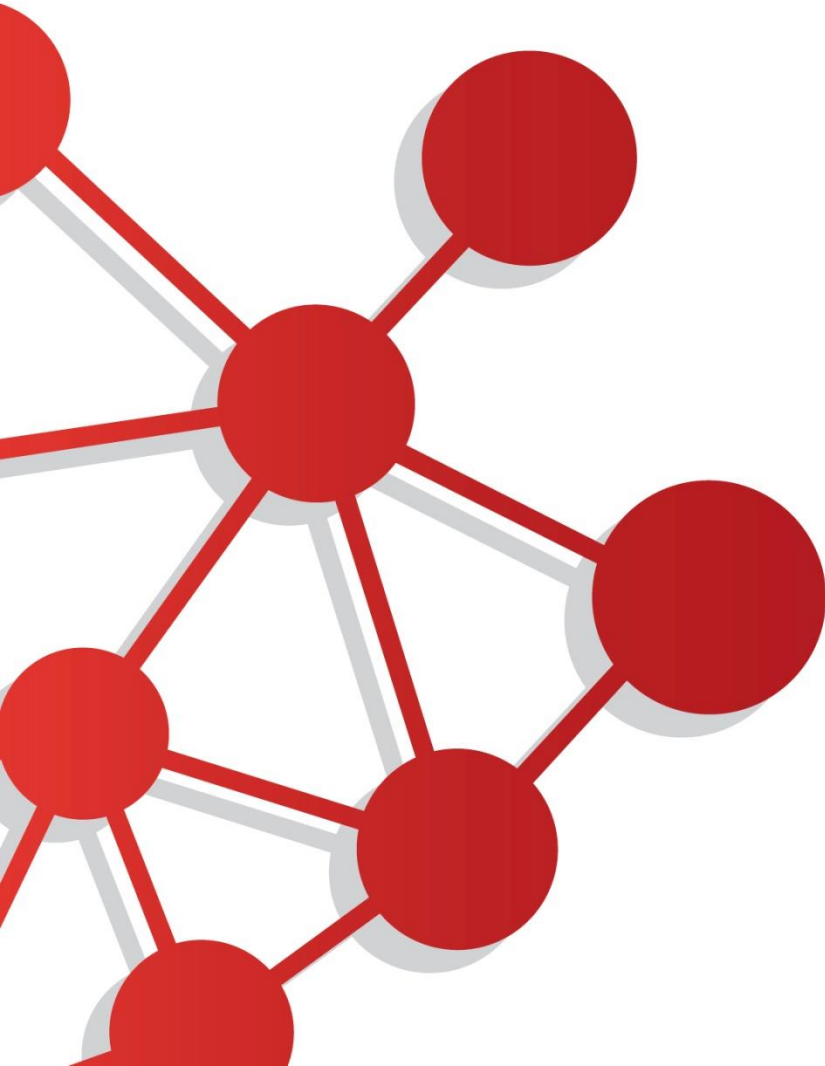


Publishing in *Nature* journals

John Plummer
Senior Editor
Nature Materials

November 2015



By the end of this talk I hope you will:

- Appreciate the key editorial differences between *Nature* journals.
- Better understand what *Nature* journal editors look for.
- Have a better idea how to write a paper for a *Nature* journal.
- Understand how editors make decisions.
- Appreciate some of the benefits of Open Access.



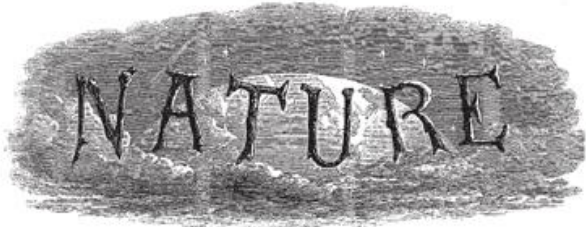
What makes a *Nature* family journal?

- Highly selective — only a fraction of submissions are published.
- High impact.
- Each journal is run by team of full-time, professional editors.
- Each journal is independent from each other journal — rejection from one doesn't prejudice consideration by another.



