

INSTRUCTIONS TO AUTHORS

AIMS AND SCOPE

The Journal of Microbiology and Biotechnology (JMB) is a monthly international journal devoted to the advancement and dissemination of scientific knowledge concerning microbiology, biotechnology, biomedicine and related academic disciplines. It covers scientific and technological aspects of microbiology, including Bioactive Compounds / Food Microbiology; Biocatalysis and Bioprocess Engineering; Environmental Microbiology / Microbial Diversity; Molecular and Cellular Microbiology / Biomedical Sciences (the subcategories are available in detail online at <http://www.jmb.or.kr/about/about.html>). JMB is published and distributed as a regular issue on the 28th of each month, and occasionally as a special issue, by the Korean Society for Microbiology and Biotechnology (KMB).

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Originality, authorship, and copyright

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Strain identification, culture deposition and fermentation optimization

Manuscripts addressing only the partial identification of microorganisms based on preliminary experiments, such as 16S rRNA gene sequencing and simple growth characterization, are unlikely to be considered by JMB for publication, unless the authors provide in depth molecular, genetic, and/or physiological analysis to accompany the identification. Similarly, the simple optimization of fermentation conditions through statistical methods are unlikely to be considered for publication. Authors are required to provide strains described in their paper upon request. JMB recommends authors deposit any newly identified, or otherwise noteworthy strains, in publicly accessible microbial stock centers or culture collections, and to provide strain numbers and/or deposit numbers in the text of the manuscript.

Ethics

All research involving human subjects must be performed in accordance with the ethical standards given in the Declaration of Helsinki and the research protocol must be approved by the author's institutional review board (IRB) prior to experiments. Experiments involving animals must be conducted in accordance with institution's or national research council's guidelines for the care and use of laboratory animals and must be approved by the author's institutional animal care and use committee (IACUC). Details of the ethical approval status of the research must be described in the Materials and Methods section of the manuscript, including the IRB and/or IACUC approval number. Authors should submit a document indicating approval of the research when submit the revised version of the manuscript.

Conflict of interest

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objectivity is considered a potential source of conflict of interest. These must be disclosed when directly relevant or indirectly related to the work that the authors describe in their manuscript. Potential sources of conflict of interest include but are not limited to patent or stock ownership, membership of a company board of directors, membership of an advisory board or committee for a company, and consultancy for or receipt of speaker's fees from a company. The existence of a conflict of interest does not preclude publication in this journal. If the authors have no conflict of interest to declare, they must also state this at submission. It is the responsibility of the corresponding author to review this policy with all authors and to collectively list in the manuscript (under the Acknowledgment section).

Sequence data

Manuscripts reporting new nucleotide and amino acid sequences should be accompanied by substantial additional experimentation to characterize the gene(s) and product(s) concerned, and/or substantial comparable analysis. A sequence alone is unlikely to be acceptable. Papers reporting new sequence data will not be published unless the sequence has an accession number from a public nucleotide database, for example GenBank, EMBL or DDBJ. Accession numbers should be included in the manuscript no later than the modification stage of the review process. The accession numbers should be included in a separate paragraph at the end of the Materials and Methods section for Articles, or at the end of the text for Notes (for example "The GenBank/EMBL/DDBJ accession number of the sequence reported in this paper is AA00000"). Authors should follow the "Sequence data format" detailed below for the preparation of nucleotide and amino acid sequence diagrams.

Omics data

For manuscripts reporting genomics or transcriptomics data (e.g. microarray, next-generation sequencing, or other high-throughput genomics data), the authors should deposit the omics data in the appropriate public database (e.g. Gene Expression Omnibus (GEO) and BioProject in NCBI, ArrayExpress, or CIBEX) and provide an approved accession number in a separate paragraph at the end of the Materials and Methods for Articles, or at the end of the text for Notes.

