

**Publishing advanced materials science with Wiley**

**WILEY**

*How to maximize your success!*

**Dr. Jos Lenders**

Editor-in-Chief

*Advanced Materials*

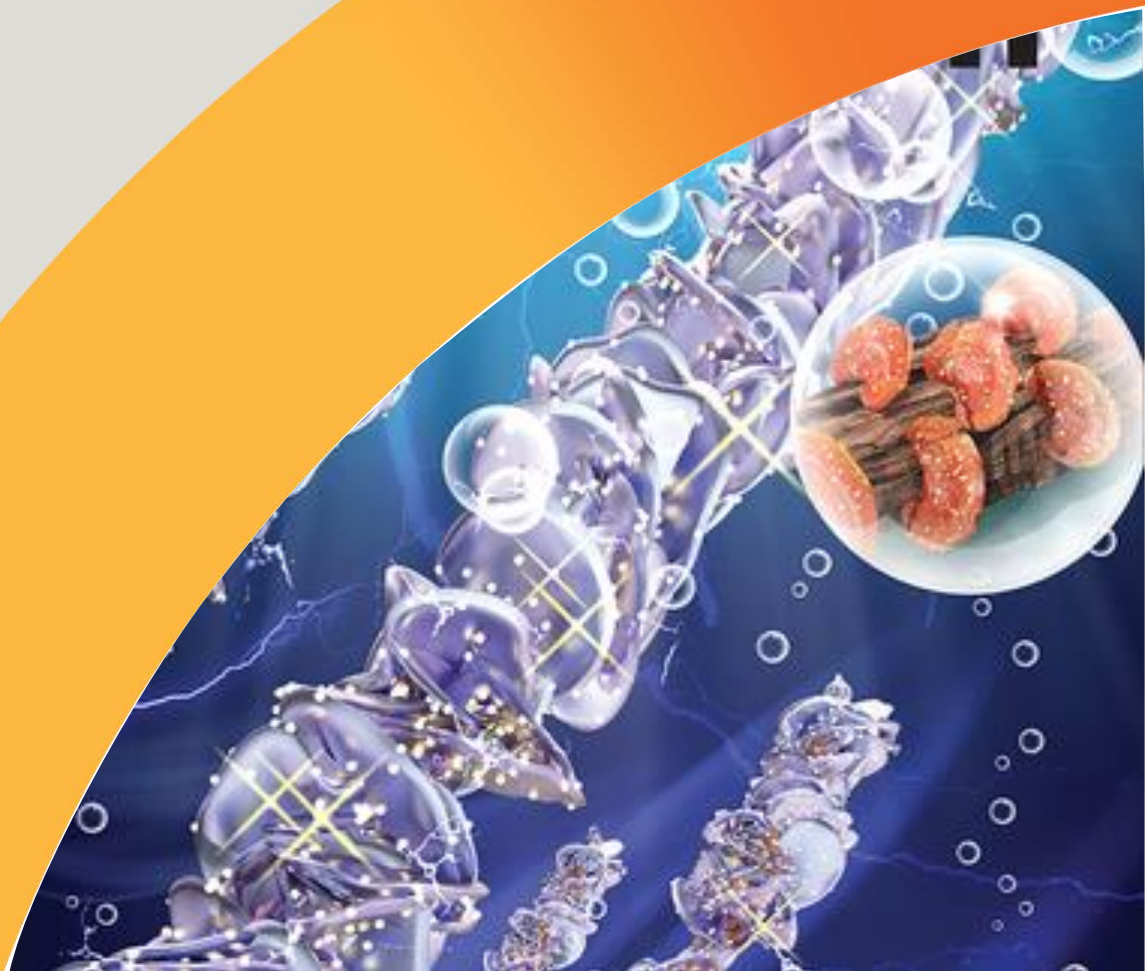
[jlenders@wiley.com](mailto:jlenders@wiley.com)

# Outline of this publishing seminar



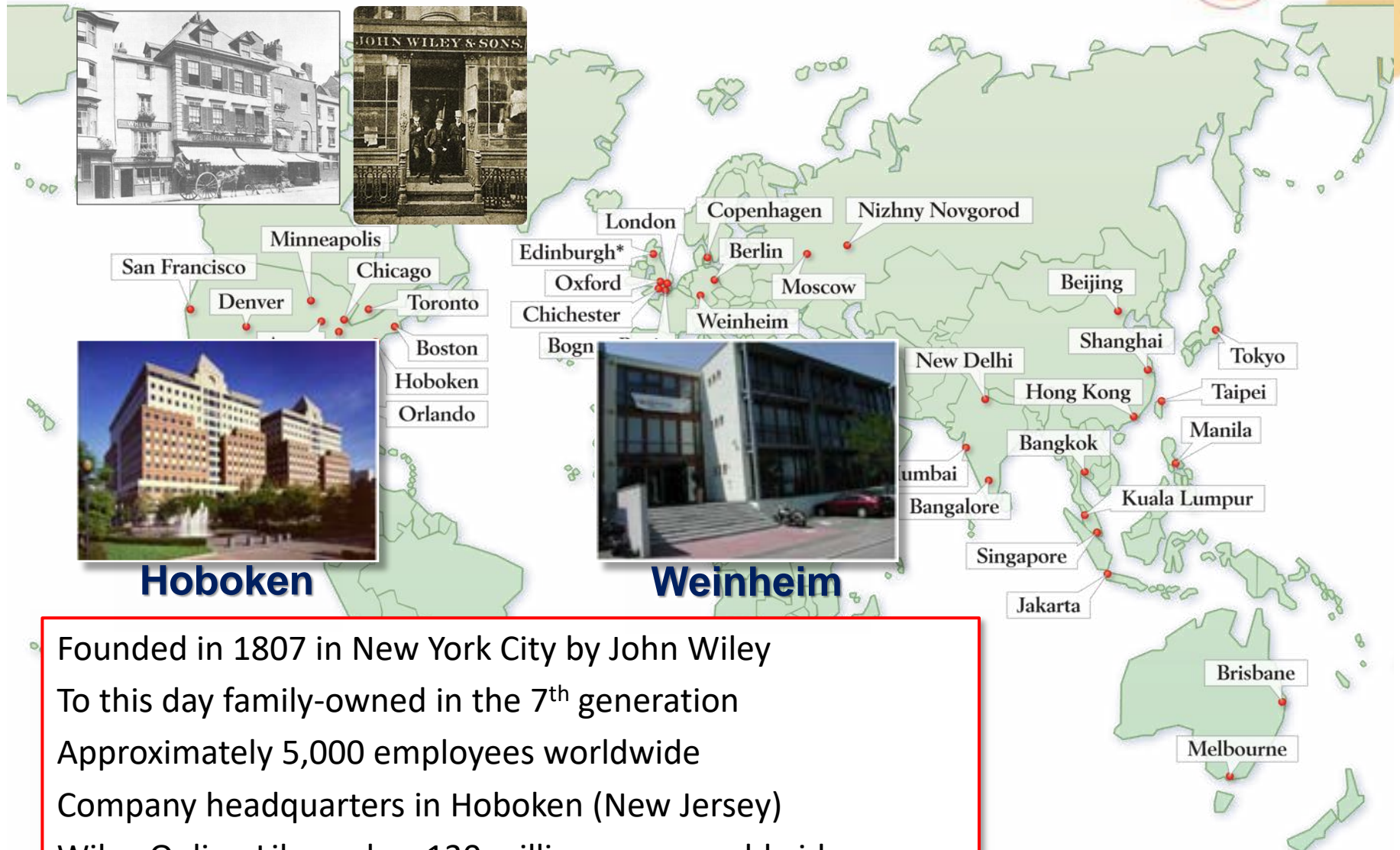
1. Global publishing trends at  
Wiley and *Advanced* journal family
2. Editorial workflow: before peer review
3. Tips on how to make it to peer review  
(and what to avoid)
4. Editorial workflow: during peer review
5. Concluding remarks

# 1. Introduction to Wiley and *Advanced* journal family





# John Wiley & Sons Publishing Group



**Hoboken**

**Weinheim**

Founded in 1807 in New York City by John Wiley  
To this day family-owned in the 7<sup>th</sup> generation  
Approximately 5,000 employees worldwide  
Company headquarters in Hoboken (New Jersey)  
Wiley Online Library has 130 million users worldwide  
>1,700 journals, >940 society partners, >460 Nobel laureates

# John Wiley & Sons Publishing Group

1,700 peer-reviewed journals published

4 million+ articles

4,000 academic libraries worldwide

40,000 institutions around the world

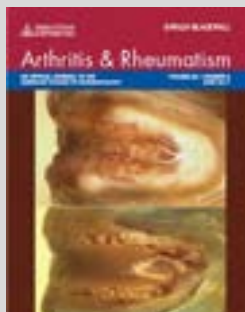
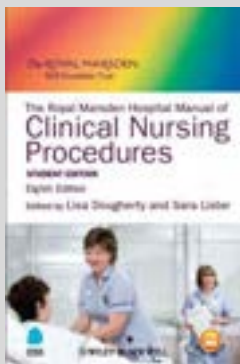
The largest society publisher: >940 societies, >2 million members



