

Instructions for Authors

1 General Information

When submitting an article to the *Beilstein Journal of Organic Chemistry* authors are not charged any publication fee. All publication costs for the journal are covered completely by the Beilstein-Institut. Authors are required to submit new manuscripts via the Beilstein Publishing System. The document <u>Help for Authors</u> serves as a guide to navigating the Beilstein Publishing System. The journal does not accept mailed hardcopy manuscripts or manuscripts submitted by email. A <u>Submission Checklist</u> is available to help authors to ensure they have collected all relevant data and information. Authors can interrupt the submission process at any time. When returning to the Beilstein Publishing System, authors may select the manuscript concerned and continue where they stopped.

Prior to manuscript submission, we expressly encourage authors to read the <u>Editorial Policy and</u> <u>Workflow</u> page of the *Beilstein Journal of Organic Chemistry*.

2 File Formats

The main manuscript must be provided as Microsoft Word (version 8 (Word 97) to version 16 (Word 2016)) document.

Note that figures, schemes and tables should be included in the manuscript after the paragraph where they are first referenced. Chemical structures should preferably be embedded in their original chemical structure drawing file format (e.g. CDX for ChemDraw).

3 Style and Language

3.1 General

- The *Beilstein Journal of Organic Chemistry* accepts only manuscripts written in English. Spelling should be US English or British English, but not a mixture of both.
- The Authors should adhere to the <u>ACS Style Guide</u> (Coghill, A. M.; Garson, L. R., Eds. *The ACS Style Guide: Effective Communication of Scientific Information*, 3rd ed.; Oxford University Press, Inc.: New York, 2006) on matters of physical quantity symbols and units, abbreviations, references, use of italics and punctuation. On matter of nomenclature the IUPAC conventions are preferred (<u>https://iupac.org/what-we-do/nomenclature/</u>).
- Abbreviations should be used consistently throughout the whole manuscript. Non-standard abbreviations must be defined the first time they are used in the text.
- Even though articles in the *Beilstein Journal of Organic Chemistry* have no page limit or restrictions in length and in the number of graphics, tables or supporting information they should adhere to scientific conciseness. Authors should provide enough background information to support the aim of study and the main claims of the paper, but unimportant or trivial information should not be included.
- Authors are advised to write clearly, concise and simply, and their article should be checked by colleagues before submission. The significance of the research should be objectively discussed. Non-native speakers of English may choose to make use of a copyediting service

since a manuscript may be rejected if it contains too many grammatical errors or typing mistakes. Alternatively, authors may seek the advice from colleagues whose native language is English.

3.2 Typography and Formatting

- Please format the manuscript as single-column text using double line spacing.
- Common fonts (Arial, Times, Helvetica, Courier) should be used to reduce problems during conversion of the manuscript to a PDF file.
- Type the text without manual hyphenating words at line breaks.
- Use line breaks only to end headings and paragraphs, and not to rearrange lines.
- All pages should be numbered.
- Footnotes must not be used in any section of the paper.
- Greek and other special characters should preferably be included using the font type "symbol". If you are unable to reproduce a particular special character, please type out the name of the symbol in full.

4 Article Types

Every manuscript submitted to the *Beilstein Journal of Organic Chemistry* has to be assigned by the authors to one of the following types of article:

- <u>Full Research Paper</u>
- <u>Review</u>
- Letter
- Perspective
- <u>Commentary</u>

Please read the descriptions of each of the article types and choose which is appropriate before writing the article. Your article should be structured in accordance with the guidelines of the article types. If you are in doubt about the article type, your manuscript should be classified as Full Research Paper, the guidelines of which are described below.

5 Organization of Full Research Papers

Manuscripts for Full Research Paper articles submitted to the *Beilstein Journal of Organic Chemistry* should be divided into the following sections:

- Title
- Authors' Names and Affiliations
- Abstract
- Keywords
- Introduction
- Results and Discussion (may be separate)
- Conclusion
- Experimental (optional)
- Supporting Information (if any)
- Acknowledgements (optional)
- Funding (optional)
- References



5.1 Title

The title of an article should be clear, concise and comprehensible to all readers with the purpose of quickly identifying the focus of the reported work. It should be brief and contain the most important keywords to optimize electronic retrieval. The use of capitals should be restricted to the first word and proper nouns. As far as possible abbreviations should be avoided.

