Publication Ethics

Hadiyanto
Editor in Chief
International Journal of Renewable Energy Development

Ethics in Publications

Why Ethical Issues are Important

- Ethical violations, especially less serious infractions, are prevalent
- Rates of detection are low
- Ethical violations affect the quality and integrity of science
- Compliance review and journal requirements are increasing (e.g., human subjects committees, conflict of interest statements)

POLICYFORUM

SCIENTIFIC INTEGRITY

Responding to Possible Plagiarism

Tara C. Long,[1] Mounir Errami,[2] Angela C. George,[1] Zhaohui Sun,[2] Harold R. Garner[1,2]*

Documenting reactions from authors and journal editors to plagiarism may help others address the problem.

212 pairs of articles with signs of potential plagiarism were chosen for this study

- 86.2% -similarity between an original article and its duplicate
- 73.1%. the average number of shared references
- Only 47 (22.2%) duplicates cited the original article as a reference.
- 71.4% of the manuscript pairs shared at least one highly similar or identical table or figure.
- 42% also contained incorrect calculations, data inconsistencies, and reproduced or manipulated photographs.

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Documenting reactions from authors and journal editors to plagiarism may help others address the problem.

The responses from duplicate authors were more varied;

- 28% denied any wrong doing,
- 35% admitted to having borrowed previously published material
- 22% were from coauthors claiming no involvement in the writing of the manuscript.
- 17% claimed they were unaware that their names appeared on the article

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Selected Responses from the authors

"There are probably only 'x' amount of word combinations that could lead to 'y' amount of statements. … I have no idea why the pieces are similar, except that I am sure I do not have a good enough
memory

"I was not involved in this article. I have no idea why my name is included."

"This article was mainly done by a young fellow Dr. [ ]. I made the corrections in text and completed the article Unfortunately Dr. [ ] has died in January this year, so we can't ask him for the reasons….."

"I am not a native English speaker so I do have problems in expressing my ideas... You and other English language speakers are lucky from this point of view…."

"To be honest with you, I was not aware of the fact that I need to take prior permission of the authors of the original article. As such I am facing many difficulties and hardships in my personal life. …"

The corresponding author has been my teacher (and a very good one at that) from whom I have learned many things. My respect for him was of the utmost level until I found that he had been plagiarizing papers from all over the world….."

7 DEADLY ISSUES

	ISSUES	Examples
1	Carelessness	Citation bias, understatement, negligence
2	Redundant publication	Same tables or literature review reported without noting prior source
3	Unfair authorship	Failure to include eligible authors, Honorary authors
4	Undeclared Conflict of Interest	Failure to cite funding source
5	Human/animal subjects violations	No approval from Review Board or Ethics Committee
6	Plagiarism	Reproducing others' work or ideas without as one's own
7	Other Fraud	Fabrication of falsification of data, Misappropriation of others ideas or plans given in confidence

Negligent Carelessness and Citation Bias

- A failure to adequately review the literature on a topic
- Lack of candor or completeness in describing one's research methods
- Presentation of data that are based on faulty statistical analyses
- Citation of articles without having read the primary sources
- Selective citation of only those articles that support a particular point of view
- Selective citation to enhance one's reputation, epitomized by self-citation.

Preventing Carelessness and Citation Bias

- Read what you cite
- Cite critically
- Minimize self-citation
- Avoid other selection biases (e.g., language or cultural preferences)

Redundant Publication

- Publication of a paper that substantially overlaps with an already published article
- Unethical
  - Wastes time of peer-reviewers and editors
  - Wastes resources and Journal pages
  - Leads to flawed meta analysis
  - Distorts Academic reward system
  - Infringes on copyright
  - Inflates scientific literature for no benefit other than to author

Redundant publication -Editorial Actions

- Prompt rejection of submitted paper
- If redundant paper already published
  - Publication of notice of duplicate publication
- Advise other editor/publisher involved
  - copyright violations
- Inform employer/ institution of author
  - For appropriate sanctions to be taken

AUTHORSHIP

- **Authorship** should be limited to those who have made a significant contribution to the concept, design, execution, or interpretation of the research study. All those who have made significant contributions should be offered the opportunity to be listed as authors. Other individuals who have contributed to the study should be acknowledged, but not identified as authors.

