

Publishing in a Research Journal

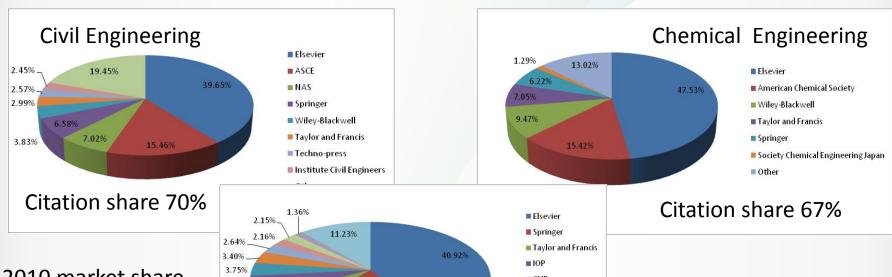
Louise Curtis
Publishing Director Engineering
June 2013



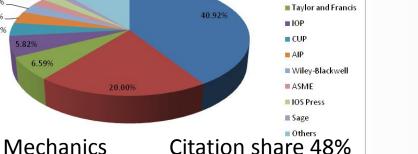
Introduction



- Publishing Director, Engineering journals
- Responsible for a team of 8 publishers
- Working on a portfolio of 120 Engineering journals with over 700 external editors



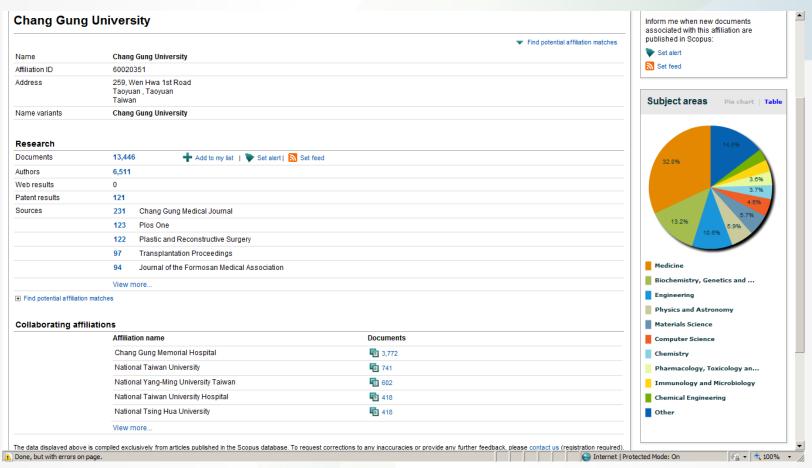
2010 market share in published articles /citations







Chang Gung University







Outline



- Initial Considerations
 - Are you ready to publish?
 - The right paper type and the right journal
- Preparing a good manuscript
- The review process
- Author rights and responsibilities
- Online developments





Initial Considerations





Are you ready to publish?

Consider publishing if you have information that advances understanding in a specific research field

This could be in the form of:

- Presenting new, original results or methods
- Rationalizing, refining, or reinterpreting published results
- Reviewing or summarizing a particular subject or field

If you are ready to publish, a strong manuscript is what is needed next





What is a strong manuscript?

- Has a <u>clear</u>, <u>useful</u>, and <u>exciting</u> message
- Presented and constructed in a <u>logical</u> manner
- Reviewers and editors can grasp the significance easily

Editors and reviewers are all busy people – make things easy to save their time





Paper types

- Full articles / Original articles: substantial and significant completed pieces of research.
- Letters / Rapid Communications/ Short communications:
 quick and early communication of significant and original
 advances. Much shorter than full articles (check
 limitations).
- Review papers / perspectives: summarize recent developments on a specific topic. Highlight important previously reported points. Not the place to introduce new information. Often invited.
- Conference Papers: Excellent for disseminating early or inprogress research findings. Typically 5-10 pages.



