

花样翻新的学术不端



曹则贤
中国科学院物理研究所
2013.11 撰写

郑重声明

本报告系受2013年初物理所纪委工作会议委托而准备的，是多年来物理所一直进行的学术规范建设年度例行活动，旨在对本所年轻的研究人员和研究生就学术责任有关问题有所提醒。

本报告无意冒犯任何个人或单位。如果发生任何意外枝节，全部责任由报告人曹则贤承担！

如果你能看，你就看见；

如果你能看见，你就仔细观察！

-José Saramago, in *Ensaio sobre a Cegueira*

如果你能仔细观察，你就请略加思考！

-曹则贤

内容提要

➤ **Ruthless academic life**

➤ 名与利的诱惑

➤ 著名学术不端案例

Schön Scandal;

Faster than light;

合成金刚石；冷聚变

➤ 你为什么不可以学术不端？

➤ 年轻人，**quo vadis?**



Ruthless academic life

Publish or Perish!

Competition for jobs is cut-throat.



In this world, you're expected to publish yearly **four or five** papers.

-J. Magueijo *Faster than the speed of light*

为了生存或凑数而发表文章，未出手已落下乘！

—曹则贤

对待发文章的态度—规规矩矩

“文章千古事，得失寸心知。”

—杜甫

本朝以文章取士，就是夫子在而今，也要念文章、做举业，断不讲那‘言寡尤，行寡悔’的话，何也？就日日讲究‘言寡尤，行寡悔’，那个给你官做？孔子的道也就不行了。

—《儒林外史》中马二先生语

你所发表的文章是你历史的一部分。为了发文章而耍的小聪明白纸黑字放在那儿，也许会发酵成摆脱不掉的梦魇。

写了文章没人知，写它干吗？如果有人知，人们可能就会知道得比你希望人家知道的要多！

—曹则贤

人的气质决定于其历史！

曹则贤猜想：粒子的质量来自于演化的历史。

数Sci论文篇数的历史渊源

商鞅变法，设爵二十等，斩得一首赐爵一级（“首级”这个词便是这么来的）。

鲁仲连：“六国尚礼义，秦国尚首功。”

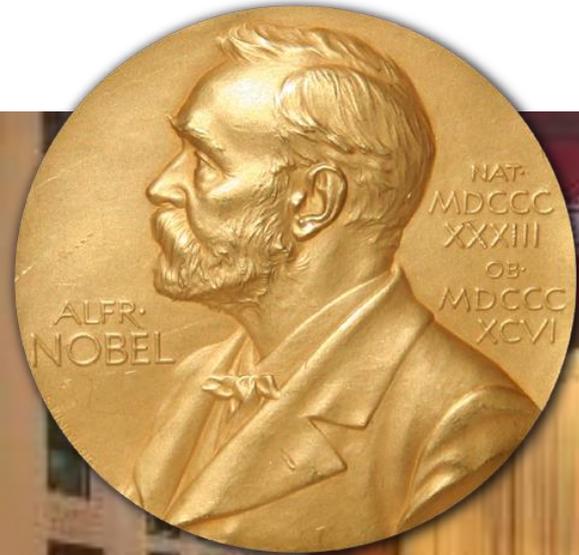
—所谓首功，便是以斩首的数目计功量爵。

元末，蒙古兵奉命镇压起义军，斩杀百姓以邀功。此“学术不端”行为终于导致起义军队伍做大，元灭。

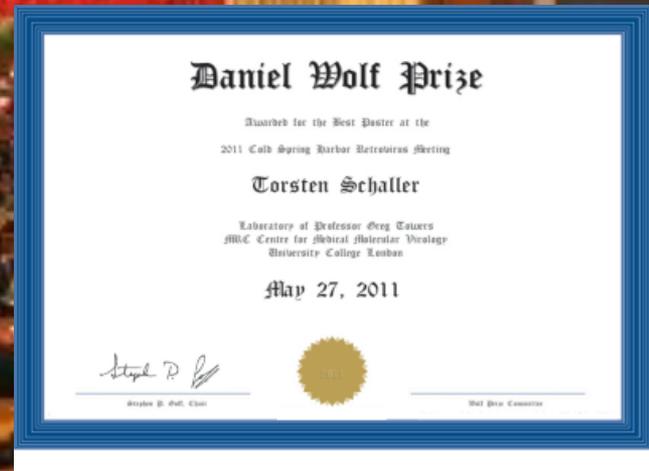
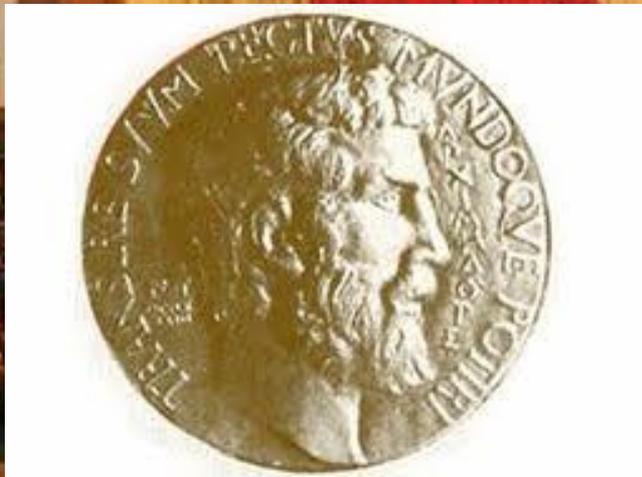
奖励的极端后果常常是事与愿违，何况鲜花会招来蜜蜂，狗屎只会招来苍蝇。

这世界上有形形色色的对科学家的诱惑

但科学家不是圣人

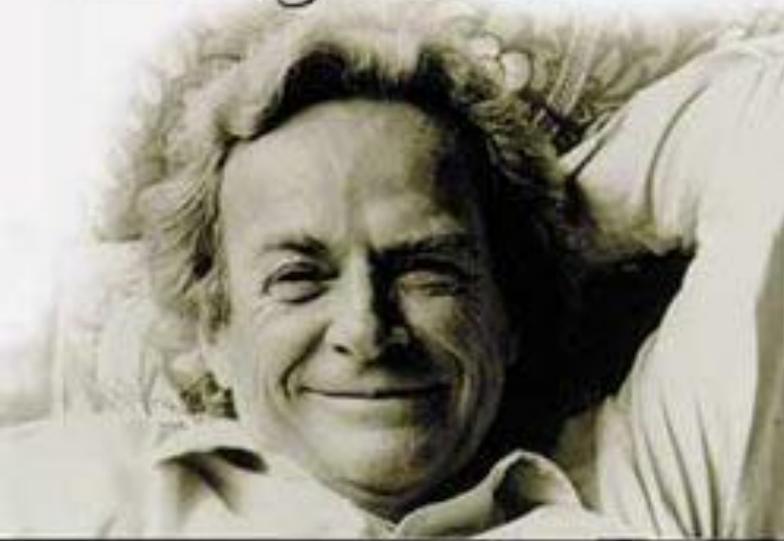


国家科学技术奖励大会



学术研究驱动力：好奇心、兴趣、快乐、自我价值

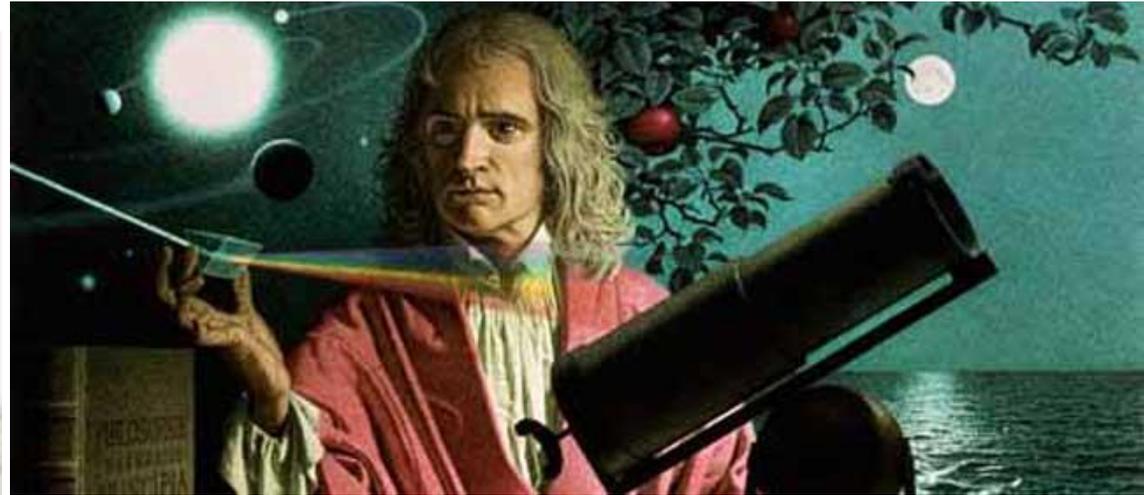
The Pleasure of Finding Things Out



THE BEST
SHORT
WORKS OF

RICHARD P. FEYNMAN

Read by Dan Cashman



Vanity Fair

Sir Isaac Newton

Master of the Mint

科学教给人们情感、美感、道德感

子曰：“诗三百，一言以蔽之，曰：‘**思无邪**’。”

——《论语》

但是，科学上要取得成果太难了；

物理尤其难；（物理学对物理学家来说，太难了。—Hilbert）

而成功人士的利益太大了，於是，有各种不同程度的学术不端。

曹则贤定律：如果你老在毛驴眼前晃悠胡萝卜，它就能把车拉到沟里。

心若邪，
路就斜！



Junk Science

Pathological Science

Fraudulent Science

Voodoo Science

Misconduct

- 采樱桃 (cherry picking)
- 隐瞒证据 (suppressing evidence)
- 证据不完整谬误 (fallacy of incomplete evidence)
- 注视下的选择 (observational selection)

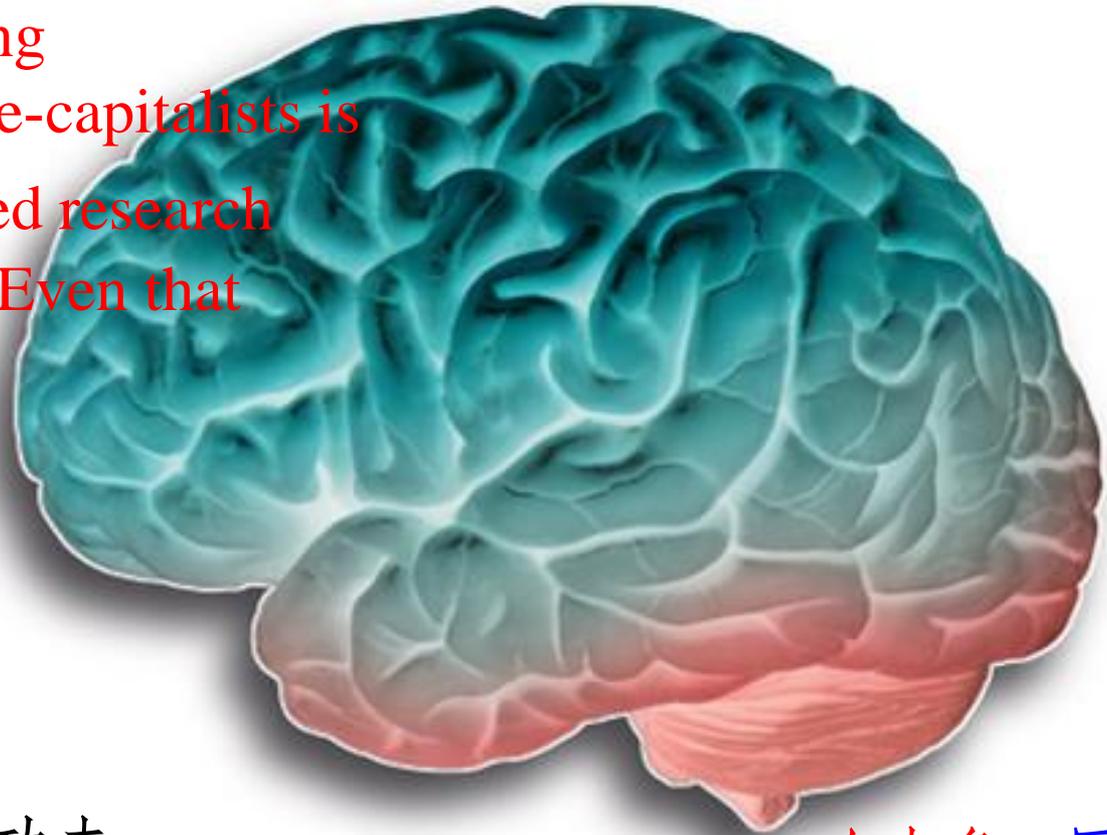
Problems with scientific research

How science goes wrong

Scientific research has changed the world. Now it needs to change itself

Oct 19th 2013, **The Economists**

A rule of thumb among biotechnology venture-capitalists is that **half** of published research cannot be replicated. Even that may be optimistic.