Nature





A WEEKLY ILLUSTRATED JOURNAL OF SCIENCE

*"To the solid ground
Of Nature trusts the mind which builds for aye."—WORDSWORTH*

THURSDAY, NOVEMBER 4, 1869

NATURE: APHORISMS BY GOETHE

NATURE! We are surrounded and embraced by her: powerless to separate ourselves from her, and powerless to penetrate beyond her.

Without asking, or warning, she snatches us up into her circling dance, and whirls us on until we are tired, and drop from her arms.

She is ever shaping new forms: what is, has never yet been; what has been, comes not again. Everything is new, and yet nought but the old.

We live in her midst and know her not. She is incessantly speaking to us, but betrays not her secret. We constantly act upon her, and yet have no power over her.

The one thing she seems to aim at is Individuality; yet she cares nothing for individuals. She is always building up and destroying; but her workshop is inaccessible.

Her life is in her children; but where is the mother? She is the only artist; working-up the most uniform material into utter opposites; arriving, without a trace of effort, at perfection, at the most exact precision, though always veiled under a certain softness.

Each of her works has an essence of its own; each of her phenomena a special characterisation: and yet their diversity is in unity.

She performs a play; we know not whether she sees it herself, and yet she acts for us, the lookers-on.

Incessant life, development, and movement are in her, but she advances not. She changes for ever and ever, and rests not a moment. Quietude is inconceivable to her, and she has laid her curse upon rest. She is firm. Her steps are measured, her exceptions rare, her laws unchangeable.

She has always thought and always thinks; though not as a man, but as Nature. She broods over an

all-comprehending idea, which no searching can find out.

Mankind dwell in her and she in them. With all men she plays a game for love, and rejoices the more they win. With many, her moves are so hidden, that the game is over before they know it.

That which is most unnatural is still Nature; the stupidest philistinism has a touch of her genius. Whoso cannot see her everywhere, sees her nowhere rightly.

She loves herself, and her innumerable eyes and affections are fixed upon herself. She has divided herself that she may be her own delight. She causes an endless succession of new capacities for enjoyment to spring up, that her insatiable sympathy may be assuaged.

She rejoices in illusion. Whoso destroys it in himself and others, him she punishes with the sternest tyranny. Whoso follows her in faith, him she takes as a child to her bosom.

Her children are numberless. To none is she altogether misery; but she has her favourites, on whom she squanders much, and for whom she makes great sacrifices. Over greatness she spreads her shield.

She tosses her creatures out of nothingness, and tells them not whence they came, nor whither they go. It is their business to run, she knows the road.

Her mechanism has few springs—but they never wear out, are always active and manifold.

The spectacle of Nature is always new, for she is always renewing the spectators. Life is her most exquisite invention; and death is her expert contrivance to get plenty of life.

She wraps man in darkness, and makes him for ever long for light. She creates him dependent upon the earth, dull and heavy; and yet is always shaking him until he attempts to soar above it.

© 1869 Nature Publishing Group

Launch Issue
1869

- Founded in 1869
- The world's leading, global, scientific journal
- Publishes the full range of scientific disciplines
- *Nature's* mission:

To communicate the world's best and most important science to scientists across the world and to the wider community interested in science

What makes a *Nature* paper?