Page charges

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All papers will be critically read by at least two anonymous reviewers, selected for their competence in the subject area of the paper. Acceptance of the paper will depend upon its scientific merit and suitability for the journal. A paper may be accepted in its original form or subject to revision.

The reviewers' (and editor's) suggestions will be conveyed to the author, who will then have an opportunity to revise the paper. If a manuscript returned to an author for revision is held for longer than two months, or if revision is sufficiently extensive, then the date of receipt of the revised manuscript will be substituted for the initial date of receipt.

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Revisions

Papers may be returned to authors for revision. Authors will be given eight weeks after receipt of the reviewers' comments to revise their paper. Revisions must be submitted via the online submission system, under the heading "Submit Manuscript Online." Click on the link "Submit a revised manuscript" then upload your revised files. Please do not submit the revision via email.

Resubmissions

Papers may be rejected but the authors are encouraged to resubmit the paper after additional experimental data are obtained. Resubmissions must be submitted via the online submission system under "Begin a new submission." The paper must be marked as a resubmission and list the handling editor and manuscript number of the original submission, in the cover letter. Please also provide a letter giving point-by-point responses to the referees of the previous version.

FILE FORMATS

Prepare the text in Microsoft (MS) Word (6.0 or later version) or WordPerfect. Set the page size to have 2.5 cm margins on all sides. The font size should be no smaller than 12 points. Type every portion of the manuscript double spaced, including References and figure legends, and number all pages in sequence, including the abstract, figure legends and tables. The last two items should be placed after the Reference section. Manuscript pages should have line numbers. The text of your manuscript (including title page, abstract, main text, references, and figure legends) followed by tables and figures should be in a single word file for initial submission. Each figure should be labeled with a figure number. Standard fonts (Times New Roman, Times, or Courier), preferably Times New Roman should be used for the generation of text and Arial or Helvetica for the figures. Use the Symbol font and the "Insert Symbol" option from the menu bar for introducing symbols in MS Word. Authors can upload their articles as MS Word (6.0 or a later version) or WordPerfect. It is also possible to submit an article in a ready made Adobe Acrobat PDF format, but if the article is accepted, the original source files will be needed. Authors must then check the PDF conversion carefully to make sure that everything converted properly. This format is acceptable for reviewing purposes only. If your paper is accepted, you are then required to send the final version as source files including a separate Word file for text and graphic TIFF or EPS files. Manuscripts that do not follow the "File Formats" and "Organization and Styles of Manuscripts" (below) are not suitable for editorial review or publication, and will be returned to the author.

ORGANIZATION AND STYLES OF MANUSCRIPTS

I. Articles

Articles are full-length research reports that contain detailed descriptions of experimental work, with clear interpretation and discussion of the theoretical and experimental results and data. Articles should be structured under the section headings Introduction, Materials and Methods, Results, Discussion, Acknowledgment, Nomenclature/Appendix (if applicable), and References. Authors should present their material with utmost clarity and conciseness and in a logical manner. Constant repetition of experimental procedures, information, and facts among sections should be avoided. The average length of a published Article should be approximately six printed page long including tables and figures.

The organization shown below should be followed (in the order given):

Title page

- title of the paper
- author name(s)
- author affiliation(s)
- address(es) of the institution(s) at which the work was performed
- name, postal and E-mail addresses, and phone and fax numbers of the corresponding author to whom the revision or galley proofs of the paper is to be sent
- a brief running title (not to exceed 54 characters and spaces)

With regard to titles, avoid the main title: subtitle arrangement, declarative titles, complete sentence constructions, and unnecessary use of articles. Because each manuscript should present results of independent and cohesive study, numbered series titles are not allowed. The running title will be considered during compilation of the subject index and will be at the top of each printed page.

Place an asterisk after the name of the author to whom inquiries regarding the paper should be directed.

The affiliation address for each author should be indicated by superscript Arabic numbers (1, 2, 3, etc).

