# Fedir A Ivanyuk

List of Publications by Year
in descending order



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|---|---|---|---|
| 60 papers | 785 citations | 623734 14 h-index | 552781 26 g-index |
| 60 all docs | 60 docs citations | 60 times ranked | 273 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Four-dimensional Langevin approach to low-energy nuclear fission of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="bold">U</mml:mi><mml:mprescripts /><mml:none /><mml:mn>236</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2017, 96, . | 2.9 | 70 |
| 2 | Optimal shapes and fission barriers of nuclei within the liquid drop model. Physical Review C, 2009, 79, . | 2.9 | 54 |
| 3 | Correlated transitions in TKE and mass distributions of fission fragments described by 4-D Langevin equation. Scientific Reports, 2019, 9, 1525. | 3.3 | 52 |
| 4 | Effects of microscopic transport coefficients on fission observables calculated by the Langevin equation. Physical Review C, 2016, 94, . | 2.9 | 49 |
| 5 | Analysis of the total kinetic energy of fission fragments with the Langevin equation. Physical Review C, 2017, 96, . | 2.9 | 48 |
| 6 | Transport coefficients for shape degrees in terms of Cassini ovaloids. Physical Review C, 1997, 55, 1730-1746. | 2.9 | 44 |
| 7 | Scission-point configuration within the two-center shell model shape parameterization. Physical Review C, 2014, 90, . | 2.9 | 43 |
| 8 | Temperature dependence of shell corrections. Physical Review C, 2018, 97, . | 2.9 | 38 |
| 9 | Nuclear fission: The â€œonset of dissipationâ€•from a microscopic point of view. Physical Review C, 2001, 64, . | 2.9 | 23 |
| 10 | Description of synthesis of super-heavy elements within the multidimensional stochastic model. Physical Review C, 2014, 89, . | 2.9 | 21 |
| 11 | Shell corrections for finite depth potentials. Zeitschrift FÃ¼r Physik A, 1978, 286, 291-297. | 1.4 | 18 |
| 12 | Fission of transactinide elements described in terms of generalized Cassinian ovals: Fragment mass and total kinetic energy distributions. Nuclear Physics A, 2015, 942, 97-109. | 1.5 | 18 |
| 13 | Energy- andN-averagings in the shell correction method. Zeitschrift FÃ¼r Physik A, 1979, 293, 337-342. | 1.4 | 17 |
| 14 | Effect of the doubly magic shell closures in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Sn</mml:mi><mml:mprescripts /><mml:none /><mml:mn>132</mml:mn></mml:mmultiscripts></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Pb</mml:mi><mml:mprescripts /><mml:none /><mml:mn>208</mml:mn></mml:mmultiscripts></mml:math> on the mass distributions of fission fragments of superheavy nuclei. Physical Review C, 2020, 101, . | 2.9 | 17 |
| 15 | Semiclassical analysis of shell structure in large prolate cavities. Annalen Der Physik, 1997, 509, 555-594. | 2.4 | 14 |
| 16 | PAIRING CORRELATIONS AND FISSION BARRIER HEIGHTS. International Journal of Modern Physics E, 2009, 18, 900-906. | 1.0 | 14 |
| 17 | THE SHAPES OF CONDITIONAL EQUILIBRIUM IN THE LIQUID-DROP MODEL. International Journal of Modern Physics E, 2009, 18, 879-884. | 1.0 | 14 |
| 18 | Description of fusion and evaporation residue formation cross sections in reactions leading to the formation of element<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Z</mml:mi><mml:mo>=</mml:mo><mml:mn>122</mml:mn></mml:mrow></mml:math> the Langevin approach. Physical Review C, 2016, 93, . | 2.9 | 14 |