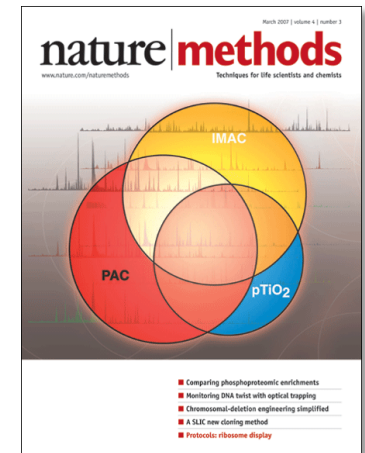
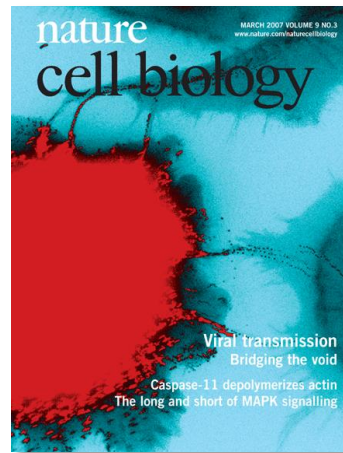
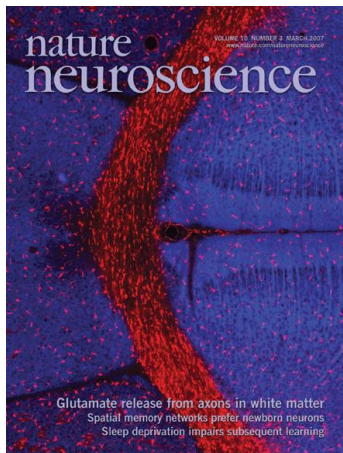
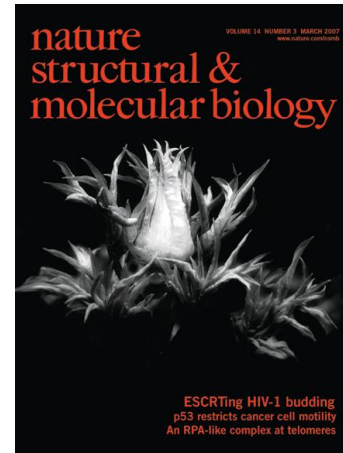
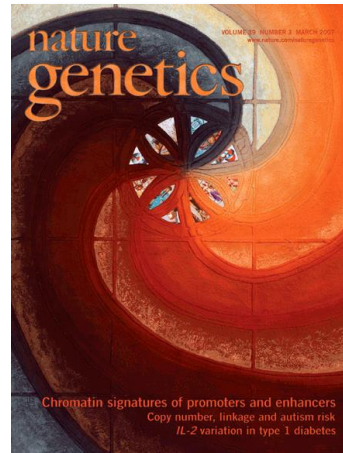


- Reports the most significant advances that have the widest implications.
- Significance should be readily appreciated by non-specialists.
- Which means, the significance of physics papers should be readily apparent to biologists, and vice versa.

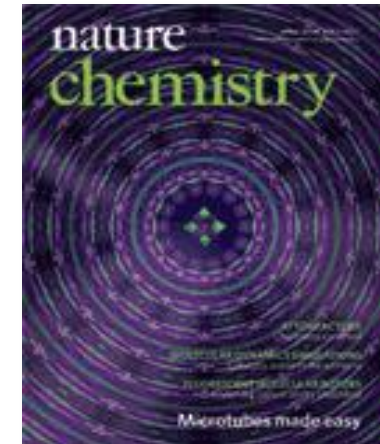
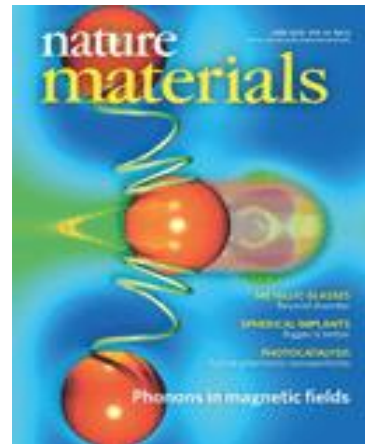
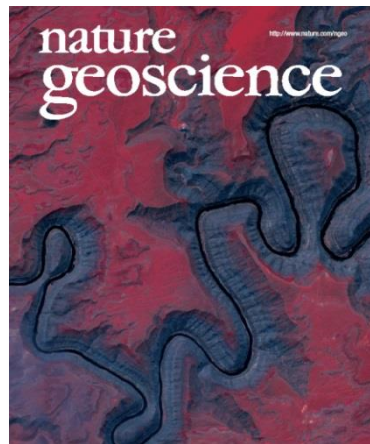
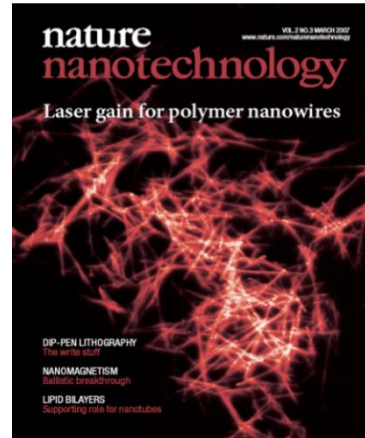
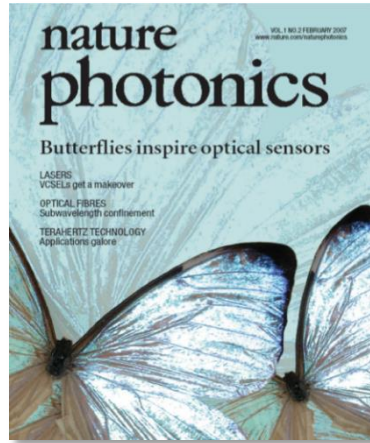
Nature research journals



