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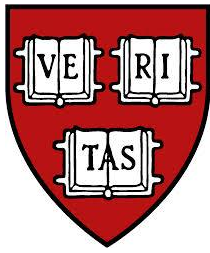
The value of perpetual resources – Journal &  
Books Backfiles

Presented by Catalin Teoharie,

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# The Value of Journal Backfiles



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References



## Broken

P.W. Higgs  
Tait Institute of Mathematics, University of Edinburgh

## Reference

- 1) J. Goldstone, Nuovo Cimento 15, 854 (1959). View Record in Scopus
- 2) J. Goldstone, Phys. Rev. 124, 963 (1961). View Record in Scopus
- 3) A. Klein, Phys. Rev. 119, 952 (1960). View Record in Scopus
- 4) W. Gilbert, Phys. Rev. 124, 953 (1961). View Record in Scopus

**BROKEN SYMMETRIES, MASSLESS PARTICLES AND THE GOLDSTONE THEOREM**  
P. W. HIGGS  
Tait Institute of Mathematics, Physics, University of Edinburgh, Edinburgh 8, Scotland  
Received 27 July 1964

Recently a number of people have discussed the Goldstone theorem. It is the aim of this note to state a Lorentz-invariant theory which violates an internal symmetry operation of that theory must contain a massless scalar particle. Klein and Lee [1] showed that this theorem does not necessarily apply in non-relativistic theories and implied that their consideration would apply equally well to Lorentz-invariant field theories. Gilbert [2], however,

Volume 13, number 2  
PHYSICS LETTERS  
1964

$\varphi_1(x), \varphi_2(x)$  which is invariant under the phase transformation

$$\varphi_1 \rightarrow \varphi_1 \cos \alpha + \varphi_2 \sin \alpha, \quad (1)$$

$$\varphi_2 \rightarrow -\varphi_1 \sin \alpha + \varphi_2 \cos \alpha.$$

Then there is a conserved current  $J_\mu$  such that

$$\partial_\mu J^\mu = 0, \quad (2)$$

We assume that the Lagrangian is such that symmetry is broken by the spontaneous breaking of the vacuum expectation value of  $\varphi_1$ . Goldstone's theorem is proved by showing that the Fourier transform of  $\langle 0 | T \varphi_1(x) \varphi_1^\dagger(y) | 0 \rangle$  contains a term

$$2i \int d^3p \delta(p_0) \delta^3(\mathbf{p}) \varphi_1(\mathbf{p}), \quad (3)$$

where  $\varphi_1$  is the momentum, as a consequence of Lorentz-invariance, the conservation law and eq. (2).

It is then noted that the result in the non-relativistic case is avoided if the most general form of this Fourier transform is now, in Gilbert's notation,

$$F.T. = \frac{1}{(2\pi)^4} \int d^4p \delta(p_0) \delta^3(\mathbf{p}) \varphi_1(\mathbf{p}) \varphi_1^\dagger(\mathbf{p}), \quad (4)$$

where  $\varphi_1$  which may be taken as  $(1, 0, 0, 0)$ , plus an "arbitrary" vector  $\mathbf{a}$ . The conservation law then reduces to eq. (2). The general form

$$F.T. = \frac{1}{(2\pi)^4} \int d^4p \delta(p_0) \delta^3(\mathbf{p}) \varphi_1(\mathbf{p}) \varphi_1^\dagger(\mathbf{p}) + C \varphi_1(\mathbf{p}) \varphi_1^\dagger(\mathbf{p}), \quad (5)$$

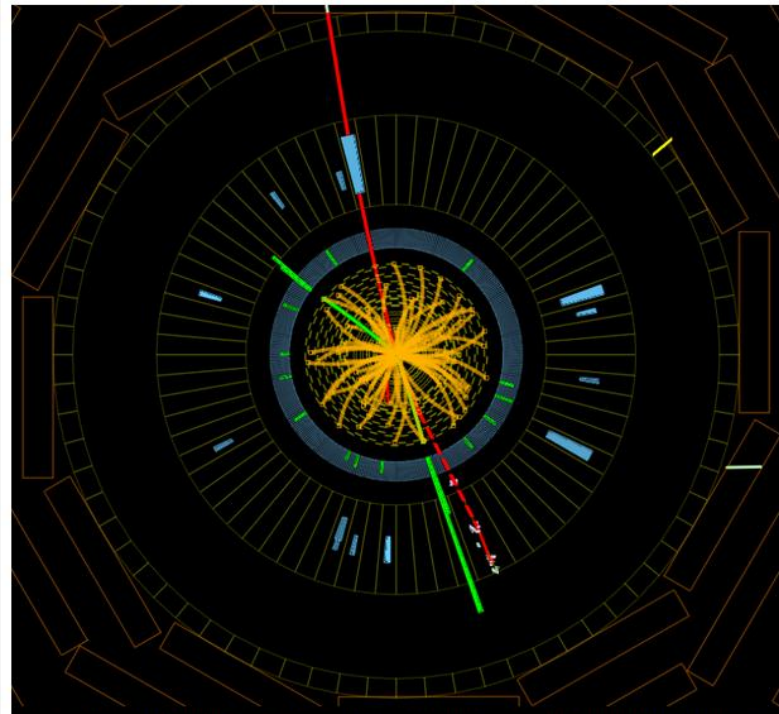
It turns out, on applying eq. (2), that all three terms in (5) can contribute to (3). Thus the Goldstone theorem fails if  $\mathbf{a} \cdot \mathbf{p} = 0$ , which is possible only if the other terms vanish. Gilbert's remark that no special irrotational vector  $\mathbf{a}$  is available in a Lorentz-invariant theory applies to rule out this possibility in such a theory.