(From ORI http://ori.dhhs.gov/education/products/RCRintro/c02/0c2.html)

Unfair Authorship

- Some persons who have made significant contributions to an article may not receive sufficient credit, or may receive no credit at all
- A co-author, such as a science writer, is not listed because the service is provided by a drug company
- Some persons are listed as co-authors even though no substantive contribution was made to the article or the research
- Failure to give proper recognition to a person's contribution by listing them lower in the author list than they deserve
- Award of co-authorship for minor contributions based on personal or political considerations

Selected for a Viewpoint in *Physics*

PRL **116,** 061102 (2016) PHYSICAL REVIEW LETTERS week ending 12 FEBRUARY 2016

Observation of Gravitational Waves from a Binary Black Hole Merger

B. P. Abbott *et al.*[*]

(LIGO Scientific Collaboration and Virgo Collaboration)

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B. P. Abbott,[1] R. Abbott,[1] T. D. Abbott,[2] M. R. Abernathy,[1] F. Acernese,[3,4] K. Ackley,[5] C. Adams,[6] T. Adams,[7] P. Addesso,[3] R. X. Adhikari,[1] V. B. Adya,[8] C. Affeldt,[8] M. Agathos,[9] K. Agatsuma,[9] N. Aggarwal,[10] O. D. Aguiar,[11] L. Aiello,[12,13] A. Ain,[14] P. Ajith,[15] B. Allen,[8,16,17] A. Allocca,[18,19] P. A. Altin,[20] S. B. Anderson,[1] W. G. Anderson,[16] K. Arai,[1] M. A. Arain,[5] M. C. Araya,[1] C. C. Arceneaux,[21] J. S. Areeda,[22] N. Arnaud,[23] K. G. Arun,[24] S. Ascenzi,[25,13] G. Ashton,[26] M. Ast,[27] S. M. Aston,[6] P. Astone,[28] P. Aufmuth,[8] C. Aulbert,[8] S. Babak,[29] P. Bacon,[30] M. K. M. Bader,[9] P. T. Baker,[31] F. Baldaccini,[32,33] G. Ballardin,[34] S. W. Ballmer,[35] J. C. Barayoga,[1] S. E. Barclay,[36] B. C. Barish,[1] D. Barker,[37] F. Barone,[3,4] B. Barr,[36] L. Barsotti,[10] M. Barsuglia,[30] D. Barta,[38] J. Bartlett,[37] M. A. Barton,[37] I. Bartos,[39] R. Bassiri,[40] A. Basti,[18,19] J. C. Batch,[37] C. 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Example

A 'gift' turned sour

- Professor Geoffrey Chamberlain resigned as editor of the *British Jnl Ob Gyn* (1995)
- He had co-authored a paper that later turned out to be fraudulent
- Professor Chamberlain said that in hindsight he agreed that gift authorship was a bad idea but that he had "*rubber stamped this paper out of politeness and because he asked me to as head of the department*"

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Conflict of Interest

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- Personal conflicts include “pet” theories, validation of one’s own ideas, achieving publishable results, and gaining recognition for a discovery
- “Financial” interests may include employment, research funding, stock or share ownership, payment for lectures or travel, consultancies, and company support for staff (COPE 2001)
- Conflict of interest is not in itself wrongdoing (FARM 1997)

Conflict of Interest

The potential for conflict of interest in the addiction field is enhanced by relationships or funding connected with tobacco industry, alcohol beverage industry, for-profit health care systems, private hospitals, pharmaceutical industry and "social aspect organizations" that receive their primary support from these sources.

There are three levels of conflict of interest:

- A real conflict of interest means that the author, or the administrative unit with which the author has an employment relationship, has a financial or other interest that could unduly influence the author's position with respect to the subject matter being considered.
- An apparent conflict of interest exists when an interest would not necessarily influence the author but could result in the author's objectivity being questioned by others.
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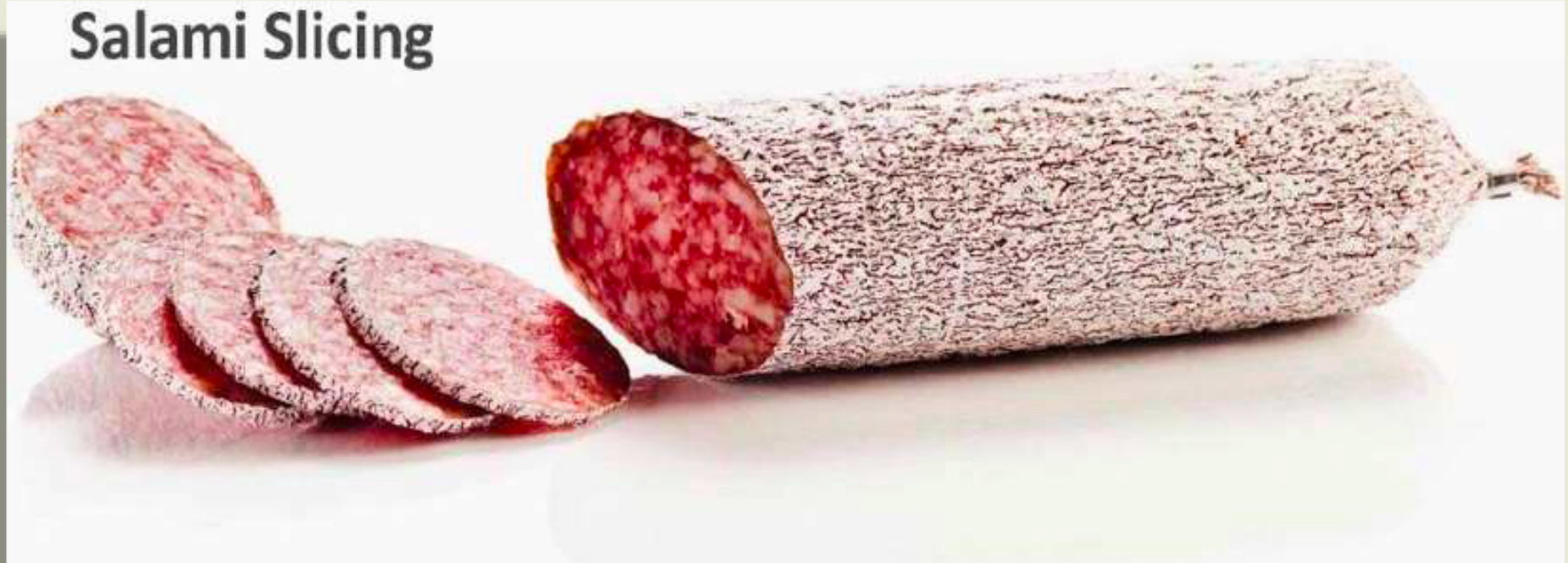

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Polystyrene-supported $GaCl_3$ as a highly efficient and recyclable heterogeneous Lewis acid catalyst for one-pot synthesis of *N*-substituted pyrroles

Ali Rahmatpour*

Polymer Science and Technology Division, Research Institute of Petroleum Industry (RIPI), 14665-1137 Tehran, Iran

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Heterogeneous Lewis acid catalyst

ABSTRACT

A new and environmentally b[illegible] method for the preparation of N-substituted pyrroles fr[illegible] one-pot condensation reaction [illegible]-hexanedione with amines and diamines in the presence [illegible] polystyrene-supported gallium [illegible]ide (PS/$GaCl_3$) as a highly active and reusable heterogeneous Lewis acid catalyst is presented. [illegible] new protocol has the advantages of easy availability, stability, reusability and eco-friendly of the catalyst, high to excellent yields, simple experimental and work-up procedure.