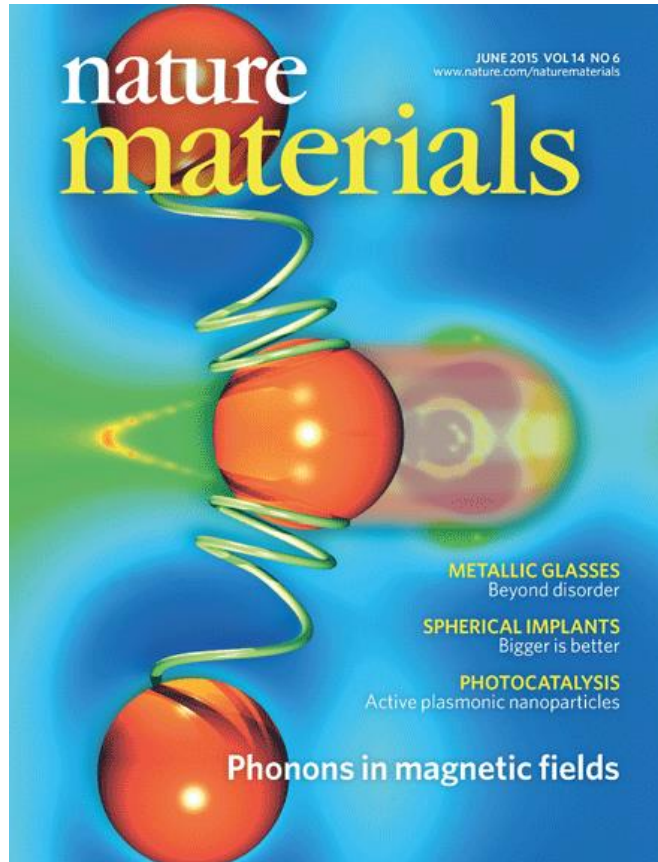
Nature life science research journals



Nature physical sciences research journals



What makes a *Nature Research* Journal paper?