Choosing the right journal

- Look at your references.
- Review recent publications in each candidate journal...
- Journal specific data e.g. impact factor, time to publish etc
- Decide on one journal. DO NOT submit to multiple journals
- Consider journals' Guides/Instructions for Authors



Article history:

Received: 2 December 2011

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14 May 2012

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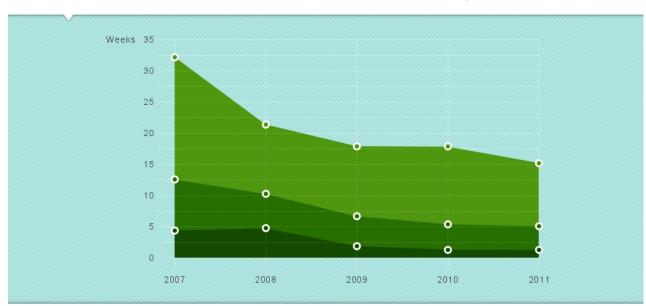




Elsevier journal metrics

Online Article Publication Time

Indicates speed of publication at the journal level



Definition

Online Article Publication Time

The average number of weeks an article takes to reach key points in the online publication process. There are 3 key points:

- 1. From manuscript acceptance to the first appearance of the article online.
- 2. From manuscript acceptance to the corrected proof online.
- 3. From manuscript acceptance to the final appearance online of the fully paginated article.

Data

	First	Corrected	Final
2011	1.3	5.1	15.2
2010	1.3	5.4	17.8
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2008	4.7	10.2	21.4
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Legend

Colour

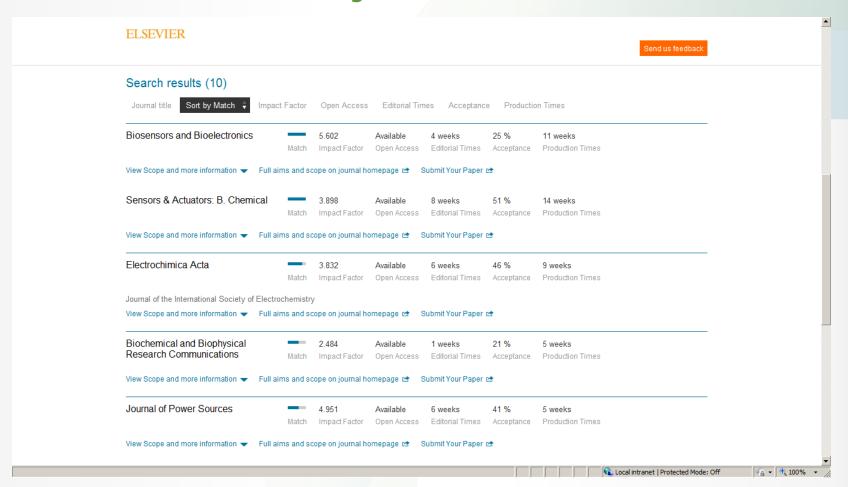
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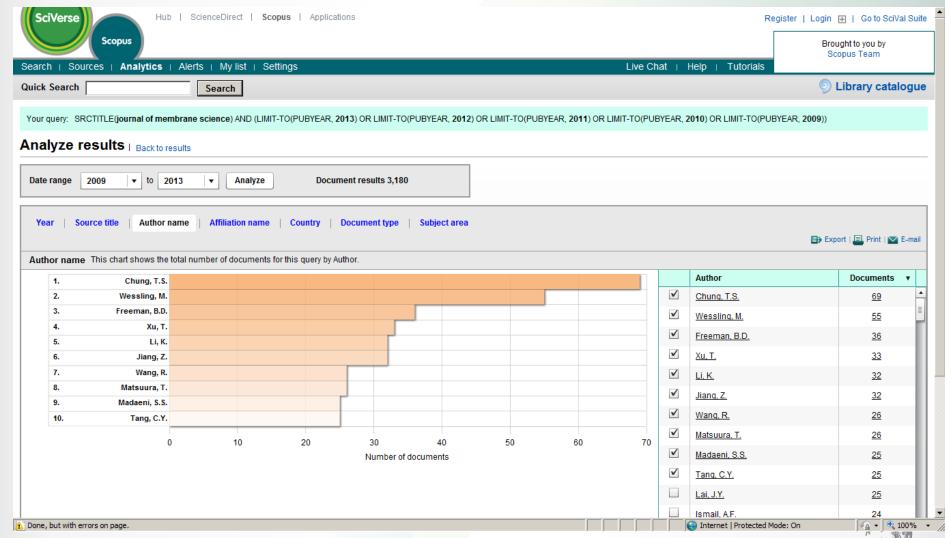