创新的年代，哪有功夫验证别人的结果。

人太多，压力大；
没人重复别人结果

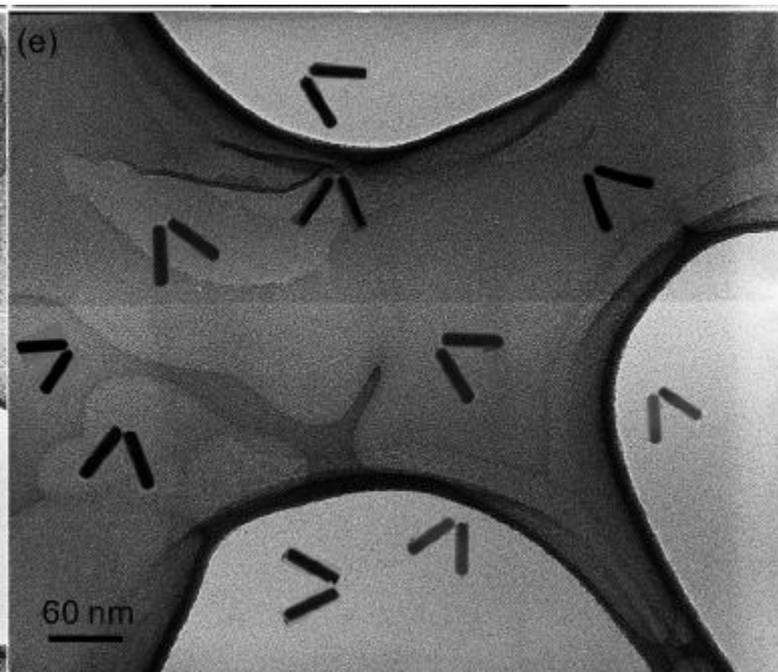
Chopstick Nanorods: Tuning the Angle between Pairs with High Yield

Rajasekhar Anupolu,* Benjamin J. Robinson, and Leonard F. Pease, III

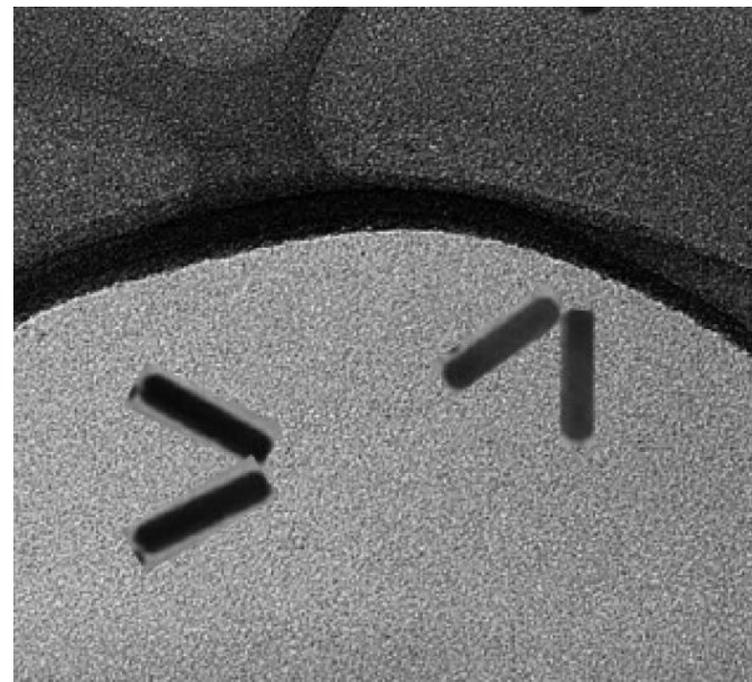
Nano Letters 2013 ASAP

This article is being retracted due to concerns over the integrity of the data. The originally published PDF of this article is available as Supporting Information.

title就有不
端嫌疑



小儿科!



1987 / 93K: Yttrium or Ytterbium? YBCO

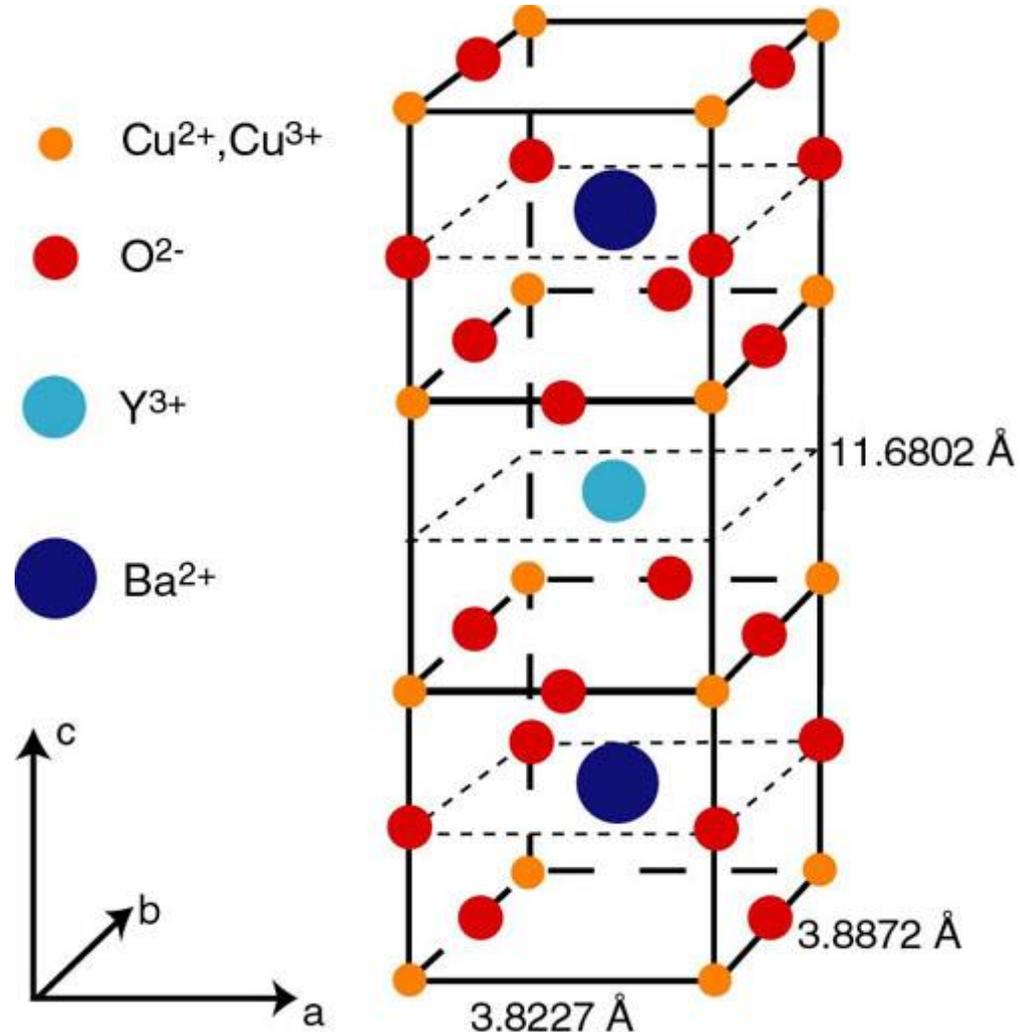
小儿科!

Yttrium No.39, $Y > 77\text{ K}$

Ytterbium No.70, Yb

$Y - Ba - Cu - O$

$Yb - Ba - Cu - O$



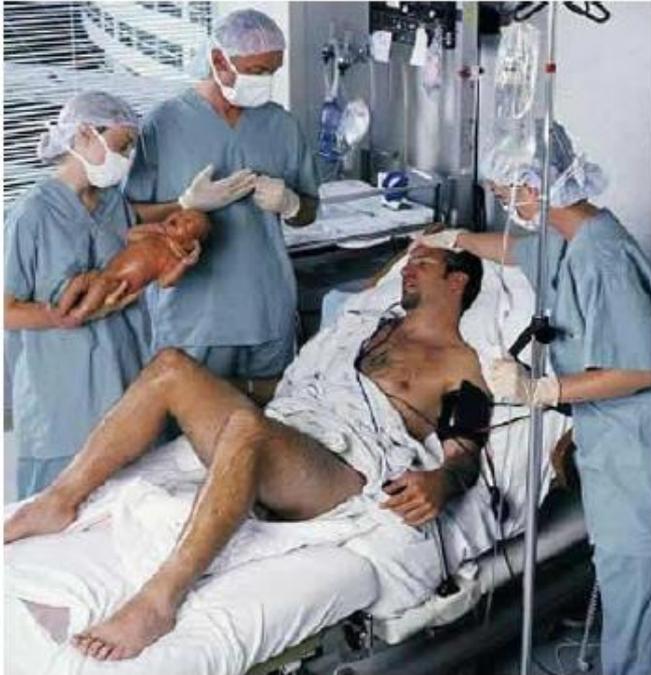
First man-born baby: A revolution in tocology

Cao Zexian

Institute of Genecology and Tocology for Men, Chinese Academy of Scientific Fictions, 100190 Beijing, China

zxcao@aphy.iphy.ac.cn

Tocology¹ and obstetrics² are always related to genecology^{3,4} since in the human history baby-bearing has been the patented activity of women⁵⁻⁷. By this technique and that method⁸⁻²¹, we first realized baby-bearing by a man. A full inspection after birth shows that the baby is more than normal, and the brave and happy Papa-Mama is in good recovery, suffering from none of unexpected damages²², either physical or psychological.



有些人，要玩就玩大的！



Fig.S1. The Papa-mama in pregnancy

Es ist **schön**, Es ist doch der legendäre **Schön**



Jan Hendrik Schön (1970-),
german, born in Verden.

Ph.D. from Uni. Konstanz in **1997**,
and then hired by Bell Labs.

In 2001 he was listed as an author
on an average of one newly
published research paper **every
eight days.**

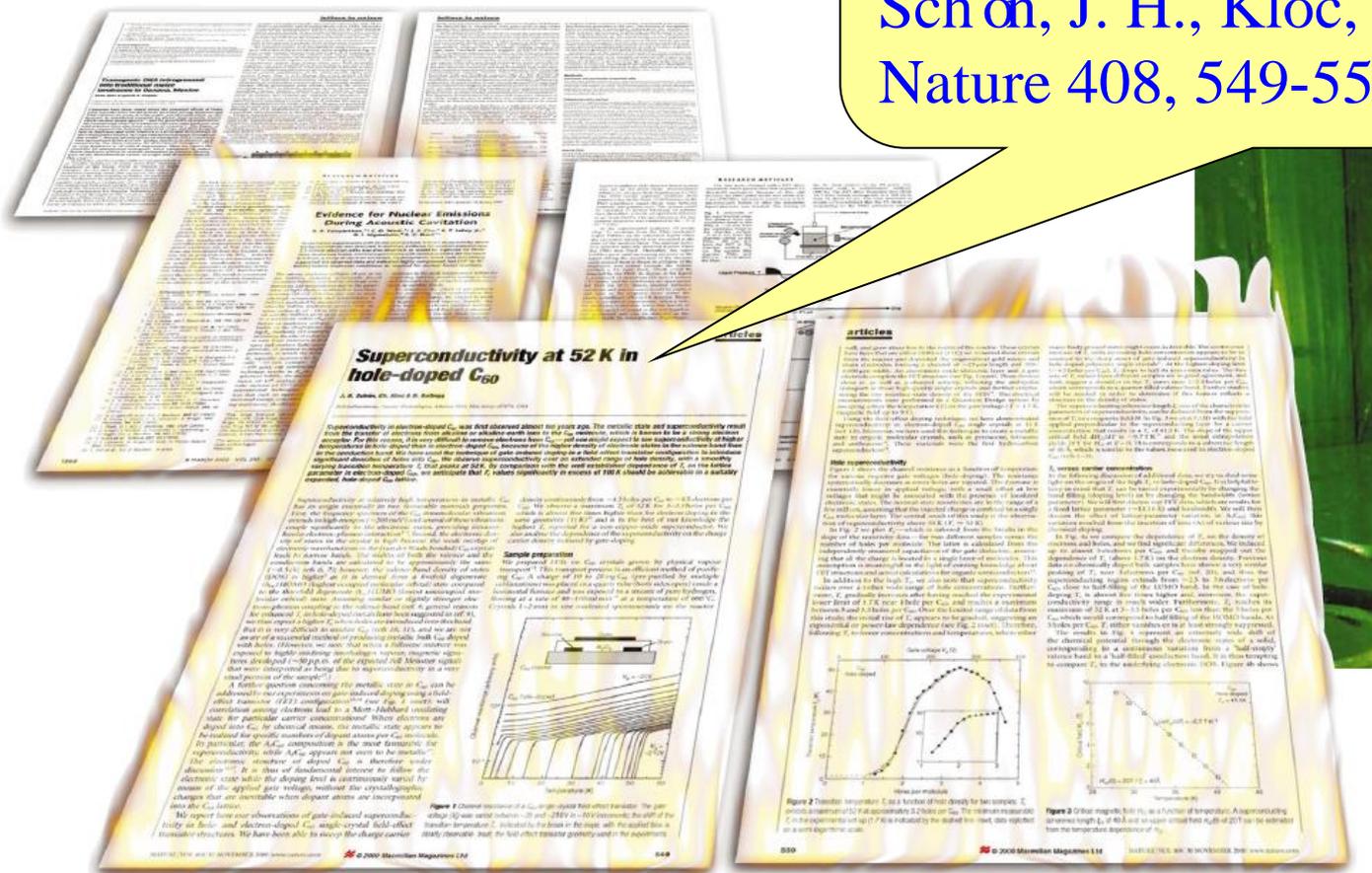
Otto-Klung-Weberbank Prize for
Physics and the Braunschweig
Prize in 2001; Outstanding Young
Investigator Award of the Materials
Research Society in 2002.

Publish, and be condemned

news feature

Superconductivity at 52 K in hole-doped C₆₀

Schön, J. H., Kloc, B., Batlogg, B., Nature 408, 549-552 (2000).



Madoff Scheme



Publish, and be damned...