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|---|---|---|---|
| 19 | Fission of superheavy nuclei: Fragment mass distributions and their dependence on excitation energy. Physical Review C, 2019, 99, . | 2.9 | 14 |
| 20 | On the Scission Point Configuration of Fissioning Nuclei. Physics Procedia, 2013, 47, 17-26. | 1.2 | 12 |
| 21 | Mass distribution of fission fragments within the Born-Oppenheimer approximation. European Physical Journal A, 2017, 53, 1. | 2.5 | 12 |
| 22 | Shell corrections for finite depth deformed potentials. II. Zeitschrift FÃ¼r Physik A, 1979, 290, 107-111. | 1.4 | 11 |
| 23 | The Multi-dimensional Langevin Approach to the Description of Fusion-fission Reactions. Journal of Nuclear and Radiochemical Sciences, 2002, 3, 71-76. | 0.7 | 11 |
| 24 | Influence of the shell structure of colliding nuclei in fusion-fission reactions. Physical Review C, 2012, 85, . | 2.9 | 11 |
| 25 | Allowance for the orientation of colliding ions in describing the synthesis of heavy nuclei. Physics of Atomic Nuclei, 2012, 75, 1500-1512. | 0.4 | 10 |
| 26 | Formation of superheavy nuclei in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">S</mml:mi><mml:mprescripts /><mml:none /><mml:mn>36</mml:mn></mml:mmultiscripts><mml:mo>+</mml:mo><mml:mmultiscripts><mml:mi mathvariant="normal">U</mml:mi><mml:mprescripts /><mml:none /><mml:mn>238</mml:mn></mml:mmultiscripts></mml:mrow></mml:math> and <mml:math xmlns:mml=" | 2.9 | 10 |
| 27 | Liquid drop surface dynamics for large nuclear deformations. Physical Review C, 1995, 52, 678-684. | 2.9 | 9 |
| 28 | Allowance for the shell structure of colliding nuclei in the fusion-fission process. Physics of Atomic Nuclei, 2011, 74, 1001-1009. | 0.4 | 9 |
| 29 | Multidimensional Langevin approach to describing the 18O + 208Pb fusion-fission reaction. Physics of Atomic Nuclei, 2002, 65, 1588-1595. | 0.4 | 8 |
| 30 | Dependence of total kinetic energy of fission fragments on the excitation energy of fissioning systems. Physical Review C, 2021, 104, . | 2.9 | 8 |
| 31 | Shell corrections for finite depth potentials. 3. Zeitschrift FÃ¼r Physik A, 1984, 316, 233-237. | 1.4 | 7 |
| 32 | The scission point configuration of fissioning nuclei. EPJ Web of Conferences, 2016, 122, 01002. | 0.3 | 7 |
| 33 | The transport coefficient of collective motion within the two-center shell model shape parameterization. Journal of Nuclear Science and Technology, 2016, 53, 737-748. | 1.3 | 7 |
| 34 | Collective friction coefficients in the relaxation time approximation. Physical Review C, 1996, 53, 1861-1867. | 2.9 | 6 |
| 35 | ON POINCARÃ‰ INSTABILITY OF ROTATING STARS AND NUCLEI. International Journal of Modern Physics E, 2010, 19, 601-610. | 1.0 | 6 |
| 36 | The shell effects in the scission-point configuration of fissioning nuclei. Physica Scripta, 2014, 89, 054012. | 2.5 | 6 |