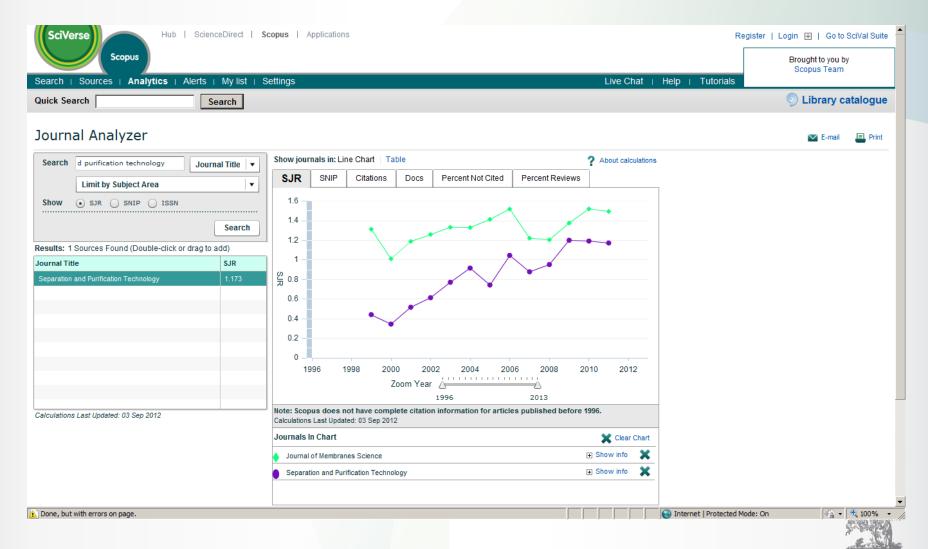


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Using Scopus to compare journals





Preparing a good manuscript





Constructing your article

- Title
- Abstract
- Keywords
- Main text (II
 - Introduct
 - Methods
 - Results
 - And
 - Discussi
- Conclusion
- Acknowled
- References
- Supplementary Data

The progression of the thematic scope of a paper:

general → specific → general

However, we often write in the following order:

- Figures and tables
- Methods, Results and Discussion
- Conclusions and Introduction
- Abstract and title







Original Title	Revised	Remarks
Preliminary observations on the effect of Zn element on anticorrosion of zinc plating layer	Effect of Zn on anticorrosion of zinc plating layer	Long title distracts readers. Remove all redundancies such as "observations on", "the nature of", etc.
Action of antibiotics on bacteria	Inhibition of growth of mycobacterium tuberculosis by streptomycin	Titles should be <u>specific</u> . Think to yourself: "How will I search for this piece of information?" when you design the title.
Fabrication of carbon/CdS coaxial nanofibers displaying optical and electrical properties via electrospinning carbon	Electrospinning of carbon/CdS coaxial nanofibers with optical and electrical properties	"English needs help. The title is nonsense. All materials have properties of all varieties. You could examine my hair for its electrical and optical properties! You MUST be specific. I haven't read the paper but I suspect there is something special about these properties otherwise why would you be reporting there?" — the Editor-in-chief



Abstract

A clear abstract will strongly influence whether or not your work is further considered...

We tackle the general linear instantaneous model (possibly underdetermined and noisy) where we model the source prior with a Student *t* distribution. The conjugate-exponential characterisation of the *t* distribution as an infinite mixture of scaled Gaussians enables us to do efficient inference. We study two well-known inference methods, Gibbs sampler and variational Bayes for Bayesian source separation. We derive both techniques as local message passing algorithms to highlight their algorithmic similarities and to contrast their different convergence characteristics and computational requirements.

Our simulation results suggest that typical posterior distributions in source separation have multiple local maxima. Therefore we propose a hybrid approach where we explore the state space with a Gibbs sampler and then switch to a deterministic algorithm. This approach seems to be able to combine the speed of the variational approach with the robustness of the Gibbs sampler.

What has been done

ng the whole

69

What are the main findings





Keywords

Used by indexing and abstracting services

- Labels/tags
- Use only established abbreviations (e.g. DNA)
- Check the 'Guide for Authors'

Article Title

"Silo music and silo quake: granular flow-induced vibration"

"An experimental study on evacuated tube solar collector using supercritical CO2"

Keywords

Silo music, Silo quake, stick-slip flow, resonance, creep, granular discharge

Solar collector; Supercritical CO2; Solar energy; Solar thermal utilization



Publishing Connect Partnering with the Global Research Community.