Abstract

Articles must include an Abstract of 250 words or fewer. The Abstract should not repeat information already present in the title. It should be suitable for direct inclusion in Current Contents, Chemical Abstracts, and Biological Abstracts, etc.

Key words

Immediately after the abstract, provide a maximum of 6 key words. Please avoid general terms, multiple concepts (avoid, for example, "and" "of"), and abbreviations. Only abbreviations firmly established in the field may be eligible.

Introduction

The Introduction presents the purpose of the studies reported and their relationship to earlier work in the field. It should not be an extensive review of the literature. Use only those references required to provide the most salient background to allow the readers to understand and evaluate the purpose and results of the present study without referring to previous publications on the topic.

Materials and Methods

The Materials and Methods section should be brief but include sufficient technical information to allow the experiments to be repeated by a qualified reader. Only new methods should be described in detail. Cite previously published procedures in References.

Results

The Results section should include the rationale or design of the experiments as well as the results of the experiments. Results can be presented in figures, tables, and text. Reserve extensive discussion of the results for the Discussion section.

Discussion

The Discussion section should focus on the interpretation of the results rather than a repetition of the Results section. The Results and Discussion sections may be combined into one section when substantial redundancy cannot be avoided in two separate sections or if a long discussion is not warranted.

Acknowledgments

Place Acknowledgments, including information on the source of any financial support received for the work being published, before the References.

References

The References section must include all relevant published works, and all listed references must be cited in the text. Arrange the reference list in the order of their appearance in the main text, and then number the list consecutively. Citation in the text should take the list number in square brackets (e.g., [1], [2-4]), not by author name/year. The author(s) must check the accuracy of all reference numbers, as the JMB will not be responsible for incorrect in-text reference citations.

Abbreviate journal names according to the *PubMed Entrez Journals* database (available at <http://www.ncbi.nlm.nih.gov/entrez/>). The referencing styles shown in the examples below should be used for journal articles (1), books (2), specific chapters in books (3), and websites (4), respectively:

1. Lee YH, Park JS. 2004. Evaluation of operational conditions and power consumption of bioattor for enzymatic saccharification of uncooked starch. *J. Microbiol. Biotechnol.* **14**: 351-357.
2. Brock TD, Madigan MT. 1988. *Biology of Microorganisms*, pp. 42-59. 5th Ed. Prentice Hall, Englewood Cliffs, New Jersey.
3. Gershon AA, Russa P La, Steinberg SP. 1999. Varicella-zoster virus, pp. 900-911. In Murray PR, Baron EJ, Pfaller MA, Tenover FC, Tenover FC (eds.), *Manual of Clinical Microbiology*, 7th Ed. American Society of Microbiology, Washington, D.C.

4. Kirkman TW. 1996. Statistics to Use. Available from <http://www.physics.csbsju.edu/stats/>. Accessed Nov. 20, 2011.

References to papers accepted for publication but not yet published should show the journal name and, if known, the probable year of publication, and state "in press."

The following types of references are not valid for listing in the References section:

- unpublished data
- personal communication
- manuscripts in preparation or submitted
- pamphlets
- abstracts
- patents
- newsletters
- material that has not been subjected to peer review.

References to such sources should be made parenthetically in the text (e.g., Lee YH et al. 1989. *Abstr. Annu. Meet. Kor. Soc. Appl. Microbiol.* Seoul, Korea, p. 159).

Figure legends

Figure legends should contain a brief description of the experiments so that the figure can be understood without reference to the body of the text. However, the legend should not repeat Materials and Methods or contain interpretive statements.

Tables

Tables should be typewritten separately from the main text and in an appropriate font size to preferably fit each table on a separate page. Each table must be numbered with Arabic numerals (e.g., Table 1, Table 2) and include a title. Place footnotes to tables below the table body and indicate them with superscript lowercase letters (a, b, c, etc), *not* symbols. Do not use vertical rulings in the tables. Each column in a table must have a heading, and abbreviations, when necessary, should be defined in the footnotes.