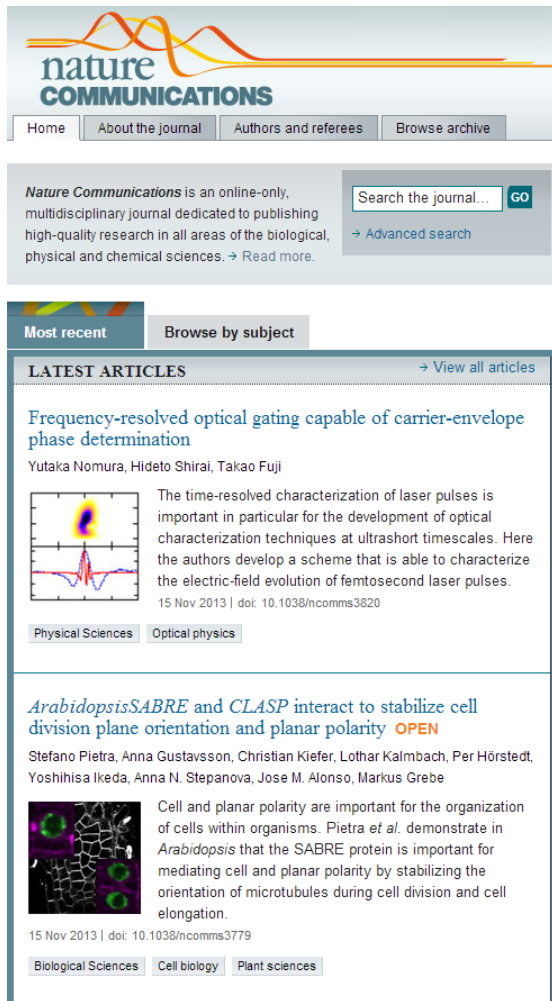


- Reports the most significant advances within the discipline it covers.
- Significance should be readily appreciated by non-specialists.
- i.e. papers should be of interest to a broad range of materials scientists.

Nature Communications



Nature Communications



The screenshot shows the homepage of Nature Communications. At the top, there is a navigation bar with links for Home, About the journal, Authors and referees, and Browse archive. Below this is a search bar with the text "Search the journal..." and a "GO" button, along with a link to "Advanced search". A brief description of the journal is provided: "Nature Communications is an online-only, multidisciplinary journal dedicated to publishing high-quality research in all areas of the biological, physical and chemical sciences." Below the search bar, there are tabs for "Most recent" and "Browse by subject". The main content area is titled "LATEST ARTICLES" and features two article previews. The first article is titled "Frequency-resolved optical gating capable of carrier-envelope phase determination" by Yutaka Nomura, Hideto Shirai, and Takao Fuji. It includes a small figure showing a 2D color plot and a 1D line plot. The second article is titled "Arabidopsis SABRE and CLASP interact to stabilize cell division plane orientation and planar polarity" by Stefano Pietra, Anna Gustavsson, Christian Kiefer, Lothar Kalmbach, Per Hörstedt, Yoshihisa Ikeda, Anna N. Stepanova, Jose M. Alonso, and Markus Grebe. It includes a small figure showing a cell division plane. Both articles include their publication date (15 Nov 2013) and DOI.

- First paper published 12th April 2010.
- Online-only means no space constraints and larger word limit.
- Now annually publishes more than **all** *Nature* journals combined.
- Current impact factor = 11.47
- Fully Open Access since October 2014.

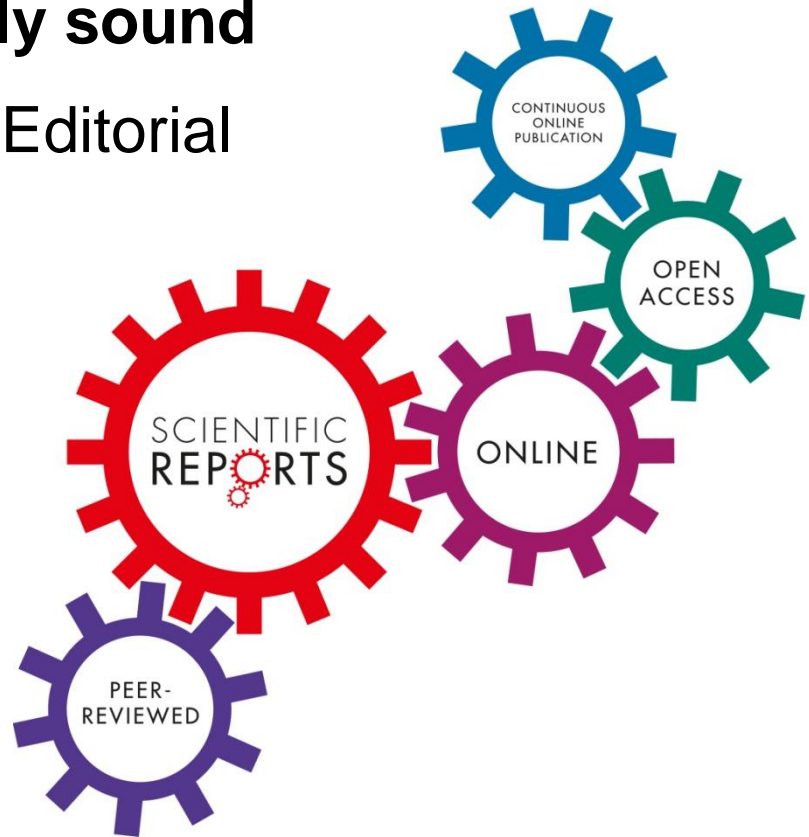
What makes a *Nature Communications* paper?