5.2 Authors' Names and Affiliations

For all persons who fulfill all requirements of authorship, their first name, middle initial(s) and last (family) name must be provided. More details regarding authorship requirements and author responsibilities can be found on our Editorial Policy and Workflow webpage in the section "6 Roles and Responsibilities of the Authors, Referees and Editors". Below this information the institutional address should be written in a separate line in the following format: department, organization, street/P.O. box, city/town and zip code/postal code, country. If several affiliations need to be mentioned, consecutive Arabic numerals should precede the address and these numerals must also be placed as superscript after the respective author's name. At least one author must be designated with an asterisk as the person to whom correspondence should be addressed. The full name and the email address of the corresponding author(s) separated by a hyphen should be given in a new paragraph following the affiliation. Finally, the meaning of the asterisk must be explained. We also highly encourage all authors to link their ORCID record to their manuscript. During the submission process, the submitting author will be asked to link their existing ORCID record to their manuscript, or create an ORCID record, if they do not already have one. All co-authors will also be provided a link where they too can amend this information. It is not necessary to include the ORCID iD directly in the manuscript, only in the online submission system.

5.3 Abstract

The abstract should summarize the context and purpose of the study, the main findings and provide a brief summary and potential implications. Abbreviations should be used sparingly in the abstract. Citations and references should not be given in abstracts. Only standard characters and those that can be included using the font "Symbol" are allowed.

5.4 Keywords

Five keywords in alphabetical order describing the main topics of the article should appear below the abstract for indexing purpose. They should be separated by a semicolon.

5.5 Introduction

The introduction section should be written from the standpoint of researchers without specialist knowledge in that area. It should clearly state the background of the research, as well as its purposes and significance, and should include a brief statement of what is being reported in the article.

5.6 Results and Discussion

The results and discussion section contains a description of the experimental results that substantiates the conclusions of the work. A comprehensible discussion which links the results to related investigations and to existing knowledge in the relevant field should follow. The sections may also be separated. The presentation of experimental details in this section should be kept to a minimum. Information already obvious in tables, figures or schemes should not be reiterated in the text if it is unnecessary for any important discussion.

5.7 Conclusion

This section should emphasize the major interpretations and conclusions of the paper as well as their significance. The preparation of this section is optional.

5.8 Experimental

This section, together with the supplementary material provided in the supporting information files, should describe the experimental methods used in the work in sufficient detail to allow repetition of the work by others. An experimental section should only be included in the main manuscript if up to 5 compounds with their preparation and characterization data are given. If more than 5 compounds are described the experimental section should be given as supporting information.

General experimental methods should be mentioned at the beginning of the experimental part. If the same procedure is used several times one detailed representative example should be given. All new compounds should be fully characterized and sufficient evidence must be provided to establish the identity and the degree of purity of each compound. Elemental analysis should be added whenever possible. Each description of an individual synthesis experiment should start with the systematic chemical name and the structure label of the reaction product, followed by an exact experimental description including details of the workup procedure. Authors are encouraged to use common abbreviations or molecular formulas for solvents or reagents and to reference other chemical structures by using the structure label instead of a chemical name. Yields of isolated and purified products are preferred to yields determined spectroscopically or chromatographically. Attention should be drawn to hazardous materials or procedures by adding the word "Caution" followed by a brief description.

Ethical approval for any human or animal experimentation must be provided by the responsible author's institutional committee and a statement that all experiments were performed in compliance with the relevant laws and institutional guidelines must be included in the Experimental section of the manuscript. In addition, for any experimentation involving human subjects a statement that informed consent was obtained must be provided in the Experimental section.

Literature references must be provided for all already known compounds. If the method of preparation is already known, the description should start with "In a manner analogous to [literature reference]" or "In a manner similar to [literature reference]". Previously published characterization data should be republished only if useful for comparison to new data, such as literature melting points or literature values for optical rotation. All other published characterization data or published spectra should not be repeated, but appropriate literature references should be given instead.