Introduction

Provide context to convince readers that you clearly know why your work is useful

Sample 1st paragraph of an Introduction

DC DITICI

1. Introduction

The environmental pollution and the energy crisis have brought serious problems to the world environment and sustainable development. The applications of solar energy to electricity generation and heat collection/refrigeration become important, and have received considerable attention [1], [2], [3], [4], [5], [6], [7] and [8]. The solar collector is the heart of these solar energy utilization systems. During the last two decades a number of researchers have worked on developing new and more efficient solar collector or improving existing ones [9], [10] and [11]. For example, the performance of a water-in-glass evacuated tube solar heater is investigated and factors influencing the operation of water-in-glass collector tubes are discussed. The results show the existence of inactive region near the sealed end of the tube which might influence the performance of the collector [12].

Zhang, XR; Yamaguchi, H. "An experimental study on evacuated tube solar collector using supercritical CO₂" Applied Thermal Engineering © Elsevier



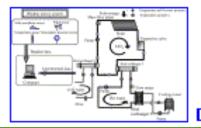


Methods

Sample 1st paragraph of an Experimental Set-Up section

2. Experimental set-up

In order to study the CO_2 -based collector characteristics well, a closed CO_2 loop including the collector is necessary. The CO_2 loop is designed and it consists of a solar collector array, flow regulating valve (throttling valve), heat exchanging system, and feed pump. The details of the experimental set-up are shown in Fig. 1. The solar collector is used to heat CO_2 fluid contained in heating channels and increase CO_2 temperature. The supercritical CO_2 flows through the valve, which can be used to adjust the CO_2 flow rate for the present study. The CO_2 flowing out of the valve is cooled in the heat exchanging system. After that, it is pumped by the feed pump, back into the higher pressure condition in the solar collector. As shown in Fig. 1 the experimental set-up is a closed cycle of CO_2 fluid, which is mainly comprised of evacuated solar collector arrays, a throttling valve, heat exchangers 1 and 2 (CO_2 /water heat exchanger), liquid CO_2 feed pump, and measurement and data acquisition system.



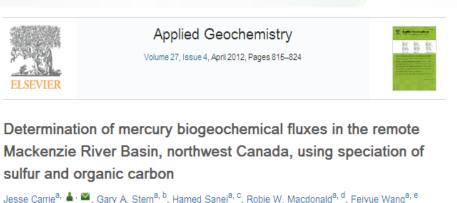
Zhang, XR; Yamaguchi, H. "An experimental study on evacuated tube solar collector using supercritical ${\rm CO_2}$ " Applied Thermal Engineering © Elsevier





Results – what have you found?

- Include:
 - Main findings
 - Results of the statistical analysis
 - Present only results that are essential to the discussion
 - Succinct/uncrowded graphs and tables, properly labelled (in same language as paper), only use colour where necessary



Centre for Earth Observation Science, Department of Environment and Geography, University of Manitoba, Winnipeg, MB, Canada R3T 2N2 b Freshwater Institute, Department of Fisheries and Oceans Canada, Winnipeg, MB, Canada R3T 2N6

Geological Survey of Canada, 3303 33rd Street NW, Calgary, AB, Canada T2L 2A7









Discussion

W

Sample 1st paragraph of an Discussion section

5. Discussion

In this section, a mechanism for the production of pulsations is suggested. The results are then compared with those obtained in previous work on pulsating granular materials, and some suggestions for further work are made.

5.1. A mechanism for producing silo quake

Using the background on stick—slip friction in granular materials discussed earlier, one can compare the experimental observations in this study with those in previous studies to qualitatively explain the physical mechanism for stick—slip motion. The dynamic arch which forms in such flows is part of a force chain—that is, a particle contact network through which stresses are transmitted [28]. The arch is fragile, and consequently when the material below it has discharged enough so that the arch is unsupported from below, a slow creep typically observed in adhesive stick—slip flow begins. During this creep, the adhesive friction forces become progressively weaker and weaker, and eventually the arch will break. Once the arch collapses, complete slip occurs, a quake is observed, and a new arch is created. This quake can set up structural vibrations of decaying amplitude that then collapse the newly formed arch; in this manner, a series of self-sustained pulsations results. This is the pulsation process observed in this study, where the discharge rate is *fast* enough (between 1 and 8 cm/s) that it does not affect the $f_{\rm p}$ unlike in Wensrich's study [8] and [9].





Conclusion

Sample Conclusion from the

present state of knowledge

6. Conclusion

This study has shown that stick—slip motion generates silo music and silo quake. Silo music is driven by the stick—slip pulsating motion of the granular material during discharge and is associated with a resonance in the air column above the bed. When the pulsating motion disappears, so does the silo music. Over the range of discharge rates studied here (equivalent to average velocities of descent through the tube of 1—8 cm/s), the pulsation frequency was independent of discharge velocity. Both silo music and flow pulsations stopped abruptly when the bed height fell below a critical value. The critical height could be changed by placing an overload in the case of crushed glass, but not in the case of the smooth glass beads. This may be rationalized, although only speculatively at this point, by differences in stress chain behavior.