On October 31, 2002, *Science* withdrew eight papers written by Schön:

Science 撤销 9篇

- J. H. Schön, S. Berg, Ch. Kloc, B. Batlogg (2000). "Ambipolar Pentacene Field-Effect Transistors and Inverters". *Science* **287** (5455): 1022–3. Bibcode:2000Sci...287.1022S^[4]. doi:10.1126/science.287.5455.1022^[5]. PMID 10669410^[6]. **(Retracted)**
- J. H. Schön, Ch. Kloc, R. C. Haddon, B. Batlogg (2000). "A Superconducting Field-Effect Switch". *Science* **288** (5466): 656–8. doi:10.1126/science.288.5466.656^[7]. PMID 10784445^[8]. **(Retracted)**
- J. H. Schön, Ch. Kloc, B. Batlogg (2000). "Fractional Quantum Hall Effect in Organic Molecular Semiconductors". *Science* **288** (5475): 2338–40. doi:10.1126/science.288.5475.2338^[9]. PMID 17769842^[10]. **(Retracted)**
- J. H. Schön, Ch. Kloc, A. Dodabalapur, B. Batlogg (2000). "An Organic Solid State Injection Laser". *Science* **289** (5479): 599–601. Bibcode:2000Sci...289..599S^[11]. doi:10.1126/science.289.5479.599^[12]. PMID 10915617^[13]. **(Retracted)**
- J. H. Schön, Ch. Kloc, B. Batlogg (2000). "A Light-Emitting Field-Effect Transistor". *Science* **290** (5493): 963–6. Bibcode:2000Sci...290..963S^[14]. doi:10.1126/science.290.5493.963^[15]. PMID 11062124^[16]. **(Retracted)**
- J. H. Schön, Ch. Kloc, H. Y. Hwang, B. Batlogg (2001). "Josephson Junctions with Tunable Weak Links". *Science* **292** (5515): 252–4. doi:10.1126/science.1058812^[17]. PMID 11303093^[18]. **(Retracted)**
- J. H. Schön, A. Dodabalapur, Ch. Kloc, B. Batlogg (2001). "High-Temperature Superconductivity in Lattice-Expanded C60". *Science* **293** (5539): 2432–4. Bibcode:2001Sci...293.2432S^[19]. doi:10.1126/science.1064773^[20]. PMID 11533443^[21]. **(Retracted)**
- ~~J. H. Schön, Ch. Kloc, A. Dodabalapur, B. Batlogg (2001). "Field-Effect Modulation of the Conductance of Singlet Superconductivity in a Spin-Ladder Cuprate". *Science* **293** (5539): 2430. Bibcode:2001Sci...293.2430S^[45]. doi:10.1126/science.1064204^[46]. **(Retracted)**~~

On May 2, 2003, *Science* withdrew another paper written by Schön:

 - J. H. Schön, M. Dorget, F. C. Beuran, X. Z. Xu, E. Arushanov, M. Laguës, C. Deville Cavellin (2001). "Field-Induced Superconductivity in a Spin-Ladder Cuprate". *Science* **293** (5539): 2430. Bibcode:2001Sci...293.2430S^[45]. doi:10.1126/science.1064204^[46]. **(Retracted)**

Physical Review 撤销 6篇

On December 20, 2002, *Physical Review* withdrew six papers written by Schön:

- J. H. Schön, Ch. Kloc, B. Batlogg (2001). "Hole transport in pentacene single crystals". *Physical Review B* **63**: 245201. Bibcode:2001PhRvB..63x5201S^[24]. doi:10.1103/PhysRevB.63.245201^[25]. (Retracted)
- J. H. Schön, Ch. Kloc, R. Laudise, B. Batlogg (1998). "Electrical properties of single crystals of rigid rodlike conjugated molecules". *Physical Review B* **58**: 12952. Bibcode:1998PhRvB..5812952S^[26]. doi:10.1103/PhysRevB.58.12952^[27]. (Retracted)
- J. H. Schön, Ch. Kloc, B. Batlogg (2000). "Mobile iodine dopants in organic semiconductors". *Physical Review B* **61**: 10803. Bibcode:2000PhRvB..6110803S^[28]. doi:10.1103/PhysRevB.61.10803^[29]. (Retracted)
- J. H. Schön, Ch. Kloc, D. Fichou, B. Batlogg (2001). "Conjugation length dependence of the charge transport in oligothiophene single crystals". *Physical Review B* **64**: 035209. Bibcode:2001PhRvB..64c5209S^[30]. doi:10.1103/PhysRevB.64.035209^[31]. (Retracted)
- J. H. Schön, Ch. Kloc, B. Batlogg (2001). "Low-temperature transport in high-mobility polycrystalline pentacene field-effect transistors". *Physical Review B* **63**: 125304. Bibcode:2001PhRvB..6315304S^[32]. doi:10.1103/PhysRevB.63.125304^[33]. (Retracted)
- J. H. Schön, Ch. Kloc, B. Batlogg (2001). "Universal Crossover from Band to Hopping Conduction in Molecular Organic Semiconductors". *Physical Review Letters* **86** (17): 3843–6. Bibcode:2001PhRvL..86.3843S^[34]. doi:10.1103/PhysRevLett.86.3843^[35]. PMID 11329338^[36]. (Retracted)

Applied Physics Letters 撤销 4+7篇

On February 24, 2003, *Applied Physics Letters* withdrew four papers written by Schön:

- J. H. Schön, Z. Bao (2002). "Nanoscale organic transistors based on self-assembled monolayers". *Applied Physics Letters* **80** (5): 847. Bibcode:2002ApPhL..80..847S^[37]. doi:10.1063/1.1445804^[38]. **(Retracted)**
- J. H. Schön, C. Kloc (2001). "Fast organic electronic circuits based on ambipolar pentacene field-effect transistors". *Applied Physics Letters* **79** (24): 4043. Bibcode:2001ApPhL..79.4043S^[39]. doi:10.1063/1.1426684^[40]. **(Retracted)**
- J. H. Schön (2001). "Plastic Josephson junctions". *Applied Physics Letters* **79** (4): 2208. Bibcode:2001ApPhL..79.2208S^[41]. doi:10.1063/1.1408277^[42]. **(Retracted)**
- J. H. Schön, C. Kloc, B. Batlogg (2000). "Perylene: A promising organic field-effect transistor material". *Applied Physics Letters* **77** (23): 3776. Bibcode:2000ApPhL..77.3776S^[43]. doi:10.1063/1.1329634^[44]. **(Retracted)**
- J. H. Schön, Z. Bao (2002). "Organic insulator/semiconductor heterostructure monolayer transistors". *Applied Physics Letters* **80** (2): 332. Bibcode:2002ApPhL..80..332S^[68]. doi:10.1063/1.1431697^[69].
- J. H. Schön, Ch. Kloc, A. Dodabalapur, B. Crone (2001). "Grain boundary transport and vapor sensing in α -sexithiophene". *Applied Physics Letters* **79** (24): 3965. Bibcode:2001ApPhL..79.3965S^[70]. doi:10.1063/1.1423787^[71].
- J. H. Schön, C. Kloc (2001). "Charge transport through a single tetracene grain boundary". *Applied Physics Letters* **78** (24): 3821. Bibcode:2001ApPhL..78.3821S^[72]. doi:10.1063/1.1379986^[73].
- J. H. Schön, C. Kloc (2001). "Organic metal–semiconductor field-effect phototransistors". *Applied Physics Letters* **78** (22): 3538. Bibcode:2001ApPhL..78.3538S^[74]. doi:10.1063/1.1376666^[75].
- J. H. Schön, C. Kloc, B. Batlogg (2000). "Efficient photovoltaic energy conversion in pentacene-based heterojunctions". *Applied Physics Letters* **77** (16): 2473. Bibcode:2000ApPhL..77.2473S^[76]. doi:10.1063/1.1318234^[77].
- J. H. Schön, C. Kloc, B. Batlogg (1999). "Reversible gas doping of bulk α -hexathiophene". *Applied Physics Letters* **75** (11): 1556. Bibcode:1999ApPhL..75.1556S^[78]. doi:10.1063/1.124753^[79].
- J. H. Schön, Ch. Kloc, R. A. Laudise, B. Batlogg (1998). "Surface and bulk mobilities of oligothiophene single crystals". *Applied Physics Letters* **73** (24): 3574. Bibcode:1998ApPhL..73.3574S^[80]. doi:10.1063/1.122828^[81].

Advanced Materials 撤销 2+1篇

On March 20, 2003, *Advanced Materials* withdrew two papers written by Schön:

- J.H. Schön, H. Meng, Z. Bao (2002). "Self-Assembled Monolayer Transistors". *Advanced Materials* **14** (4): 323–326. doi:10.1002/1521-4095(20020219)14:4<323::AID-ADMA323>3.0.CO;2-5^[47]. (Retracted)
- J. H. Schön, C. Kloc, J. Wildeman, G. Hadziioannou (2001). "Gate-Induced Superconductivity in Oligophenylenevinylene Single Crystals". *Advanced Materials* **13** (16): 1273–1274. doi:10.1002/1521-4095(200108)13:16<1273::AID-ADMA1273>3.0.CO;2-P^[48]. (Retracted)

The retraction notice from March 20, 2003 in *Advanced Materials* mentions concerns about another paper written by Schön:

- J. H. Schön, C. Kloc, Z. Bao, B. Batlogg (2000). "Electron Transport in Fluorinated Copper-Phthalocyanine". *Advanced Materials* **12** (20): 1539–1542. doi:10.1002/1521-4095(200010)12:20<1539::AID-ADMA1539>3.0.CO;2-S^[82].

Nature 撤销 7篇

On March 5, 2003, *Nature* withdrew seven papers written by Schön:

- J. H. Schön, M. Dorget, F. C. Beuran, X. Z. Zu, E. Arushanov, C. Deville Cavellin, M. Laguës (2001). "Superconductivity in CaCuO_2 as a result of field-effect doping". *Nature* **414** (6862): 434–6. Bibcode:2001Natur.414..434S^[49]. doi:10.1038/35106539^[50]. PMID 11719801^[51]. (Retracted)
- J. H. Schön, Ch. Kloc, T. Siegrist, M. Steigerwald, C. Svensson, B. Batlogg (2001). "Superconductivity in single crystals of the fullerene C_{70} ". *Nature* **413** (6858): 831–3. doi:10.1038/35101577^[52]. PMID 11677603^[53]. (Retracted)
- J. H. Schön, H. Meng, Z. Bao (2001). "Self-assembled monolayer organic field-effect transistors.". *Nature* **413** (6857): 713–6. Bibcode:2001Natur.413..713S^[54]. doi:10.1038/35099520^[55]. PMID 11607026^[56]. (Retracted)
- J. H. Schön, A. Dodabalapur, Z. Bao, Ch. Kloc, O. Schenker, B. Batlogg (2001). "Gate-induced superconductivity in a solution-processed organic polymer film.". *Nature* **410** (6825): 189–92. Bibcode:2001Natur.410..189S^[57]. doi:10.1038/35065565^[58]. PMID 11242074^[59]. (Retracted)
- J. H. Schön, Ch. Kloc, B. Batlogg (2000). "Superconductivity at 52 K in hole-doped C_{60} ". *Nature* **408** (6812): 549–52. doi:10.1038/35046008^[60]. PMID 11117735^[61]. (Retracted)
- J. H. Schön, Ch. Kloc, B. Batlogg (2000). "Superconductivity in molecular crystals induced by charge injection.". *Nature* **406** (6797): 702–4. Bibcode:2000Natur.406..702S^[62]. doi:10.1038/35021011^[63]. PMID 10963589^[64]. (Retracted)
- J. H. Schön, Ch. Kloc, E. Bucher, B. Batlogg (2000). "Efficient organic photovoltaic diodes based on doped pentacene.". *Nature* **403** (6768): 408–10. Bibcode:2000Natur.403..408S^[65]. doi:10.1038/35000172^[66]. PMID 10667788^[67]. (Retracted)

Schön 造假关键词

- **Superconductivity** → 1972 Nobel prize for physics/ BCS: a Mardoff Scheme
- **Organic/Plastic** → 2000 Nobel Prize for chemistry, 对固体物理的**反动**, 降低成本?
- **Field-Effect Transistor** → 信息时代高存储密度需求
- **Single Molecule** → 信息时代高存储密度需求, 降低成本

Schön 造假成功的关键

- 利用了科学界忽悠之集大成?
- 利用Bell实验室的历史 (superconductivity, transistor, charge transfer complex/1954)

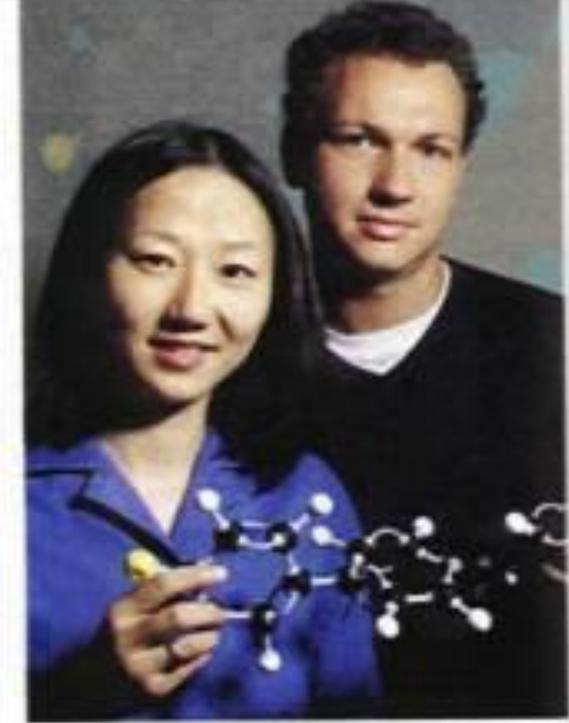
Interested → 揭发者

Soon after Schön published his work on single-molecule semiconductors, others in the physics community alleged that his data contained anomalies. ...then of **Princeton University**, noticed that two experiments **carried out at very different temperatures had identical noise**. When the editors of *Nature* pointed this out to Schön, he claimed to have **accidentally** submitted the same graph twice.