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1. Introduction

Function[illegible]d pyrroles are an important class of nitrogen-containing [illegible]ocyclic compounds. They constitute the core unit of many natural products, synthetic m[illegible]ds, and serve as building blocks for porphyrin synthesis [1,2]. [illegible]bers of this family have wide applications in medicinal chemistry, being used as antimalarial, antiflammatory agents, antibacterial, a[illegible] tiviral [3–5]. These compounds can be prepared from the [illegible]cal Hantzsch procedure [6], 1,3-dipolar cycloaddition reactions [7], aza-Wittig reactions [8], annulations reactions [9], and other multistep oper[illegible]s [10]. Despite these new developments, the Paal–Knorr [illegible]ion remains one of the most significant and simple methods [illegible]h consists the cyclocondensation of primary amines with [illegible]dicarbonyl compounds to produce N-substituted pyrroles. Several catalysts have been used to promote this reaction including HCl [11], p-TSA [12], H_2SO_4 [13], $Sc(OTf)_3$ [14], $Bi(NO_3)_3 \cdot 5H_2O$ [15], $SnCl_2 \cdot 2H_2O$ [16], $Ti(OPr^i)_4$ [17], $RuCl_3$ [18], $InCl_3$, $InBr_3$, $In(OTf)_3$ [19], zeolite [20], Al_2O_3 [21], montmorillonite K10 [22], silica sulfuric acid [23], layered zirconium phosphate and phosphonate [24], [illegible] montmorillonite [25], montmorillonite KSF-clay and I_2 [26]. [illegible]ionally, the above cyclocondensa[illegible] process could proceed in ionic liquid [27] or ultrasonic and [illegible]owave irradiation [28]. However, despite the potential utility of these catalysts, many of these methodologies for the synthesis of pyrroles [illegible] associated with several shortcomings such as low yields, prolonged reaction time, harsh reaction conditions, the requirement of excess of catalysts, the use of toxic and detrimental metal precursors as catalysts, and relativ[illegible]pensive reagents and high temperature, and tedious work-up [illegible]ng to the generation of large amounts of toxic metal-containing waste. The main disadvantage of almost all existing methods is that the catalysts are destroyed in the work-up procedure and their recovery and reuse is often impossible, which limit their use under the aspect of environmentally benign pr[illegible]s.

[illegible]eterogeneous supported catalysts have been gained much attention in recent years, as the [illegible]ess a number of advantages in preparative procedures [29,30]. [illegible]mobilization of catalysts on solid support improves the available active site, stability, hygroscopic properties, handling, and reusability of catalysts which all factors are important in industry [31]. Therefore, use of supported and reusable catalysts in organic transformations has economical and environmental benefits. A large number of polymer supported Lewis acid catalysts have been prepared by immobilization of the catalysts o[illegible]ymer via coordination or covalent bonds [32]. Such polymeric [illegible]talysts are usually as active and selective as their homogeneous counterparts while having the distinguishing characteristics of being easily separable from the reaction mixture, recyclability, easier handling, non-toxicity, enhanced stability, and improved selectivity in various organic reactions. Polystyrene is one of the most widely studied heterogeneous and polymeric supports due to its environmental stability and hydrophobic nature

* Tel.: +98 21 44739518; fax: +98 21 44739517.
E-mail address: rahmatpoura@ripi.ir.

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Paper-1

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Ageing effects of perovskite solar cells under different environmental factors and electrical load conditions

Zaeem Aslam*, Hifsa Shahid, Zeeshan Mehmood

Centre for Energy Research and Development, University of Engineering & Technology Lahore, UET, Lahore 54000, Pakistan

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ABSTRACT

Perovskite solar cells have achieved power-conversion efficiency values approaching those of established photovoltaic technologies, making the reliable assessment of their operational stability the next essential step towards commercialization. Although studies increasingly often involve a form of stability characterization, they are conducted in non-standardized ways, which yields data that are effectively incomparable. Furthermore, stability assessment of a novel material system with its own peculiarities might require an adjustment of common standards. Here, we investigate the effects of different environmental factors and electrical load on the ageing behaviour of perovskite solar cells. On this basis, we comment on our perceived relevance of the different ways these are currently aged. We also demonstrate how the results of the experiments can be distorted and how to avoid the common pitfalls. We hope this work will initiate discussion on how to age perovskite solar cells and facilitate the development of consensus stability measurement protocols.

nature energy

ARTICLES

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Paper-2

Systematic investigation of the impact of operation conditions on the degradation behaviour of perovskite solar cells

Konrad Domanski[1*], Essa A. Alharbi[1], Anders Hagfeldt[2], Michael Grätzel[1] and Wolfgang Tress[1,2*]

Perovskite solar cells have achieved power-conversion efficiency values approaching those of established photovoltaic technologies, making the reliable assessment of their operational stability the next essential step towards commercialization. Although studies increasingly often involve a form of stability characterization, they are conducted in non-standardized ways, which yields data that are effectively incomparable. Furthermore, stability assessment of a novel material system with its own peculiarities might require an adjustment of common standards. Here, we investigate the effects of different environmental factors and electrical load on the ageing behaviour of perovskite solar cells. On this basis, we comment on our perceived relevance of the different ways these are currently aged. We also demonstrate how the results of the experiments can be distorted and how to avoid the common pitfalls. We hope this work will initiate discussion on how to age perovskite solar cells and facilitate the development of consensus stability measurement protocols.