Figures

Figures should be provided separately from the main text. Use Arabic numerals to number all figures (e.g., Figure 1, Figure 2) according to their sequence in the text. The figure number must appear well outside the boundaries of the image itself. Multipart figures should be numbered in uppercase and bold font letters (**A**, **B**, **C**, etc) without parenthesis, both on the figure itself and in the figure legends.

Note that figures may have to be reduced in size to fit the one-column (84 mm) or two-column (176 mm) space of the printed page, as determined by the journal designer. Original figures, especially line drawings, must therefore contain fonts and other detail that are large and clear enough to be legible even after a 50% reduction in size. Line drawings must be a minimum of 0.5 mm thickness for clear reproduction. The preferred symbols for graphs are ○, ●, □, ■, △, ▲, ▽, ▼. Where possible, the same symbol should be used for the same quantity in different figures. Simple bar diagrams reporting only a few values are usually unnecessary; the data can normally be given in a few lines of text. It is editorial policy not to publish bar diagrams with "three-dimensional" bars unless there is a specific justification for their use. Tints should not be used as shading for bars.

All figures should be created with applications that are capable of preparing high resolution TIFF or EPS files acceptable for publication. All figures should be embedded at the end of text in a single Word or PDF file when you initially submit manuscript. If your paper is accepted, we will require submission of figures as separate TIFF or EPS files at publication quality resolution. Blurred images will not be accepted. Diagrams and photographs submitted in electronic format must be of the following minimum resolutions:

- 300 dpi for photographs or halftones only, in both black and white and color
- 600 dpi for photographs or halftones with line artwork as insets
- 600 dpi for line artwork or lettering
- 1,200 dpi for fine-line artwork and artwork with gray shades

The author(s) will be required to pay for reproduction of color photographs. The cost is US\$160 (₩160,000) for each illustration containing color. Any figures submitted in color will be reviewed and processed with the understanding that the figure will be published in color. The mode of the TIFF or EPS file must be CMYK, *not* RGB.

II. Notes

Notes are short reports for the presentation of brief observation that have insufficient material to fulfill the structure of a full-length article. They are intended for reporting preliminary studies or brief studies of a descriptive nature. *Notes* should be arranged in the same way as *Articles*, except that the Introduction, Results, and Discussion sections are in a combined section

with no section headings. The abstract should not exceed 100 words. The main text should follow the logical flow of a structured article and should not exceed 1,200 words; the total number of figures and tables should not exceed four. *Notes* should be approximately 3–4 printed page long. The References section is identical to that of *Articles*. *Notes* are subjected to review.

III. Reviews and Minireviews

Authoritative and critical Reviews and Minireviews of the current state of knowledge regarding any aspect of microbiology and biotechnology are preferred. They must be based on original articles, and may address subjects within the scope of the JMB. Reviews should be divided into sections with appropriate headings. The format of the References section is identical to that of *Articles*. While there is no limitation on the length of a Review, it is recommended that a standard Review comprises no more than the equivalent of 12 printed journal pages, including display items and references. References should number no more than 80. The JMB is also happy to publish more compact Minireviews that highlight topics of emerging interest and summarize developments in rapidly advancing areas. A Minireview should occupy no more than 3 printed journal pages, including display items and references. Minireview references should number no more than 30. If, for a particular reason, an author wishes to exceed or diverge from these guidelines significantly, they should contact the Production Editor (jmb@jmb.or.kr) before submitting a manuscript. Unsolicited reviews will be considered but are subject to the approval of the Editor-in-Chief and will be accepted only under special circumstances. Reviews will be subjected to an independent peer review, and the Editor-in-Chief may request changes or decide not to proceed with publication.

NOMENCLATURES, UNITS, ABBREVIATIONS, AND SYMBOLS

Nomenclatures and abbreviations for chemical and biochemical agents, microorganisms, enzymes, proteins, and genes should follow the Instruction to Authors for journals published by the American Society for Microbiology (available online at <http://journals.asm.org/>).