- Reports significant advances that have potential to influence thinking in a field.
- New ideas, new insights and new technologies, new methods.
- Broad appeal **isn't** a prerequisite for publication (unlike *Nature* & *Nature* research journal).



Scientific Reports

- Editorial criteria: **scientifically sound**
- Editorial Advisory Panel and Editorial Board
- Fully **Open Access**
- Current impact factor = 5.57



How to publish in a *Nature* family journal:

- 1) Planning and writing your paper
- 2) Submission process



Planning and writing your paper



Think well ahead

- *Nature* journals consider papers that are conceptually novel and that do not represent an incremental step.
- Resist temptation for quick publication.
- Conference proceedings can count as formal publications; depends on the specific case.
- Reports on pre-print servers (e.g. arXiv) are fine.



Writing the paper

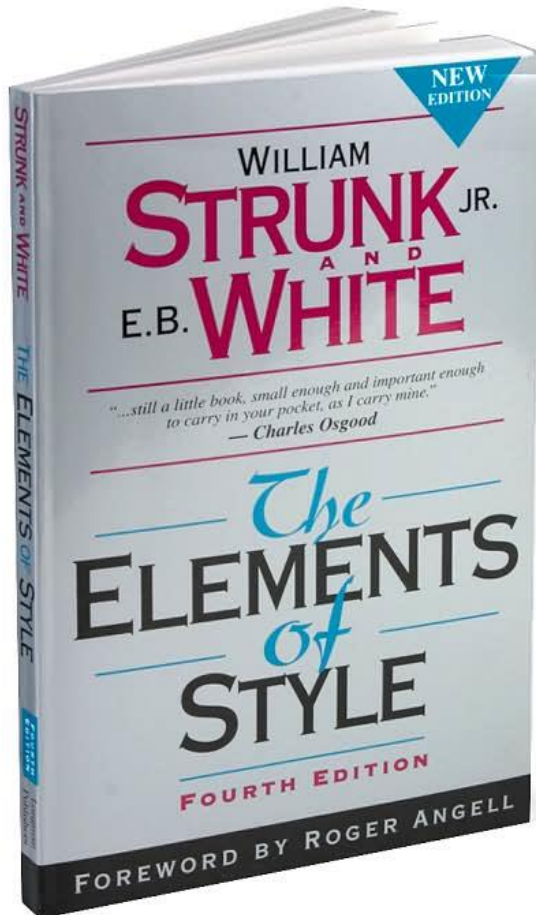
- Explain, don't hype. Show, don't tell.
i.e. **Results should speak for themselves.**
- Descriptive not superlative
 - e.g. “high elastic strain” not “giant elastic strain”.
- CONTEXT — Not every reader will understand the details but every reader should appreciate your work's significance.
- Format isn't critical – can be changed prior to acceptance

Important: Think of the reader!

It is your job to ensure your paper can be understood by others; don't assume!



Resources for better writing



- *The Elements of Style* by William Strunk Jr and E. B. White (Longman, August 1999).



- Whitesides, G. M. Writing a Paper. *Advanced Materials* **16**, 1375–1377 (2004).



- Editorial: How to be popular. *Nature Physics* **7**, 827 (2011).