Copies of spectra used in the characterization of compounds may be reproduced as figures in the supporting information. Nucleic acid sequences and protein sequences should be deposited in an appropriate database in time for any relevant accession numbers to be included in the published data. When reporting a new X-ray structure of a small molecule a CIF file (as supporting information) and a structural drawing with probability ellipsoids (ORTEP plot) should be given. A table containing the essential crystal-related data should be provided in a human readable format in the supporting information file. X-ray crystallographic data for small molecules should be deposited at the Cambridge Crystallographic Data Centre (CCDC), CSD: <u>https://www.ccdc.cam.ac.uk/deposit</u>. The accession number should be included in the manuscript.

5.9 Supporting Information

If supporting information files are provided, each should be described in this section of the manuscript, providing the following information:

- a consecutive Arabic numeral in the order of the first mention in the manuscript text (e. g. Supporting Information File 1, Supporting Information File 2, etc.)
- the file name

- the file format (including the name and the URL link of an appropriate viewer if the format is unusual)
- a concise and descriptive title of 15 words maximum
- optional: a detailed description of the dataset.

Additionally, supporting information files may be referenced within the body of the article to allow the creation of a hyperlink in the full text version. For example: "(see Supporting Information File 1 for full experimental data)" could be embedded at an appropriate place in the section "Results and Discussion" or "Experimental".

5.10 Data Availability Statement

This section is automatically added during manuscript submission and indicates the level of data availability for the article. For instructions, please see section <u>7.3 Data Deposition</u>.

5.11 Acknowledgements

In this section, persons who are not manuscript authors, however have contributed to the work, should be acknowledged with their permission for the contributions they have made, such as technical assistance, providing materials or advice. This section may also include a dedication of the article to a scientist of outstanding merit. Should a manuscript contain extensive text parts from a thesis or dissertation written by one of the manuscript authors, this should also be acknowledged in the Acknowledgements section.

5.12 Funding

In this section the authors can acknowledge the source(s) of financial support for the research reported in their article by naming the financially supporting body(s) followed by associated grant number(s) (if applicable). It is the responsibility of the corresponding author(s) to provide the relevant funding information from all authors.

5.13 References

In general, authors are obliged to perform literature searches and to cite original publications describing closely related work.

A complete list of all references should be provided at the end of the article with an individual reference number for each reference. All references must be numbered consecutively with Arabic numerals, in the order in which they are first cited in the text. The references should be inserted at the appropriate location in the text by writing the reference number in square brackets. Multiple citations should be separated by commas within the square brackets. In case of more than two sequential references, ranges should be given. In general, a reference should appear before a punctuation mark and not after. Reference citations should not appear in titles, headings or the abstract. Unnecessarily long lists of references are not desirable. Authors are requested to constrict the reference list to the most important or most recent references relating to a specific topic. However, all previous publications in which portions of the present article have appeared must be referenced. If references refer to a supporting information file, they should be listed at the end of that file.

The references should be presented in a style consistent with the <u>ACS Style Guide</u> and should not contain any form of note or comment. If automatic numbering systems are used, the reference numbers must be finalized and the bibliography must be fully formatted before submission. Web links and URLs should be included in the reference list. They should be provided in full, including both the title of the site and the URL.

BEILSTEIN JOURNAL OF ORGANIC CHEMISTRY

Examples of the *Beilstein Journal of Organic Chemistry* reference style are shown below. Please take care to follow the reference style precisely; references not in the correct style must be retyped, necessitating tedious proofreading.

Beilstein Journal of Organic Chemistry Reference Style

Article within a journal

- 1. Jacobsen, M. F.; Moses, J. E.; Adlington, R. M.; Baldwin, J. E. Org. Lett. 2005, 7, 2473-2476.
- 2. Constantino, M. G.; Lacerda, V., Jr.; Aragão, V. Molecules 2001, 6, 770-776.
- 3. Bartlett, P. A.; Green, F. R., III; Webb, T. R. Tetrahedron Lett. 1977, 331-334.