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- Trimming: smoothing irregularities to make the data appear extremely accurate and precise.
- Cooking: retaining only those results that fit the theory, and discarding others.
- Forging: inventing some or all of the research data that are reported; even reporting experiments that were never performed.

Hwang Case

- **Woo-Suk Hwang** (born 1953), South Korean biomedical scientist.

- **Woo-Suk Hwang** He was a professor of biotechnology at Seoul National University (dismissed on March 20, 2006) who rose to fame after claiming a series of remarkable breakthroughs in the field of stem cell research. Until November 2005, he was considered one of the pioneering experts in the field of stem cell research, best known for two articles published in journal *Science* in 2004 and 2005 where he (fraudulently) reported to have succeeded in creating human embryonic stem cell lines by cloning. Both papers have been editorially retracted after being found to contain a large amount of fabricated data. He has admitted to various lies and frauds.

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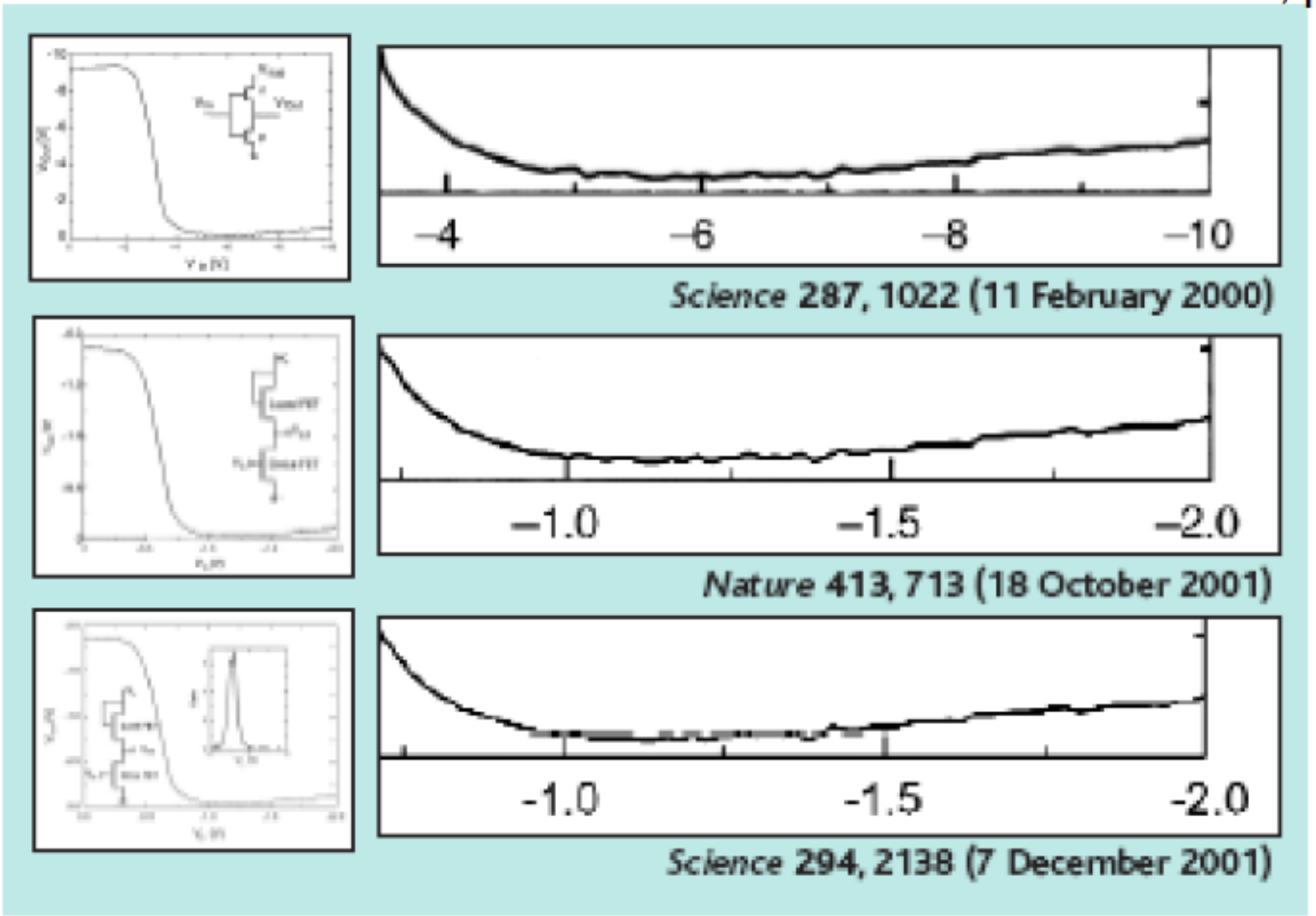

Striking resemblance. Published data from studies of different devices revealed a similarity in recorded "noise." Schön says the bottom figure was sent to *Science* by mistake (see correction, p. 1400).