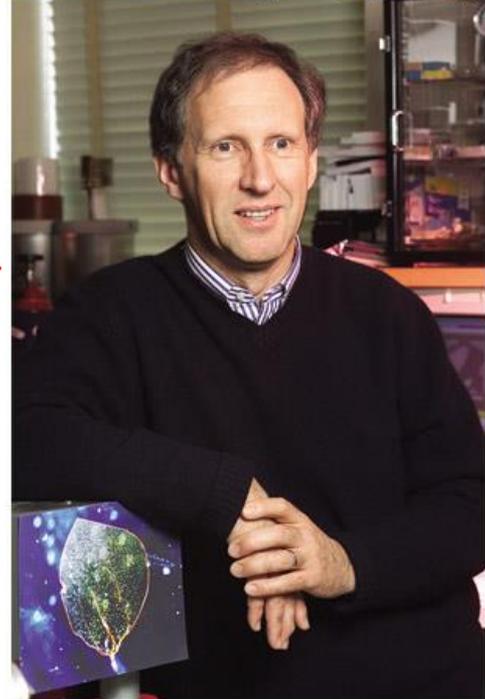
Paul McEuen of Cornell University then found **the same noise in a paper describing a third experiment**.

曹则贤悖论：造假是为了引起注意，如果没人注意，说明你造假的水平很低，白玩了。但如果引起注意了，这个世界上高手很多，总有人看出造假来！

接下来，你就只能靠无耻和**共同体**撑着了。



合作者，是同谋，
还是无辜的，谁还
听你辩解？



Jan Hendrik Schön und Zhenan Bao mit einem Modell ihres 'Transistormoleküls'.



我发誓，那
时候我‘图样图
森破’！

但是，你只要在那个作者名单上，伤害就是难免的，因为人们会说：

But I am suggesting that many participants unwittingly or perhaps in some cases **half-wittingly aided**, and thus enabled, the deception in both situations for the same self-serving reasons.

What other people say

共同作者Batlogg said, “If I’m a **passenger** in a car that drives through a red light, then it’s not my fault.”

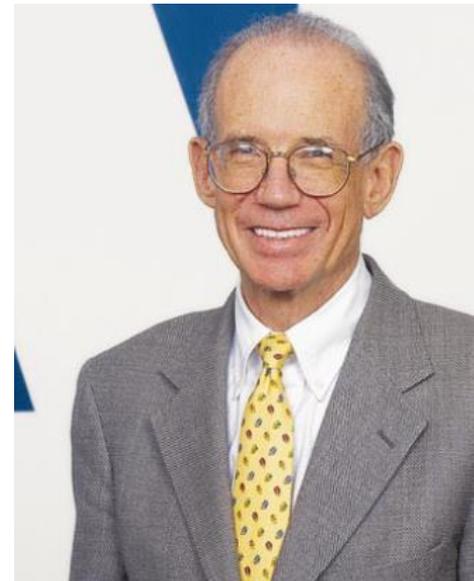
Karl Ziemelis (*Nature* 's **physical sciences editor**):
Nature was an obvious scapegoat.

Donald Kennedy (editor-in-chief of *Science*):
"There is little journals can do about detecting research misconduct."

These two industry-leading publications (nature/science) “decide for themselves what is **good science** — or **good-selling science**”

-Anderson

Academic Duty



Donald Kennedy Editor-in-chief of Science

Cold Fusion

1920年, Austrian born scientists, Friedrich Paneth and Kurt Peters claimed the following reaction



The helium was measured. **But there is helium in air!**

In 1927/32, Swedish J. Tandberg investigated H+H/Pd, and D+D/Pd

(电) 化学过程: ~eV

核反应过程: ~MeV

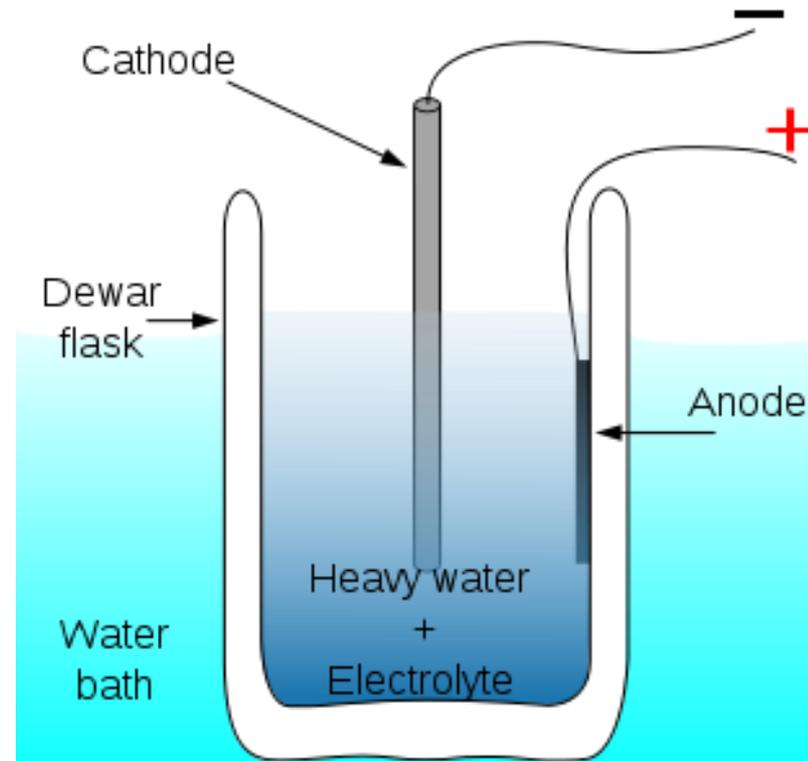
1eV ~ 11600K

无知者无畏

Cold Fusion

Stanley Pons and Martin Fleischmann in 1989 登场了

- Fleischmann, Martin; Pons, Stanley, Electrochemically induced nuclear fusion of deuterium, *J.Electroanal. Chem.* **261**, 301-308(1989).
- Fleischmann, Martin; Pons, Stanley; Anderson, Mark W.; Li, Lian Jun; Hawkins, Marvin, Calorimetry of the palladium-deuterium-heavy water system, *J.Electroanal. Chem.* **287**, 293-348(1990).
- Fleischmann, Martin; Pons, S., Calorimetry of the Pd-D₂O system: **from simplicity via complications to simplicity**, *Phys. Lett. A* **176**, 118-129(1993).



Cold Fusion

合作者：见利忘义

In mid-March 1989, both (Fleischmann/Jones, **grant reviewer**) research teams were ready to publish their findings, and Fleischmann and **Jones** (**muon-catalyzed fusion**) had agreed to meet at an airport on March 24 to send their papers to *Nature* via **FedEx**. Fleischmann and Pons, however, pressured by the University of Utah, which wanted to establish priority on the discovery, **broke their apparent agreement**, submitting their paper to the *J. Electroanalytical Chem.* on March 11, and disclosing their work **via a press release** and press conference on March 23. Jones, upset, **faxed** in his paper to *Nature* after the press conference.

浑水摸鱼

无耻者无敌

Cold Fusion

On April 10, 1989, a group at Texas A&M University published results of excess heat and later that day a group at the Georgia Institute of Technology **announced neutron production**—the strongest replication announced up to that point due to the detection of neutrons and the reputation of the lab. But Georgia Tech retracted their announcement in 13 April, explaining that their **neutron detectors gave false positives** when exposed to heat.

Robert Huggins at Stanford University also reported early success with a **light water control**, but when he finally presented his results he reported an excess heat of only **one degree Celsius**.

Another example: p-ZnO

赌：如果是对的，早晚有人做出来，干脆我先宣布成功吧！

Cold Fusion

M. Gai, et al., Upper limits on neutron and big gamma-ray emission from cold fusion", *Nature* **340**, 29–34 (1989).

德国Garching 马普所的评论：冷聚变这个事件只是告诉我们一个事实，就是这个世界上80%以上的所谓物理学家其实是不懂物理学的。

"N" RAYS

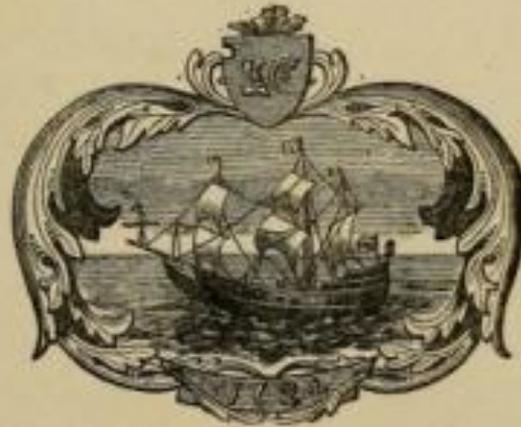
A COLLECTION OF PAPERS COMMUNICATED
TO THE ACADEMY OF SCIENCES
*WITH ADDITIONAL NOTES AND INSTRUCTIONS FOR
THE CONSTRUCTION OF PHOSPHORESCENT
SCREENS*

BY
R. BLONDLOT

CORRESPONDENT OF THE INSTITUTE OF FRANCE
PROFESSOR IN THE UNIVERSITY OF NANCY

TRANSLATED BY
J. GARCIN

INGÉNIEUR E.S.E., LICENCIÉ-EN-SCIENCES



*WITH PHOSPHORESCENT SCREEN AND OTHER
ILLUSTRATIONS*

LONGMANS, GREEN, AND CO.
39 PATERNOSTER ROW, LONDON
NEW YORK AND BOMBAY

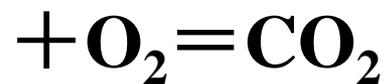
1905

All rights reserved

Nancy Ray

一言难尽的金刚石

1744 拉瓦锡证明

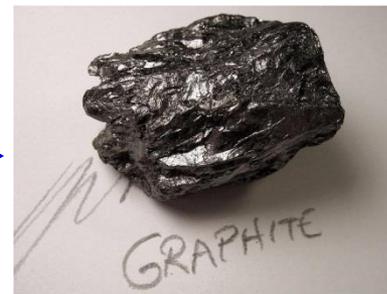


1768 台南特断定

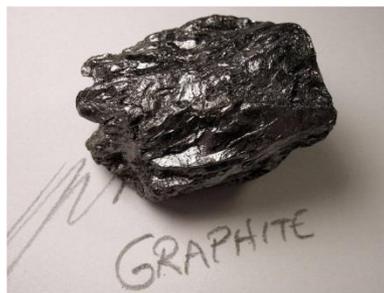


= Carbon

1799 摩尔沃实现了



如果

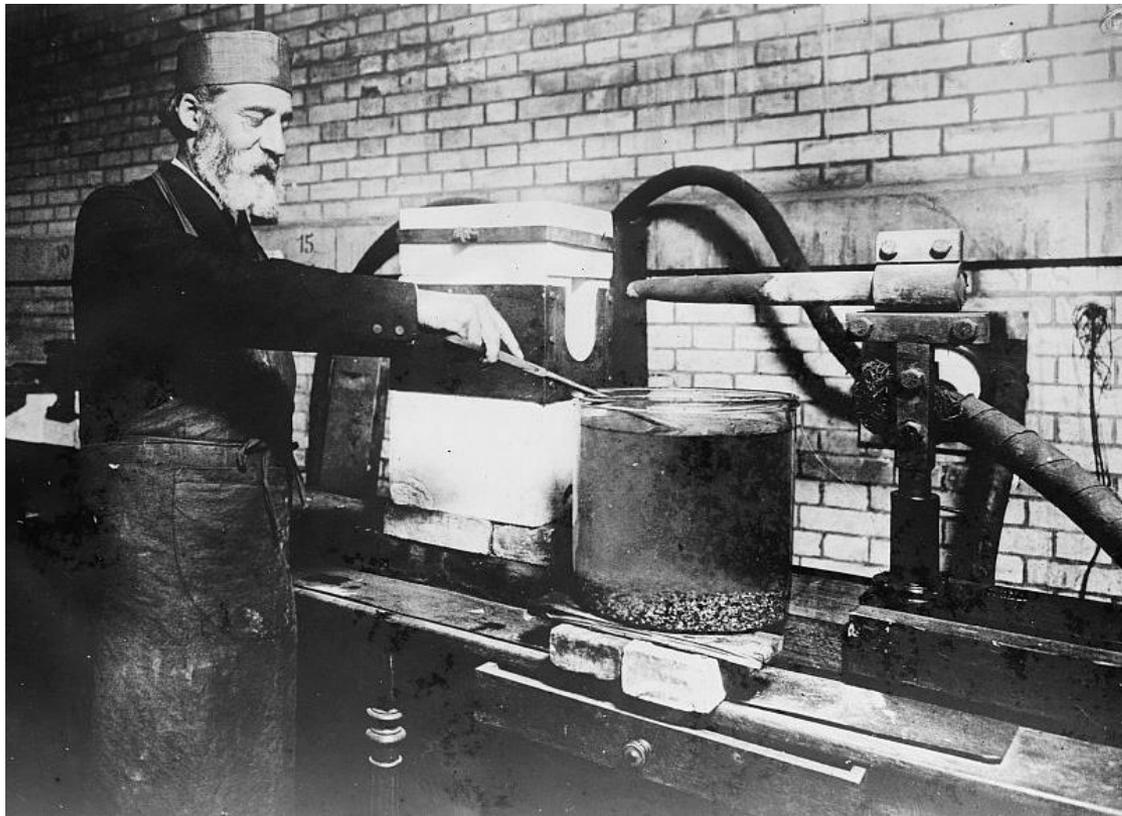


你就发了老财了！

1880，霍尼用骨油+石蜡+锂，在钢管内加热，发现了金刚石。

1893年，Henri Moissan，C+Fe体系熔化后冷却，酸洗，获得了金刚石，1906年获得了诺贝尔化学奖。

后来，其遗孀泄露，是助手实在受不了无休止的失败，自己把金刚石颗粒混进去糊弄老师的。

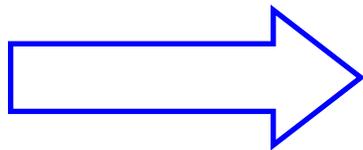


Diamonds from the Pressure Cooker—Science or Science Fiction?*

*Hermann Sachdev**

Angew. Chem. Int. Ed. 43, 4696 – 4699 (2004).