Article within a journal with non-continuous (i.e. issue-based) pagination

4. Gröger, H.; Sans, J.; Güthner, T. Chim. Oggi 2000, 18 (3/4), 12-16.

5. Wills, M. R.; Savory, J. Lancet 1983, No. 2, 29.

Article within a journal with article number

6. Flamme, E. M.; Roush, W. R. Beilstein J. Org. Chem. 2005, 1, No. 7.

Article within a journal supplement

7. Orengo, C. A.; Bray, J. E.; Hubbard, T.; LoConte, L.; Sillitoe, I. *Proteins* **1999**, 37 (Suppl. S3), 149–170.

8. Papapoulos, S. E. Am. J. Med. 1993, 95 (5, Suppl. 1), S48-S52.

Article within a journal with two separate editions or with translations

9. Grubbs, R. H. Angew. Chem. **2006**, *118*, 3845–3850; Angew. Chem., Int. Ed. **2006**, *45*, 3760–3765. 10. Šorm, F.; Holub, M.; Sýkora, V.; Mleziva, J.; Streibl, M.; Plíva, J.; Schneider, B.; Herout, V. Chem. Listy **1952**, *46*, 554–560; Collect. Czech. Chem. Commun. **1953**, *18*, 512–526.

Article within a journal with additional Chemical Abstracts reference

11. Ryzhenkov, V. E.; Molokovskii, D. S.; Ioffe, D. V. Vopr. Med. Khim. 1984, 30, 78-80; Chem. Abstr. 1984, 100, 203340s.

12. Dement'eva, L. P.; Kostikov, R. R. Zh. Org. Khim. **1990**, 26, 138–139; J. Org. Chem. USSR **1990**, 26, 117–118; Chem. Abstr. **1990**, 113, 132046f.

In press article

13. Betson, M. S.; Clayden, J.; Helliwell, M.; Mitjans, D. Org. Biomol. Chem., in press.

Patent

14. Sheem, S. K. Low-Cost Fiber Optic Pressure Sensor. U.S. Patent 6,738,537, May 18, 2004.

Article within conference proceedings

15. Jones, X. Zeolites and synthetic mechanisms. In *Proceedings of the First National Conference on Porous Sieves*, Baltimore, MD, June 27–30, 1996; Smith, Y., Ed.; Butterworth-Heinemann: Stoneham, MA, 1996; pp 16–27.

Whole issue of a journal 16. O'Brien, P., Ed. Recent developments in chiral lithium amide base chemistry. *Tetrahedron* **2002**, *58*, 4567–4733.

Whole conference proceedings 17. Smith, Y., Ed. Proceedings of the First National Conference on Porous Sieves, Baltimore, MD, June 27–30, 1996; Butterworth-Heinemann: Stoneham, MA, 1996.

Complete book

18. Gutsche, C. D. Calixarenes; Royal Society of Chemistry: Cambridge, U.K., 1989.

19. Gleiter, R.; Hopf, H., Eds. *Modern Cyclophane Chemistry;* Wiley-VCH: Weinheim, Germany, 2004.

Book edition

20. Smith, M. D.; March, J. Advanced Organic Chemistry: reactions, mechanisms, and structure, 5th ed.; John Wiley & Sons, Inc.: New York, 2001.

Book chapter or article within a book

Yus, M. Arene-catalyzed lithiation. In *The Chemistry of Organolithium Compounds;* Rappoport, Z.; Marek, I., Eds.; Wiley and Sons: Chichester, U.K., 2004; pp 647–748.
Deslongchamps, P. Amides and Related Functions. *Stereoelectronic Effects in Organic Chemistry;* Pergamon: New York, 1983; pp 101–162.

Book chapter or article within a multi-volume book

23. Farnum, M. A.; DesJarlais, R. L.; Agrafiotis, D. K. Molecular Diversity. In *Handbook of Chemoinformatics: From Data to Knowledge;* Gasteiger, J., Ed.; Wiley-VCH: Weinheim, Germany, 2003; Vol. 4, pp 1640–1686.

Chapter of a book in a series

24. Goldfuss, B. Enantioselective addition of organolithiums to C=O groups. In *Organolithiums in Enantioselective Synthesis;* Hodgson, D. M., Ed.; Topics in Organometallic Chemistry, Vol. 5; Springer: Berlin, 2003; pp 21–35.

Book with institutional author

25. Advisory Committee on Genetic Modification. Annual Report; London, 1999.

Thesis

26. Westlund, N. Stereoselective reactions of atropisomeric tertiary amides. Ph.D. Thesis, University of Manchester, U.K., 1998.