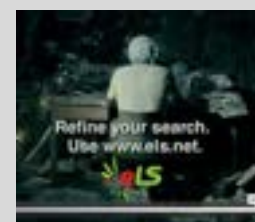
# Wiley products and services



## Health Sciences



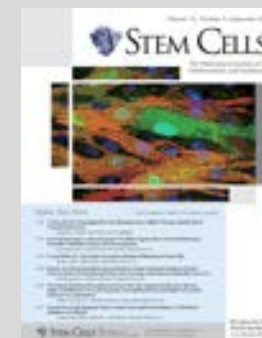
## Physical Sciences & Engineering



## Life Sciences

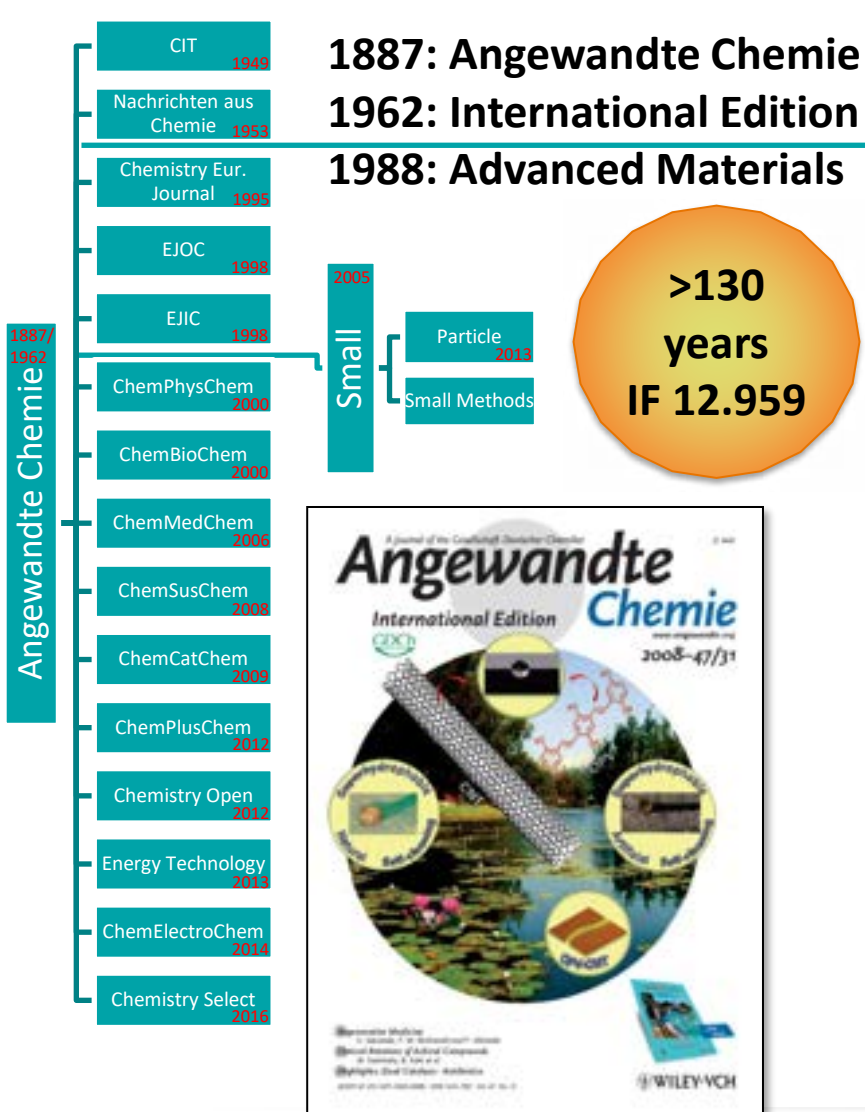


## Social Sciences & Humanities





# Angewandte Chemie & Advanced Materials



**ADVANCED MATERIALS**

**WILEY**

# Advanced editors around the world





# Advanced Materials editors around the world

Meet the global editorial team of *Advanced Materials*

26 editors  
in 4 different continents



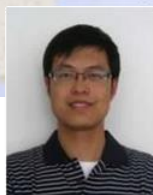
**Jos Lenders**  
Editor-in-Chief



**James Cook**  
Deputy Editor  
(post-accept role)



**Esther Levy**  
Consulting Editor



**Duoduo Liang**  
Deputy Editor  
*photonics, condensed matter physics,  
energy storage*



**Babak Mostaghaci**  
Deputy Editor  
*engineering, electronic devices,  
systems & modeling*



**Kate Perets**  
Deputy Editor  
*biomedical engineering, diagnosis &  
therapy, chemistry & polymer science*

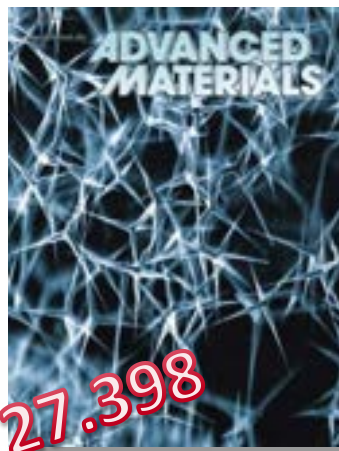


**Lu Shi**  
Deputy Editor  
*interface science, catalysis,  
energy generation & conversion*

## Global Peer Review Team



# Wiley's materials science journals



27.398

**Launched 1989**

*Editor-in-Chief*  
**Jos Lenders**

*Deputy Editors*  
James Cook  
Duoduo Liang  
Babak Mostaghaci  
Ekaterina Perets  
Lu Shi



25.245

**Launched 2011**

*Editor-in-Chief*  
Till von Gräberg

*Deputy Editors*  
Aaron Brown  
Carolina Novo da Silva  
Francesca Riboni  
Anna Troeger  
Jipei Yuan



15.840

**Launched 2014**

*Editor-in-Chief*  
Kirsten Severing

*Deputy Editors*  
Ana V. Almeida  
Prisca Henheik  
Anne Pfisterer  
Ulf Scheffler  
Bo Weng



16.836

**Launched 1992**  
**Relaunched as AFM 2001**

*Editor-in-Chief*  
Jörn Ritterbusch

*Deputy Editors*  
Mary De Vita  
Jessica D'Lima  
Emily Hu  
Muxian Shen  
Marc Zastrow



11.459

**Launched 2005**

*Editor-in-Chief*  
José Oliveira

*Deputy Editors*  
Ana V. Almeida  
Jovia Jiang  
Ekaterina Perets  
Lisa Smith



# Meet the *Advanced* family members





# Meet the new *Advanced* family members



A new family of *Advanced* open access journals

**ADVANCED**X**RESEARCH**

Open Access

Open for submissions now

Building on the success of

**ADVANCED**ENERGY**MATERIALS**

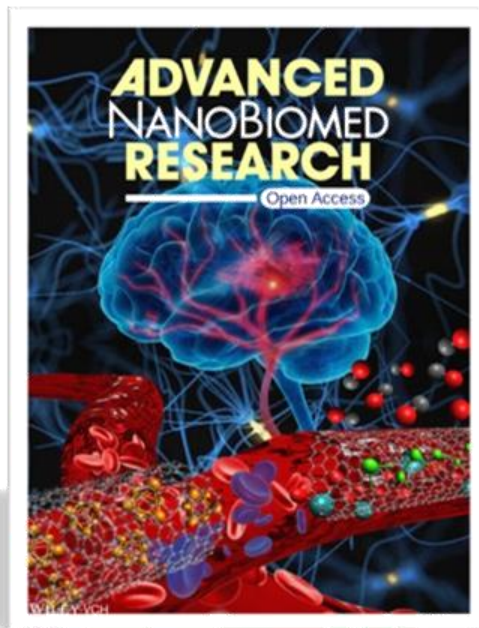
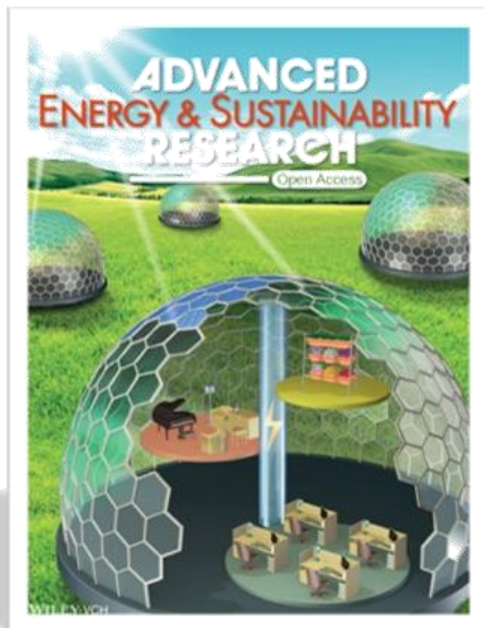
**ADVANCED**SUSTAINABLE**SYSTEMS**

**ADVANCED**HEALTHCARE**MATERIALS**

**ADVANCED**BIO**SYSTEMS**

**ADVANCED**THERAPEUTICS

**ADVANCED**OPTICAL**MATERIALS**



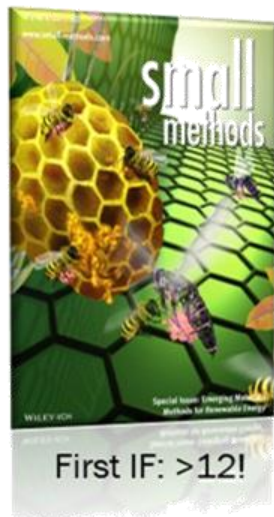
**ADVANCED  
MATERIALS**

**WILEY**

# Meet the new *Small* family members



## New members of the *Small* family of journals



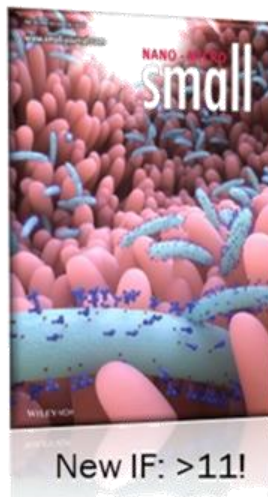
First IF: >12!

Open for submissions



[www.small-structures.com](http://www.small-structures.com)

*Top-quality forum for cutting-edge research on sub-macroscopic structures across various dimensions and multiple disciplines*



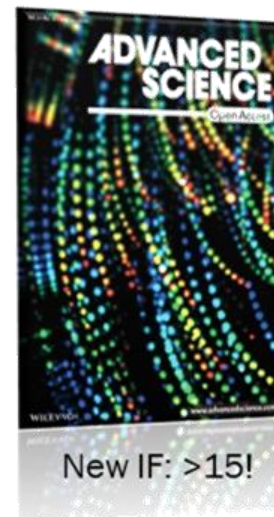
New IF: >11!

Open for submissions



[www.small-science-journal.com](http://www.small-science-journal.com)

*Premium open access journal for the most innovative advances from all areas of micro- and nanoscience and -technology*



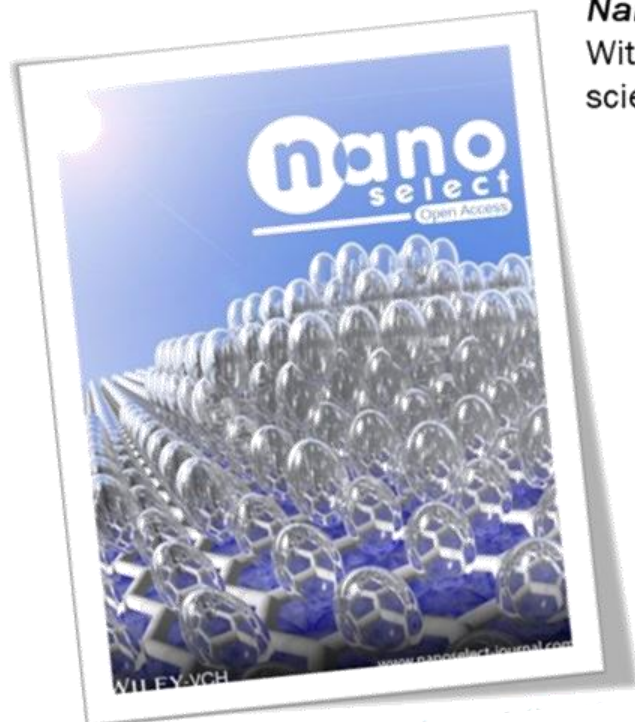
New IF: >15!



# Meet Nano Select






























## Nano Select: Wiley's new open access nanoscience journal



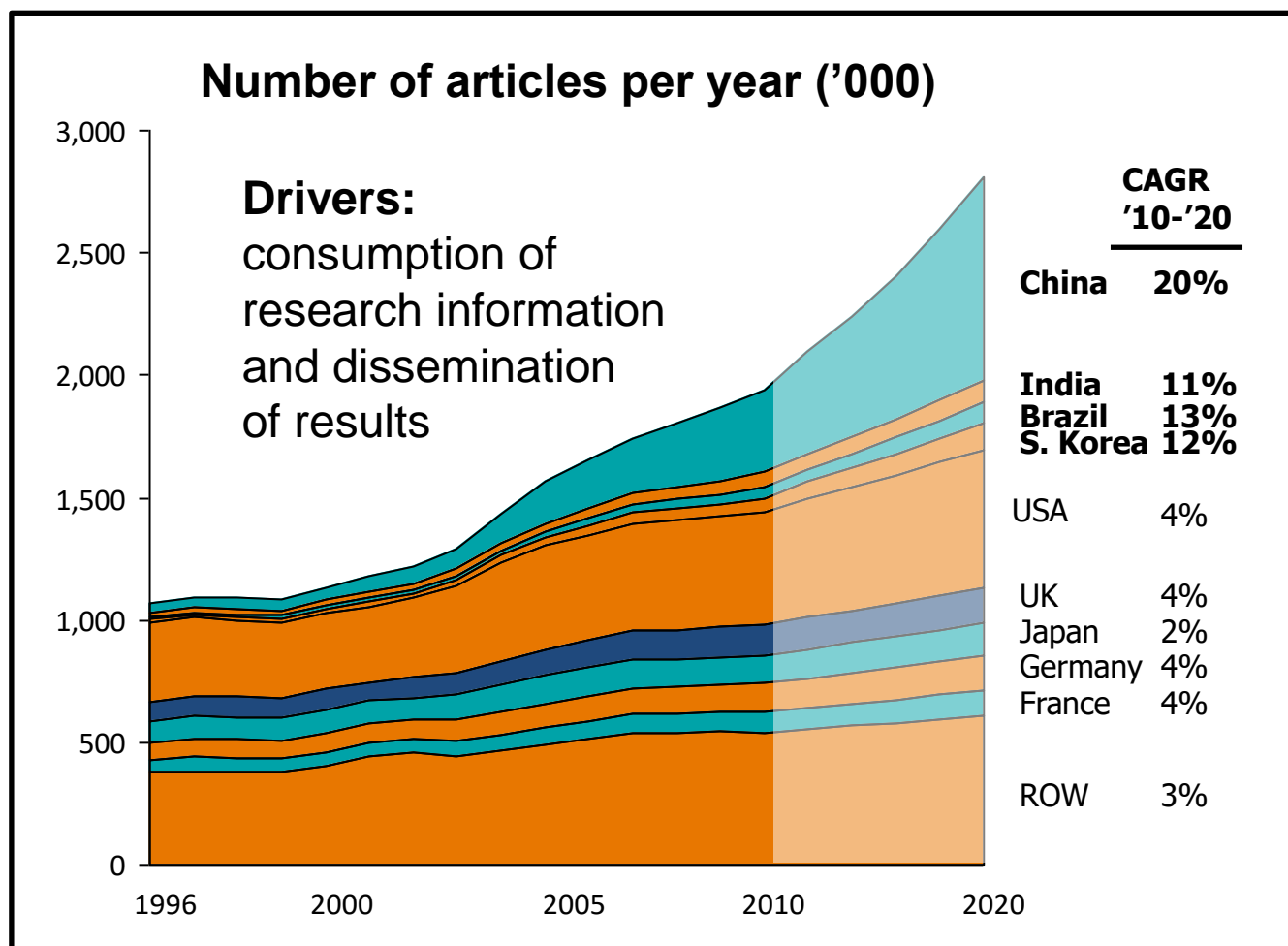
**Nano Select** covers fundamental and applied research in all areas of nanoscience. With its broad scope, **Nano Select** provides an author-friendly platform for sound scientific studies, with eligibility determined through a fair reviewing process.

