

# Journal of Microorganism Control

## Instructions for Authors

### 1. General Introduction

Submission of a paper to the Journal of *Microorganism Control* implies that it has not previously been published and is not being considered for publication elsewhere. The manuscript should be carefully written following this Instruction for the authors, otherwise, it will be returned to the author. At least one of the authors or affiliated institution must be a member of the Society for Antibacterial and Antifungal Agents, Japan. For overseas authors, no such restriction is applied.

### 2. Types of papers

There are several types of papers as follows. These are subjected to peer review, except for Editorial.

- 1) Review: A subject overview presents developments and concepts of a topic field to readers and covers relating references. The Editorial Board may sometimes invite scientists to write a review article.
- 2) Minireview: A compact review of findings and ideas in a topic field rather than a summary or reference list. It may also be commissioned from the Editorial Board.
- 3) Original (full-length paper): The study, results, and theory of original research.
- 4) Note: An alternative to the original full-length paper for describing smaller but concentrated pieces of not preliminary findings but completed research work.
- 5) Communication: A concise and definitive paper reporting new findings and theories that deserve rapid publication. This also includes scientific opinions and perspectives.
- 6) Editorial: Communications and Information from the Editors-in-Chief and Editorial Board of the journal or the Society.

### 3. Format and structure of papers

Authors should write their manuscript in English using a word processor and create 25 lines per page in a font size of 10.5 or 11 with a 2.5 cm wide margin on A4 size paper. Three pages of the manuscript are equivalent to about one print page. The consecutive numbers of pages and lines must be included in the bottom and left margins of the manuscript, respectively. The manuscript should be written with *Microsoft Word*, using a standard typeface such as Times New Roman, Arial, or Calibri. When referring to figures and tables in the text, figures should be abbreviated to Fig. (i.e., Fig. 1) but tables should not be abbreviated (i.e., Table 1).

The default page limits and the structure of each type of paper are:

- 1) Reviews and mini-reviews: Do not exceed 12 and 8 pages, respectively, including the space required for the figures and tables. Write an abstract of up to 200 words at the beginning of your manuscript, followed by a freestyle text with several headings.
- 2) Original (full-length paper): Do not exceed 8 printed pages in total. The text should

be divided into Introduction, Theory (if necessary), Materials and Methods, Results, and Discussion (Results and Discussion, if necessary), after an abstract of up to 200 words.

- 3) Note and communication: Do not exceed 4 printed pages in total. An abstract of up to 150 words is required to be described before the text. The text should not be divided into the sections described in the above Original.

For all types of paper, if the manuscript exceeds the above limitations of pages, an additional fee is charged. See below (no. 33) for the publication fee.

#### **4. Manuscript submission**

Manuscripts should be submitted to the Editor-in-Chief of the *Journal of Microorganism Control* as an attachment of their files to the e-mail (submission procedures are subject to change). See the mailing address below for sending the manuscript (see no. 35). The corresponding author must also confirm that all co-authors agree on the content and submission of the manuscript and that they agree to publish the manuscript if accepted, and must include this information in the cover letter.

If the manuscript contains information about individuals (e.g., personal communication), authors must retain evidence of written informed consent for the release of those details. Since the journal does not have an online support system and supplementary information cannot be published separately, authors may add and present additional results and data in the text by bracketing them with "(data not shown)".

#### **5. Cover letter including the manuscript information**

The authors should prepare the cover letter for submission of the manuscript. The letter corresponds to the title page, which includes the following manuscript information.

- 1) Article title: The title should be informative and concise (within 30 words).
- 2) Authors' names: The name of each author should be written in the full first name and last name in capital letters. Each name should be followed by a superscript number 1, 2, etc. to designate the institution where the study was performed. The name of the corresponding author should be followed by an asterisk, \*, after the superscript number.
- 3) Name of the institute where the study was held: The institution name with its postal address should be preceded by the superscript number.
- 4) Telephone number, Fax number, and E-mail address of the corresponding author.
- 5) Present address, if any, of the authors have moved to a different institute
- 6) Keywords: Authors need to select five or fewer appropriate keywords.
- 7) Running head: This should be given as a compact headline within five words in all capital letters.