Link/URL

27. Proceedings of "Molecular Informatics: Confronting Complexity", May 13–16, 2002, Bozen, Italy. http://www.beilstein-institut.de/index.php?id=154 (accessed Sept 12, 2007).

Software

28. Gaussian 03, Revision C.02; Gaussian, Inc.: Wallingford, CT, 2004.

Data from a repository or database

29. Chung, Y. G.; Camp, J.; Haranczyk, M.; Sikora, B.; Bury, W.; Krungleviciute, V.; Yildirim, T.; Farha, O. K.; Sholl, D. S.; Snurr, R. Q. Computation-Ready, Experimental Metal–Organic Frameworks, Version 1.0.0, Zenodo, 2014. https://zenodo.org/record/3228673. doi: 10.5281/zenodo.3228673.

Please note: when using BibTeX, use the @www reference type. Add the name of the repository and, if applicable, version and publication date to the title.

6 Graphics and Tables

6.1 Preparation of Figures and Schemes

All figures and schemes must be embedded in the manuscript text after the paragraph where they are first mentioned. After the peer review process authors may be asked to upload individual graphic files separately. All diagrams, graphs, spectra, micrographs or other types of illustrations should be presented in the manuscript as a figure. The designation scheme should be used primarily for reaction schemes. It is the authors' responsibility to provide figures at a sufficiently high resolution to ensure high quality reproduction in the final article. The following guidelines must be considered when preparing figures and schemes:

- Figures and schemes are consecutively numbered with Arabic numerals in the order they are first cited in the manuscript text (i.e. Figure 1, Figure 2, etc.).
- The caption of figures and schemes should be positioned directly below the corresponding graphic in the main manuscript rather than as part of the graphic file. The caption should comprise the word "Figure" or "Scheme", the figure or scheme number and a colon, all in boldface font, followed by a detailed description of the contents. Any caption should be comprehensible without reference to the relevant parts of the manuscript text. If a figure has several labeled parts a, b, c, etc., then each part should be identified in the caption.
- Each figure or scheme should comprise only a single file. Multi-panel figures with individual parts, a, b, c, etc., should be included as a single composite file.
- Each figure or scheme must fit a width of 8.0 cm (single column) or 16.0 cm (double column) and should be prepared accordingly. The maximum height is 23.0 cm including the legend.
- The image resolution of raster images should be at least 300 dpi (colored graphic) or 600 dpi (black and white graphic).
- Figures and schemes should be cropped as closely as possible to minimize white space surrounding the graphic.
- The maximum file size should not exceed 10 MB to optimize online handling.
- Individual compounds must be numbered with boldface Arabic numerals in the order in which the compounds are first mentioned in the text. Boldface lower case letters may be added to distinguish compounds that differ only in the identity of substituents.
- There is no charge for the use of color.

6.2 Acceptable Formats of Figures and Schemes Including the Graphical Abstract

The following file formats can be accepted:

- **SVG** (preferred format for diagrams)
- **PNG** (preferred format for photos or images)
- **CDX** (ChemDraw, preferred format for chemical structures)
- GIF (suitable for images)
- TIFF (suitable for images)
- JPEG (suitable for photographic images)
- BMP (suitable for images)
- MML (suitable for mathematical formulas)
- EMF (suitable for diagrams)
- WMF (suitable for diagrams)

A raster image (e.g. GIF, TIFF JPEG or BMP) consists of pixels. If a raster image is enlarged it will become fuzzy. To ensure that such images will be of high quality in the web and in the printed article a minimum of 300 dpi (colored graphic) or 600 dpi (black and white graphic) is required. By contrast, a vector image (e.g. SVG, CDX, EMF or WMF) is a mathematically defined geometric shape which can be enlarged without a loss of quality of the depiction. All lines of the image are sharp at any zoom.