Original Paper
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Yu et al, *J. Phys. Chem. B* 2006, *110,* 21667-21671 (Figure 3)

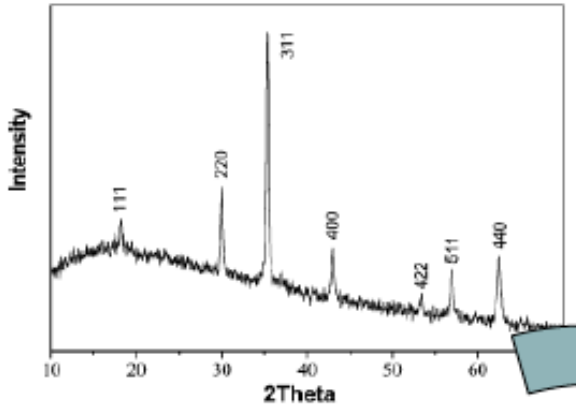
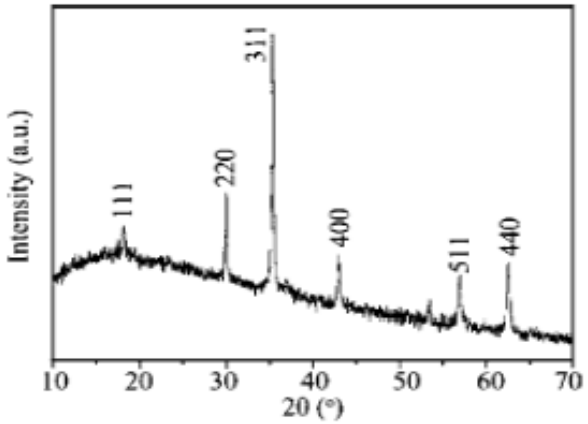


Figure 3. A typical XRD pattern of Fe_3O_4 hollow microspheres.



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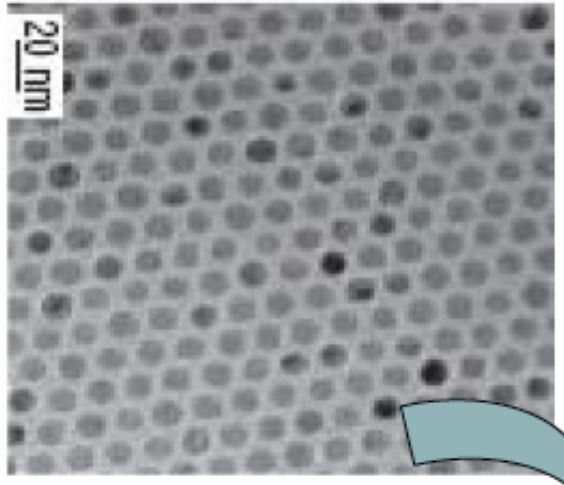
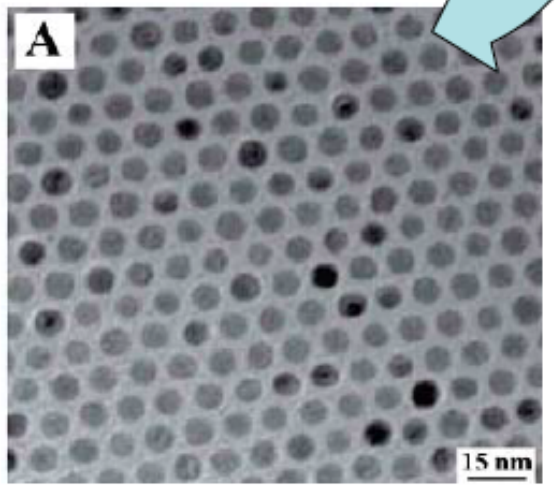
Original paper:
Ultra-large-scale syntheses of monodisperse nanocrystals, Park et al. Nature Materials, 2004, 3, 891 (Figure 3C)





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New Carbon Materials

Volume 33, Issue 5, October 2018, Pages 385-391

RETRACTED: Functional carbon materials in marine science and technology

Chen ZHANG [a], Quan-jun TANG [a], Ying TAO [2], Hong-bing WU [c], Guo-wei LING [a], Quan-hong YANG [b]

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This article has been retracted at the request of the editor due to incorrect format. Therefore, it has been corrected and replaced.