### Associate Editors:

	Kah-Wee ANG, NUS, Singapore		Martin Oschatz, MPI of Colloids and Interfaces, Germany
	Zhuangjun Fan, Harbin Engineering University, China		Ho Seok Park, SKKU, Korea
	Lin Gu, Institute of Physics, Chinese Academy of Sciences, China		Joselito Raza, Deakin University, Australia
	Jiaqi Huang, Beijing Institute of Technology, China		Hélder A. Santos, University of Helsinki, Finland
	Lang Jiang, ICCAS, China		Joe Shapter, The University of Queensland, Australia
	Jae Young Lee, Gwangju Institute of Science and Technology (GIST), Korea		Han Wang, University of Southern California, USA
	Bilu Liu, Tsinghua U(Shenzhen), China		Shuangyin Wang, Hunan University, China
	Shengzhong Liu, Shaanxi Normal University, China		Zhongming Wei, Institute of Semiconductors, China
	Zhou Li, Institute of Nanoenergy and nano system, China		Dominik Woll, RWTH Aachen University, Germany
	Daishun Ling, Zhejiang University, China		Jiaying Yuan, Stockholm University, Sweden
	Yaowen Li, Suzhou University, China		Yuchao Yang, Peking University, China
	Yingying Lu, Zhejiang University, China		Lijun Zhang, Jilin University, China
	David Munoz-Rojas, UGrenoble, France		Yu Zhang, Beihang University, China
			Yu Shrike Zhang, Harvard Medical School, USA



# Growing global research contributions



Source: Scopus and Web of Science (projections based on trend information)

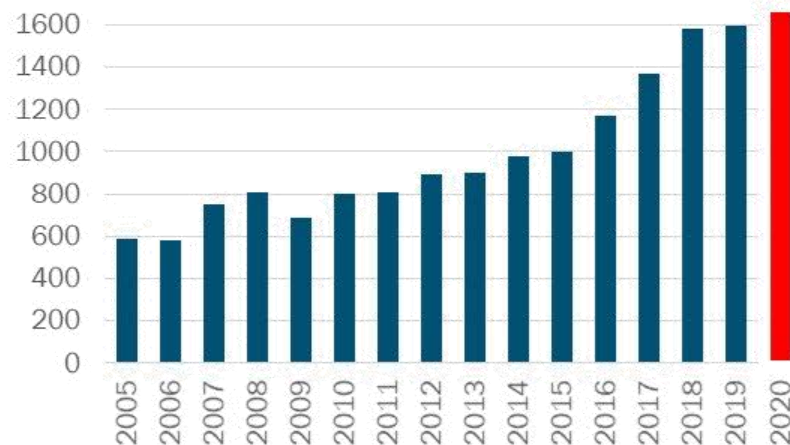
# Growing subs to and pubs in *Advanced Materials*

The field of materials science is booming...

**...and so is *Advanced Materials***

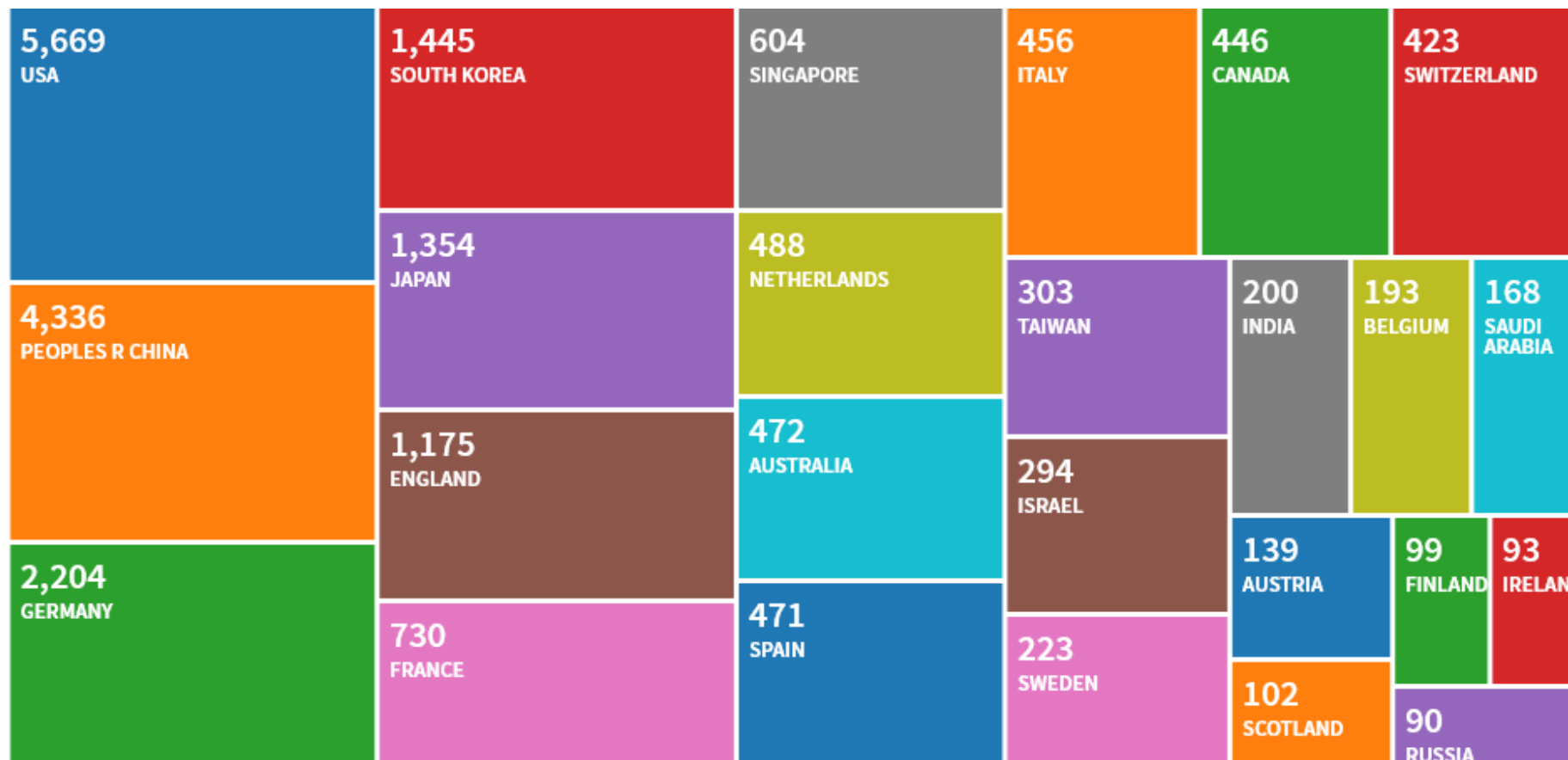
Thank you for your support as our authors, reviewers, and readers!

Publications



**2.7x** more published papers  
in **15** years

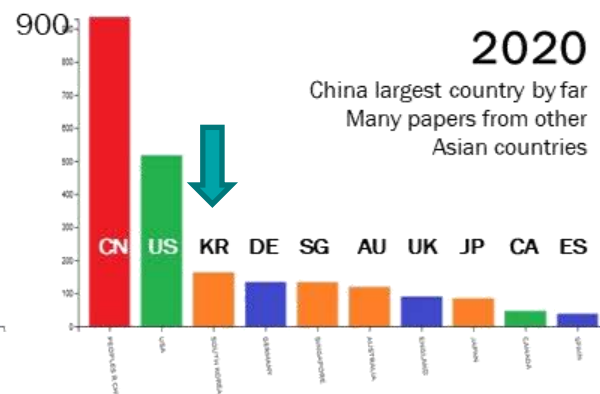
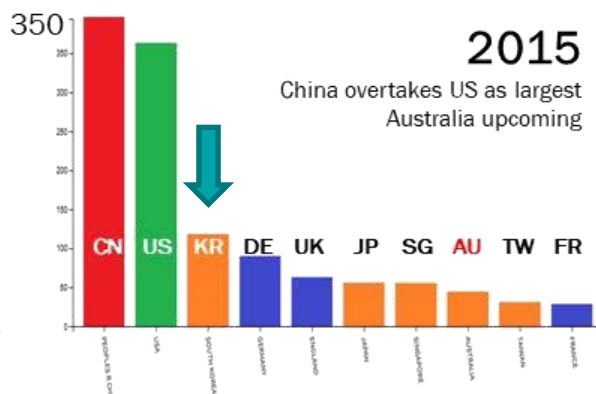
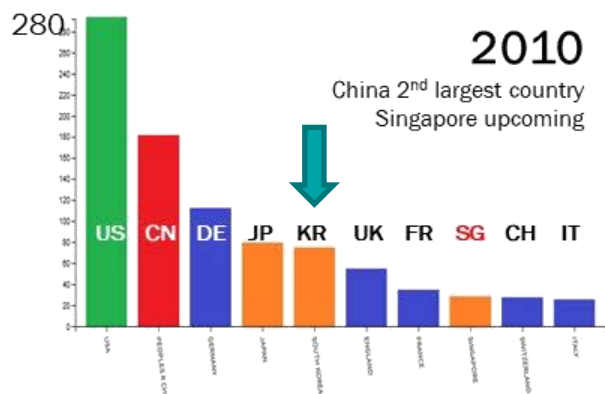
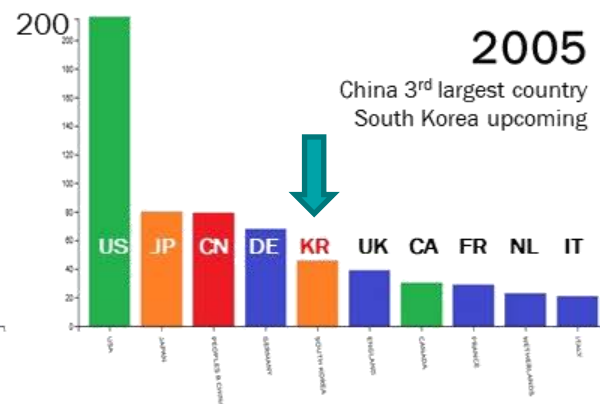
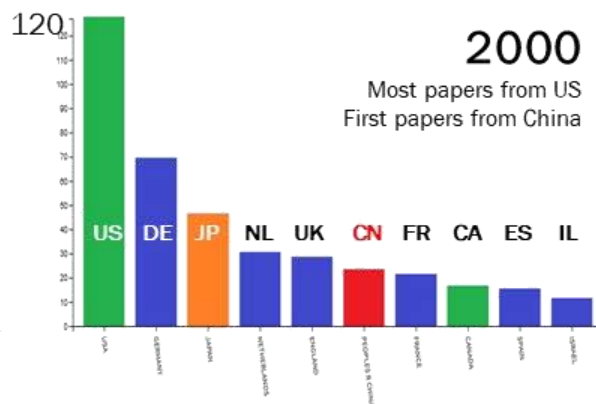
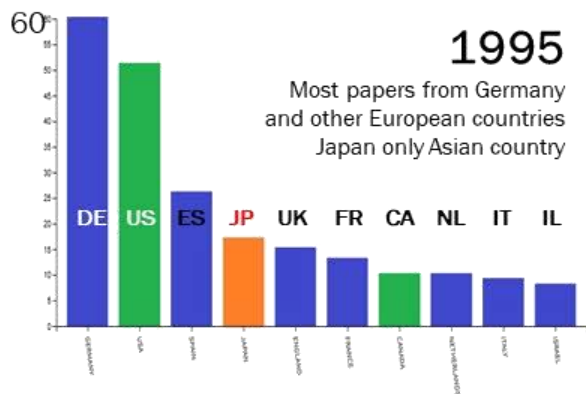
# Advanced Materials top countries