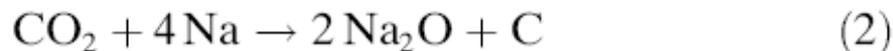
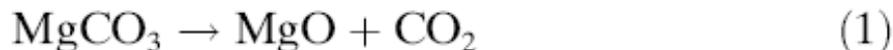
Angewandte Chemie, Volume 116, issue 36 (September 13, 2004), p. 4800 - 4803



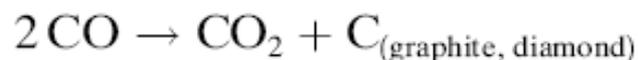
Diamonds from the Pressure Cooker—Science or Science Fiction?***

*Hermann Sachdev**

Synthesis of diamond by reduction of carbon dioxide or carbonates with sodium metal at about 460–500°C/800–860 atm.



Disproportionation



Diamonds from the Pressure Cooker—Science or Science Fiction? **

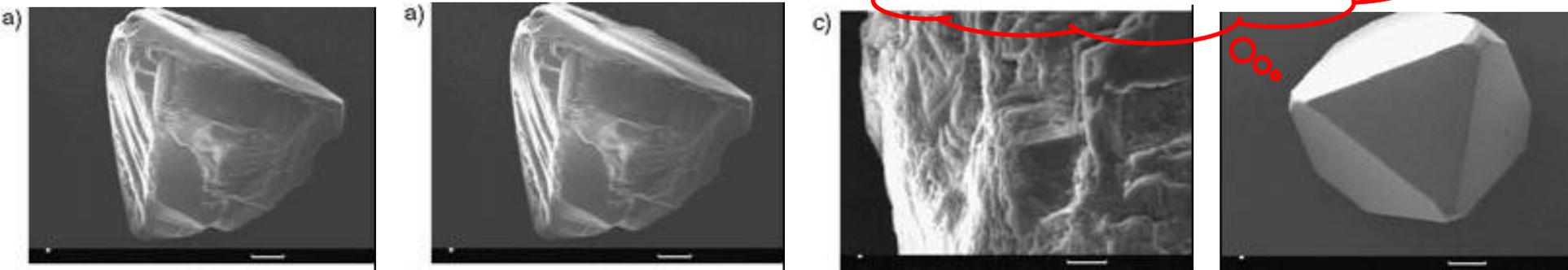
Hermann Sachdev*

怎么量的?

Synthesis of diamond by reduction of carbon dioxide or carbonates with sodium metal at about 460–500°C/800–860 atm.

When a new reaction pathway is claimed, the characterization and presentation of **intermediates** is necessary and mandatory in a communication, even if a full and thorough scientific interpretation cannot be given in the first instance.

表征不专业



Diamonds from the Pressure Cooker—Science or Science Fiction?***

*Hermann Sachdev**

The most critical parameters for diamond formation by any method are the pressure and temperature conditions. The experimental descriptions do not allow a straightforward reproduction of the procedures, **since there are no details of how the temperature/ pressure values were obtained**. There are also other significant factors that may severely affect the reaction (e.g., moisture incorporated by weighing the solid carbon dioxide, influence of iron from the autoclave, etc.). From **the way of handling the XRD and other data by the authors**, together with the above raised aspects, there are **severe doubts** that both approaches of the diamond syntheses are based on the experiments as described by the authors, even if they are not contradictory to the current models of diamond formation and might be feasible. At this stage the authors failed to prove their reported syntheses and their interpretation is not supported by the presented analytical data.

Diamonds from the Pressure Cooker—Science or Science Fiction? **

*Hermann Sachdev**

通讯作者的回复

We should have cited reference 1 paper in our communication in reference 2 because the latter paper reported progress related to the former.....

We also apologize for a mistake made during handing the X-ray diffraction data for reference 2. The original XRD paper was recorded on **chart paper**, which was then scanned into the computer as a BMP format file and subsequently digitized. In this process, **our technician responsible for treating the X-ray data made an error** and used, after **polishing**, a similar BMP format file obtained from a another sample synthesized in our lab.

Last year in *Angewandte Chemie* and in the *Journal of the American Chemical Society* Quianwang Chen et al. reported diamond syntheses from $\text{MgCO}_3\text{-Na}$ and $\text{CO}_2\text{-(Li, Na, K)}$, respectively.^[1,2] The authors have apologized for failing to cross-reference the papers and for manipulation of some of the data (see the second paragraph in the Correspondence from Z. Lou and Q. Chen on page 4700).

In addition, the results reported in both publications are heavily criticized by H. Sachdev in the Correspondence on page 4696.^[3] The details of the reaction conditions are not reported in sufficient detail for the work to be repeated and the characterizations (or even proof) of the final products are not without doubt; furthermore, the characterization of intermediate products, important for the postulated reaction mechanism, is missing. Even if a diamond synthesis is, in principle, possible under the conditions presumably present in the reaction system used by Chen et al. then its actual realization remains doubtful. Chen and Lou give a series of arguments in their Reply^[4] in order to support their diamond synthesis, however, they close with the comment “we could produce diamonds *from time to time* in $\text{MgCO}_3\text{-Na}$ and $\text{CO}_2\text{-(Li, Na, K)}$ system” (italicized by me), which naturally casts doubts about the reproducibility. Hopefully this Note and the two Correspondences^[3,4] will lead to a rapid resolution of the problem of whether or not diamonds can be prepared by the method of Chen et al.^[1,2]

Peter Göllitz

from the Pressure Cooker—Science or Fiction?***

v*

编辑部的断词

- **Manipulation of some of the data;**
- **Details of the reaction conditions are not reported in sufficient detail for the work to be repeated;**
- **Characterizations of the final products are not without doubt;**
- **Characterization of intermediate products, is missing.**

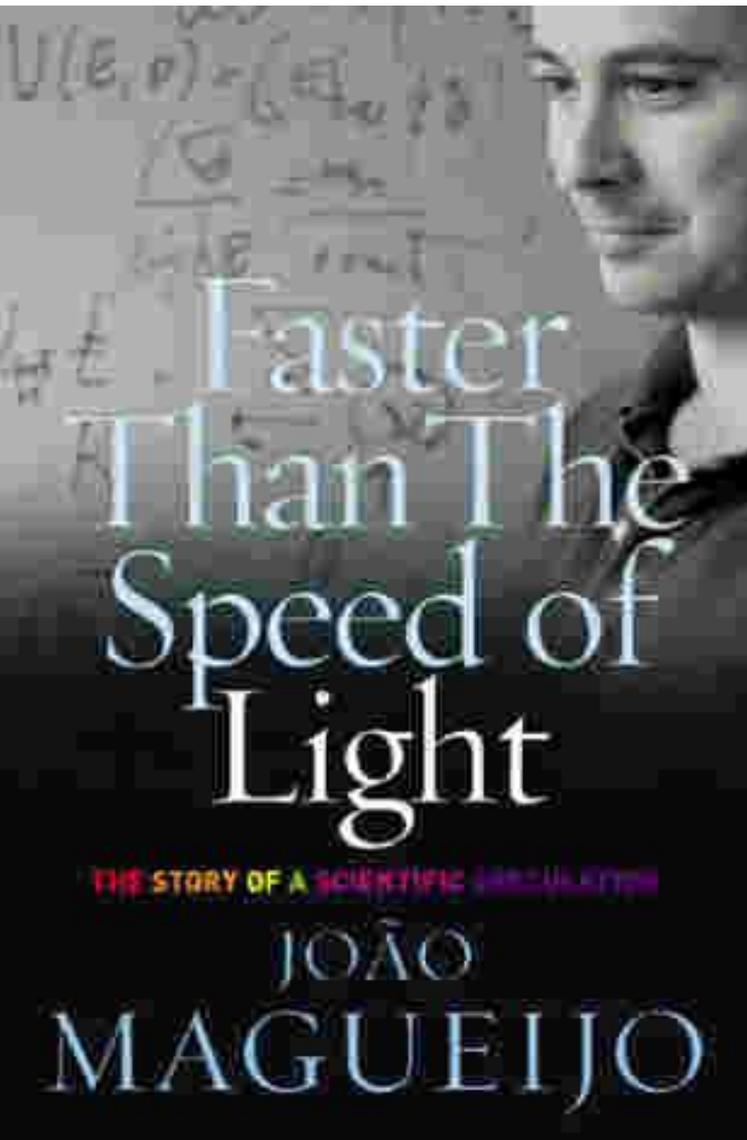
一个简单判据

如果有人发表了一件伟大得了不起的工作，
后来，就没有后来了，那么，这也许意味着点什么！

诱人的‘金刚石’欸！

唯一比金刚石还硬的物质是鸭子的嘴！

Faster Than Light



$$\frac{v}{c} = \frac{v_1/c + v_2/c}{1 + v_1 v_2 / c^2}$$

$$\frac{iv}{c} = \frac{iv_1/c + iv_2/c}{1 - iv_1 iv_2 / c^2}$$

“Faster than the light”会让你成为‘**证明Einstein is wrong的人**’,所以有很多版本的“Faster than the light”故事，构成了一个多姿多彩的‘superluminal’场景。

2012年，最‘图样图森破’的superluminal英雄出现了，CERN!

Faster Than Light

Measurement of the neutrino velocity with the OPERA detector in the CNGS beam*

Neutrino is faster than the light!

T. Adam^a, N. Agafonova^b, A. Aleksandrov^{c,1}, O. Altinok^d, P. Alvarez Sanchez^e, A. Anokhina^f, S. Aoki^g, A. Ariga^h, T. Ariga^h, D. Autiero^{if}, A. Badertscherⁱ, A. Ben Dhahbi^h, A. Bertolin^k, C. Bozza^l, T. Brugièreⁱ, R. Brugnera^{m,k}, F. Brunetⁿ, G. Brunetti^{o,i,2}, S. Buontempo^c, B. Carusⁱ, F. Cavanna^q, A. Cazesⁱ, L. Chaussardⁱ, M. Chernyavsky^r, V. Chiarella^s, A. Chukanov^t, G. Colosimo^u, M. Crespi^u, N. D'Ambrosio^v, G. De Lellis^{w,c}, M. De Serio^x, Y. Déclaisⁱ, P. del Amo Sanchezⁿ, F. Di Capua^c, A. Di Crescenzo^{w,c}, D. Di Ferdinando^p, N. Di Marco^v, S. Dmitrievsky^t, M. Dracos^a, D. Duchesneauⁿ, S. Dusini^k, J. Ebert^y, I. Efthymiopoulos^e, O. Egorov^z, A. Ereditato^h, L.S. Esposito^j, J. Favierⁿ, T. Ferber^y, R.A. Fini^x, T. Fukuda^{aa}, A. Garfagnini^{m,k}, G. Giacomelli^{o,p}, M. Giorgini^{o,p,3}, M. Giovannozzi^e, C. Girerdⁱ, J. Goldberg^{ab}, C. Göllnitz^y, D. Golubkov^z, L. Goncharova^r, Y. Gornushkin^t, G. Grella^l, F. Grianti^{s,ac}, E. Gschwendtner^e, C. Guerinⁱ, A.M. Guler^d, C. Gustavino^{ad}, C. Hagner^y, K. Hamada^{ae}, T. Hara^g, M. Hierholzer^y, A. Hollnagel^y, M. Ieva^x, H. Ishida^{aa}, K. Ishiguro^{ae}, K. Jakovcic^{af}, C. Jollet^a, M. Jones^e, F. Juget^h, M. Kamiscioglu^d, J. Kawada^h, S.H. Kim^{ag,4}, M. Kimura^{aa}, E. Kiritsis^{ah}, N. Kitagawa^{ae}, B. Klicek^{af}, J. Knuesel^h, K. Kodama^{ai}, M. Komatsu^{ae}, U. Kose^k, I. Kreslo^h, C. Lazzaro^j, J. Lenkeit^y, A. Ljubicic^{af}, A. Longhin^s, A. Malgin^b, G. Mandrioli^p, J. Marteauⁱ, T. Matsuo^{aa}, N. Mauri^s, A. Mazzoni^u, E. Medinaceli^{m,k}, F. Meisel^h, A. Mereaglia^a, P. Migliozzi^c, S. Mikado^{aa}, D. Missiaen^e, K. Morishima^{ae}, U. Moser^h, M.T. Muciaccia^{aj,x}, N. Naganawa^{ae}, T. Naka^{ae}, M. Nakamura^{ae}, T. Nakano^{ae}, Y. Nakatsuka^{ae}, V. Nikitina^f, F. Nitti^{ak}, S. Ogawa^{aa}, N. Okateva^r, A. Olchevsky^t, O. Palamara^v, A. Paoloni^s, B.D. Park^{ag,5}, I.G. Park^{ag}, A. Pastore^{aj,x}, L. Patrizii^p, E. Pennacchioⁱ, H. Pessardⁿ, C. Pistillo^h, N. Polukhina^r, M. Pozzato^{o,p}, K. Pretzl^h, F. Pupilli^v, R. Rescigno^l, F. Riguzzi^{al}, T. Roganova^f, H. Rokujo^g, G. Rosa^{am,ad}, I. Rostovtseva^z, A. Rubbia^j, A. Russo^c, O. Sato^{ae}, Y. Sato^{an}, J. Schuler^a, L. Scotto Lavina^{h,6}, J. Serrano^e, A. Sheshukov^t, H. Shibuya^{aa}, G. Shoziyoev^f, S. Simone^{aj,x}, M. Sioli^{o,p}, C. Sirignano^v, G. Sirri^p, J.S. Song^{ag}, M. Spinetti^s, L. Stanco^k, N. Starkov^r, S. Stellacci^l, M. Stipevic^{af}, T. Strauss^h, S. Takahashi^g, M. Tenti^{o,p,i}, F. Terranova^{s,ao}, I. Tezuka^{an}, V. Tioukov^c, P. Tolun^d, N.T. Tranⁱ, S. Tufanli^h, P. Vilain^{ap}, M. Vladimirov^r, L. Votano^s, J.-L. Vuilleumier^h, G. Wilquet^{ap}, B. Wonsak^y, J. Wurtz^a, C.S. Yoon^{ag}, J. Yoshida^{ae}, Y. Zaitsev^z, S. Zemskova^t, A. Zghicheⁿ

Neutrino faster than light?