In the case of the Japanese corresponding author, the Japanese information on the following items is also required to be presented all in Japanese.

- 8) Article title.
- 9) Authors' names.
- 10) Names of the institute where the study was held.
- 11) Postal present address if the author has moved.

- 12) Name and complete address of the corresponding author

## **6. Author statements (outline)**

Authors are required to present the statements including declarations in the manuscript, before REFERENCES. They include the following but are not compulsory for numbers 3 to 6, if not applicable. See below (nos. 14 to 20) in detail.

- 1) Author contributions
- 2) Conflicts of interest
- 3) Funding information
- 4) Ethical approval
- 5) Acknowledgments
- 6) Data availability

## **7. Dates of reception and acceptance of the manuscript**

The date of the reception of the manuscript is the day when the Editorial Board recognized its submission. And after reviewing, if the manuscript is confirmed by the Editorial Board to be accepted for publication, the acceptance day is noted.

## **8. Abstract and keywords**

The abstract should be written on page 2. Although the word "ABSTRACT" itself is not necessary, it is recommended to write with a bracket for recognition, i.e., (Abstract). The content should be in one paragraph without breaking the line within the limited number of words used (see no. 3).

Keywords must be provided a maximum of six, each of which should be separated with a slash (/). General names such as 'membrane', 'enzyme', 'inactivation', etc. should not be used, instead, more concrete expressions such as 'membrane structure' and 'enzyme inactivation' are preferable. In a keyword, the uses of 'of' and 'and' should be avoided. The initial alphabet of each word should not be in capital, except for proper nouns.

## **9. Introduction**

The background of the study should be presented. Neither the summary of the results nor a review of the references should be written. Do not use subtitles.

## **10. Materials and Methods**

It must be described concisely and compactly using subtitles. The standard and already published method quote the references and describe the necessary item minimally.

## **11. Results**

The results must be described specifically and consisted logically using subtitles. They must be written effectively using figures and tables, and also take notice of redundant and unclear explanations. Figures and tables should be of minimal necessity. The simple results must be described in the text.

**12. Discussion**

Authors should avoid the repeat of results and must limit the descriptions relating to the fact and interpretation of obtained results as much as possible with citation of closely relating references. The use of subtitles should be avoided. If necessary, a figure or table can be used for explaining any author's concept as a model or a conclusion.

**13. Theory**

If the manuscript contains a theoretical concept, this title can be inserted in the text preferably between INTRODUCTION and MATERIALS AND METHODS or between MATERIALS AND METHODS and RESULTS. For a description of the extensive theory, subtitles can be used.

**14. Author statements including declarations**

The authors are required or encouraged to present the following statements including declarations relating to the submitted manuscript. They are author contributions, conflicts of interest, funding information, ethical approval, acknowledgments, and data availability. Each of these is commented on below.

**15. Author contributions**

The author's contributions are required for the authors to be described. We recommend including authorship and contributions using the CRediT taxonomy from CASRAI (<https://casrai.org/credit/>), which aims to provide transparency to the contributors of researchers to the published study, improving attribution, credit, and accountability. The roles included in the taxonomy are conceptualization, data curation, draft preparation, formal analysis, funding, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing-original creation, writing-the initial draft, writing-review, and editing. Additional roles can also be described.

**16. Conflicts of interest**

Authors must disclose any substantial or potential conflict of interest including financial, personal, or other issues with other persons or institutes that could improperly influence their work. Even if authors have no conflict of interest, they are required for this statement in the "Conflict of interest".

**17. Funding information**

The authors need to state in detail the funding sources that support this study. It includes the names of funding organizations and grant numbers. Any authors relating to the special funding should be described. If authors received no special funding for the study, it is preferable to state that.

**18. Ethical approval**

If any, authors should describe the ethical matter. The code of Ethics of the Society for Antibacterial and Antifungal Agents, Japan is as follows.

The papers intended for the human body shall be the studies conducted with respect

for “the Declaration of Helsinki” (1964, revised 2008), “Ethical Guidelines for Epidemiological Studies” and “Ethical Guidelines for Clinical Studies” by the Ministry of Education, the Ministry of Health, Labor and Welfare, “Ethical Guidelines for Studies on the Human Genome and Gene Analyses” by the Ministry of Education, Culture, Sports, Science and Technology, the Ministry of Health, Labor and Welfare, and the Ministry of Economy, Trade, and Industry, in Japan and other similar ethical guidelines.