Suggest future experiments

Muite, B.K., Quinn, S.F., Sundaresan, S., Rao, K.K.. "Silo music and silo quake: granular flow-induced vibration" *Powder Technology*. © Elsevier



References



Cite the main scientific publications on which

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References

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- [7] J. Tejchman, G. Gudehus, Silo-music and silo-quake, experiments and a numerical cosserat approach, Powder Technol. 76 (1993) 201.
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- [9] C.M. Wensrich, Analytical and Numerical Modeling of Quaking in Tall Silos, PhD thesis, University of Newcastle, Australia (2002).

Conform strictly
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 granular flow-induced v

Muite, B.K., Quinn, S.F., Sundaresan, S., Rao, K.K.. "Silo music and silo quake: granular flow-induced vibration" *Powder Technology.* © Elsevier

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Acknowledgements

Ensures those who helped in the research are recognised

Include individuals who have assisted with your study, including:

- Advisors
- Financial supporters
- Proofreaders
- Suppliers who may have given materials



Language



Save your editor and reviewers the trouble of guessing what you mean



Complaint from an editor:

"[This] paper fell well below my threshold. I refuse to spend time trying to understand what the author is trying to say. Besides, I really want to send a message that they can't submit garbage to us and expect us to fix it. My rule of thumb is that if there are more than 6 grammatical errors in the abstract, then I don't waste my time carefully reading the rest."

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Language

Write with clarity, objectivity, accuracy, and brevity

- Key to successful manuscript writing is to be alert to common errors:
 - Sentence construction
 - Incorrect tenses
 - Inaccurate grammar
 - Mixing languages

Check the <u>Guide for Authors</u> of the target journal for any language specifications





Language – sentences

An example of what NOT to do:

"If it is the case, intravenous administration should result in that emulsion has higher intravenous administration retention concentration, but which is not in accordance with the result, and therefore the more rational interpretation should be that SLN with mean diameter of 46nm is greatly different from emulsion with mean diameter of 65 nm in entering tumor, namely, it is probably difficult for emulsion to enter and exit from tumor blood vessel as freely as SLN, which may be caused by the fact that the tumor blood vessel aperture is smaller."

A possible modification:

"It was expected that the intravenous administration via emulsion would have a higher retention concentration. However, the experimental results suggest otherwise. The SLN entered the tumor blood vessel more easily than the emulsion. This may be due to the smaller aperture of the SLN (46 nm) compared with the aperture of the emulsion (65 nm)."





Language – tenses/grammar

- Present tense for known facts, past tense to describe experiments
 - "The average life of a honey bee is 6 weeks"
 - "The average life span of bees in our contained environment was 8 weeks..."
- Use active voice to shorten sentences
 - "It has been found that there had been..." "We found that..."
 - "carbon dioxide was consumed by the plant..." "...the plant consumed carbon dioxide.."
- Avoid abbreviations: "it's", "weren't", "hasn't"
 - Only use abbreviations for units of measure or established scientific abbreviations, e.g. DNA
- Minimize use of adverbs: "However", "In addition", "Moreover"





Professor H. Covering letter

School of Science and Engineering Northeast State University College Park, MI 10000 USA

January 1 2000

Final approval from all authors

Explanation of importance

of research

Your cha

Dear Professor Schmidt,

- Submitt
- Mentior special
- Note sp of inter

Enclosed with this letter you will find en electronic submission of a man entitled "Mechano-sorptive creep under compressive loading – a microp cal model" by John Smith and myself. This is an original paper which an either previously nor simultaneously in whole or in part been submitted anywhere else. Both authors have read and approved the final version submitted.

Mechano-sorptive is sometimes denoted as accelerated creep. It has been experimentally observed that the creep of paper accelerates if it is subjected to a cyclic moisture content. This is of large practical importance for the paper industry. The present manuscript describes a micromechanical model on the fibre networ level that is able to capture the experimentally observed behaviour. In particular, the difference between mechano-sorptive creep in tension and compression is analyse John Smith is a PhD-student who within a year will present his doctoral thesis. The present paper will be a part of that thesis.