这个也可以?

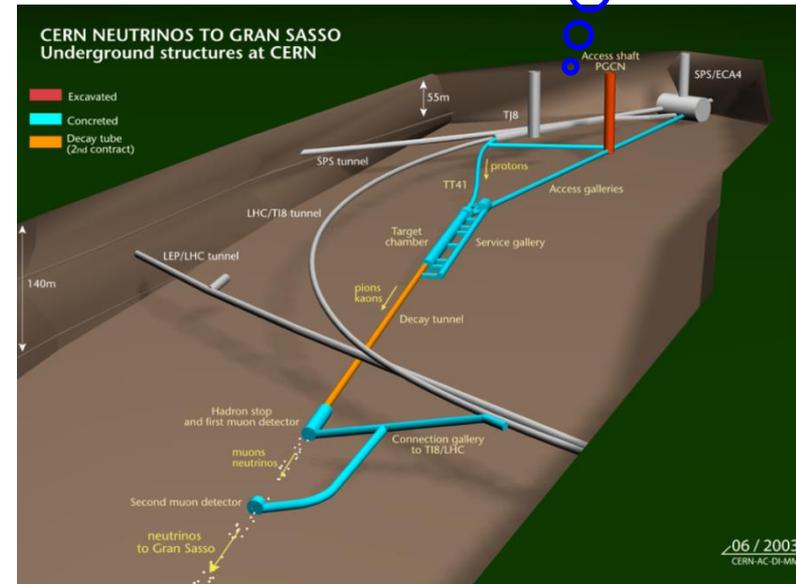
In 2012, CERN said that a **plug** (or whatever) caused a 60 ns delay!

So naïve an experiment, why they did it? Do they understand physics?

The speed of light is not only a constant, it is also an **INTEGER!**

You cannot use $\Delta x / \Delta t$ to determine a velocity near the light of speed.

用这个方法您能得出光速比光速还快的结论!



$$v = \frac{\Delta x}{\Delta t}$$

$$c = 299,792,458 \text{ m/s}$$

Neutrino faster than light?

看似很科学的荒唐

$$(v-c)/c = (2.37 \pm 0.32 \text{ (stat.) } {}^{+0.34}_{-0.24} \text{ (sys.)}) \times 10^{-5},$$

一切只有少数人掌握数据或者证据的研究领域，曹则贤都保持适度的存疑！作者太多的文章，大抵没有看的价值。

科学家的不断**制造轰动**和官兵的**养贼自保**是一个道理：保证**饭碗里的肉**。

案例1：左良玉在张献忠逃窜到四川走投无路的时候，饶了他！

案例2：前苏联撑杆跳运动员布勃卡每次都把成绩提高‘最小值’。



precision is not accuracy

你为什么不可以学术不端？

A balloon bluffs when it is blown sufficiently large

人，容易因他人‘规则外’的
轻易成功而心浮气躁。

Suddenly it collapse on its own.

By itself

From outside

From inside

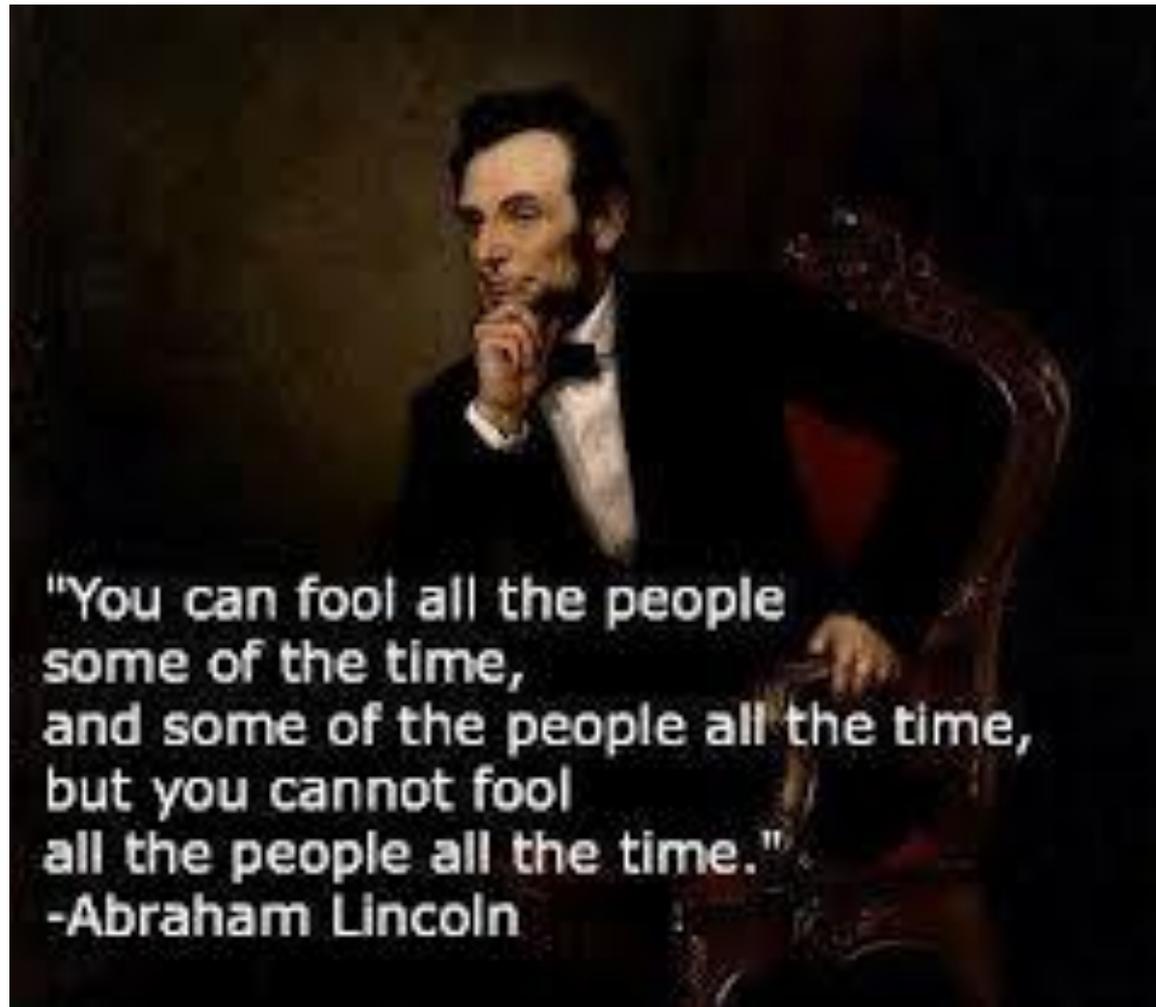
局破了，你能保护自己吗？





小保方晴子，日本理化学研究所（RIKEN）：“刺激触发的多能性获得”（STAP）方法，虽然名称叫起来有点绕口，但做起来似乎很简单，就是用酸泡一泡（“酸浴”），就能把体细胞转变成干细胞。这比她的前辈、诺奖获得者山中伸弥的iPS制备法不知要简单多少倍，既不需要核移植，也不需要导入转录因子基因，更重要的是这种理化刺激没有致癌风险。（2014）

伟人林肯早就说过：你可能在某些时间欺骗所有的人，或者在所有的时间欺骗某些人，但你不能在所有的时间欺骗所有的人。



God is not
the only one
watching

并不是只有天在看！

Three things I cannot escape: the **eye of God**, the **voice of conscience**, the **stroke of death**. In company, guard your tongue. In your family, guard your temper. When alone guard your thoughts.

- Venerable Matt Talbot



没有后台，
别玩悬的！
—caozexian



有一天你不在了，我不在了，物理所还在；
物理所在与不在，物理学都在。

想在物理学上留点正面的事迹，很难；甚至
想留下一个别人瞧得起的学术不端案例也很难。
**对于物理，不懂就不懂了，不会就不会了，犯
不着动歪心思。**

没学懂物理的，没对物理学有贡献的，算不
得物理学家，任何循其它途径的成功都不足以
让别人认为您是一个物理学家。**你左手公章右
手盒子炮也没用！**

年轻人，Quo vadis?

在一个无耻的大环境中，如何避免成为很无耻的人？

- 1) 思无邪；
- 2) 保持欲望和能力的大体平衡；
- 3) 穷汉子不和地主比收成！



Pauca, sed matura.

少, 但是成熟.

-Carl Friedrich Gauss

Quo vadis?

苏轼《稼说送张琥》

盍尝观于富人之稼乎？其田美而多，其食足而有余。其田美而多，则可以更休，而地力得全；其食足而有余，则种之常不后时，而敛之常及其熟。故富人之稼常美，少秕而多实，久藏而不腐。

今吾十口之家，而共百亩之田。寸寸而取之，日夜以望之，锄、耨、耰（you1）、艾，相寻于其上者如鱼鳞，而地力竭矣。种之常不及时，而敛之常不待其熟。此岂能复有美稼哉？

古之人，其才非有以大过今之人也。平居所以自养而不敢轻用，以待其成者，闵闵焉，如婴儿之望之长也。弱者养之，以至于刚；虚者养之，以至于充。三十而后仕，五十而后爵。信于久屈之中，而用于至足之后；流于既溢之余，而发于持满之末。此古之人所以大过人，而今之君子所以不及也。

吾少也有志于学，不幸而早得与吾子同年，吾子之得，亦不可谓不早也。吾今虽欲自以为不足，而众已妄推之矣。呜呼！吾子其去此，而务学也哉！博观而约取，厚积而薄发，吾告子止于此矣。

子归过京师而问焉，有曰辙、子由者，吾弟也，其亦以是语之。

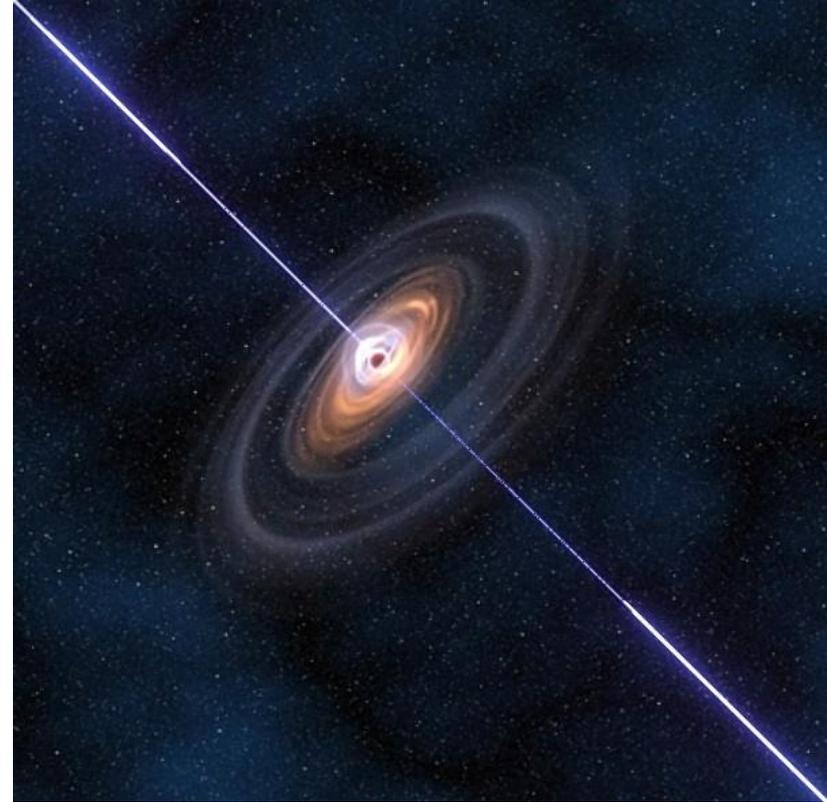
Pulsar

1967, Nov. 28. Jocelyn Bell Burnell.

Pulses separated by 1.33s, and kept to sidereal time (23h 56min). At this point, Burnell notes of herself and Hewish that "we did not really believe that we had picked up **signals from another civilization**, but obviously the idea had crossed our minds and we had no proof that it was an entirely natural radio emission."

They nicknamed the signal **LGM-1**.

The second one: 1.25s.



Pulsar

Observation of a Rapidly Pulsating Radio Source

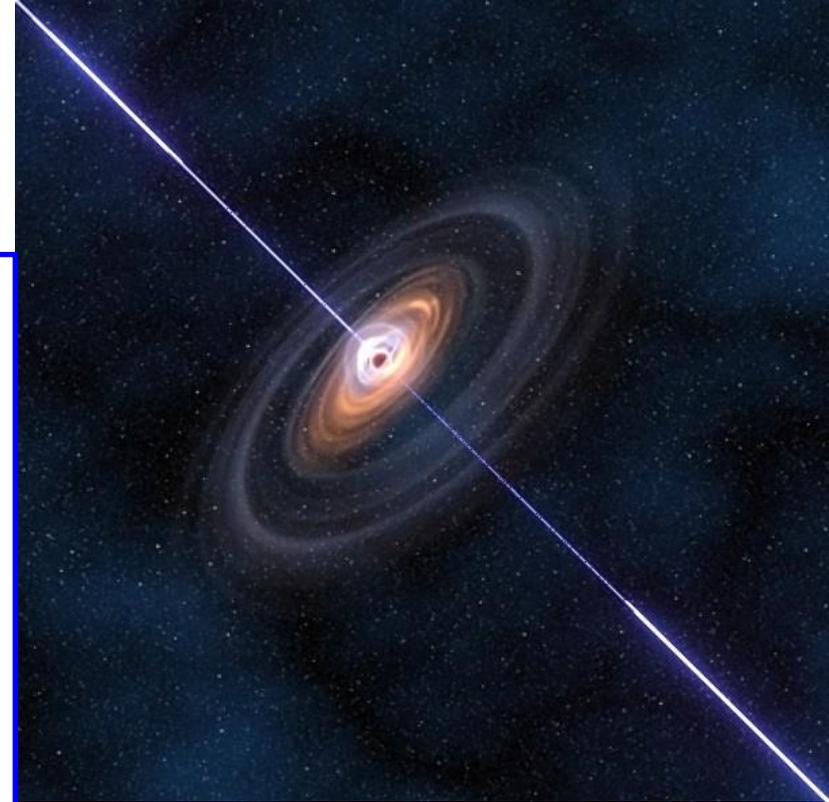
A. HEWISH, S. J. BELL, J. D. H. PILKINGTON, P. F. SCOTT & R. A. COLLINS

Mullard Radio Astronomy Observatory,
Cavendish Laboratory, University of Cambridge

Nature 217, 709 - 713 (24 February 1968);

In 1974, Antony Hewish, Nobel Prize.