Submission process



Submission process

- Cover letters useful but not mandatory.
- SHORT cover letters are best — significance should be explainable in two sentences.
- Referee suggestions
 - Can be helpful.
 - Please don't suggest former supervisors, former students, friends, parents.
- We try to honor referee exclusion requests, as long as they are reasonable (3 individuals MAX).
- Identify all related papers submitted elsewhere.



Editorial process

- Initial assessment typically within a week (as far as possible).
- We look for impact **not** impact factors.
- At least one editor will read the paper, and often several editors.
- 2-4 referees per paper and aim for total turnover time of 4-6 weeks for a first decision after review.



Referees selected based on:

- Experience in the field
- Technical expertise
- Efficient
- History of thorough and to-the-point reports
- Fair-minded and constructive

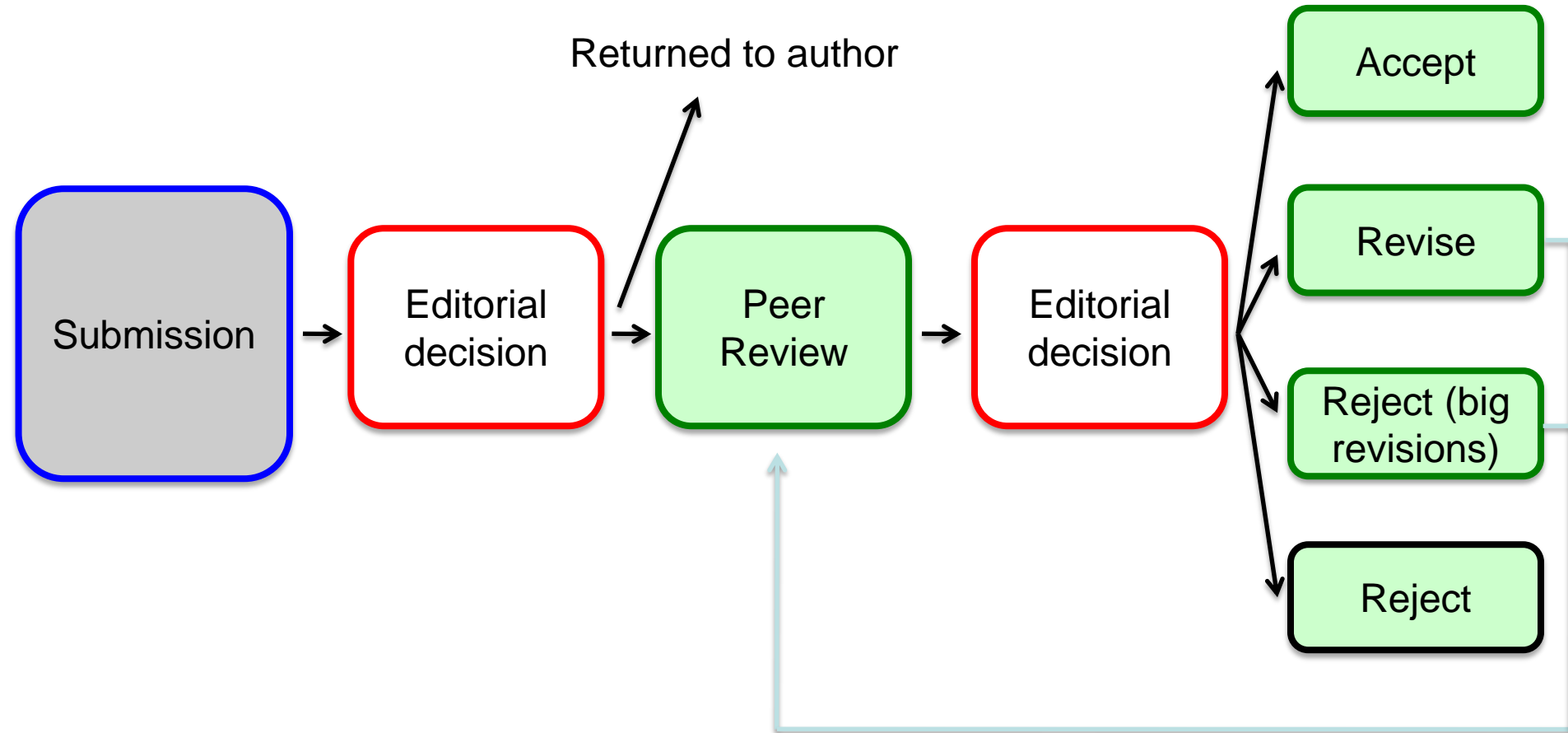


How our decisions are made

- Editors make decision based on the substance our referees' comments
 - Our decisions are based on **ADVICE** not **VOTES!**
- The decision is for the editors — not the referees — to make.
- Most papers require two or three rounds of review before publication
 - Acceptance for publication after only round of review is unusual.



The editorial process



Responding to referees

- Stay professional — the referees are your peers and colleagues.
- Persuasion and diplomacy are key.
- Be concise.
- If invited to resubmit, only do so after you have comprehensively addressed ALL comments.
- If further experiments are requested, revisions to text alone are UNLIKELY to be enough.



Appeals

- Only a minority of appeals result in eventual publication.

What helps?

- New data that addresses the major criticisms
- Referee or editor has made factual errors.

What doesn't help?

- “Do you know who I am!”
- “Referees don't like my work, therefore they are biased!”
- Celebrity endorsements
- Cosmetic revisions



OPEN ACCESS

- Nature Publishing Group is one of the largest Open Access publishers in the world.
- We now have two multi-disciplinary journals that offer Open Access publishing options:
 - *Nature Communications*
 - *Scientific Reports*
- And many specialist titles, including *Light Science & Applications*, *Asia Materials*...

A new series of high-quality, fully open access journals, published in collaboration with renowned international partners.



npj nature partner journals

Partnerships that drive high impact open science

Do you share our vision and values?

