Key-criteria to check the quality of scientific journals
(suppl. to ‘HZI Publication Rules’)

Publishing in scientific journals of high quality is important in order to meet professional goals (e.g., tenure review, grant funding) and to reach the intended audience. Fake/predatory/fraudulent journals publish articles without peer review or publishing services (i.e., quality control, licensing, indexing into indexing services/databases, content preservation) in order to receive article processing charges. These journals often claim to be (but are not limited to) open access.

What is the harm and how does it affect you?
Good science may get lost or interpreted as poor science when it is published in predatory journals. Thus, before publishing, please check the quality criteria of your journal.

How to avoid publishing in a journal with low quality/predatory journal
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Please be aware that assessing a single or only a few criteria is insufficient for determining whether a journal is predatory. The complete list of “Clues to quality of journals” (DOI: 10.13140/RG.2.2.18278.32320) can be accessed via the HZI Library website. When in doubt, please ask the colleagues of HZI Library (Bibliothek@helmholtz-hzi.de). They are happy to help you check the quality of the journal of your choice.

Indicators for Predatory Journals

- not indexed in recognized directories (ZDB, EZB, JCR) and not indexed by and hence not accessible via common quality-controlled databases (e.g. Scopus, PubMed)
- instead of impact factor the Copernicus value/index is displayed and/or articles have a DAI (digital article identifier) instead of a DOI (digital object identifier)
- description of manuscript handling is missing
- massive marketing via spam mails enticing scientists to publish, review or suggest further experts
- no retraction policy indicated
- containing “light-content”-issues or pseudo-science content
- lower charges than non-predatory journals (around 18-fold lower)
- reputable journals are mimicked (similarly named, similarly designed, appears to be a professional website)

The most important criteria for checking the quality of a journal are:

1. Do you or your colleagues know the journal/publisher? Ask colleagues/experts/HZI Library.
   a) Have you or your colleagues read previous articles from this journal?
   b) Are the recent articles easy to find?
2. Is the journal’s website (including the text that it contains) …
   a) demonstrating that care has been taken to ensure high ethical and professional standards (“received”, “revised”, “accepted” dates shown, indicating valid peer review & digital preservation policy to ensure content stays permanently online even when journal ceases operations)?
   b) offering author guidelines?
   c) describing the publication process & quality methods e.g. peer review process, editorial policy, retraction policy?
   d) showing the publisher’s name and contact details (Tel., mail= journal-/publisher-affiliated?)
3. Is the ISSN (check via ZDB) & Journal Impact Factor (check via JCR) displayed & correct?
4. Is the journal indexed in recognized directories ZDB / EZB / DOAJ?
   a) Regular journals are referenced in JCR & the journals’ database ZDB
   b) eJournal are listed in the Electronic Journals’ Library EZB
   c) Open Access Journals are listed in the DOAJ (Directory of OA Journals)
5. Is Content (Articles) indexed in abstracting and indexing services (Scopus, PubMed etc.)?
6. Is the Publisher a member of recognized industry initiatives?
   a) Memberships: Is it a member of the Committee on Publication Ethics (COPE) & in case of OA-Publisher: Open Access Scholarly Publishers’ Association (OASPA)?
   b) Directories: Is the journal/publisher listed in Sherpa/ROMEO & - in case of an OA Journal - Directory of Open Access Journals (DOAJ)?
7. Does the journal have a publication history and/ or an archive of past issues?

1 Predatory conference providers can be checked using the criteria by https://thinkcheckattend.org/
2 The key-criteria list is based on criteria by http://thinkcheckssubmit.org/ & DOAJ principles.