# Publications in *Advanced Materials* per country

## Where do papers in *Advanced Materials* come from?



# Advanced Materials top-100 institutes

1	INSTITUTE OF CHEMISTRY CAS	536	34	NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SC	159	67	ULSAN NATIONAL INSTITUTE OF SCIENCE TECHNOLO	103
2	UNIVERSITY OF CHINESE ACADEMY OF SCIENCES CAS	459	35	SUZHOU UNIVERSITY	158	68	TOHOKU UNIVERSITY	102
3	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	376	36	CHANGCHUN INSTITUTE OF APPLIED CHEMISTRY CAS	153	69	KING ABDULLAH UNIVERSITY OF SCIENCE TECHNOLO	101
4	NANYANG TECHNOLOGICAL UNIVERSITY	350	37	BEIHANG UNIVERSITY	149	70	NATIONAL TSING HUA UNIVERSITY	100
5	TSINGHUA UNIVERSITY	342	38	UNIVERSITE PARIS SACLAY COMUE	147	71	UNIVERSITE DE STRASBOURG	99
6	GEORGIA INSTITUTE OF TECHNOLOGY	331	39	UNIVERSITY OF CHICAGO	146	72	UNIVERSITY OF GRONINGEN	99
7	PEKING UNIVERSITY	324	40	UNIVERSITY OF NORTH CAROLINA	145	73	INTERNATIONAL BUSINESS MACHINES	98
8	SEOUL NATIONAL UNIVERSITY	317	41	UNIVERSITY OF MICHIGAN	144	74	KOREA UNIVERSITY	98
9	UNIVERSITY OF CAMBRIDGE	295	42	SHANGHAI JIAO TONG UNIVERSITY	142	75	CORNELL UNIVERSITY	97
10	HARVARD UNIVERSITY	281	43	NANJING UNIVERSITY	141	76	BEIJING INSTITUTE OF NANOENERGY NANOSYSTEMS	95
11	UNIVERSITY OF CALIFORNIA SANTA BARBARA	262	44	AGENCY FOR SCIENCE TECHNOLOGY RESEARCH	140	77	NANKAI UNIVERSITY	94
12	KOREA ADVANCED INSTITUTE OF SCIENCE TECHNOLO	254	45	CNRS INSTITUTE OF CHEMISTRY INC	139	78	PHILIPS	94
13	UNIVERSITY OF CALIFORNIA BERKELEY	236	46	OAK RIDGE NATIONAL LABORATORY	134	79	RICE UNIVERSITY	94
14	UNIVERSITY OF SCIENCE TECHNOLOGY OF CHINA	234	47	UNIVERSITY OF MASSACHUSETTS AMHERST	131	80	SUN YAT SEN UNIVERSITY	93
15	NATIONAL UNIVERSITY OF SINGAPORE	226	48	EINDHOVEN UNIVERSITY OF TECHNOLOGY	130	81	NATIONAL TAIWAN UNIVERSITY	92
16	NATIONAL CENTER FOR NANOSCIENCE AND TECHNC	216	49	UNIVERSITY OF LONDON	126	82	SORBONNE UNIVERSITE	91
17	NORTHWESTERN UNIVERSITY	216	50	TIANJIN UNIVERSITY	125	83	UNIVERSITY OF ERLANGEN NUREMBERG	90
18	STANFORD UNIVERSITY	215	51	SAMSUNG	124	84	UNIVERSITY OF WISCONSIN MADISON	90
19	NATIONAL INSTITUTE OF MATERIALS SCIENCE JAPAN	207	52	YONSEI UNIVERSITY	124	85	HUAZHONG UNIVERSITY OF SCIENCE TECHNOLOGY	89
20	FUDAN UNIVERSITY	199	53	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE	123	86	UNIVERSITY OF TEXAS AUSTIN	89
21	LAWRENCE BERKELEY NATIONAL LABORATORY	198	54	PENN STATE UNIVERSITY	120	87	JOHANNES GUTENBERG UNIVERSITY OF MAINZ	88
22	UNIVERSITY OF TOKYO	195	55	WEIZMANN INSTITUTE OF SCIENCE	120	88	SOUTH CHINA UNIVERSITY OF TECHNOLOGY	88
23	UNIVERSITY OF TORONTO	187	56	KARLSRUHE INSTITUTE OF TECHNOLOGY	119	89	KOREA INSTITUTE OF SCIENCE TECHNOLOGY	86
24	INSTITUTE OF PHYSICS CAS	185	57	OSAKA UNIVERSITY	119	90	PHILIPS RESEARCH	86
25	UNIVERSITY OF WASHINGTON SEATTLE	181	58	DRESDEN UNIVERSITY OF TECHNOLOGY	117	91	UNIVERSITE PARIS SACLAY	85
26	UNIVERSITY OF CALIFORNIA LOS ANGELES	180	59	TOKYO INSTITUTE OF TECHNOLOGY	114	92	UNIVERSITY OF CALIFORNIA SAN DIEGO	85
27	UNIVERSITY OF ILLINOIS URBANA CHAMPAIGN	178	60	UNIVERSITY OF OXFORD	114	93	RIKEN	84
28	POHANG UNIVERSITY OF SCIENCE TECHNOLOGY	175	61	ARGONNE NATIONAL LABORATORY	113	94	INSTITUTE FOR BASIC SCIENCE KOREA	83
29	SUNGKYUNKWAN UNIVERSITY	171	62	LINKOPING UNIVERSITY	112	95	KYUSHU UNIVERSITY	83
30	ETH ZURICH	170	63	UNIVERSITES DE STRASBOURG ETABLISSEMENTS ASS	111	96	UNIVERSITY OF PENNSYLVANIA	82
31	ZHEJIANG UNIVERSITY	167	64	CITY UNIVERSITY OF HONG KONG	107	97	SHANGHAI INSTITUTE OF CERAMICS CAS	81
32	IMPERIAL COLLEGE LONDON	166	65	HONG KONG UNIVERSITY OF SCIENCE TECHNOLOGY	107	98	HANYANG UNIVERSITY	80
33	JILIN UNIVERSITY	160	66	NORTH CAROLINA STATE UNIVERSITY	106	99	UNIVERSITY OF BAYREUTH	80
						100	WUHAN UNIVERSITY	80

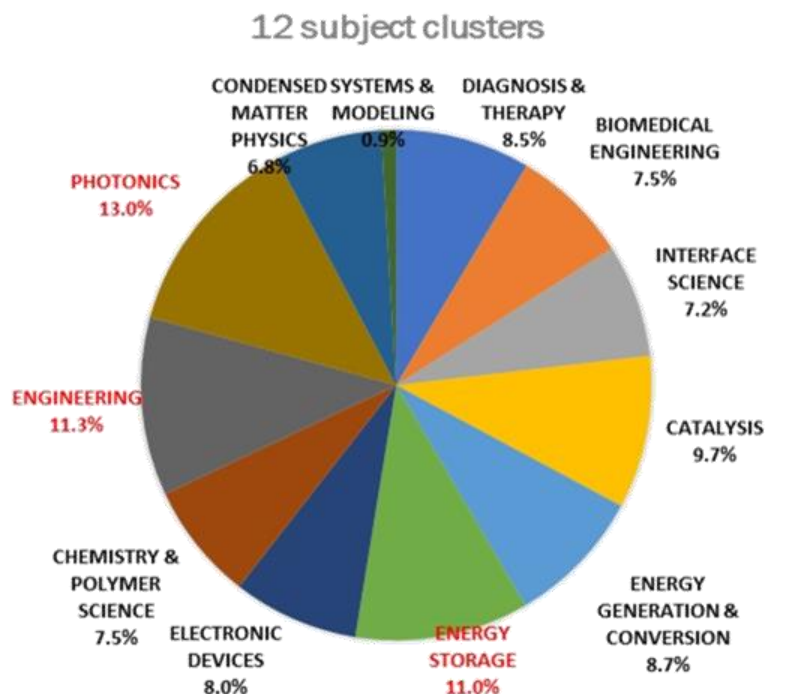
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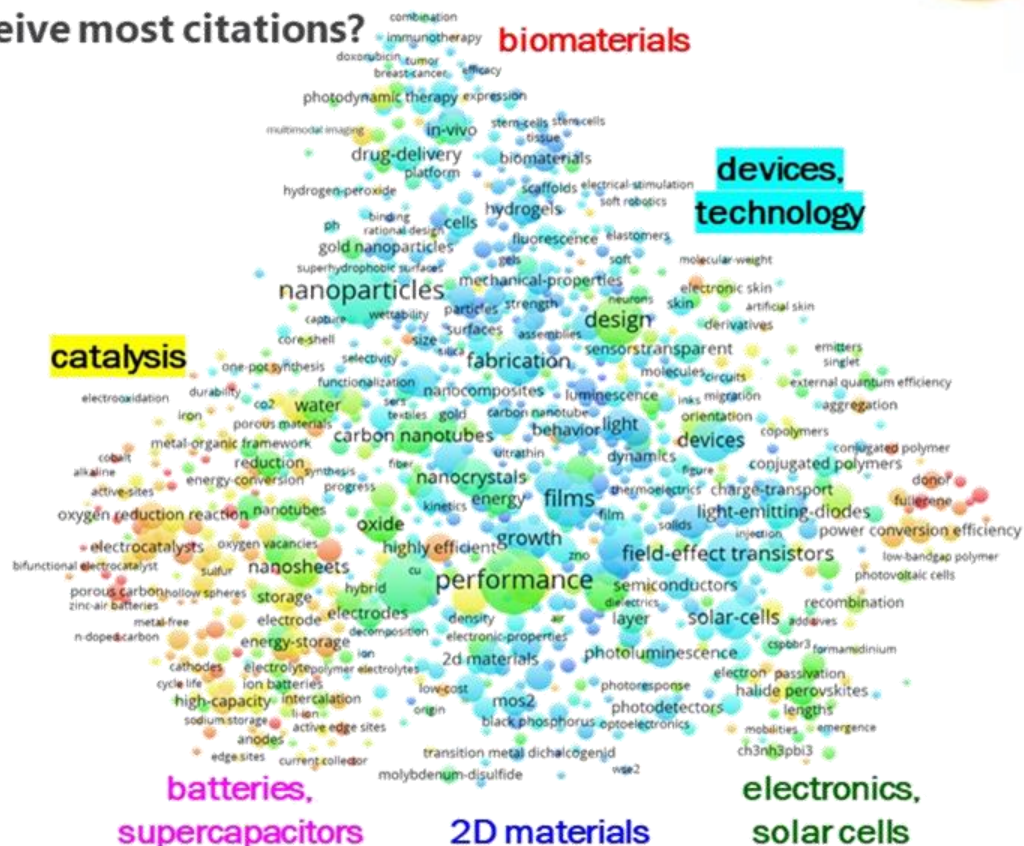


# Hot topics in Advanced Materials

Which topics in materials science receive most citations?

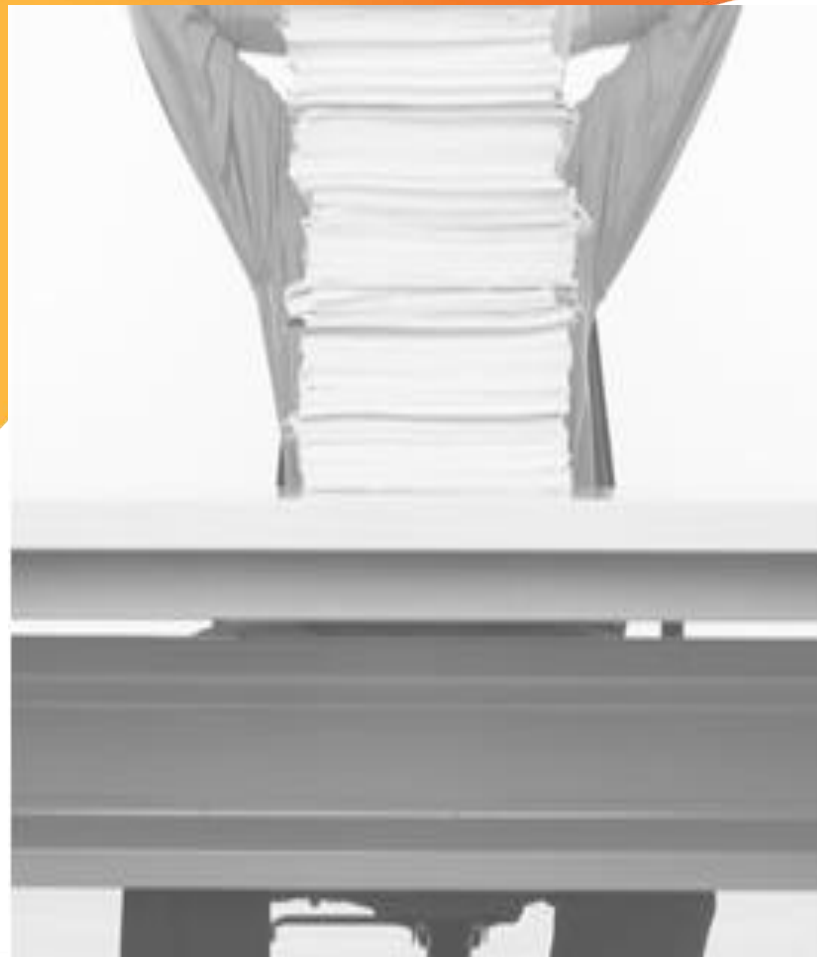


Submissions 2019-2020



Publications 2015-2019

## 2. Editorial workflow: before peer review



# External editorial office structure



## Editor-in-Chief

(possibly several regional or topical editors)

Professors,  
Experts,  
Specialists

Publisher

### Administrators

- Correspondence
- Administration
- System Maintenance
- Reporting
- Support Functions

### Managing Editor

- Chief Administrator
- Sets Managerial Policy Only
- Does NOT Decide on Manuscripts
- Liaison with External Editor-in-Chief

### Technical Editors

- Technical Management (Workflows)
- Manuscript Handling
- Copyediting & LP
- Proofs & Revisions (Author Liaison)
- Liaison with Content Management
- News & Portals

### Content Management

- Supplier & Provider Management
- Electronic Publication
- Print Publication

Editorial Office

Production



# Internal editorial office structure



# In-house or external?

**CellPress**



**ELSEVIER**

external



external

Or automated:

**ADVANCED  
MATERIALS**

nature publishing group **npg**

in-house

**RSC** Publishing

toward external?