Three potential independent reviewers who have excellent expertise in the this paper are:

Dr. Fernandez, Tennessee Tech, email1@university.com

Dr. Chen, University of Maine, email2@university.com

Dr. Singh, Colorado School of Mines, email3@university.com

I would very much appreciate if you would consider the manuscript for publication in the International Journal of Science.

Suggested reviewers

rely yours,





The review process





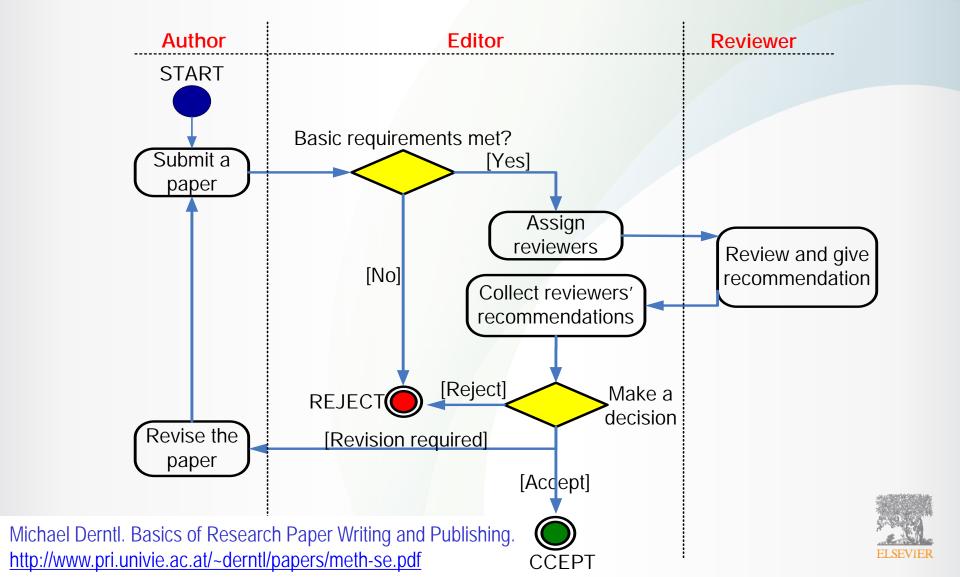


Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'





Demystifying the 'black hole'





Open peer review example



Agricultural and Forest Meteorology

Volume 157, 15 May 2012, Pages 39-48



Vineyard frost protection with upward-blowing wind machines

Mark C. Battany 4, Mark

University of California Cooperative Extension, 2156 Sierra Way, Suite C, San Luis Obispo, CA 93401, USA

Received 30 August 2011, Revised 16 December 2011, Accepted 13 January 2012, Available online 13 February 2012.

http://dx.doi.org/10.1016/j.agrformet.2012.01.009, How to Cite or Link Using DOI

Cited by in Scopus (0)

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What do reviewers look for?

- Importance and clarity of research hypothesis
- Originality of work
- Delineation of strengths and weaknesses of methodology, experimental / statistical approach, interpretation of results



- Writing style and figure / table presentation
- Ethics concerns (animal / human)





An editor's view...

"The following problems appear much too frequently"

- Submission of papers which are clearly out of scope
- Failure to format the paper according to the Guide for Authors
- Inappropriate (or no) suggested reviewers
- Inadequate response to reviewers
- Inadequate standard of English
- Resubmission of rejected manuscripts without revision
 - Paul Haddad, Editor, Journal of Chromatography A





Author rights and responsibilities





Author responsibilities

Originality

Avoid fabrication / falsification / plagiarism

Conflicts of Interest

Disclose any potential conflict of interest to the editor

Authorship

 An author must substantially contribute, review/revise the paper and approve submission

Submission

Avoid duplicate submission, submission of previously published work, salami slicing





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Online developments





Article of the Future: Presentation, Content, Context

3 components of the Article of the Future concept:

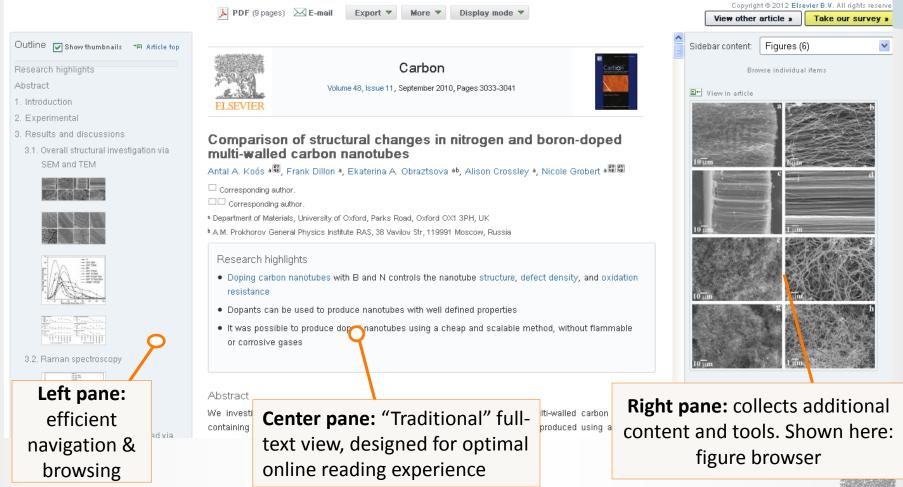
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- Content: Support authors to share a wider range of research output – data, computer code, multimedia files, etc.
- Context: Connecting the online article to trustworthy scientific resources to present valuable pres information in the context of the article context



content



Article of the Future: Presentation





Article of the Future: Presentation

2 EarthquakeOriginal Research Article

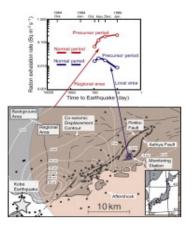
Anomalous change in atmospheric radon concentration sourced from broad crustal deformation: A case study of the 1995 Kobe earthquakeOriginal Research Article

Pages 825-830

Yumi Yasuoka, Yusuke Kawada, Yasutaka Omori, Hiroyuki Nagahama, Tetsuo Ishikawa, Shinji Tokonami, Masahiro Hosoda, Tetsuo Hashimoto, Masaki Shinogi

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Graphical abstract



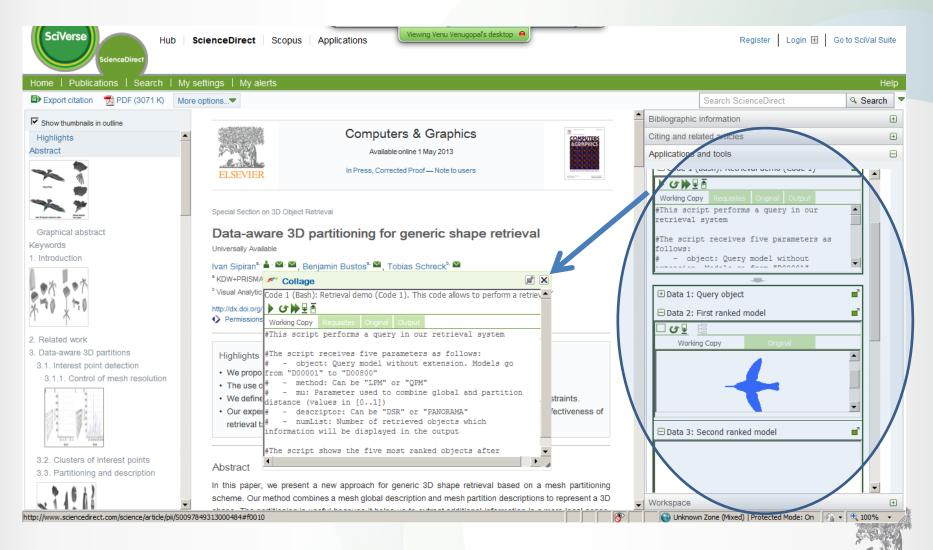
Graphical abstract and research highlights

Highlights

► The pre-seismic radon in air was observed as one exhaled from the regional area. ► The regional area had a large displacement up to 30 cm due to the co-seismic event. ► Mean radon exhalation rates are considered to increase up to five times higher. ► The regional area was highly strained in the order of