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|---|---|---|---|
| 37 | Application of a two-step dynamical model to calculating properties of fusion-fission reactions. Physics of Atomic Nuclei, 2008, 71, 2052-2066. | 0.4 | 5 |
| 38 | Towards CRAMOLA, the cranking model for large amplitudes. Zeitschrift FÃ¼r Physik A, 1982, 306, 273-280. | 1.4 | 4 |
| 39 | Towards a macroscopic generator coordinate method. Zeitschrift FÃ¼r Physik A, 1992, 341, 267-274. | 0.9 | 4 |
| 40 | THE FISSION BARRIERS OF HEAVY AND EXOTIC NUCLEI. International Journal of Modern Physics E, 2010, 19, 514-520. | 1.0 | 4 |
| 41 | THE SHAPE TRANSITIONS IN ROTATING NUCLEI. International Journal of Modern Physics E, 2012, 21, 1250032. | 1.0 | 4 |
| 42 | Allowance for the shell structure of the 42 100 Mo and 46 110 Pd nuclei in the synthesis of 84 200 Po, 88 210 Ra, and 92 220 U. Physics of Atomic Nuclei, 2012, 75, 37-44. | 0.4 | 4 |
| 43 | On the PoincarÃ© instability of a rotating liquid drop. Physica Scripta, 2013, T154, 014021. | 2.5 | 4 |
| 44 | Allowance for the tunnel effect in the entrance channel of fusionâ€“fission reactions. Physics of Atomic Nuclei, 2016, 79, 342-350. | 0.4 | 4 |
| 45 | Fission Fragments Mass Distribution of $^{236}$U. Acta Physica Polonica B, Proceedings Supplement, 2015, 8, 659. | 0.1 | 4 |
| 46 | The effect of nuclear rotation on the collective transport coefficients. Nuclear Physics A, 2001, 694, 295-311. | 1.5 | 3 |
| 47 | Description of the two-humped mass distribution of fission fragments of mercury isotopes on the basis of the multidimensional stochastic model. Physics of Atomic Nuclei, 2014, 77, 167-174. | 0.4 | 3 |
| 48 | Dielectric function of metal clusters: Finite-size effects and the macroscopic limit. Physical Review B, 2008, 77, . | 3.2 | 2 |
| 49 | REMARKS ON THE NUCLEAR SHELL-CORRECTION METHOD. International Journal of Modern Physics E, 2009, 18, 123-130. | 1.0 | 2 |
| 50 | Systematic Analysis of Fission Fragment Mass Distribution and TKE for Actinides by Langevin Equation. Energy Procedia, 2017, 131, 299-305. | 1.8 | 2 |
| 51 | Effects of microscopic transport coefficients on fission observables calculated by Langevin equation and its systematics. EPJ Web of Conferences, 2017, 146, 04025. | 0.3 | 2 |
| 52 | Fission observables from 4D Langevin calculations with macroscopic transport coefficients. EPJ Web of Conferences, 2018, 169, 00027. | 0.3 | 1 |
| 53 | Description of the mass-asymmetric fission of the Pt isotopes, obtained in the reaction <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>Ar</mml:mi><mml:mprescripts /><mml:none /><mml:mn>36</mml:mn></mml:mmultiscripts><mml:mo>+</mml:mo><mml:mmultiscripts><mml:mi>Nd</mml:mi><mml:mprescripts /><mml:none /><mml:mn>142</mml:mn></mml:mmultiscripts></mml:mrow></mml:math> within the two-stage fusion-fission model. Physical Review C, 2019, 99, . | 2.9 | 1 |
| 54 | The adiabatic cranking model for large amplitudes. Zeitschrift FÃ¼r Physik A, Atomic Nuclei, 1989, 334, 69-75. | 0.3 | 0 |

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|---|---|---|---|
| 55 | Fission dynamics of excited nuclei within the liquid-drop model. Physics of Atomic Nuclei, 2002, 65, 824-830. | 0.4 | 0 |
| 56 | Diabatic States from Nodal Structure Conservation. Physical Review Letters, 2005, 95, 082501. | 7.8 | 0 |
| 57 | THE TRANSPORT COEFFICIENTS OF LARGE SCALE NUCLEAR COLLECTIVE MOTION. International Journal of Modern Physics E, 2008, 17, 60-71. | 1.0 | 0 |
| 58 | Fission barrier heights and lifetimes for heavy and superheavy nuclei. , 2009, , . | | 0 |
| 59 | The Scission Point Configuration and the Multiplicity of Prompt Neutrons. Physics Procedia, 2015, 64, 28-33. | 1.2 | 0 |
| 60 | Deformation of fission fragments at scission studied by 4D Langevin model. AIP Conference Proceedings, 2021, , . | 0.4 | 0 |