**SPRINGER NATURE**

**npj** nature partner  
journals

**WILEY**

toward in-house?

**F1000Research**  
Open for Science

**WILEY**

# What are the roles of an editor?

- Manuscript assessment
- Reviewer selection
- Decision making
- Journal strategy
- Community interaction
  - Acquisition, up-to-date knowledge, hot topics, etc.
- News, publicity, marketing
- Scientific publishing ethics

**Advanced journals:**  
**editors are generalists**  
**responsible for their own**  
**decisions over a wide**  
**range of subject areas**



# What are the roles of peer review?



Wikipedia: “Peer review is the **evaluation** of work by **one or more** people of **similar competence** to the producers of the work (peers).

It constitutes a form of self-regulation by qualified members of a profession within the relevant field. Peer review methods are employed to maintain standards of quality, improve performance, and provide credibility. In academia peer review is often used to determine an academic paper's suitability for publication.”

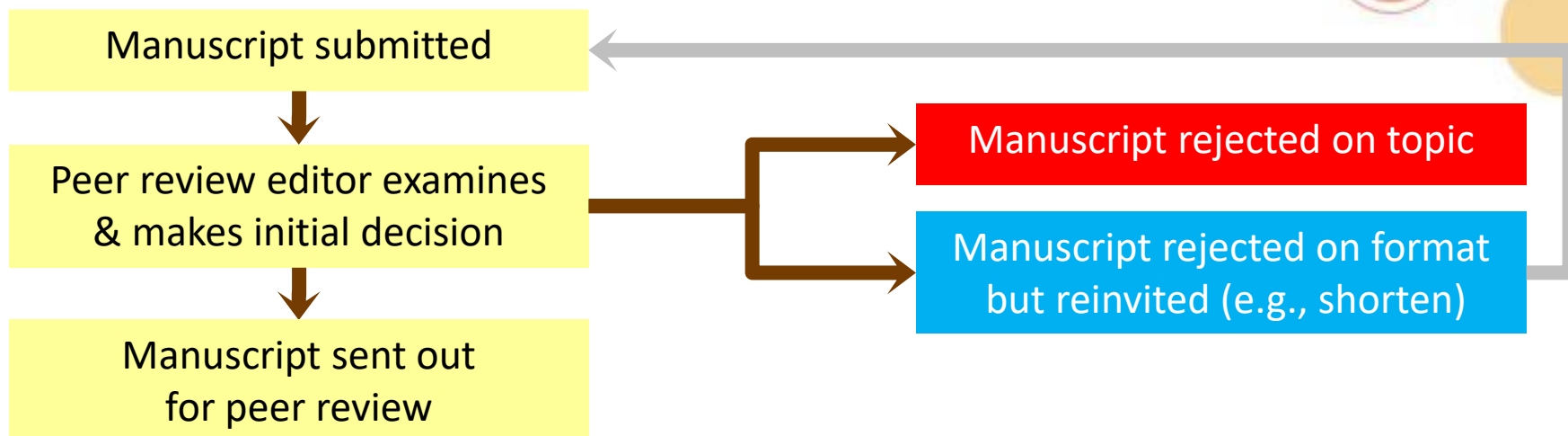
To select papers for publication:

- True / credible?
- Important?
- Relevant?
- Communicated effectively?

To improve papers for publication:

- Interpretation of results
- Presentation of results
- Critical feedback
- New ideas

# The peer review workflow



Depending on the specific journal,  
**50% – 70%**  
of all submissions  
don't make it to  
peer review!

→ Transfer to  
sister journal

# What the editor looks for

## Initial screening



**Read and follow the Guide for Authors!**

**Publishing space is limited – choose a journal whose readership  
will be keen to see your results!**



# What the editor looks for for *Advanced* journals

## Characterization / proof of existence

Is there proper proof that the compound or structure aimed for has indeed been created?

## New properties or abilities

Is it superior to previous materials / devices or has an entirely new functionality?

## Proof of usefulness in application

Is there a concrete demonstration of feasibility, **or only speculation on uses?**

## Synthesis / fabrication

Is it a new material or system?

**Is it only a variant of previous methods or similar materials, i.e., incremental?**



## Broad readership appeal

Is this a source of inspiration for others?  
Can this method or idea be applied to help overcome other challenges out there?

**"Fulfills our requirements – let's see what the community thinks (peer review)!"**

# Where the editor will look

While reading new manuscripts, the editor will especially look at:

»In conclusion, we have synthesised a novel class of multifunctional nanoparticles which are capable of significantly increasing the photoconversion efficiency of flexible solar cells ...«

## Conclusions section of manuscript

**Keyword1** nanotechnology  
**Keyword2** gold nanorods  
**Keyword3** cancer therapy  
**Keyword4** medical imaging  
**Keyword5** liposomes  
**Keyword6** micelles

## Keywords

- [1] W. C. W. Chan, S. M. Nie, *Science* **1998**,
- [2] L. Wang, C. Y. Yang, W. H. Tan, *Nano L*
- [3] L. Y. Wang, R. X. Yan, Z. Y. Huo, L. X. Wang, Q. Peng, Y. D. Li, *Angew. Che*
- [4] M. Bruchez, M. Moronne, P. Gin, S. We

## Literature references

»Upconversion multifunctional n are synthesised in a core-shell co from lanthanide-doped NaYF<sub>4</sub> by

## Abstract

### Additional Information:

#### Question

Please submit a plain text version of your cover letter here.

If you are submitting a revision of your manuscript, please do not overwrite your original cover letter. There is an opportunity for you to provide your responses to the reviewers later; please do not add them here.

#### Response

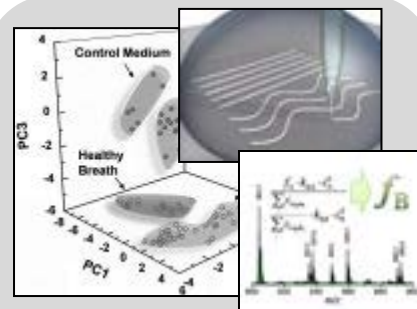
To the attention of Dr. Jörn Rittterbusch, Editor-in-Chief of Advanced Functional Materials

Dear Dr. Rittterbusch, Please find enclosed the manuscript of our paper on "Biomimetic Magnetite Nanoparticles". The manuscript describes the evolution of the synthesis of nanoparticles. In our approach we employed genetic optimization to realize the aqueous synthesis of nanoparticles. We not only describe how to investigate, and optimize bio-inspired mineralization first simple room temperature method for the aqueous synthesis of nanoparticles with narrow size distribution.

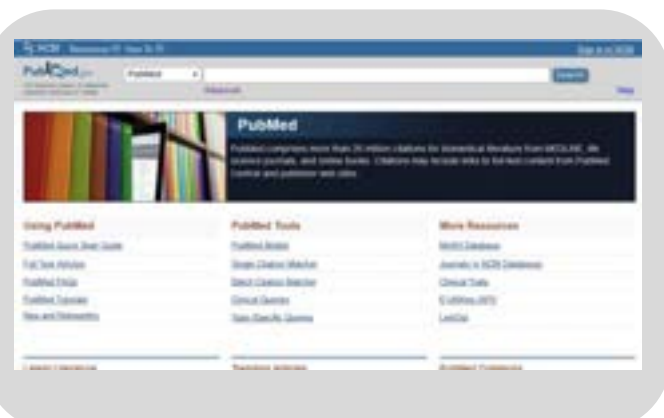
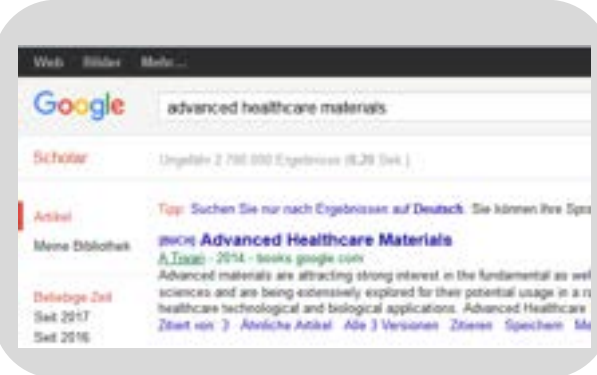
## Cover letter



"If I'm interested, my readers will be, too!"



## Visual information



WILEY



### 3. Tips on how to make it to peer review (and what to avoid)



# Selecting the right journal for your work



- **Impact Factor is not everything**
- What is the scope of your candidate journal?
- Who reads your candidate journal?
- What are the implications of your research?
- How important will others find your research?
  - In your field?
  - In related fields?
- Where do *you* read related papers?
- Which journals do *you* like the most?
- What is the format of your candidate journal?

# Some comments about Impact Factors



## A high IF does not say...

*"All articles in this journal are highly cited"*

*"All articles in this journal are the same (high) quality"*

*"Many people read these articles and many people cite them"*

## So what does a high IF say?

*"Articles in this journal are cited a lot **on average**"*

*"Articles in this journal are highly visible to the community that reads this journal"*

*"The articles may influence funding and benefit the career of the authors, **depending on their country's policies**"*

## Impact versus volume:

<i>Journal</i>	<i>No. papers</i>	<i>IF</i>
Nature Materials	120	38.663
Advanced Materials	950	27.398
Nature Physics	300	20.113
Nano Letters	996	11.238
Angewandte Chemie	2550	12.959
Phys. Rev. Lett.	2000	8.385

# Structuring a manuscript

**Introduction**

**Why did I do it?**

**Results and Discussion**

**What did I do?**

**Conclusions**

**What does it mean?**

## **Make an outline:**

- Organize the data
- Sketch the figures
- Put things in order

## **Important:**

Figure out what data or figures are still needed to complete the outline – and subsequently complete the manuscript with your co-authors



# Avoiding textual plagiarism

## 1. Inevitable / Harmless

Silicon (Si) has a great potential as a photoelectrode because it is an earth-abundant element with several desirable properties, including a narrow energy band gap of  $\sim 1.2$  eV, high carrier mobility, stability over a wide pH range, non-toxicity, and commercial availability.<sup>[11]</sup> Si is a key material in the solid-state photovoltaic industry, whilst modified Si has been used increasingly in solid/liquid photoelectrochemistry. For example, the surface of p-Si was doped heavily with donor ( $n^+$ ) to acquire a larger open-circuit voltage in photocatalytic systems (P. Li, C. Li, J. Li, and J. Li, *Chem. Commun.*, 2012, 1–3). However, the long optical path of the Si photocatalyst is a drawback for PEC water splitting.<sup>[12]</sup> In contrast, Si nanowire arrays are promising for PEC water splitting because of their high surface area and short charge carrier recombination length. However, a wire-array geometry possesses long optical paths for efficient photon absorption and increased collection efficiency for the minority carrier. A comparison of planar p-Si and p-Si wire arrays indicated that the latter exhibits a significantly lower reflectance<sup>[13]</sup> and 0.1–0.3 V higher anodic onset potentials in PEC water splitting processes.<sup>[13,18]</sup>

With this in mind, this study attempted, for the first time, to fabricate Sn-coupled p-Si nanowire arrays for application to solar  $\text{CO}_2$  conversion. Vertically aligned, free-standing p-Si nanowire arrays of varying lengths were grown on p-Si wafers using an electrodeless chemical etching technique.

higher anodic-onset potentials in photocurrent generation. The formate formation of the same surface area nanoparticles were studied.