The papers dealing with animals shall also be the studies that have been conducted to follow the guideline for animal experiments specified by an ethical review board of the affiliated organization based on the intention of the “Act on Welfare and Management of Animals”, “Basic Guidelines for Conducting Animal Experiments in the Organization Under the Justification of the Ministry of Health, Labor and Welfare”, and “Standard for Breeding, Safekeeping of Animals for Experiments and Reduction of Pain” by the Ministry of the Environment, in Japan. The statement is required for authors that the study has been conducted with the approval of an ethical review board of the affiliated organization.

All authors are recommended to consult the relevant EQUATOR guidelines (<https://www.equator-network.org/>) for the study relating to humans and animals. Even if no ethical matter is involved, the authors are recommended to state that.

## **19. Acknowledgments**

Authors can state acknowledgments of persons, organizations, etc. in the manuscript. For those relating to funding, describe it in the Funding information.

## **20. Data availability**

If authors have any tool for interlinking to a data repository, the published results data can be opened to readers for a better understanding of the research reported. The statement of data availability is not compulsory.

## **21. References**

Reference citation in the text should follow the system denoted as follows. The articles that have been published or are “in press” can be included in the reference list placed in the final part of the manuscript. Unpublished or submitted studies should be cited in the text using parentheses, for example, (T. Bokin, unpublished). Personal communication also can be cited in the text but not in the reference list, like, (H. Bobai, personal communication), providing that the authors should get permission from the person or organization concerned.

In the text, references should be noted in parentheses in date order as follows, (Bokin 2003; Sakkin and Shodoku 2010; Bobai et al. 2022), except for the citation of the author’s name in the sentence, for which only a given year is parenthesized, like ‘Bokin (2003) has reported that ...’, etc. Multiple references from the same author(s) in the same year should be distinguished by the letters, ‘a’, and ‘b’, etc. after the year, like ‘Sawai et al. (2013a)’. Web references can also be in the reference list and the URL and other information should be given with the date when the reference was last accessed. See an example presented below. If authors intend to cite a specific software or database, its name and the website with the accessed date in parenthesis should be

referred to.

The reference list should be in alphabetical order according to the first author. The order of description is the author(s) name(s), year in parentheses, title, journal name, volume in boldface, and initial and last page numbers. Articles with two authors should follow those of the first author, arranged in alphabetical order according to the name of the second author. Articles with more than two but up to seven authors should do those of the first author in chronological order. In articles with multiple references from the same first author in a given year, authors should arrange those in chronological order. For articles written by eight or more authors, the first seven authors should be listed and followed by “et al.” In the REFERENCES section, if any author has (a) middle name(s), no space should be placed between the initial capital followed by a dot for the first or last name and middle name(s).

‘DOI’ can be described but not compulsory, providing that the authors should follow the same citation style for all references. If authors cite a non-English written paper, the language name should be identified with parentheses after the title of the paper cited, e.g., (in Japanese). The authors should use the standard abbreviation of a journal’s name according to the ISSN List of Title Word Abbreviations (ISSN-LTWA, <https://www.issn.org/services/online-services/access-to-the-ltwa/>). The abbreviation of our journal is “*J. Microorg. Control*”. See the following examples for citations in different cases.

◆Examples of papers:

Urano, H., and Fukuzaki, S. (2005) The mode of action of sodium hypochlorite in the cleaning process. *Biocontrol Sci.*, **10**, 21-29.

Furuhata, K. (2019) Occurrence prevention and removal technology of biofilm formed in various environments (in Japanese). *J. Antibact. Antifungal Agents, Jpn. (Bokin-Bobai-shi)*, **47**, 395-405.

Miyoshi, S., Kumagai, M., Tanida, R., Soda, K., Yoshimoto, Y., and Mizuno, T. (2022) Inhibitory effects of polymyxin B and human LL-37 on the flagellin expression in *Vibrio vulnificus*. *Biocontrol Sci.*, **27**, 57-64.