For nomenclature of restriction enzymes, DNA methyltransferases, homing endonucleases, and their genes, refer to the article by Roberts et al. (*Nucleic Acid Res.* 31:1805–1812, 2003)

The JMB follows the same nomenclature for viruses as the Journal of Virology, and more detailed information can be found in the instruction to author of that journal (available online at <http://jvi.asm.org/>).

All abbreviations should be defined at their first use in the text only; do not repeat the definition of abbreviations thereafter.

Note that the JMB uses the following specific design styles (*Nomenclature, abbreviations, units and symbols*):

- The JMB prefers American spelling (e.g., labeling, sulfur, nonspecific, antiviral), abbreviations (Table 1), and nomenclature to follow internationally agreed recommendations. However, authors may use commonly used abbreviations/acronyms but these must be defined in the text at first citation and included in the Abbreviations list.
- It is often convenient, especially in figures and table headings, to give a multiple of the quantity set or measured by multiplying it by a stated factor. The units in which it is expressed should not be multiplied by a number but may be indicated by prefixes such as: M, k, m, μ , n or p (see Table 2).
- The JMB prefers the IUBMB recommendations on symbolism and terminology in rate/equilibrium constants and enzyme kinetics. e.g., K_m , K_s , k_1 , k_{cat} , V_{max} , V_0 , E_0 , E_p , M_p , I_0 , ΔG_a (i.e., subscripted, non-italicized).
- SI (Système International d'Unités) units and quantities should be used (see Tables below) (see http://www.bjpm.fr/enus/3_SI/si.html) but Å, cal, p.p.m. can be used where appropriate.
- Leave a space between a number and its unit of measure. (Exception, do not leave a space between a number and the temperature degree, percent, angular degree, angular minute, or angular second symbols, 15°C, 50%, 90°, 75', 18").
- Use a slash (/) in units of measure (i.e., g/ml rather than g ml⁻¹).
- Use a slash (/) in spelled-out units of measure, not the word "per", before the abbreviation for a unit in complex expressions. e.g., 50 μ g of peptide/ml, 25 mg of drug/kg of body weight, 10 counts/s, 12 domains/cm³, 2×10^3 ions/min, 0.8 keV/channel, and 125 conversions/mm².
- Do not add an "s" to make the plural of any abbreviated units of measure. e.g., 50 mg (not 50 mgs), 3 mol (not 3 mols).
- Do not mix abbreviations and spelled-out units within units of measure.
- Do not capitalize surnames that are used as units of measure.
- Centrifugal force should be preferably expressed as $\times g$, rather than rpm.
- L-amino acid, D-amino acid (i.e., LD in small caps).
- Names for regional bioproducts should be written in non-italicized lowercase letters. The names should be explained in a parenthesis

when used first time in the abstract/text. (e.g., kimchi (Korean traditional fermented cabbages)).

- Usage should be consistent within a paper.

Table 1. Abbreviations

Name	memo	Name	memo
DNA	Deoxyribonucleic acid	NADP ⁺	Nicotinamide adenine dinucleotide phosphate, oxidized
cDNA	Complementary DNA	Poly(A) and poly(dT), etc.	Polyadenylic acid and polydeoxythymidylic acid, etc.
RNA	Ribonucleic acid	Oligo(dT), etc.	Oligodeoxythymidylic acid, etc.
cRNA	Complementary RNA	UV	Ultraviolet
RNase	Ribonuclease	PFU	Plaque-forming units
DNase	Deoxyribonuclease	CFU	Colony-forming units
rRNA	Ribosomal RNA	MIC	Minimal inhibitory concentration
mRNA	Messenger RNA	Tris	Tris[hydroxymethyl]aminomethane
tRNA	Transfer RNA	DEAE	Diethylaminoethyl
AMP, ADP, ATP, dAMP, ddATP, and GTP, etc.	For the respective 5' phosphates of adenosine and other nucleosides	EDTA	Ethylenediamine tetraacetic acid
ATPase and dGTPase, etc.	Adenosine triphosphatase and deoxyguanosine triphosphatase, etc.	EGTA	Ethylene glycol-bis[β-aminoethyl ether]-N,N,N',N'-tetraacetic acid
NAD	Nicotinamide adenine dinucleotide	HEPES	N-2-hydroxyethyl piperazine-N'-2-ethanesulfonic acid
NAD ⁺	Nicotinamide adenine dinucleotide, oxidized	PCR	Polymerase chain reaction
NADH	Nicotinamide adenine dinucleotide	AIDS	Acquired immune deficiency syndrome
NADPH	Nicotinamide adenine dinucleotide phosphate		