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### 2. Results and discussion

#### 2.1 Structure and electrochemical performance

The morphology and crystal structure of the three as prepared compounds were characterized by SEM and XRD. As shown in the SEM images of Figure 1, the particle size ranges from several micrometers to tens of micrometers, and particle size becomes larger and more non-uniform as the Fe content increases. From the X-ray diffraction (XRD) patterns (Figure 2a,b,c), it is very interesting to find that  $\text{Fe}_{0.2}\text{Mn}_{0.8}\text{S}$  and  $\text{Fe}_{0.5}\text{Mn}_{0.5}\text{S}$  have the same crystal structure as  $\text{MnS}$ , but the diffraction peaks shift to

### Experimental Section

#### Fabrication of p-type Si nanowire electrodes

An Ag-catalyzed electrodeless chemical etching method was used to prepare vertically aligned, free-standing silicon nanowire array electrodes. For this, p-type Si (100) wafers (Wafers Korea, Inc.; B-doped at  $10^{14}$ – $10^{15}$   $\text{cm}^{-3}$  based on its resistivity of 1–30  $\Omega\text{-cm}$  according to the manufacturer's specification) were rinsed with acetone, 2-propanol, and ultra-pure deionized water. During the etching process, the wafers were placed on a silicon wafer holder and connected to a power supply. The etching solution was prepared by dissolving  $\text{H}_2\text{O}_2$  (30%),  $\text{HF}$  (48%), and  $\text{HCl}$  (37%) in deionized water and then in  $\text{HF}$  (3%) for 1 min to remove the surface oxides. To deposit the Ag seed layer, the substrates were dipped into an aqueous solution of  $\text{AgNO}_3$  (10 mM) and  $\text{HF}$  (5 M)

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Small matches of frequently used standard terms or expressions.

# What's plagiarism and what isn't?



## Experimental section:

### Material synthesis and characterization:

All the samples were prepared using a solid-state reaction method.  $\text{Fe}_x\text{Mn}_{1-x}\text{S}$ ,  $\text{MnS}$  and  $\text{Fe}_x\text{Mn}_{1-x}\text{S}$  ( $x=0.2, 0.5, 0.8$ ), the  $\text{Fe}_x\text{Mn}_{1-x}\text{S}$  powders were carefully ground and milled. The samples were then pressed into pellets and heat-treated to  $900^\circ\text{C}$  for 40 h. After cooling down to room temperature, the obtained samples were ground for electrode preparation. The morphologies of the samples were observed using a scanning electron microscope (SEM) (Hitachi S-4800). The structure of the samples were characterized by X'Pert Pro MPD X-ray diffractometer (Philips, Holland) using Cu-K $\alpha$  radiation ( $1.5405\text{\AA}$ ), and the exact lattice parameters were obtained by refining the XRD data using Fullprof.

### Electrochemistry test:

The working electrode was prepared by spreading the slurry of the active materials (70 wt.%), acetylene black (20 wt.%) and sodium alginate binder (10 wt.%) on Cu foil with the distilled water as solvent. The electrode was dried at  $100^\circ\text{C}$  in vacuum for 10 h before use. The coin cells were assembled with pure lithium foil as the counter electrode, and a glass fiber as the separator in an argon-filled glove box. The charge/discharge measurements were carried out on a Land BT2000 battery test system (Wuhan, China) at a current rate of  $0.1\text{C}$  ( $1\text{C}=600\text{ mA g}^{-1}$ ) under room temperature. The  $\text{MnS}$  and  $\text{Fe}_x\text{Mn}_{1-x}\text{S}$  ( $x=0.2, 0.5, 0.8$ ) electrodes were discharged and charged between the voltage range of  $0.1\text{--}2.5\text{ V}$ . The voltage range for the FeS electrode was  $1.0\text{--}2.5\text{ V}$ .

This looks worse, doesn't it?

Looks bad, but it's about standard experimental procedures – very difficult to rephrase, and why would one intentionally describe the same method differently? That could be understood as trying to make it look new.

# What's plagiarism and what isn't?



paper.

**1. Introduction**

The increasing needs of electrical energy storage have promoted the great success of lithium-ion batteries (LIBs) in portable electronics, and they are also being developed for application in large-scale applications, such as electric vehicles and grid-scale storage. The transition from portable electronics to vehicles and grid, with expected lifetime greater than ten years, will require substantial improvements of the LIBs in calendar and cycling life.<sup>[1,2]</sup> In addition, vehicle applications require at least a two-fold improvement of the energy and power densities. One of the promising classes of electrode materials that could meet these stringent requirements is the conversion reaction based transition metal compounds (including oxides, fluorides, sulphides and nitrides), which provide capacities several times higher than those of existing intercalation compounds, due to the multiple electron transfer per transition metal ion through the conversion reaction.<sup>[3-5]</sup> Among them, transition metal oxides<sup>[6-9]</sup> and fluorides<sup>[10-15]</sup> have been intensively investigated. It was shown that Li insertion into the MO/MF (M=Mn, Fe, Co, Ni and Cu)



The red overlap is harmless (hundreds of papers on topic published already).



The purple overlap is highly questionable. This was probably lifted intentionally from the source paper and only minimally modified.

## 3. Questionable...

If a manuscript displays a number of such overlaps, coincidence can be ruled out – especially when the number of sources is very limited.

**The editor will take action!**



# What's plagiarism and what isn't?

## 4. Plagiarism



# What's plagiarism and what isn't?

## 5. Outrageous

# Writing a good cover letter

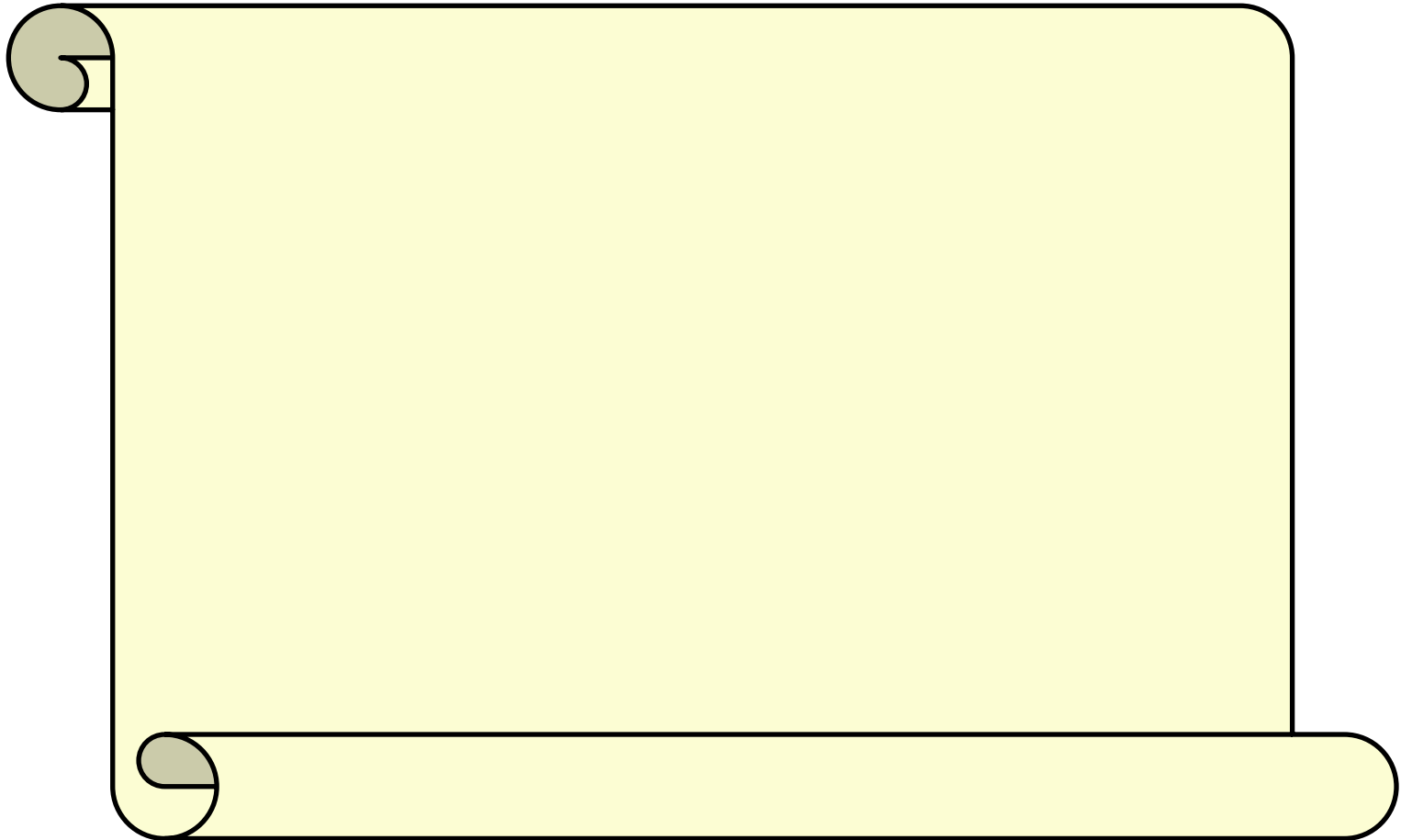
The editor reads this, so make it count!



**Tip: Keep the cover letter as short as possible!**

# Writing a good cover letter

## The worst type



# Writing a good cover letter

## Not much better

Dear Editor,

We would like to submit our manuscript “Really Awesome Fabrication of Interesting High-Entropy Alloys” to your journal. We hope you will accept it for publication as soon as possible.

Yours sincerely,

A. N. Author



# Writing a good cover letter

## This could be interesting

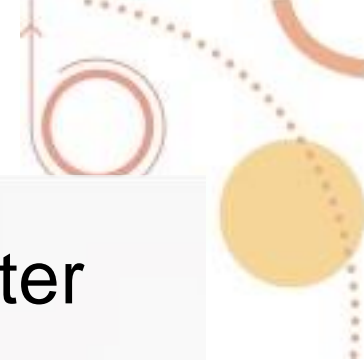
Dear Editor,

Here, we show high-performance high-entropy alloys with enhanced mechanical properties manufactured via an efficient 3-step route... First report of HEAs applied in spacecraft technology...

Yours sincerely,

A. N. Author

# Ethical obligations as an author



- Disclose conflicts of interest in cover letter
- List related papers in press or under consideration (very important)
- Proper reviewer suggestions:
  - Some big names, but also some peers
  - Diverse mix (expertise, geographical location)
  - Not too well connected (= current or former collaborators, colleagues within your institute, PhD or postdoc advisor or student...)
- Also oppose those reviewers who might be unfairly negative (direct competitors)

# Choosing a good title

- **Short** – not longer than 15 words
- **Informative** – main message or finding (not vague)
  - What did you find?
  - NOT: What did you do?
- **Statement form**
  - Connect **relevant keywords**...
  - ...through **active verbs**
- Avoid starting with:
  - *Study on...*
  - *Research on...*
  - *Investigation on...*
  - *Characterization of...*
  - *Optimization of...*
  - *Effect of...*
- Do not use “new” or “novel”

**The first impression counts**

# How to simplify your writing

## Some examples

exhibits, shows, possesses	= has
represents	= is
methodology	= method
spectroscopic analysis, chromatographic analysis	= spectroscopy, chromatography
compound x was found to be a good...	= compound x was a good
was synthesized in good yield (79%)	= was synthesized in 79% yield



# Things to consider/avoid

Taken from an abstract

“It presents a large optical modulation (...), fast switching (...) and high coloration efficiency (...). Even more importantly, excellent electrochemical cycling stability (...) and remarkable mechanical flexibility (...) were achieved.”

- Words like remarkable, outstanding, excellent, superior, overwhelming... are marketing speech. These words should be avoided, especially in titles.
- If you want to say something is really good, always compare it to the standard system that is being used and/or to other similar systems that have been reported “recently”.
- If you put values and comparisons in a table, the readers will appreciate it (and the editor will love you!).



# Things to consider/avoid

## Recently

“Recently”, in materials science – pretty much in any research field really – should not be more than **two or three years ago**. Even that is not really “recent”...



- Better use something like: “...in recent years.<sup>[x,y,z]</sup>”



# Things to consider/avoid

## Rarely reported

“The use of X in combination with Y has been rarely reported.

[no reference]”

- I do read this a lot! And in 50% of the cases **no reference** is given. So is it reported at all? Did the author just write “rarely” because he/she wasn’t sure and too lazy to check? This leaves a **bad impression**.
- Always be precise.
  - **Are there reports? Cite them.**
  - **Are there none? Say it.**



# Things to consider/avoid

To the best of the author's knowledge

“To the best of our knowledge there are no reports on X.”

- Quite a common phrase. This is totally fine. However, keep in mind that this sentence might **challenge** the editor to take a closer look.
- Best double-check before submission. Then it's fine.