Gonçalves, A. P., Heller, J., Daskalov, A., Videira, A., and Glass, N. L. (2017) Regulated forms of cell death in fungi. *Front. Microbiol.*, **8**, 1837. doi:10.3389/fmicb.2017.01837.

◆Examples of books (‘Japan’ is not necessary, if published in Japan),

Tsuchido, T., Kourai, H., Matsuoka, H., and Koizumi, J. (2000) *Biseibutsu Seigyo, Kagaku-to-Kougaku (Microorganism Control. Science and Engineering)* (in Japanese), pp. 112-129, Kodansha Scientific, Tokyo.

Holdsworth, S. D., and Simpson, R. (2016) Safety aspects of thermal processing. In *Thermal Processing of Packaged Foods, 3rd ed.*, pp. 149-158, Springer Intl. Pub. Switzerland.

Setlow, P., and Johnson, E. A. (2013) Spores and their significance. In *Food Microbiology: Fundamentals and Frontiers, 4th ed.* (Doyle, M. P. and Buchanan, R. L., ed.), pp. 45-79. ASM Press, Washington, D. C., USA.

◆Example of a dissertation,

Vo, C.K. (2021) Conditional generation and its mechanism of oxidative injury in heated and irradiated *Escherichia coli* cells. Dissertation, Osaka Prefecture University.

◆Example of a patent,

Shimamura, T. and Hara, Y. (2001) Compositions and methods of potentiating antibiotics with polyphenols. EP0761226B1.

◆Example of a website,

World Health Organization (2022) World health statistics 2021: A visual summary. World Health Organization, Geneva, Switzerland. <https://www.who.int/data/stories/world-health-statistics-2021-a-visual-summary/> (accessed 2022/05/08).

## 22. Tables

Tables are presented consecutively in turn after REFERENCES, as TABLE 1, etc. Authors are required for preparation of those on (a) separate page(s) with the notation of the first author's name and table number in the top right corner of each page. Each table should have a concise title. Vertical lines between columns should be avoided. The first letter of each item should be capitalized. The content and experimental conditions should be described sufficiently to be understood without reading the text with the supportive explanations in the footnote referred to in the table, using superscript italic alphabets in turn (*a*, *b*, *c*, etc.).

## 23. Legends to figures

Each figure should have a concise legend describing precisely what the figure indicates and explaining essential experimental conditions without reading the text. Legends to figures should be included in the text of the manuscript on a separate page after TABLEs. The title and the legends are indicated in turn, starting from FIG. 1.

## 24. Figures and photographs

Figures should be submitted separately from the main manuscript file. They are made in turn using a TIFF format preferably but PowerPoint is also available. As for the font used in the figures, Arial or Helvetica is preferable. Composite figures are recommended to be presented using capitalized alphabets, like FIGs. 1A, 1B, and 1C. The first author's name and the figure number must be indicated in the right top margin of each page. All figures should be original but, if the author cites figures already published elsewhere, permission from the copyright owner is required based upon the author's responsibility.

Photographs must be of good quality and have high contrast. The magnification should be indicated with a bar displaying a unit length.

The author can use color art for figures and photographs with a charge of ¥40,000 per page and must indicate that.

## 25. Abbreviations and units

Abbreviations can be available for general names such as the scientific name, physical quantity, elements, and compounds' names, and commonly used international words (see TABLEs 1 and 2). The authors need to use SI units. When using non-SI units, the equivalent in SI units must also be given at the first appearance.

Latin words in current use, for example, *in vitro*, *in vivo*, and *in situ*, and abbreviations for expressions, for example, *et al.*, *e.g.*, *i.e.*, and *cf.* are given in Roman.

For other names used in the manuscript, as a rule, authors can use an abbreviation if it will appear more than three times in the text. Authors must define the abbreviations at the first appearance in the Abstract and in the text of the paper including figures and tables.

If the authors use equations with many parameters, abbreviations, or units in the text, the section of NOMENCLATURE is recommended to be set up (see no. 26).

## 26. Nomenclature

For microorganisms, plants, and animals, the Latin names of Genus and species must be described at first appearance in the text and thereafter the generic name should be abbreviated. For organisms with genera beginning with the same letter such as *Streptococcus*, *Staphylococcus*, and *Streptomyces*, authors should avoid using confusing abbreviations. Subspecies are italicized and groups and types are in Roman and designated by initial capital letters.