Nobel? No-Bell!



“Arguably, my student status and perhaps my gender were also my downfall with respect to the Nobel Prize, which was awarded to Professor Antony Hewish and Professor Martin Ryle.

At that time, science was still perceived as being carried out by **distinguished men (大牛)** leading teams of **unrecognized minions (小卒)** who did their bidding and did not themselves contribute other than as instructed!”

Jocelyn Bell Burnell, “So Few Pulsars, So Few Females”, *Science* **304**, 489 (2004).



Jocelyn Bell joined the project as a graduate student in 1965, helping as a member of the construction team and then analysing the paper charts of the sky survey.

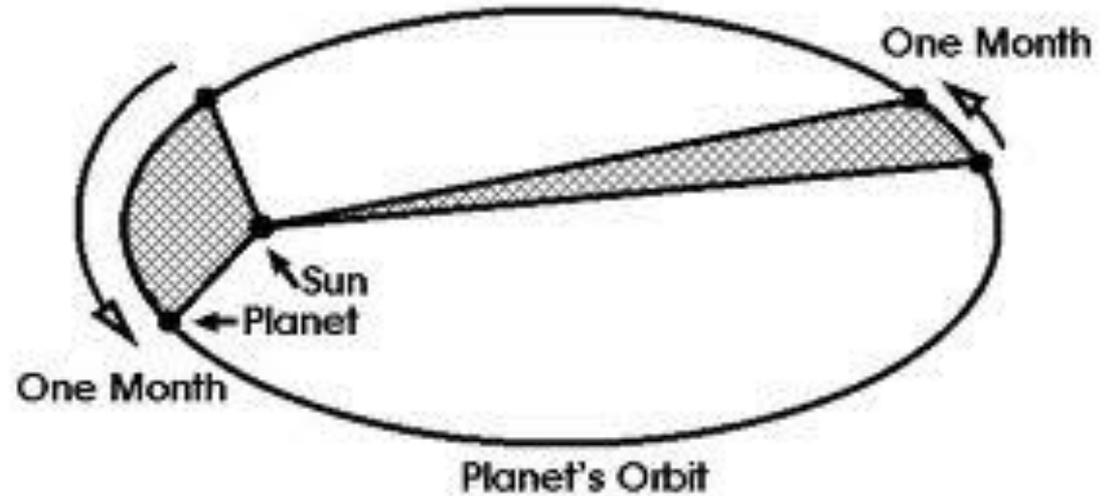
(Antony Hewish)

izquotes.com



牛顿式的滑头

$$f \propto \frac{1}{r^2}$$



The inverse square law corresponds to Kepler's third law
“as **Wren**, **Hooke** and **Halley** independently asserted”.

-Isaac Newton

Michael Faraday and Humphry Davy



书店学徒Faraday 成了Davy教授的助手兼仆人，液化氯气功劳被抢，电磁感应被Davy指为‘剽窃“，后来以来自Davy的唯一一票反对当选皇家学会会员。

年轻人，Quo vadis?

厕身豪门，沾人余惠，倘不思进取，终不成器。

An epigone never will be a master.

-caozexian 2005, 从《随园诗话》谈如何写好文章

要命的成果

代悲白头翁

[唐] 刘希夷

.....
年年岁岁花相似，
岁岁年年人不同。
寄言全盛红颜子，
应怜关死白头翁。
此翁白头真可怜，
伊昔红颜美少年。

.....

有所思

— [唐] 宋之问

幽闺女儿惜颜色 (song)

洛阳女儿好颜色 (liu)

灵隐寺

[唐] 宋之问

.....

楼观沧海日，门对浙江潮。
桂子月中落，天香云外飘。

.....

近乡情更怯，不敢问来人。

.....

明朝望乡处，应见陇头梅。

《宾客嘉话录》：“刘希夷诗曰：年年岁岁花相似，岁岁年年人不同。其舅宋之问苦爱此两句，知其未示人，恳乞，许而不与。之问怒，以土袋压杀之。”

《唐才子传》：“使奴以土囊压杀于别舍”。

合作生蛆

不会就不会呗。

天底下可做的事多了。

天底下你做不来的事多了。

科学当然需要合作，但那是心地纯洁者的事。没有实质性合作的合作本就是齷齪的。

Marcel Grossmann对广义相对论的贡献怎么评价都不为过，人家要求过署名吗？

牛顿的合作者是谁？

爱因斯坦的合作者是谁？

高斯的合作者是谁？

欧拉的合作者是谁？

康德的合作者是谁？

庞加莱的合作者是谁？

玻尔兹曼的合作者是谁？

麦克斯韦的合作者是谁？

.....

谁配？最高端的智识活动，另一颗脑袋是帮不上忙的！

真正的大学者，和自己都不合作！

—曹则贤

这样的作品，成色、品味是大打折扣的！

*Philosophiae Naturalis
Principia Mathematica*

自然哲学之数学原理

Isaac Newton, 曹则贤 合著

Shamelessness Publishing Co.

*Die Grundlage der
allgemeinen
Relativitätstheorie*
广义相对论基础

Albert Einstein, 曹则贤 合著

Shamelessness Publishing Co.

结束语

- 1) 学术不端是一项高风险、高回报的事业，投身其中者慎重；
- 2) 风物长宜放眼量 (**quoted Mao Zedong**);
- 3) 对自己不懂的方法、技术产出的结果，要慎重；
- 4) 自己没有把握、没有贡献的文章，避免署名；
- 5) 年轻的朋友要挺起腰杆，堂堂正正做一个科研新手。
有野心，无贪欲。
- 6) 养浩然之气。**如果你有灵魂，内心怎肯龌龊？**

在学术的海边开心地遛达吧。

属于你的贝壳在不经意处！

谢谢大家！



有一种研究

研究一个没有其它物理给它自洽性限制的问题。

把search 说成 find; 把 not found 说成 setting the new limit for the existence of that thing; 愿意面对媒体而不是同领域的大同行; 小同行之间严格地自觉地穿一条裤子。

But generations of ever bigger detectors have come up empty, and physicists are rethinking the argument for WIMPs and what it might take to find them. They have **bigger detectors** in the works and are laying plans for the ultimate WIMP detector.

When it comes to underground detectors, **SIZE is the only concern**. But many other proposed dark matter particles **lack a connection to known physics** like the WIMP miracle.

Adrian Cho, *Crunch time for dark matter hunt, Science 351, 1376(2016)*.

内容提要

有人的地方就有江湖，有名利的地方就有欺诈。学术界从来都不缺乏各种别处心裁的不端行为。一个真正的学者，除了不可以心存不端以外，看破学界高人的学术不端甚至虚假学术也是应该修炼的基本功。本报告撷取几个著名学术不端案例，意在给初入学界的朋友们洗洗眼睛。

2015 radio burst australia Emily Petroff, 一台微波炉加一台射电望远镜, 那就好玩了。

Why did the self-correcting nature of science not bring the fraud to light sooner? Some of it is that there are bad scientists, just like in any other occupation, and they are drawn to money and silliness, and some of it is that peer-reviewed journals were not doing their jobs. As book author Gary Taubes, no stranger to ferreting out bad science, [said in an interview here](#):

I used to joke with my friends in the physics community that if you want to cleanse your discipline of the worst scientists in it, every three or four years, you should have someone publish a bogus paper claiming to make some remarkable new discovery — infinite free energy or ESP, or something suitably cosmic like that. Then you have it published in a legitimate journal ; it shows up on the front page of the New York Times, and within two months, every bad scientist in the field will be working on it.

不着调的量子力学和它的正确性建立
可观测量； 物理现实与理论体系！！

第一个 建议建设成吨的液氙XENON WIMP的是探索，第二个是
跟踪从热闹捡便宜，第N个建设XENON，你回去吧，我都懒得
说你。

保尔柯察金。。。。关键是凭什么公众要花大把的税费让你玩？
凭什么连累物理学家的名声？

迈斯纳 [Walther Meissner](#), 1882-1974 German‘迈斯纳效应：超导
体的抗磁性 {从电磁学怎么理解；麦克斯韦方程怎么修改？}
那些伟大的思想，大体不会在我们能找到的文献中。-caozexian

But generations of ever bigger detectors have come up empty, and physicists are rethinking the argument for WIMPs and what it might take to find them. They have bigger detectors in the works and are laying plans for the ultimate WIMP detector.

When it comes to underground detectors, **SIZE is the only problem,**

bigger is better,

But many other proposed dark matter particles **lack a connection to known physics** like the WIMP miracle. 没有其它物理给它自洽性限制。Adrian Cho, *Crunch time for dark matter hunt, Science 351, 1376(2016).*

If the WIMP doesn't show up soon, dark matter hunters may not know what to look for next.

Z. Lou, Q. Chen, Y. Zhang, W. Wang, Y. Qian, J. Am. Chem. Soc. 2003, 125, 9302 –9303.

Z. Lou, Q. Chen, W. Wang, Y. Qian, Y. Zhang, Angew. Chem. 2003, 115, 4639 –4641; Angew. Chem. Int. Ed. 2003, 42,4501 – 4503.

每一年烦躁的十月

年年十月看落花，落花飘过俺们家！

2008年，中国媒体颇为激动地庆祝钱永健获得了诺贝尔化学奖，因为他也中国“导弹和航天之父”钱学森的侄子。

（钱永健说 I'm an American）

2013年诺贝尔医学奖得主之一的托马斯·祖德霍夫，其夫人曾就读于中国科学技术大学。于是，得主夫人的母校为这位“中国女婿”而欢呼雀跃。

（科大说是校友会的干活。丢人！）

於是，中国有关部门帮诺贝尔奖委员会规划了中国的“诺贝尔奖候选人”。几位中国特色候选人已经等得不耐烦了。



获奖人国籍：Cine

但是工作是在美国做的，且两人都归化为美国人。





@我们的历史-OURHISTORY V

#《我们的历史·斗地主》精彩推荐#1963年,高玉宝找到周春富三子周长义,翻来覆去叮嘱:写周扒皮不是写你家的事,不是写咱这地方的事,但天底下能没有这样的事吗?小说是拿到全国来教育群众的,有没有重名重姓的,肯定有。回去告诉你们家老少,不要乱讲话!而作报告时,他反复强调一切是真的,说毛主席是他后台。

收起 | 查看大图 | 向左转 | 向右转



人的一生中难免有撒谎的时候,但难的是一辈子都在撒谎。在同这种困难的斗争中,中国人取得了不俗的战绩。



报告，诺奖距离我朝还有十光年左右

网上的漫画。这么严肃的事情，有些国人竟然还讽刺！



中国科学家

为什么连边都挨不上呢？

俺们的后辈当科学家的盼头在哪里呢？

中国人为什么出不了学术大师？

第一、中国人没有是非观！

和稀泥；是非不分；颠倒黑白。

设想情景：如果诺贝尔奖由中国人评选，会是什么样的人得奖？

第二、中国人心胸狭窄，不容异己！

百家争鸣成就了春秋战国时期中国文化繁荣；

百花齐放在二十世纪是一个“钓饵”。

中国的学术界如今依然是“没有学术批评”的净土。

第三、心灵不纯，动机不纯

升官发财（科举）才是中国人读书的真正动力

“学得文武艺，货与帝王家”

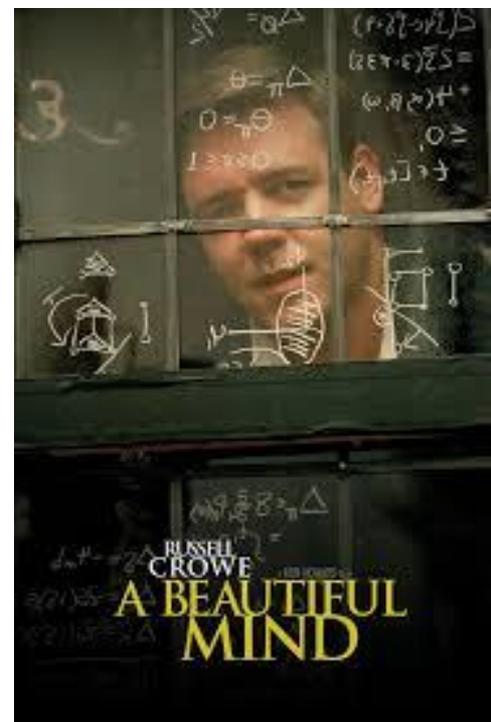
“天子重英豪，文章教尔曹”