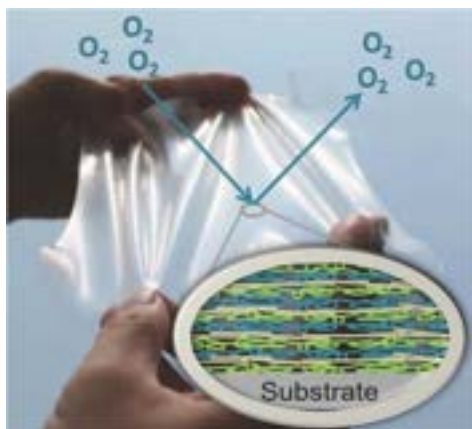




# Writing a good abstract

The chlorogenic acids of *Gardeniae Fructus* used traditionally as a Chinese herbal medicine (zhizi) have been investigated qualitatively by liquid chromatography/multi-stage mass spectrometry (LC/MS<sup>n</sup>). Twenty-nine chlorogenic acids were detected and twenty-five characterised to regioisomer level on the basis of their fragmentation, twenty-four for the first time from this source. Assignment to the level of individual regioisomers was possible for three caffeoylquinic acids, three dicaffeoylquinic acids, three sinapoylquinic acids, four caffeoyl-sinapoylquinic acids, two feruloyl-sinapoylquinic acids, one *p*-coumaroyl-sinapoylquinic acid, three (3-hydroxy, 3-methyl)glutaroylquinic acids, two (3-hydroxy, 3-methyl)glutaroyl-feruloylquinic acids, one (3-hydroxy, 3-methyl)glutaroyl-dicaffeoylquinic acid, and one (3-hydroxy, 3-methyl)glutaroyl-caffeoyl-feruloylquinic acid. Six (3-hydroxy, 3-methyl)glutaroyl-caffeoylquinic acids were detected and two were tentatively assigned as 3-caffeoyl-4-(3-hydroxy, 3-methyl)glutaroylquinic acid and 3-caffeoyl-5-(3-hydroxy, 3-methyl)glutaroylquinic acid. The (3-hydroxy, 3-methyl)glutaroyl residue modifies the mass spectral fragmentation behavior and elution sequence compared with the chlorogenic acids that contain only a cinnamic acid residue(s). Fourteen of these twenty-nine chlorogenic acids have not previously been reported from any source.

- Why? Why is this important?
- Too many details on the results and characterization
- State why the research is important to a broad audience
- Introduce the rationale simply
- Describe the experiments briefly
- Offer a brief overview of results



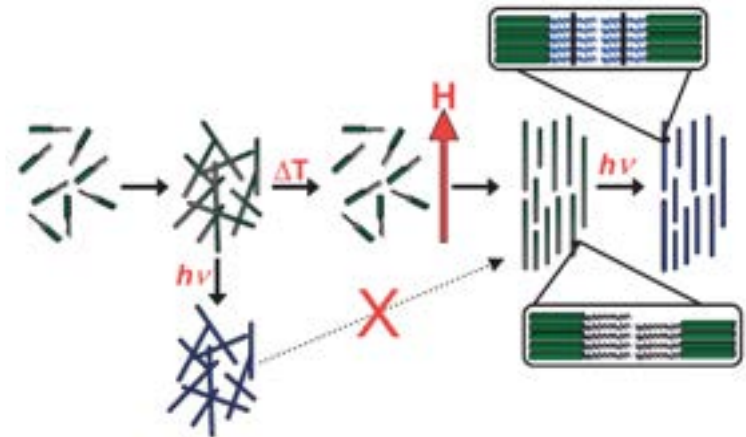
Super gas barrier nanocoatings are recently demonstrated by combining polyelectrolytes and clay nanoplatelets with layer-by-layer deposition. These nanobrick wall thin films match or exceed the gas barrier of  $\text{SiO}_x$  and metallized films, but they are relatively stiff and lose barrier with significant stretching ( $\geq 10\%$  strain). In an effort to impart stretchability, hydrogen-bonding polyglycidol (PGD) layers are added to an electrostatically bonded thin film assembly of polyethylenimine (PEI) and montmorillonite (MMT) clay. The oxygen transmission rate of a 125-nm thick PEI-MMT film increases more than 40x after being stretched 10%, while PGD-PEI-MMT trilayers of the same thickness maintain its gas barrier. This stretchable trilayer system has an OTR three times lower than the PEI-MMT bilayer system after stretching. This report marks the first stretchable high gas barrier thin film, which is potentially useful for applications that require pressurized elastomers.





# Preparing good figures

## Figures (and schemes, tables, equations) are critical

- Figures *summarize* the results
- Figures are “read” first by editors, reviewers, and readers
- Figures should be designed for clarity, simplicity, consistency, and impact

...and in good quality



**Figure 2.** Schematic presentation of a strategy to obtain magnetically aligned and polymerized peptide amphiphile assemblies and the mode of their alignment.  = Peptide amphiphile monomer.  = Polymerized peptide amphiphile.  = Polymerizable peptide amphiphile nanofiber.  = Polymerized nanofiber. The red arrow indicates the direction of the magnetic field.

**A well-designed figure is worth a thousand words**

# The importance of search engines

## Visits to Wiley Online Library



# Making sure your work is found

**Search Engine  
Optimization**

Carefully select relevant keywords



Lead with keywords in article title in first 65 characters



Repeat keywords 3-4 times throughout abstract



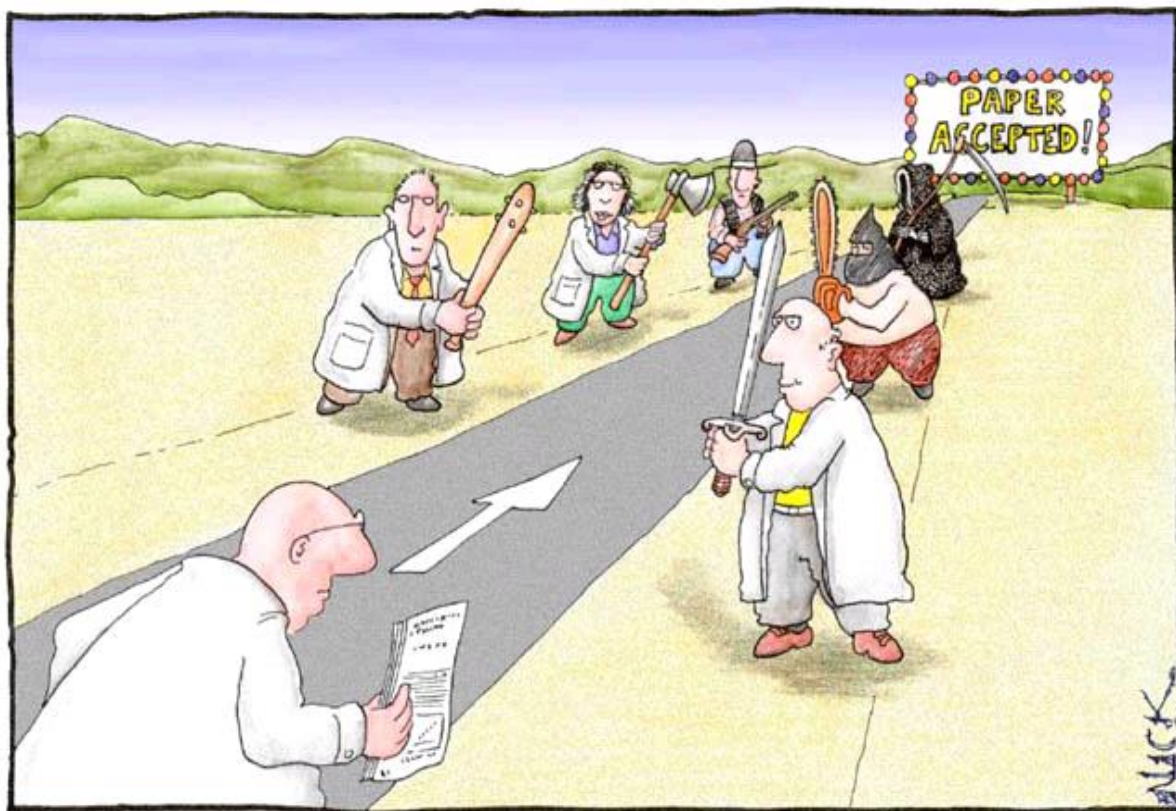
Use headings throughout article



Link to published article on social media, blogs and academic websites

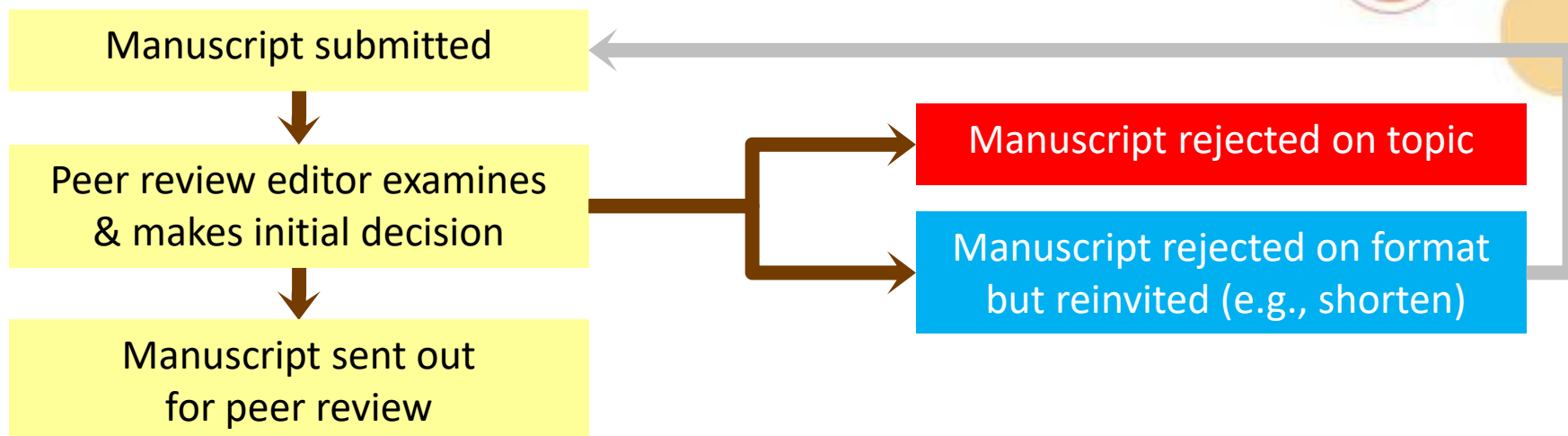


## 4. Editorial workflow: during peer review



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

# The peer review workflow



# Peer review models



Three most common models:

## Single blind

The author does not know who the reviewers are. This is the most common type among science journals

## Double blind

The reviewers don't know the identity of authors and vice versa. This is the most common among social science and humanities journals

## Open review

The identity of the author and the reviewers are known by all participants. A growing minority of journals do this

# How the editor selects reviewers

Quality of peer review depends on good reviewer choices



**"You can help keep decision times short with good keywords and reviewer suggestions!"**



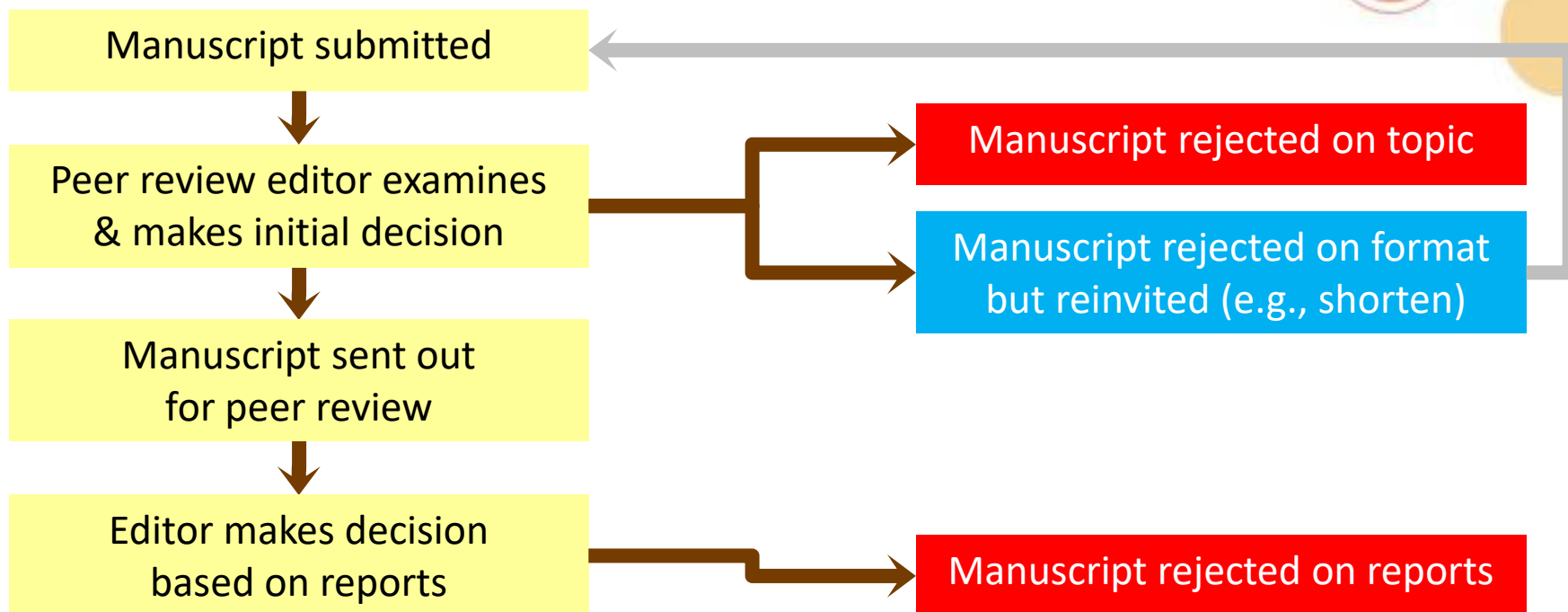
# What feedback we ask our reviewers for