Nature Partner Journals is a new series of online open access journals, published in collaboration with world-renowned international partners, delivering high-quality, peer-reviewed original research to the global scientific community.

Our partners share our vision to advance the dissemination of scientific research through open access.

Nature Publishing Group (NPG) has a proven track record of editorial and commercial success working with leading societies and institutions to publish high-impact science. We bring this expertise to open access publishing with the Nature Partner Journals portfolio. Our new open platform launched on nature.com ensures high-visibility and reach for open access content enabling our partners to disseminate high-impact research that advances the sciences.

Collaboratively we:

- Help define the market need, scope and opportunity for a new journal
- Deliver rigorous editorial quality, process and ethical standards
- Appoint an external Editor-in-Chief, who retains full editorial independence

npj | Aging and Mechanisms of Disease

npj | Parkinson's Disease

npj | Biofilms and Microbiomes

npj | Primary Care Respiratory Medicine

npj | Breast Cancer

npj | Quantum Information

npj | Computational Materials

npj | Schizophrenia

npj | Genomic Medicine

npj | Science of Learning

npj | Microgravity

npj | Systems Biology and Applications

Why publish Open Access?

Because it's better for science.

- Scientific knowledge belongs to everyone.
- Science progresses more rapidly when new ideas, new results and new understanding are shared most freely.
- Public understanding of science is improved by public access to primary research.



Why publish Open Access?

Because it's better for YOU!

Independent statistical analysis carried out by the Research Information Network of articles published in *Nature Communications* found that **Open Access articles are viewed three times more often** than articles that are only available to subscribers. The report also found that OA articles are cited more than subscription articles.



Research Information Network on the effect of Open Access on citations and downloads of *Nature Communications* articles.

http://www.nature.com/press_releases/ncomms-report.html

New *Nature* journals!

Physical sciences:

Nature Reviews Materials – January 2016

Nature Energy – January 2016

Nature Reviews Chemistry – 2017

Nature Astronomy – 2017

Life sciences:

Nature Microbiology – January 2016

Nature Biomedical Engineering – 2017

Nature Ecology and Evolution – 2017

Nature Human Behaviour – 2017



Thank you!