For chemicals, authors should follow the recommendations of the International Union of Pure and Applied Chemistry (IUPAC), and for biochemicals, should do those of the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology (IUBMB) and the IUPAC-IUBMB Joint Commission on Biochemical Nomenclature. In this journal, commonly used compounds listed in TABLE 3 can be abbreviated.

In mathematical and graphical expressions of the parameters, abbreviations, and units (see no. 25), if they exceed over ten, authors are recommended to give those as the NOMENCLATURE just before REFERENCES.

## 27. Japanese digest for Japanese authors

Japanese authors are required for writing a Japanese digest of the manuscript for submission within 2,000 Japanese characters for Review, Minireview and Original papers and within 1,000 characters for Note and Communication, respectively. Tables and figures cannot be included in the digest. The digest text should be attached to the materials submitted to *the Journal of Microorganism Control*. It will be published in *the Journal of Antibacterial and Antifungal Agents, Japan*, which is another official Journal of the Society. Writing of the digest text should follow *the Instruction for Authors* of the above Japanese Journal. The author can download the template located in the subsite of *the Journal of Microorganism Control* on the Society website (<https://www.saaaj.jp>) to write the digest text.

## 28. Peer review

The submitted manuscript is reviewed carefully by at least two reviewers chosen by the Editor-in-Chief or Editor-in-Vice Chief. The authors can recommend several possible reviewers to Editor to enhance the editing process. The manuscript authored by Editors and Editorial Board members is sent to unrelated reviewers affiliated with different institutions.

**29. English editing before submission**

Authors are recommended to have the manuscript professionally edited before submission to improve the English sufficiently for understanding by reviewers. If the content of the manuscript cannot be understood well by reviewers or have many grammatical mistakes, the manuscript may be returned to the author without review.

**30. Revision**

The article sent back to the authors for revision must be returned to the Editor within four weeks. A letter describing all modifications written in both replies to the reviewers' and editor's comments, item by item, should be attached to the revised manuscript. Otherwise, it will be dealt with as a new submission. If the additional period is necessary, the author can contact the editor. If any editing problem is found in the manuscript, the Editor or Editorial Office may ask the author to resolve it even after its acceptance.

**31. Proofs and reprints**

Proofs are sent to the corresponding author. The author should correct them carefully and send them back to the Editorial Office within 6 days. If there is no response until the time limit, the author must accept that the final proofreading may be performed by the Editorial Board. Authors cannot insert or eliminate a sentence or word at this stage, except for mistakes in printing. If the author needs such a modification, its cost is charged to the author.

The reprint order form is sent to the author together with proofs. Reprints are obliged to purchase by the author at least 50 copies at a minimum. Authors can purchase additional copies of reprints for the Society, using the format. The reprint has no title cover page. See the Publication and reprint fees item for reprint fee.

**32. Erratum and correction after publication**

If authors find an error in a paper after its printing for publication, and if it is due to a printing error, an erratum will be inserted into a proximate issue. If the error is made by the author, however, the author is responsible for the charge.

**33. Publication and reprint fees**

The charge for publication is ¥30,000 plus tax for original full-length papers, minireview, and review papers and ¥15,000 plus tax for Notes and Communications within the limited pages described above. There will be a charge of ¥18,000 plus tax for each page exceeding the limits. If the paper contains color art or photographs, a fee of ¥40,000 will be charged per page to the corresponding author, as also described in item no. 24.

The reprint fees are tabulated below (see TABLE 4).

**34. Copyright**

The copyright of the material published in the journal belongs to the Society for Antibacterial and Antifungal Agents, Japan.

**35. Mailing addresses (at submission, after revision, and after acceptance)**

- ◆ For submission of the manuscript,  
Editorial Board of *Journal of Microorganism Control*.  
E-mail: biocontrol-sci@saaaj.jp (subject to change)
- ◆ For the final accepted manuscript,  
Editorial Office  
The Society for Antibacterial and Antifungal Agents, Japan  
E-mail: hensyu.saaaj@nifty.com

**36. Online access to published paper (J-Stage)**

Papers published in the *Journal of Microorganism Control* appear on the J-Stage site (<https://www.jstage.jst.go.jp/browse/-char/ja>).