Quality of peer review depends also on clear reviewer reports



**"Besides your general opinion, please give clear reasons for rejection or acceptance!"**

# The peer review workflow



# Decisions: should you appeal a rejection?

## Usually, no

Risk of longer time  
to publication

Editor and reviewers  
know journal well

Criticisms may be valid

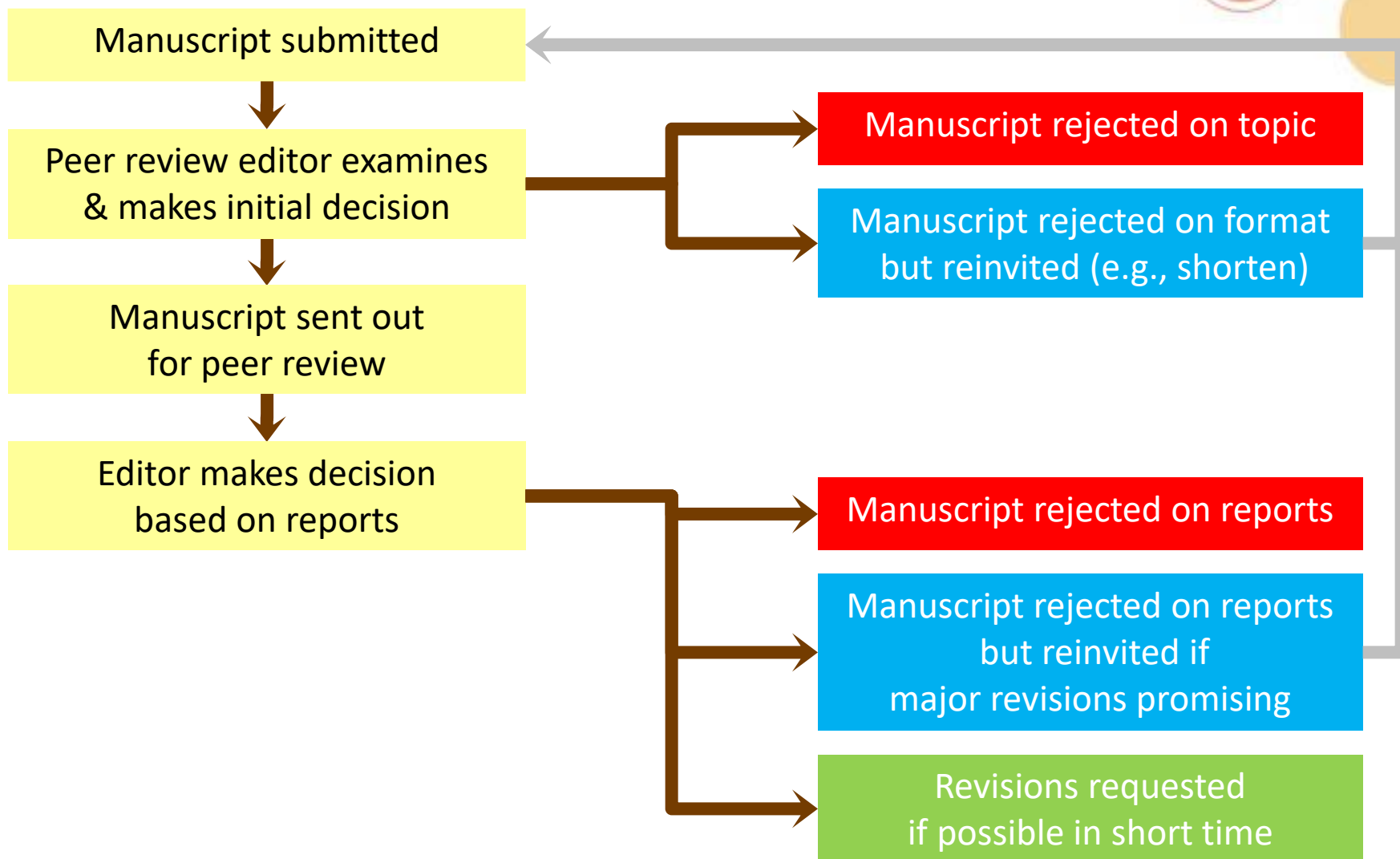
## Occasionally, yes

Importance / impact /  
novelty missed by editor  
and/or reviewers

Factual errors in  
reviewer reports that  
led to rejection



# The peer review workflow





# Revisions requested: how should you revise?

## Carefully consider reviewer comments

Not all changes have to be made, but...

...you need convincing arguments  
for changes not made

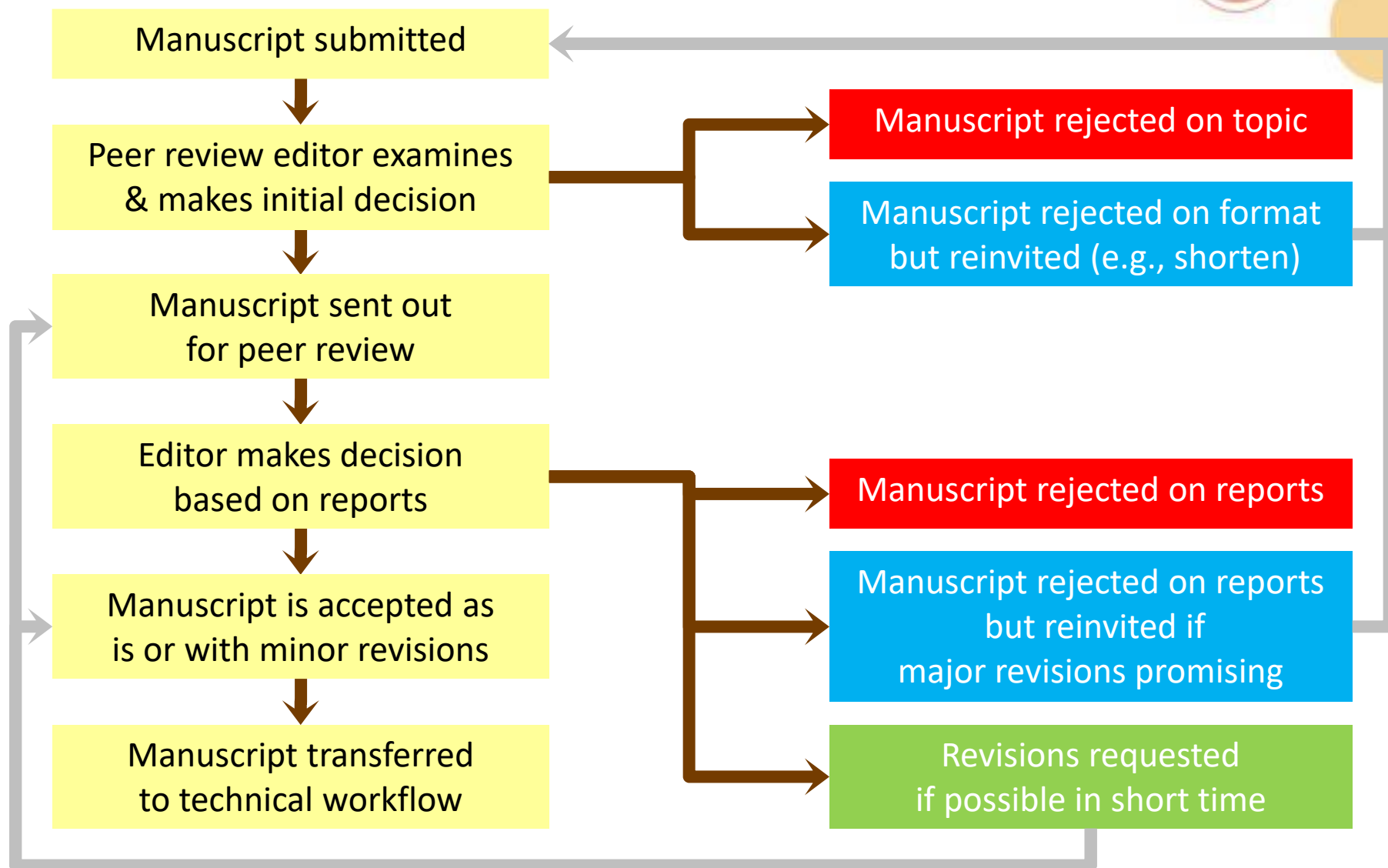
## Prepare revision

- Make changes to the manuscript
- Highlight changes in manuscript
- Point-by-point response letter to all reviewer issues
- Response likely will go back to reviewers



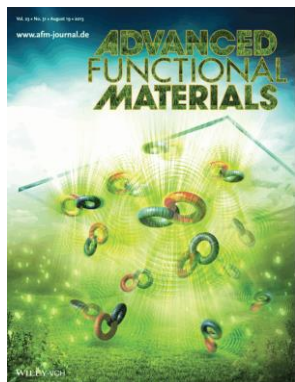
**Need to convince both reviewers *and* editor**

# The peer review workflow



# Author services

- Many articles featured on our new in-house research news website, **AdvancedScienceNews.com**, and on social media:  
twitter.com/**AdvSciNews**  
facebook.com/**AdvSciNews**
- Run your **press release** on **AdvancedScienceNews.com**, and coordinate online publication date of your article
- Generate additional publicity for your research with feature on journal front / back / inside **cover**, or as **frontispiece**



- Open Access** possibilities via Wiley's **OnlineOpen** services, allowing authors to make their work freely available to all, and to comply with funder funding / institutional mandates

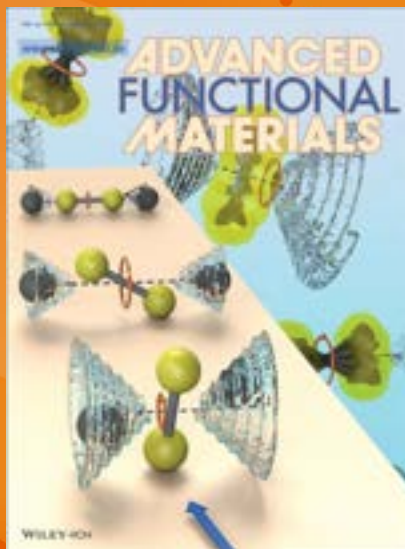
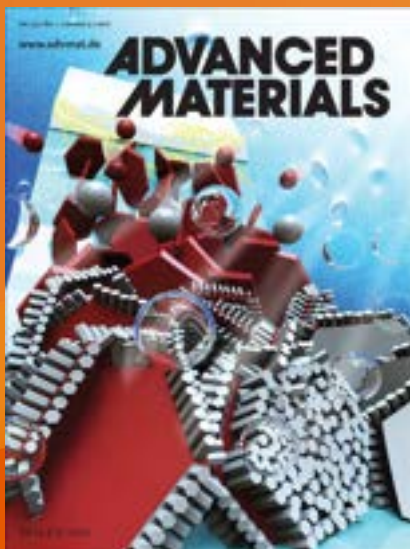
# Concluding remarks



- Editors, referees, and readers  
all want the same thing:

## High-Quality Articles

- Competition is tough,  
so make your work stand out!



**Thank you!**  
*Questions?*

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