Nash, Turing, Cantor这些近似疯子一样的人物，中国有吗？我们肯让他们活下去吗？

明朝王守仁的‘怎样当圣贤’的纯粹还见得到吗？

层次呀层次

- 心智愉悦
- 理解自然、造福人类
- 获得诺贝尔奖
- 获得诺贝尔奖金



子牙兄垂钓，

在权、在利、在那个啥，

在**anything but fish!**



第四、缺乏学术传统，未见过真学问



所谓民国以后的一批大师们，多是《围城》人物。



第四、缺乏学术传统，未见过真学问

2013.10.10日，论及《柳如是别传》同《Die Welt als Wille und Vorstellung》相比，简直不值得一提；

13日晚辗转反侧，不知是否将它纳入讲座；

14日晨见到李继宏先生《陈寅恪走上神坛之路》，内有

“一个人生幸福、学问寻常的 历史学者” 的评价。诚哉斯言！

-仔细想来，民国的学问家，除了钱钟书有《管锥编》《谈艺录》可资学问的凭证以外，其他大抵平平。不过，考虑到在民国时人们普遍是文盲，会背诵《百家姓》加上会说‘豪赌油肚’，就应该算是学贯中西了。大学里的普通教员被恭维为大师，也就不足为怪了。

婢婢自誉，不知有夫人也！

—木心《素履之往》

1998年，当我听说 PRL上的文章代表物理学的最高水平时，一直不知道该如何描写这种心态。

你只看到你想看到的东西

你只看到你想看到的东西

茶水当作尿液进行尿检；

保姆当亲妈，没奶，断定孩子营养不良

科学成就所带来的精神和物质回报是巨大的，因此科学界这一聪明人扎堆的地方从来都不缺少骗子！然而，科学注定是大浪淘沙的事业，骗子和它们的事迹因此注定是一场笑话。本报告分析科学史上一些著名的学术不端行为，希望有助于大家提高辨别能力并引以为戒。

画人难，画鬼易。凝聚态理论物理之争

中国人为什么出不了学术大师？

中国人没有是非观！

和稀泥；是非不分；颠倒黑白。

设想情景：如果诺贝尔奖由中国人评选，会是什么样的人得奖？

中国人心胸狭窄，不容异己！

百家争鸣成就了春秋战国时期中国文化繁荣；

百花齐放在二十世纪是一个“钓饵”。

中国的学术界如今依然是“没有学术批评”的净土。

中国人心灵不纯，读书动机不纯

升官发财（科举）才是中国人读书的真正动力

“学得文武艺，货与帝王家”

“天子重英豪，文章教尔曹”

科学家： 中央组织部~中国科学院？

中国科学院，如果没有国家赋予“院士”的特殊利益，号召力在哪？中国科学院院士吸引各路豪杰申请，是因为“科学”吗？是因为“中国科学”吗？是因为“中国科学院”吗？

研究基金是为了装兜里的？

Nash, Turing, Cantor这些近似疯子一样的人物，中国有吗？我们肯让他们活下去吗？

没有学术传统，眼皮子浅

陈寅恪：《柳如是》

Schopenhauer: Die Welt als Wille und Vorstellung

所谓民国以后一批大师们，多是《围城》人物。

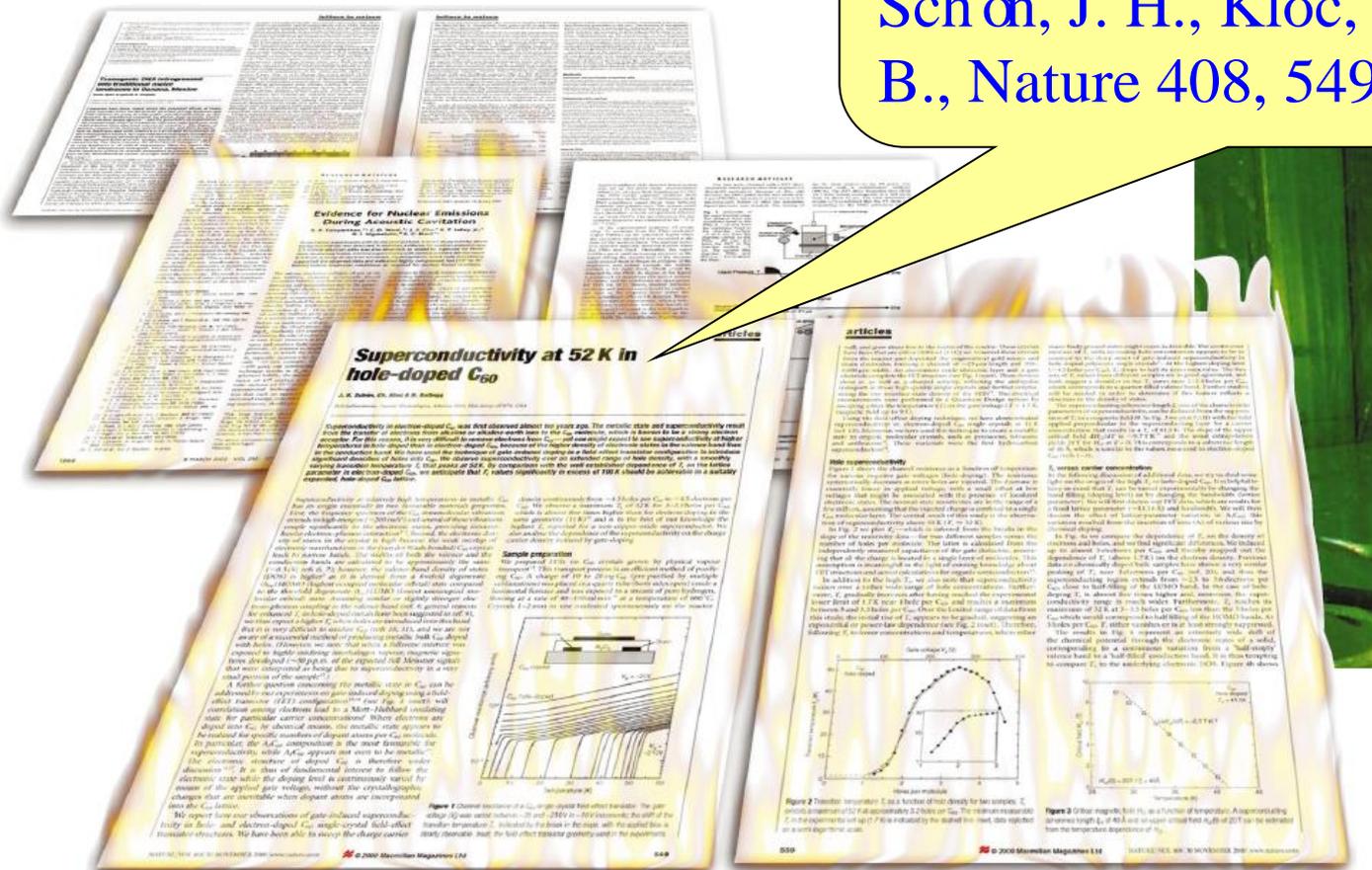
李贺：少年心事当拏云

做科学家的底线：不造假

Superconductivity at 52K in hole-doped C60

Schön, J. H., Kloc, B., Batlogg, B., Nature 408, 549-552 (2000).

news feature



Publish, and be damned...



报告，诺奖距离我朝还有十光年左右

这是一个出产《三“虫”门》的国度。王立军是29所大学教授的国度！

人们不去讨论真伪，而是谈论动机、利益、平衡等“诛心学”概念！

学骗

妓女资深不从良！

骗子也敢表示“在北大物理系读博士期间养成的严谨求实的作风和心无旁骛做学问的习惯，一直伴随至今。”





至于杨沛宜

可能因为按照某些标准不能‘拔份儿’，她的声音就成了林**的了。其后，这个小女孩名利双收，但也梦魇缠身。当然，她那时还是个孩子，是大人们造成的这一切。

这是一个奥运开幕式演唱都公然造假的过度！

有一天你不在，我不在了，物理所还在；
就算物理所不在，物理学还在。进入不了物理学的pantheon的，拿物理学当跳板的，就不是物理学家

没学懂物理的，没对物理学有贡献的，算不得物理学家。掌握枪杆子也没用！！

王正敏院士自知自己抄袭了Ugo Fisch教授的名著《Microsurgery of the Skull Base》这一事实，为了不被中国同行发现，所以想方设法阻止我们去翻译Fisch教授这本耳鼻喉科领域的经典之作。 ，所以一直按照数年前与Fisch教授的约定（王正敏院士也是约定人之一）希望进行翻译以介绍给中国同行，推动本专科的发展。最后，在Fisch和我们的共同努力下，王正敏院士不得不改变初衷，在此背景下 Fisch教授写了下面这封信给王正敏院士（并同时转发给另一位同志和我），字里行间对王正敏院士先前拒绝翻译的理由和做法明确表明了态度。当然王正敏院士见到这封信后又对我采取什么样的阴谋迫害以后再叙述吧。因为目前王正敏院士位高权重，为防止王正敏采取一些非常措施影响其他人，我对这封信在丝毫不改变原意的情况下作了点技术处理（删掉了可能涉及的其他人）。

学术传统、学术氛围

人们还在积累血腥的第一桶金

艺术在质不在量

人格即风格—Buffon

抱怨管理的错误，其恰在于某些‘应时科学家’的不道德。某种意义上说，还是我们的国家在学习当科学家的初级时代。

一些能人因为学术不端而被钉在历史的耻辱柱上。但是，有个地方的猥琐的学术造假者，因为水平太低，连上历史的耻辱柱都不够格。偷着乐吧！

想当真正的科学家， 把手拿开



凡是真正的诗人， 必定是第一流的批评家。

-法国诗人瓦莱里

The fact that Bardeen was regarded as an authority in superconductivity at the time is evidenced by the fact that the New York Times wrote a story on the BCS theory of superconductivity less than a month after it appeared in print[16].

其获奖的操作也比较skillful!

有意无意的不端为什么横行？

借助别的力量而不是工作本身！

冷聚变

Many physicists never try to understand physics

But I am suggesting that many participants unwittingly or perhaps in some cases half-wittingly (不好拿捏) aided, and thus enabled, the deception in both situations for the same self-serving reasons.

如果有个辉煌被充分利用以后而不愿被人提起，那就一定有猫腻！

Science or Science Fiction

They are the best
qualified to question BCS theory
but have no incentive
to do so.

Many physicists never try to understand physics

1992年我从一个租书摊上借了一本武侠小说《神眼劫》-曹若冰

“任何人能挖取‘神眼’房天义一对目珠者，以奇剑‘青萍’作酬，为示信于天下，‘青萍宝剑’每夜悬在本庙神殿中，任意观看，但妄起贪心者，杀无赦！”

双眼自将秋水洗，
一生不受古人欺！

—袁枚《随园诗话》

未拆封的邮件

Arxiv

Why is NASA scientist and Nobel Laureate John C. Mather the greatest science fraud in history:



1. In terms of the public money he consumed (~ hundreds of millions of US taxpayer dollars for the COBE Satellite alone.)
2. In terms of the complexity of the technology involved in perpetrating the fraud (~ then current space age technology.)
3. In terms of the size of the team he led (~ all told, nearly a thousand individuals wittingly or unwittingly collaborated in the fraud).
4. In terms of the sheer number and the volume of bogus publications he coauthored.
5. In terms of the ludicrous nature of his scientific bungs that later morphed into diabolic fraud.
6. In terms of the unprecedented protectionism he received from noble quarters in the academic sphere, and from US Government employees and powerful members of the US Congress.
7. Finally, and most importantly, people do not realize that Mather's fraud did not start with nor end with the COBE Satellite fraud of 1990. He had reported the same bogus discovery in 1975. He then claimed to have extended and refined that result in 1990. After 1990 and continuing to this day, his insistence that his discovery is intact has shaped the > \$10 billion James Webb Space Telescope. **The John Mather reign of fraud is now nearly four decades old and has cost the US taxpayers in excess of \$ 10 billion.**

A public education message from www.flibido.com ©2011

THE GREAT PHYSICS FRAUD TRIO



Who?	Victor Niess	Jan Hendrik Schön	John Cronweb Mather
Nationality	Belgian	German	American
Ph. D.	Dramstadt 1992	U Konstanz 1997	UC Berkeley 1974
Venue of experiment	Laboratory	Laboratory	Earth-orbiting satellite
"Discovered" what?	New element Z=108/109	Organic semiconductor	Big Bang Cosmology relic blackbody spectrum
Worked where?	Lawrence Berkeley Lab	AT&T Bell Labs	NASA Goddard (US Govt)
Accolades?	1	Miss. awards	Nobel Prize 2006 +-
Discovery reported:	~ 1998	~ 2000	1990
Fraud exposed:	~ 2002	~ 2001	2001
Who investigated?	Lawrence Berkeley Lab	Bell Labs	NASA HQ
Finding from above?	Misstated data	Fabricated data	Not disclosed
Finding made public?	Yes	Yes	No
Visible disciplinary action:	Lost job	Lost job	Job frozen at pre-Nobel Prize level
Others tried to replicate his discovery?	Yes, failed	Yes, failed	Yes, failed twice
Admitted fault?	No	Partially	No. Promulgates discovery.
How high did it get?	Scientific community	Derman courts	The White House
Order-of-magnitude damage \$ (billions)	~5	8	~100
Scientific establishment stance?	Righteous indignance	Sacrilegious historic	Fraud? What fraud! He's an inspiration to our children
Scientific media did what?	Tore him apart	Tore him apart	Self-singing his praises
Status today:	Teaches in US (7)	Not known (in Germany)	At his frozen NASA job

Same journey, different outcome!

©www.flibido.com 10/2011

Neutrino faster than light

So naïve an experiment, why they did it? Do they understand physics?

They rely on chance detection of a particle that rarely involves in interaction. Have they ever got any reliable data in this field (I mean high-energy physics, cosmology)

一切只有少数人掌握数据或者证据的研究领域，都是可疑的！！

揭秘这个整个骗人的行业！！！！

一个寡言少语的、不入流的教授教一个凝聚态实验物理，老是被嘲笑的研究生，然后慢慢接近秘密的中心。