**37. Contacts**

For further information relating to the submission of the article or editing process and publication, please contact us below.

Editorial Office:  
The Society for Antibacterial and Antifungal Agents, Japan  
Shin-Kosan Bldg.  
1-13-38 Nishi-Honmachi, Nishi-Ku, Osaka, Japan  
550-0005 (zip code)  
E-mail: hensyu.saaaj@nifty.com; boukin@nifty.com  
Tel.: +81-6-6538-2166; Fax: +81-6-6538-2169.

August 1, 2022

The Editorial Board of *Journal of Microorganism Control*  
The Society for Antibacterial and Antifungal Agents, Japan

**TABLE 1.** Selected quantities, abbreviations, and units.

Quantity	Abbreviation	Unit
Time	<i>t</i>	yr (not year), mo (not month), wk (not week), d (not day), h (not hour), min, s (not second), ms, $\mu$ s, ns
Length	<i>l</i>	m, mm, $\mu$ m (not $\mu$ ), nm, $\text{m}^2$ , $\text{cm}^2$ , $\text{mm}^2$ , $\mu\text{m}^2$ , $\text{nm}^2$ , $\text{m}^3$ , $\text{dm}^3$ , $\text{cm}^3$ , $\text{mm}^3$ , $\mu\text{m}^3$ , $\text{nm}^3$
Area	<i>A</i>	nm, $\text{m}^2$ , $\text{cm}^2$ , $\text{mm}^2$ , $\mu\text{m}^2$ , $\text{nm}^2$ , $\text{m}^3$ , $\text{dm}^3$ , $\text{cm}^3$ , $\text{mm}^3$ , $\mu\text{m}^3$ , $\text{nm}^3$
Volume	<i>V</i>	kL, L, mL, $\mu$ L, nL
Mass	<i>m</i>	kg, mg, $\mu$ g (not $\gamma$ ), ng
Concentration	<i>C</i>	M, mM, $\mu$ M, nM
Amount of substance	<i>N</i>	mol, mmol, $\mu$ mol, nmol
Molecular mass	<i>m</i>	Da (dalton)
Relative molecular mass	<i>M<sub>r</sub></i>	dimensionless
Molar mass	<i>M</i>	$\text{g} \cdot \text{mol}^{-1}$
Temperature	<i>T</i>	K, $^{\circ}\text{C}$
Heat	<i>q, Q</i>	kJ, J (not cal)
Electricity and magnetism		
Electric current	<i>I</i>	A, mA, $\mu$ A
Potential difference	<i>V</i>	V, mV, $\mu$ V
Capacitance	<i>C</i>	F (farad)
Magnetic field strength	<i>H</i>	G (gauss)
Resistance	<i>R</i>	$\Omega$
Conductivity	<i>k</i>	S ( $\Omega^{-1}$ )
Force	<i>F</i>	N ( $\text{kg} \cdot \text{m} \cdot \text{s}^{-2}$ )
Pressure	<i>P</i>	Pa ( $\text{N} \cdot \text{m}^{-2}$ ), atm, bar, mbar, torr, $\text{kg}/\text{cm}^2$ , mmHg
Sedimentation coefficient	<i>s</i>	S ( $=10^{13}\text{s}$ )
Density	$\rho$	$\text{g} \cdot \text{cm}^{-3}$
Relative density	<i>d</i>	dimensionless
Viscosity	$\eta$	P ( $=0.1 \text{ Pa} \cdot \text{s}$ )
Frequency	<i>V, f</i>	Hz
Wavelength	$\lambda$	nm (not m $\mu$ )
Absorbance	<i>A</i>	dimensionless
Transmittance	<i>T</i>	dimensionless
Molar absorption coefficient	$\epsilon$	$\text{M}^{-1} \cdot \text{cm}^{-1}$
Ionic strength	<i>I</i>	M ( $\text{mol} \cdot \text{l}^{-1}$ ), mM
Energy	<i>E</i>	J (not cal)
Gibbs free energy	<i>G</i>	J (not cal)
Equilibrium constant	<i>K</i>	dimensionless
Michaelis constant	<i>K<sub>m</sub></i>	M, mM
Inhibition constant	<i>K<sub>i</sub></i>	M, mM
Rate constant	<i>k</i>	$\text{s}^{-1}$ , $\text{M} \cdot \text{s}^{-1}$
Rate of reaction		$\text{mol} \cdot \text{s}^{-1}$ , $\text{mmol} \cdot \text{s}^{-1}$
Other units		
Absorption dose		Gy
Dose equivalent		Sv
Radioactivity		Bq
Acceleration of gravity	<i>g</i>	

