

# Michał Kowal

## List of Publications by Year in descending order

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papers

1,019

citations

516710

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docs citations

47

times ranked

393

citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Fission barriers for even-even superheavy nuclei. Physical Review C, 2010, 82, .  | 2.9 | 135       |
| 2  | Predictions of the fusion-by-diffusion model for the synthesis cross sections of elements based on macroscopic-microscopic fission barriers. Physical Review C, 2012, 86, .                               | 2.9 | 100       |
| 3  | Fission barriers and probabilities of spontaneous fission for elements with $Z \geq 100$ . Nuclear Physics A, 2015, 944, 442-470.   | 1.5 | 92        |
| 4  | Global properties of even-even superheavy nuclei in macroscopic-microscopic models. Physical Review C, 2005, 72, .  | 2.9 | 72        |
| 5  | Light-particle emission from the fissioning nuclei $^{126}\text{Ba}$ , $^{188}\text{Pt}$ and $^{266,272,278}110$ : theoretical predictions and experimental results. Nuclear Physics A, 2000, 679, 25-53. | 1.5 | 71        |
| 6  | Adiabatic fission barriers in superheavy nuclei. Physical Review C, 2017, 95, .   | 2.9 | 51        |
| 7  | Secondary fission barriers in even-even actinide nuclei. Physical Review C, 2012, 85, .   | 2.9 | 48        |
| 8  | Eight-dimensional calculations of the third barrier in $^{232}\text{Th}$ . Physical Review C, 2013, 87, .   | 2.9 | 40        |
| 9  | $Q_{\pm}$ -values in superheavy nuclei from the deformed Woods-Saxon model. Physical Review C, 2014, 89, .  | 2.9 | 38        |
| 10 | Examination of the existence of third, hyperdeformed minima in actinide nuclei. Physical Review C, 2012, 85, .  | 2.9 | 37        |
| 11 | Dependence of heaviest nuclei with $Z > 126$ on $Q_{\pm}$ . Physical Review C, 2014, 89, .  | 2.4 | 35        |
| 12 | Superdeformed oblate superheavy nuclei. Physical Review C, 2011, 83, .  | 2.9 | 32        |
| 13 | Exploring the production of new superheavy nuclei with proton and $\alpha$ -particle evaporation channels. Physical Review C, 2019, 99, .   | 2.9 | 26        |
| 14 | Static fission properties of actinide nuclei. Physical Review C, 2020, 101, .   | 2.9 | 26        |
| 15 | Calculations of the cross sections for the synthesis of new isotopes in $^{293}_{\Lambda}\text{Zn}$ and $^{296}_{\Lambda}\text{Mn}$ . Physical Review C, 2019, 99, .                                      | 2.9 | 26        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | EFFECT OF NON-AXIAL DEFORMATIONS ON THE FISSION BARRIER OF HEAVY AND SUPERHEAVY NUCLEI. International Journal of Modern Physics E, 2009, 18, 914-918.  | 1.0 | 14        |
| 20 | Possibilities of direct production of superheavy nuclei with $Z=112\text{--}118$ in different evaporation channels. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 809, 135760. | 4.1 | 14        |
| 21 | Multi-dimensional fission barriers for heavy and superheavy nuclei. Physica Scripta, 2006, T125, 68-72.  | 2.5 | 12        |
| 22 | Level-density parameters in superheavy nuclei. Physical Review C, 2021, 103, .   | 2.9 | 11        |
| 23 | Hindered $\langle \text{mml:math} \rangle$ decays of heaviest high- $\langle \text{mml:math} \rangle$ isomers. $\langle \text{mml:math} \rangle$ Physical Review C, 2018, 98,  | 2.9 | 9         |
| 24 | EFFECT OF NON-AXIAL DEFORMATIONS OF HIGHER MULTIPOLARITY ON THE FISSION-BARRIER HEIGHT OF HEAVIEST NUCLEI. International Journal of Modern Physics E, 2010, 19, 493-499.   | 1.0 | 8         |
| 25 | Search for octupole correlations in Nd147. Physical Review C, 2015, 92, .  | 2.9 | 8         |
| 26 | Fission of SHN and Its Hindrance: Odd Nuclei and Isomers. Acta Physica Polonica B, 2018, 49, 621.  | 0.8 | 8         |
| 27 | Rate of decline of the production cross section of superheavy nuclei with $\langle \text{mml:math} \rangle$ at high excitation energies. Physical Review C, 2021, 103, .   | 2.9 | 7         |
| 28 | NON-AXIAL OCTUPOLE DEFORMATION OF A HEAVY NUCLEUS. International Journal of Modern Physics E, 2009, 18, 1088-1093.   | 1.0 | 5         |
| 29 | DESCRIPTION OF EXPERIMENTAL FISSION BARRIERS OF HEAVY NUCLEI. International Journal of Modern Physics E, 2009, 18, 869-872.  | 1.0 | 5         |
| 30 | PROPERTIES OF SUPERHEAVY NUCLEI IN VARIOUS MACROSCOPIC-MICROSCOPIC MODELS. International Journal of Modern Physics E, 2005, 14, 365-372.   | 1.0 | 4         |
| 31 | TEST OF TETRAHEDRAL SYMMETRY FOR HEAVY AND SUPERHEAVY NUCLEI. International Journal of Modern Physics E, 2011, 20, 514-519.  | 1.0 | 4         |
| 32 | Calculations of synthesis cross sections of $Z=104\text{--}113$ superheavy nuclei in the fusion-by-diffusion model with the Warsaw macro-micro-model fission barriers. Physica Scripta, 2013, T154, 014005.              | 2.5 | 4         |
| 33 | Energy dependent ratios of level-density parameters in superheavy nuclei. Physical Review C, 2022, 105, .  | 2.9 | 4         |
| 34 | ROLE OF HIGHER-MULTIPOLARITY DEFORMATIONS IN THE POTENTIAL ENERGY OF HEAVIEST NUCLEI. International Journal of Modern Physics E, 2007, 16, 425-430.  | 1.0 | 3         |
| 35 | SADDLE-POINT SHELL EFFECTS OF HEAVIEST NUCLEI. International Journal of Modern Physics E, 2008, 17, 259-264.   | 1.0 | 3         |
| 36 | COMPETING MINIMA AND NON-AXIAL SADDLES IN SUPERHEAVY NUCLEI. International Journal of Modern Physics E, 2010, 19, 508-513.   | 1.0 | 3         |