Table 2. Multiplying SI Prefixes

Factor	Prefix	Symbol
10 ¹	deca	da
10 ²	hecto	h
10 ³	kilo	k
10 ⁶	mega	M
10 ⁹	giga	G
10 ¹²	Tera	T
10 ¹⁵	peta	P
10 ¹⁸	exa	E

Table 2. Continued

Factor	Prefix	Symbol
10 ²¹	zetta	Z
10 ²⁴	yotta	Y
10 ⁻¹	deci	d
10 ⁻²	centi	c
10 ⁻³	milli	m
10 ⁻⁶	micro	μ
10 ⁻⁹	nano	n
10 ⁻¹²	pico	p
10 ⁻¹⁵	femto	f
10 ⁻¹⁸	atto	a
10 ⁻²¹	zepto	z
10 ⁻²⁴	yocto	y

Table 3. SI-Derived Units

Name	Symbol	Quantity	In terms of other units	In terms of SI based units
becquerel	Bq	activity (of a radionuclide)	-	s ⁻¹
coulomb	C	quantity of electricity, electric charge	-	s·A
farad	F	capacitance	C/V	m ² ·kg ⁻¹ ·s ⁴ ·A ²
gray	Gy	absorbed dose, kerma, specific energy imparted	J/kg	m ² ·s ⁻²
henry	H	inductance	Wb/A	m ² ·kg·s ⁻² ·A ⁻²
hertz	Hz	frequency	-	S ⁻¹
joule	J	energy, work, quantity of heat	N·m	m ² ·kg·s ⁻²
lumen	lm	luminous flux	cd·sr	m ² ·m ⁻² ·cd=cd
lux	lx	illuminance	lm/m ²	m ² ·m ⁻⁴ ·cd=m ⁻² ·cd
newton	N	force	-	m·kg·S ⁻²
ohm	Ω	electric resistance	V/A	m ² ·kg·S ⁻³ ·A ⁻²
pascal	Pa	pressure, stress	N/m ²	m ⁻¹ ·kg·S ⁻²
siemens	S	conductance	A/V	m ⁻² ·kg ⁻¹ ·s ³ ·A ²
sievert	Sv	dose equivalent	J/kg	m ² ·s ⁻²
tesla	T	magnetic flux density	Wb/m ²	kg·s ⁻² ·A ⁻¹
volt	V	electric potential, potential difference, electromotive force	W/A	m ² ·kg·s ⁻³ ·A ⁻¹
watt	W	power, radiant flux	J/s	m ² ·kg·s ⁻³
weber	Wb	magnetic flux	V·s	m ² ·kg·s ⁻² ·A ⁻¹

Table 4. SI-Derived Compound Units

Name	Symbol	Quantity	In terms of other units
ampere per meter	A/m	Magnetic field strength	-
ampere per square meter	A/m ²	Current density	-
candela per square meter	Cd/m ²	Luminance	-
coulomb per cubic meter	C/m ³	Electric charge density	m ⁻³ ·s·A
coulomb per kilogram	C/kg	Exposure (X-rays and γ-rays)	-