(cont'd)

(cont'd)

---

Prefixes for units

---

E, exa ( $10^{18}$ ) ; P, peta ( $10^{15}$ ) ; T, tera ( $10^{12}$ ) ; G, giga ( $10^9$ ) ; M, mega ( $10^6$ ) ; k, kilo ( $10^3$ ) ; h, hector ( $10^2$ ) ; da, deca ( $10^1$ ) ; d, deci ( $10^{-1}$ ) ; c, centi ( $10^{-2}$ ) ; m, milli ( $10^{-3}$ ) ;  $\mu$ , micro ( $10^{-6}$ ) ; n, nano ( $10^{-9}$ ) ; p, pico ( $10^{-12}$ ) ; f, femto ( $10^{-15}$ ) ; a, atto ( $10^{-18}$ ).

---

**TABLE 2.** Abbreviations for words other than units, quantities, or chemical compounds.

Abbreviation	Word
BOD	biological oxygen demand
b.p.	boiling point
calc.	calculated
cf.	compare
COD	chemical oxygen demand
conc.	concentrated
concn	concentration
cpm	counts per minute
dil.	dilute
dpm	disintegration per minute
e.g.	for example
et al.	et alia (and others)
Expt. (pl. Expts.)	Experiment(s)
Fig. (pl. Figs.)	Figure(s)
i.e.	that is
max.	maximum
min.	minimum
<i>m</i> -, <i>p</i> -, <i>o</i> -	meta- para- ortho-
m.p.	melting point
<i>n</i> -	normal
%	percent
p. (pl. pp.)	page(s)
ppb	parts per billion
ppm	parts per million
ppt	precipitate
ref. (pl. refs.)	reference(s)
$R_f$	distance traveled by zone, divided by distance traveled by the solvent front
rpm	revolutions per minute
SD	standard deviation
SE	standard error
sec-	secondary
spec. act.	specific activity
temp.	temperature
<i>tert</i> - ( <i>t</i> -)	tertiary
UV	ultraviolet
vol. (pl. vols.)	volume(s)
vs.	versus
v/v	volume per volume
vvm	volume per volume per minute
wt.	weight
w/v	weight per volume
w/w	weight per weight

**TABLE 3.** Abbreviations for chemical compounds (these abbreviations can be used without definition).

Abbreviation	Chemical compound
ADP	adenosine 5'-diphosphate
AMP	adenosine 5'-monophosphate
ATP	adenosine 5'-triphosphate
ATPase	adenosine triphosphatase
CoA	coenzyme A
DNA	deoxyribonucleic acid
cDNA	complementary DNA
DNase	deoxyribonuclease
EDTA	ethylenediaminetetraacetic acid
FAD	flavin adenine dinucleotide
FMN	flavin mononucleotide
NAD, NAD <sup>+</sup>	nicotinamide adenine dinucleotide
NADH	reduced NAD
NADP, NADP <sup>+</sup>	nicotinamide adenine dinucleotide phosphate
NADPH	reduced NADP
RNA	ribonucleic acid
mRNA	messenger RNA
rRNA	ribosomal RNA
tRNA	transfer RNA
RNase	ribonuclease
SDS	sodium dodecyl sulfate
Tris	Tris (hydroxymethyl) aminomethane

**TABLE 4.** Reprint fee of *Journal of Microorganism Control*<sup>a</sup>

Pages	No. of copies			
	50	100	200	300
1~2	23,000 <sup>b</sup>	25,000	34,500	41,000
3~4	27,000	30,000	45,000	58,000
5~8	42,000	47,000	78,000	108,000
9~12	64,000	67,000	92,000	132,000
Over 12	Plus ¥2,000 per one additional page			

<sup>a</sup>Valid from 1 January, 2023.<sup>b</sup>Japanese yen.