6.3 Structure Drawing Guidelines

Chemical Structures should be prepared according to the guidelines given below. The parameters are benchmarks which should be used to prepare chemical structures with chemical structure editors such as ChemDraw, etc.

chain angle	120 degree
bond spacing	18 % of width
fixed length	0.406 cm (11.5 pt)
bold width	0.056 cm (1.6 pt)



line width	0.018 cm (0.5 pt)
margin width	0.046 cm (1.3 pt)
hash spacing	0.071 cm (2 pt)
scale	100 %
font	Arial
size	8 pt
hash spacing scale font	0.071 cm (2 pt) 100 % Arial

6.4 Preparation of Tables

All tables must be inserted in the manuscript text after the paragraph where they are first mentioned. Large datasets can be uploaded separately as supporting information file. The following guidelines must be considered when preparing tables:

- Tables are consecutively numbered with Arabic numerals in the order they are first cited in the manuscript text (i.e. Table 1, Table 2, etc.).
- Tables must be cell-based and thus should be created using the "Table object" in MS Word. This ensures that columns of data are kept aligned when the file is sent electronically for review. It is not allowed to generate columns by simply separating the text with tabs.
- Line returns and tabs should not be used within the cells.
- Above each table a sequential bold typed Arabic table number must be provided followed by a short and concise title after a colon.
- All table columns must have a short and self-explanatory heading.
- Footnotes should be typed below the table using lower case letter designations. They should be referenced in the table with lower case superscript letters. The sequence of letters should proceed by row rather than by column. An explanation of all non-standard abbreviations used in a table as well as additional descriptive information to the table content must be given in a footnote.
- Each table must fit a width of 8.0 cm (single column) or 16.0 cm (double column) and should be prepared accordingly.
- Individual compounds must be numbered with boldface Arabic numerals in the order in which the compounds are first mentioned in the text. Boldface lower case letters may be added to distinguish compounds that differ only in the identity of substituents.
- Color and shading should not be used.

Tabular data provided as supporting information files can be uploaded as an Excel spreadsheet (.xls), Word document (.doc) or comma separated values (.csv). As with all files, the standard file extensions should be used.

6.5 Graphical Abstract

A graphical abstract must be supplied as a separate file and not embedded in the main manuscript. Together with the article title, the graphical abstract should provide the reader a quick visual description of the type of chemistry covered in the article. Colors should be used judiciously in graphical abstracts. The graphical abstract will be scaled to fill a nominal space of 15 by 5 cm, and should be prepared accordingly. Preferably, any graphic included within the manuscript should not be duplicated.

7 Supporting Information and Datasets

7.1 General Information about Supporting Information

Authors are encouraged to provide extensive supplementary material to support the scientific results and conclusions described in the main manuscript. Supporting information files can be uploaded separately during the submission process, with a maximum file size of 100 MB for each file. All supplementary files will be scanned for viruses during submission. They will be subject to peer review

and published online alongside the final article. Many types of supplementary data, and thus a wide range of technical formats are allowed and supported. For example, detailed experimental procedures including characterization data, spectra, graphs, photos, X-ray crystallographic data, physical data, biochemical data, large tables, rotatable molecular models, animations or movie files. Unlike the main article, any supporting information should address the interest of specialists rather than the interest of general readers.

All pages in a supporting information file containing text, for example, the description of experimental methods, should be numbered consecutively (exception: CIF files). In such cases, the first page must be a title page listing the manuscript title, the full name of all authors and the affiliation as given in the main manuscript to emphasize the relationship between supplementary material and the corresponding article. If appropriate, a detailed table of content may follow.

If possible, authors should combine spectra or other graphics into a single file rather than providing numerous individual files each containing a single image. All spectra or graphics should be marked with the corresponding structure label. CIF files must be supplied separately from other file types.

In addition, supplementary data or datasets can be deposited in repositories or databases, which is to be stated during manuscript submission. For instructions, please see section <u>7.3 Data Deposition</u>.

7.2 Acceptable Formats for Supporting Information Files

Many types of supplementary data, and thus a wide range of technical formats are allowed and supported. For example, detailed experimental procedures including characterization data, spectra, graphs, photos, X-ray crystallographic data, physical data, biochemical data, large tables, rotatable molecular models, animations or movie files. Unlike the main article, any supporting information should address the interest of specialists rather than the interest of general readers.

File formats for supporting information files should not be platform-specific and should be viewable using free or widely available tools. Files should be given the standard file extensions. Please also make sure that supporting information files are not linked to each other.

7.3 Data Deposition

We are committed to <u>FAIR data sharing</u> and open science principles. In line with this, we strongly recommend authors to deposit all data that has led to the results represented in the work in subject-specific repositories.

