### 1. General

We welcome papers containing original research results and review papers in the fields of

- General Physics,
- Atomic and Molecular Physics,
- Optics and Quantum Optics,
- Quantum Information,
- Biophysics,
- Condensed Matter Physics, and
- Applied Physics,

which correspond to the scope of the journal.

Manuscripts should be submitted by e-mail to: appol@ifpan.edu.pl in direct-printable computer version, as a  $\star$ .doc(x) file or  $\star$ .pdf file, or as LaTeX source with attached pdf file.

The corresponding author should sign and send the Copyright Transfer Form, which can be downloaded directly from http://info.ifpan.edu.pl/APP/copyright\_transfer\_form.doc. By signing this form they — on behalf of all the Authors — accept all points listed in the document and agree to respect them, together with the resulting consequences. In particular, they confirm that the manuscript is not under active consideration for publication elsewhere.

Submission of a review paper can be made only after prior arrangement with the Editors.

There are no author page charges in *Acta Physica Polonica A*.

Submissions containing all the required documents are processed. The Editor-in-chief considers submissions, guided by their compliance with the journal scope, as well as striving to eliminate plagiarism. The Editors have the right to accept or to reject submitted manuscripts. Any ambiguities are consulted with the Editorial Board. In the case of approval by the Editor-in-chief, a manuscript number is assigned and relevant information is sent to the corresponding author.

The Editors select reviewers on the basis of competence and expertise on the topic. The process of reviewing is single-blind. The reviewers are obliged to disclose any conflicts of interest. The time for making the report is usually 3–4 weeks.

The Editors assess, also on the basis of the bibliography,

- whether the research topic is of interest to the field internationally,
- whether the topic is one of current interest, and
- whether the article is in scope. Acta Physica
  Polonica A is a journal specializing in physics.

In particular, please be aware that a tendency to copiously or prevailingly self-cite indicates poor science and lack of interest in the topic among the community, while citing primarily old articles suggests that the topic is no longer relevant for advancing the state of the art.

Authors are obliged to present their results in a reliable, honest and unambiguous manner. Analysis should be carried out in a clear way. False claims, falsification or data manipulation are considered unethical and are not accepted.

Authorship is limited to people who have had a significant impact on establishing the concept, research methods and their implementation. Cases of so-called guest authorship and ghostwriting are considered unethical and are not accepted.

Violations of scientific ethics will be reported by the Editorial Board to the Authors' affiliated institutions.

We encourage the Authors to upload the paper to arxiv before the submission to APPA. This has mutual benefits. It ensures the visibility of the research, the priority of the results given: who as the first made the observations and which journal appreciated the Authors' results as the first.

## 2. Content

The manuscript needs to be written in good scientific English. Further guidelines are as follows:

## Title

The title should be brief (less than 10 words), informative, without abbreviations or acronyms.

#### List of Authors

Include author names, with affiliations in the format:

 $\frac{\text{name of institution/university},}{\text{address, postal code and city, country}}. \\ \\ \frac{\text{mailing}}{\text{rotation}}$ 

Provide the corresponding author's email (preferably, from the institution where the author is employed).

## Abstract (on the title page)

The abstract should summarise in a concise way all core aspects of the paper:

- the scope of research; methods used; main results; originality or significance of the results.
- References to an article from the bibliography or a footnote are not allowed in the abstract. One can, however, cite the reference giving its full form, e.g., Acta Phys. Pol. A 140, 1 (2021).
- Abbreviations are not used in the abstract (except for the names of chemical compounds and the abbreviations commonly known in physics, i.e., NMR, EPR, BCS, etc.).
- Instead, abbreviations are defined only in the main text and only once, i.e., when the full name appears for the first time, the abbreviation is given in round brackets.

### Keywords (just below the abstract)

Maximally 4 keywords, written with small letters (except method abbreviations, personal names), all separated with commas.

# Organisation of the paper

- The paper should be divided into numbered sections (including Introduction, Conclusions), subsections, etc., ordered in ascending order with Arabic numerals.
- In the main text, they should be quoted in abbreviated form, like: "Sect. 1", "Sect. 2.1.", etc. The same rule applies to figures, tables, and equations, quoted respectively, as: "Fig. 3", "Table IV", and "Eq. (5)".
- Arabic numbers are used for numbering the figures and equations while Roman numerals for the tables.
- As an exception, if the sentence begins from the word "figure", then the long-whole-word form is used, e.g., "Figure 3 represents . . . ".

- If figures are reproduced from other articles, the source must be quoted. Permission for reproduction must be obtained by the Authors from the owner of the copyright (usually the publisher), and should be submitted along with the manuscript. Regarding this point, see Sect. 3.1.
- Displayed formulae in the paper should be clearly typed, each on a different line, numbered on the right-hand side.
- Formulas should be entered in formatted text form (e.g., through LaTeX). Images of equations are not allowed!

## Specification: figures and tables

- The volume of figures and tables should not exceed the volume of the main text.
- The formatting of figures/tables is described in detail in Sect. 3.1 and Sect. 3.2.

#### References

- References in the text should be in square brackets with Arabic numerals [1] (not with superscripts, or author-year style).
- In the bibliography, entries should be ordered according to their order of appearance in the main text.
- Please do not group multiple works into one reference, but give them separate numbers.
- For works with more than 10 authors, list the first 3 authors, followed by "et al." in their bibliography entry.
- The DOIs of cited articles, wherever applicable, are required in the bibliography.
- Bibliography styles are detailed in Sect. 3.3.