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碳基功能材料在海洋领域中的应用进展

张 辰[1]，唐全骏[1]，陶 莹[2]，吴红兵[3]，凌国维[1]，杨全红[2]

(1. 天津大学 海洋科学与技术学院，天津 300072；
2. 天津大学 化工学院，天津 300072；
3. 河南省濮阳市范县工业局，河南 濮阳 457500)

摘 要： “海洋战略”是中国重要的国家发展战略，海洋资源开发与环境保护、海上运输、海港和海[illegible]设、海洋工[illegible]装备、海洋探测设备都需要大量的新型功能材料。碳基材料，已在诸多科学和工程领域显示出良好的应用前[illegible]本文系统[illegible]述了碳基功能材料在海洋科学领域的应用进展，重点对环境应急材料、防腐涂料、结构材料、海水淡[illegible]等领域的应用进[illegible]评述，并对碳基功能材料在海洋储能等新兴方向的应用进行了展望。

关键词： 海洋科学与技术；碳基材料；石墨烯

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通讯作者：凌国维，副研究员。E-mail：lgw@tju.edu.cn

作者简介：张 辰，博士。E-mail：zhangc@tju.edu.cn

Functional carbon materials in ma[illegible]ence and technology

ZHANG Chen[1], TANG Qu[illegible]un, [illegible]O Ying[2], WU Hong-bing[3], LING Guo-w[illegible] [illegible]ANG Quan-hong[2]

(1. *School of Marine [illegible] Technol[illegible] Tianjin University, Tianjin* 300072, *China*;
2. *School of Chemic[illegible]gineeri[illegible]nd Techn[illegible], Tianjin University, Tianjin* 300072, *China*;
3. *Fa[illegible] Ind[illegible]l Bureau, Puyang* 457500, *China*)

Abstract: China's marine st[illegible]y has bec[illegible]one of the most important national strategies for our future development. Our knowledge of the oceans is st[illegible]d. Owing to [illegible]xtreme physiochemical environment, advanced functional materials are highly required in marine explorati[illegible], trans[illegible]tion, construction, national defense and equipment, et al. Carbon materials, which have been widely used in m[illegible] important fie[illegible]ch as aerospace, are good candidates for use in marine science and technology. In this review, such use i[illegible]stemati[illegible]lly highlig[illegible]d, particularly in some emerging fields including the treatment of oil spills, anti-corrosion, anti-fouli[illegible]ructu[illegible]materials for offshore facilities and seawater purification. The roles, mechanisms and effects of carbon materials are comp[illegible]ely dis[illegible]ed, and some promising applications are also presented for their use in marine energy storage, desalinati[illegible]tings [illegible] the [illegible]lds, both from the academic and industrial requirements.

Key [illegible]ds: [illegible]arine sci[illegible] and technology; Carbon-based materials; Graphene

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Correspo[illegible] Author: LING Guo-wei, Associate Professor. E-mail: lgw@tju.edu.cn

Author introd[illegible]n: ZHANG Chen, Ph. D. E-mail: zhangc@tju.edu.cn

RETRACTED

1 前言

21 世纪是海洋的世纪，世界各国已将发展战略从陆地转移到海洋、从近海转移到远海、从浅海转移到深海。随着海洋科学技术的不断发展，人们能够更加全面、准确和深入地了解海洋、利用海洋、保护海洋。海洋科学技术的发展是一项系统工程，是多学科、多领域集成交叉的结合部。最为重要和关键的技术，是材料科学的发展和突破，特别是海洋功能材料的进展[1]。

海洋功能材料，广义上讲，是“取之海洋”和“用之海洋”材料的总称，也就是从海洋中提取的材料和用于海洋开发利用的材料。“海洋功能材料”概念的提出，对于海洋和材料两大领域交叉融合和国家海洋战略实施具有重大意义。海洋资源开发、海洋工程装备、海上交通以及海洋探测设备的发展都需要大量新型功能材料的支撑。由于海洋特殊的物

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