acs.jctc.3c01200](#)
77. Granados G.E., Miorelli R., Gatti F., Robert S., Clouteau D.
[Towards a multi-fidelity deep learning framework for a fast and realistic generation of ultrasonic multi-modal Total Focusing Method images in complex geometries](#)
NDT & E International (2023), 139, art. no. 102906
[DOI: 10.1016/j.ndteint.2023.102906](#)
78. Hoang T.-K.-D., Quiquet A., Dumas C., Born A., Roche D.M.
[Using a multi-layer snow model for transient paleo-studies: Surface mass balance evolution during the Last Interglacial](#)
Climate of the Past (2025), 21 (1), pp. 27 - 51
[DOI: 10.5194/cp-21-27-2025](#)
79. Assogba K., Bourhrara L., Zmijarevic I., Allaire G., Galia A.
[Spherical Harmonics and Discontinuous Galerkin Finite Element Methods for the Three-Dimensional Neutron Transport Equation: Application to Core and Lattice Calculation](#)
Nuclear Science and Engineering (2023), 197 (8), pp. 1584 - 1599
[DOI: 10.1080/00295639.2022.2154546](#)
80. Galazo-García R., Brax P., Valageas P.
[Self-similar solutions for fuzzy dark matter](#)
Phys.Rev.D (2022), 105 (12), art. no. e123528
[DOI: 10.1103/PhysRevD.105.123528](#)
81. Marini S., Kleij P.S., Pisani F., Amiranoff F., Grech M., Macchi A., Raynaud M., Riconda C.
[Ultrashort high energy electron bunches from tunable surface plasma waves driven with laser wavefront rotation](#)
Phys. Rev. E (2021), 103 (2), art. no. L021201
[DOI: 10.1103/PhysRevE.103.L021201](#)