# Acknowledgements

Acknowledgements should be brief, contain grant and contribution numbers. A person can be thanked for assistance, comments, etc., without inessential adjectives.

### 3. Requirements – some details

Make sure that all quantities are defined/described in the text.

The units of quantities in the text, figures, tables, or captions, should be written in square brackets (for instance, "x [mm], E [eV]"), when not referring to a particular value. For explicitly given values, the format is instead like "x = 10 mm, E = 10 eV".

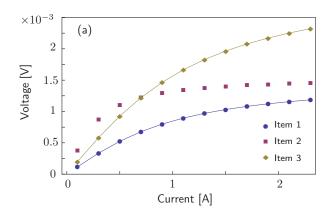
#### 3.1. Figures

Figures, as well as tables, should be numbered in order of appearance in the text, and placed in the vicinity of their first mention (NOT at the end of the manuscript).

- Their maximal width should normally be 8 cm. In the case of important small details, one should prepare figures/tables at most 15 cm wide.
- The preferable font size should be in the range (i) 6–9 pt for axes, (ii) 9–11 pt for axes labels. The font sizes look good when they are **not larger** than in the main.
- The preferred figure style is demonstrated in Fig. 1.
- The preferred figure format is one that shows all elements with high-quality. Thus, one should rely on vector graphics (e.g., eps) rather than raster images (e.g., png).
- When there are several smaller panels within one figure, each of them should be labelled with small letters of the alphabet, i.e., (a), (b), ...
- In the axes, please use abbreviations rather than whole words.
- Placing any tables in the figure area is forbidden.
- The symbol of multiplication, if necessary, should be written using ×.
- The decimal point should be used rather than a decimal comma, i.e., 0.2 not 0, 2.
- Numbers in labels should use the explicit exponential form: 10<sup>4</sup>, not E-4.
- Inscriptions on figures should be kept to a minimum. Explanations of the different types of curves or data points should be given in captions rather than on the plots.
- When the paper includes a figure published elsewhere, a note is formally required in the caption of the figure:
  - "Reproduced with the permission from Ref. [1]".
- Moreover, the figures should be neat and sufficiently visually appealing!

### 3.2. Tables

• Headings for columns in tables should be brief, minimising the number of words. For simplicity, it is helpful to use symbols defined in the text or caption.



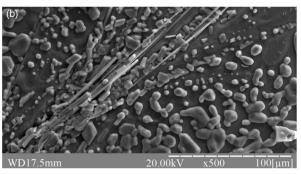


Fig. 1. (a) An example of a figure that meets the APPA criteria. (b) Reproduced from Ref. [3]. Note that the panel labels (a), (b) are slightly smaller than in the main text.

- Footnotes to each table should be indicated by superscript letters and placed in the table caption or below the table.
- Text elements in tables should follow the same requirements as text in figures, see Sect. 3.1.

### 3.3. Bibliography style

We encourage the use of BibTeX to generate entries from the BibTeX meta-data provided by publishers (using e.g., the *natural*, *sciences*, *physics* bibliography styles).

Among bibliography elements relevant for the APPA style are the following: a list of authors names, *The Journal*, **volume**, page (year), DOI.

For example:

```
 \begin{aligned} & @article \{example citation 1, \\ & author = \{Name, Surname\}, \\ & title = \{Title\}, \\ & journal = \{Quantum\}, \\ & volume = \{123\}, \\ & page = \{123456\}, \\ & year = \{1932\}, \\ & doi = \{10.22331/idonotexist\}, \\ \} \end{aligned}
```

```
 \begin{split} @book\{examplecitation2,\\ &author=\{Name_1,\,Surname_1\,\,and\,\,Name_2,\,Surname_2\},\\ &title=\{Title\},\\ &publisher=\{Springer\},\\ &address=\{Berlin\},\\ &year=\{1932\},\\ &doi=\{10.22331/idonotexist\},\\ \} \end{split}
```

As a result, the following forms should appear

```
[1] R.P. Feynman, Phys. Rev. 3, 440 (1950)DOI: 10.1103/PhysRev.80.440
```

[2] R.P. Feynman, Surely You're Joking, Mr. Feynman!: Adventures of a Curious Character, Princeton University Press, USA 1985.

[3] V. Kapustianyk et al., *Acta Phys. Pol. A* **140**, 58 (2021)

DOI: 10.12693/APhysPolA.140.58

### 4. Proofs

Proofs of accepted papers will be prepared as soon as possible and sent to the corresponding author. The Authors are required to read them carefully, and report any needed corrections/changes to the Editors, answering also any questions attached to the proofs.

The paper will not be published if the responses to the proof and/or the Author's approval on the proof are not sent by the time specified in the correspondence from the Editors.

The DOI of an accepted paper is assigned at the moment of online publication.

### 5. Conference proceedings

Acta Physica Polonica A publishes conference proceedings, as well as special issues that are within the scope of the journal. If a conference topic goes beyond the scope of APPA, the Editor-in-chief, after consulting with the conference organisers, selects in-scope conference papers for publication.

Publication of conference proceedings requires the signing of a contract between the conference organisers and the Publisher (the Director of the Institute of Physics, Polish Academy of Sciences). There is a page charge for conference proceedings. The organisers should contact the Editor-in-chief for details.