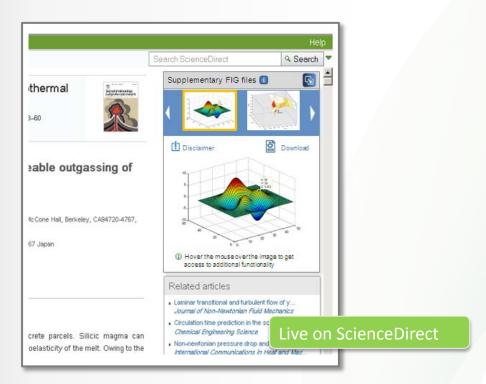


Article of the Future: Content





Article of the Future: Content



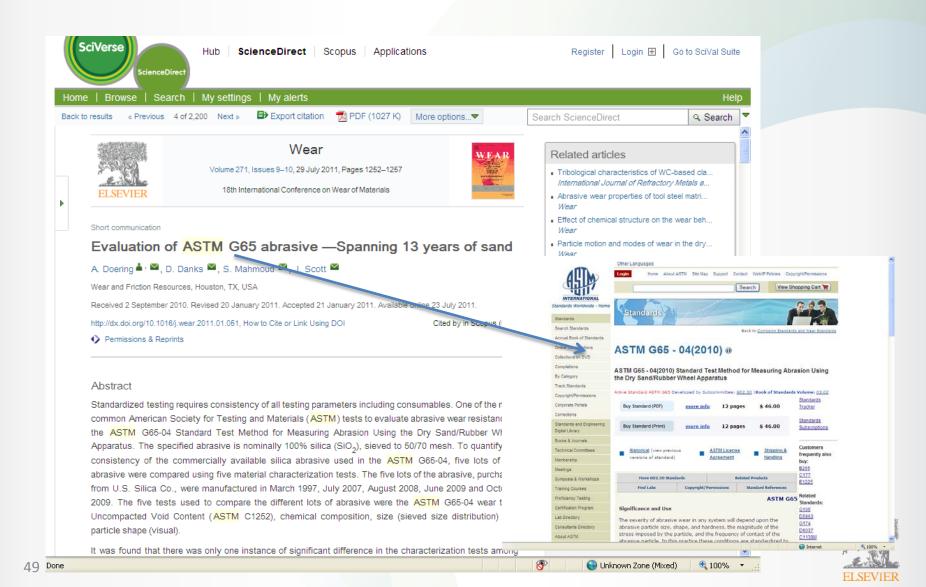
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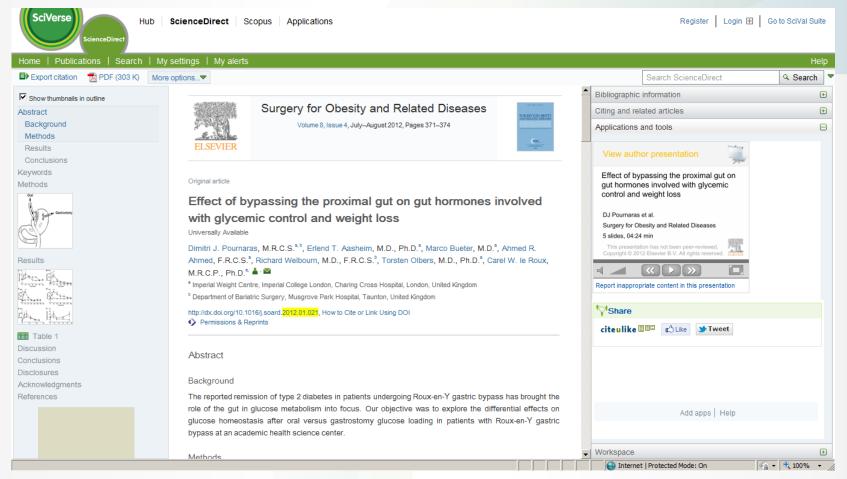


Article of the Future: Context Community





Article of the Future: Audioslides







Summary





Top 5 takeaways

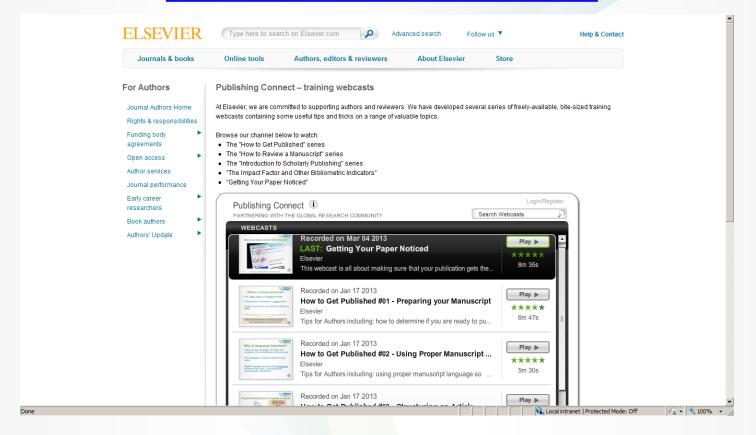
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Good Luck!