Table 4. Continued

Name	Symbol	Quantity	In terms of other units
coulomb per square meter	C/m ²	Electric flux density	m ⁻² ·s·A
cubic meter	m ³	Volume	-
cubic meter per kilogram	m ³ /kg	Specific volume	-
farad per meter	F/m	Permittivity	m ⁻³ ·kg ⁻¹ ·s ⁴ ·A ²
henry per meter	H/m	Permeability	m·kg·s ⁻² ·A ⁻²
joule per cubic meter	J/m ³	Energy density	m ⁻¹ ·kg·s ⁻²
joule per kelvin	J/K	Heat capacity, entropy	m ² ·kg·s ⁻² ·K ⁻¹
joule per kilogram	J/kg	Specific energy	m ² ·s ⁻²
joule per kilogram kelvin	J/(kg K)	Specific heat capacity, specific entropy	m ² ·s ⁻² ·K ⁻¹
joule per mole	J/mol	Molar energy	m ² ·kg·s ⁻² ·mol ⁻¹
joule per mole kelvin	J/(mol K)	Molar entropy, molar heat capacity	m ² ·kg·s ⁻² ·K ⁻¹ ·mol ⁻¹
kilogram per cubic meter	Kg/m ³	Density, mass density	-
meter per second	m/s	Speed, velocity	-
meter per second squared	m/s ²	Acceleration	-
mole per cubic meter	mol/m ³	Concentration (amount of substance per volume)	-
newton-meter	N·m	Moment of force	m ² ·kg·s ⁻²
newton per meter	N/m	Surface tension	kg·s ⁻²
pascal second	Pa·s	Dynamic viscosity	m ⁻¹ ·kg·s ⁻¹
radian per second	rad/s	Angular velocity	-
radian per second squared	rad/s ²	Angular acceleration	-
reciprocal meter	m ⁻¹	Wavenumber	-
reciprocal second	s ⁻¹	Frequency	-
square meter	m ²	Area	-
square meter per second	m ² /s	Kinematic viscosity	-
volt per meter	V/m	Electric field strength	m·kg·s ⁻³ ·A ⁻¹
watt per meter kelvin	W/(m K)	Thermal conductivity	m·kg·s ⁻³ ·K ⁻¹
watt per square meter	W/m ²	Heat flux density, irradiance	kg·s ⁻³
watt per square meter steradian	W/(m ² sr)	Radiance	-
watt per steradian	W/sr	Radiant intensity	-

SEQUENCE DATA FORMATS

Diagrams of nucleotide and amino acid sequences should be prepared in the most effective layout. The layout should be designed to fit the journal page economically, i.e. to fill either the full width of the page (176 mm) or a single column (84 mm). The height of the characters should be about 1.5–2 mm (or 6–8 point). For sequence data at full-page width with this size of type, a layout with 80–100 nucleotides per line is appropriate (or 60–70 if there are spaces between the codons). A single-column layout would ideally fit 50–60 nucleotides per line. If possible, lines of nucleic acid sequence should be subdivided into blocks of 10 or 20 nucleotides by spaces within the sequences or by marks above it. There should not be too much space between the lines of sequence. Use of the single-letter amino acid code is preferred.

MICROARRAY DATA

Data from microarray gene expression studies must comply with the MIAME guidelines (see <http://www.mged.org/Workgroups/MIAME/miame.html>).

MANUSCRIPT CHECKLIST

It is hoped that this list will be useful during the final checking of your manuscript prior to submitting it to the journal for review. Ensure that the following items are present:

- One author designated as corresponding author
- Telephone and fax numbers, and E-mail address of the corresponding author
- Running title
- Key words
- Page and line numbers
- All tables (including title, description, footnotes) and figures (separated from figure legends) are provided in a single file with main text for initial submission.
- References are in the correct format for this journal.
- All references mentioned in the Reference list are cited in the text, and vice versa.