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|----|--|-----|-----------|
| 37 | ROLE OF THE NON-AXIAL OCTUPOLE DEFORMATION IN THE POTENTIAL ENERGY OF HEAVY NUCLEI. International Journal of Modern Physics E, 2010, 19, 768-773.                    | 1.0 | 3         |
| 38 | First observation of high-K isomeric states in $\text{^{249}Md}$ and $\text{^{251}Md}$ . European Physical Journal A, 2021, 57, 1.                                   | 2.5 | 3         |
| 39 | Diffusion as a possible mechanism controlling the production of superheavy nuclei in cold fusion reactions. Physical Review C, 2022, 105, .                          | 2.9 | 3         |
| 40 | IMPORTANCE OF DEFORMATION AND ORIENTATION OF NUCLEAR SHAPES FOR THE SYNTHESIS OF SUPER-HEAVY ELEMENTS. International Journal of Modern Physics E, 2004, 13, 361-366. | 1.0 | 2         |
| 41 | INFLUENCE OF THE ENTRANCE CHANNEL EFFECTS ON THE FORMATION PROCESS OF SUPERHEAVY ELEMENTS. International Journal of Modern Physics E, 2005, 14, 327-332.             | 1.0 | 2         |
| 42 | TEST OF APPROXIMATION USED IN DESCRIPTION OF NON-AXIAL HEXADECAPOLE SHAPES OF HEAVIEST NUCLEI. International Journal of Modern Physics E, 2007, 16, 402-409.         | 1.0 | 2         |
| 43 | DEFORMATIONS OF MULTIPOLARITY SIX AT THE SADDLE POINT OF HEAVIEST NUCLEI. International Journal of Modern Physics E, 2008, 17, 265-271.                              | 1.0 | 2         |
| 44 | SADDLE-POINT SHAPES OF HEAVY AND SUPERHEAVY NUCLEI. International Journal of Modern Physics E, 2008, 17, 168-176.  | 1.0 | 2         |
| 45 | PROPERTIES OF HEAVIEST NUCLEI AT THE SADDLE-POINT CONFIGURATION. International Journal of Modern Physics E, 2010, 19, 1055-1063.                                     | 1.0 | 1         |
| 46 | Fusion-fission probabilities, cross sections, and structure notes of superheavy nuclei. EPJ Web of Conferences, 2016, 131, 04005.                                    | 0.3 | 1         |
| 47 | FISSION BARRIERS OF HEAVIEST NUCLEI. , 2008, , .   | 0   |           |