To indicate the level of data availability for the article, authors are required to provide a data availability statement. This statement confirms the presence or absence of shared data and must be entered by the submitting author during manuscript submission. The statement will be automatically added to the article. For additional information regarding the data sharing policy of the *Beilstein Journal of Organic Chemistry*, please refer to the <u>Editorial Policies page</u>.

When generating the data availability statement in the submission wizard during manuscript submission, it is recommended to utilize the selection of standard templates listed below. These templates can be used as a basis for your data availability statement and modified as required. It is also possible to fully draft a customized data availability statement.

Level of data availability	Template
Data in publicly accessible	The data generated and analyzed during this study is openly
repository with DOI	available in [repository name] at [DOI].
Data derived from public domain	The data used for/in this study is openly available in
resources with DOI	[repository name] at [DOI]. The data was derived from
	sources available in the public domain [list of resources, date
	accessed].
Data will be available in a public	The data generated and analyzed during this study will be
repository with DOI following	openly available in [repository name] at [DOI] following an
embargo from the date of	embargo period of [months] from the date of publication.
publication	
Data available upon request from	The data that supports the findings of this study is available
the authors	from the corresponding author upon reasonable request.
Data owned by third party and	The data analyzed in this study was provided by [third party]
restrictions apply to availability	under license/by permission and is not publicly available.
	The data is available upon request to [third party, including contact information].
Data charing not applicable as no	
Data sharing not applicable as no new data was generated	Data sharing is not applicable as no new data was generated or analyzed in this study.
Authors have elected not to share	Additional research data is not shared.
additional data	Additional research data is not shared.
	All data that supports the findings of this study is available
All data available in published article and/or supplementary	All data that supports the findings of this study is available in the published article and/or the supporting information to
material	this article.
matchiai	

To indicate that data has been shared, authors can use this tool which has been integrated into the submission wizard to link the data and to name the repository in their data availability statement. Additionally, the shared data or datasets could be acknowledged within the manuscript and cited in the References section as appropriate. Please see section 5.13 on this page for the appropriate reference style. In case sharing data conflicts with ethical norms, privacy, or legal obligations, authors are not expected to share it. If no such issue exists, for better accessibility and preservation, it is recommended to deposit the data in publicly accessible subject-specific repositories rather than providing the data only upon request.

An overview on selected registered repositories for data deposition can be found, for example, in the Registry of Research Data Repositories, Registry of Open Research Repositories, or on the FAIRsharing portal. To that end, NFDI4Chem maintains a list of community-trusted repositories for chemistry research data. All reports of kinetic and binding data must fully describe the catalytic or binding entity (enzyme, protein, nucleic acid or other molecule) and the experimental conditions. For reporting enzymology data, we recommend using STRENDA DB http://www.strenda-db.org – the output "Fact Sheet" should be provided as supporting information.

Please note that data availability statements such as "data available upon request from the authors" and "authors have elected not to share data" are not in accordance with FAIR data sharing principles and not encouraged because the data is neither findable nor accessible. Furthermore, a statement such as "data available in supplementary material" is discouraged since data kept in supplementary PDFs is not interoperable, and hence difficult to be reused.

8 Cover Letter

• A full paper report which is an extension of an already published letter article (or preliminary communication) may be submitted for publication provided that the previous work is properly cited in the manuscript and contains significant new information or permits new insights. The discussion, evidence, main result and conclusion should not remain the same in the different

publications. The editor must be made aware of any earlier communication in the cover letter that accompanies the manuscript.

- The editor must always be informed of any related manuscript submitted or in press elsewhere by any of the authors. In such cases, a notice about the related work (submitted or in press) must be included in the cover letter. Copies of those manuscripts must be supplied as review-only material and a citation must be provided to any relevant paper at an appropriate place in the manuscript.
- Any previous submission to the *Beilstein Journal of Organic Chemistry* of the same manuscript must be mentioned in the cover letter. Copies of all review reports must be appended as review-only material and the cover letter should include a detailed explanation of all revisions whether or not they were performed.

9 Obtaining Permission for Reuse of Third-party Material

If you wish to use/reuse material (figures, images, tables, etc.) you may or may not need permission to do so.

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