There is however a class of relativistic field theories in which a vector  $\mathbf{a}$  does indeed play a part. This is the class of gauge theories, where an auxiliary unit timelike vector  $\mathbf{a}_\mu$  must be introduced.

## ATLAS and CMS submit Higgs-search papers

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Protons collide in the CMS detector at 8 TeV, forming Z bosons which decay into electrons (green lines) and muons (red). Such an event is compatible with the decay of a Standard Model Higgs boson (Image:CMS)

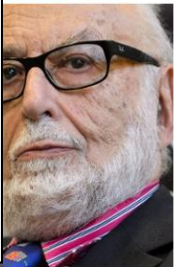
The ATLAS and CMS collaborations today submitted papers to the journal *Physics Letters B* outlining the latest on their searches for the Higgs boson. The teams report even stronger evidence for the presence of a new Higgs-like particle than announced on 4 July.

On 4 July the experiments reported indications for the presence of a new particle, which could be the Higgs boson, in the mass region around 126 gigaelectron volts (GeV). Both ATLAS and CMS gave the level of significance of the result as 5 sigma. On the scale that particle physicists use to describe the certainty of a discovery, one sigma means the results could be random fluctuations in the data, 3 sigma counts as an observation and a 5-sigma result is a discovery.

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Peter Higgs (left) and Francois Englert won the Nobel Prize in Physics 50 years after theorising the field that gives fundamental particles their mass. Photograph: Getty


And so the wait is over. Half a century after he wrote down a theory that would change the world, Peter Higgs, the Edinburgh-based researcher, has won the Nobel Prize in Physics.

Higgs, 84, shares the 8m Swedish kronor (£775,000) prize – and no shortage of kudos – with Francois Englert at the Free University of Brussels for showing how fundamental particles get their masses. Before the theory, the answer to this basic question was unknown.

The Royal Swedish Academy awarded the prize for "the theoretical

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 **Journal of Molecular Biology**  
Volume 20, Issue 3, October 1966, Pages 483–496

**Host specificity of DNA produced by *Escherichia coli* 9. Host-controlled modification of bacteriophage fd\***

Werner Arber  
Institute of Molecular Biology University of Geneva, Switzerland

**Abstract**

Host-controlled modification is shown to occur with four related male-specific bacteriophage strains containing single-stranded DNA: fd, f1, M13 and F12. All four phages are restricted and modified in bacteria with B host specificity, the first three also in P1-lysogenic cells. None of the phages is restricted in strains with K host specificity or carrying the episome RTF-2. The bacterial characters  $\lambda$  and  $\lambda$  which control the B host specificity of  $\lambda$  DNA, are also responsible for restriction and modification of phage fd. The apparent difference in K restriction, which is encountered by  $\lambda$ , but not by fd, is thought to find its explanation in the small molecular size of fd DNA, on which K specificity sites might be lacking. Indeed, restriction and modification act on the DNA of fd: DNA from fd phages which infect restricting host cells is partially broken down to acid-soluble products. On the other hand, one-cycle growth of fd.B on non-restricting and non-modifying  $Kr^+m^-$  bacteria yields, among a majority of progeny of fd  $Kr^+m^-$  phage, some phage particles with parental B host specificity, and they also have parental DNA as shown by density labelling of the infecting phage. The efficiency of such transfer of parental fd.B DNA was found to be 0.12 if measured after 18 minutes incubation of the infected cells. The implication of this transfer on the mechanism of phage DNA replication is discussed.

**References**

Arber, 1965 W. Arber  
Ann. Rev. Microbiol., 19 (1965), p. 365  
[View Record in Scopus](#) | [Full Text via CrossRef](#) | [Cited By in Scopus](#) (21)

Arber and Dussoix, 1962 W. Arber, D. Dussoix  
J. Mol. Biol., 5 (1962), p. 18  
[Article](#) | [PDF \(1185 K\)](#) | [View Record in Scopus](#) | [Cited By in Scopus](#) (45)

Arber and Latate-Dorolle, 1961 W. Arber, C. Latate-Dorolle  
Path. Microbiol., 24 (1961), p. 1012

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*J. Mol. Biol.* (1966) **20**, 483–496

## Host Specificity of DNA produced by *Escherichia coli*

### 9. Host-controlled Modification of Bacteriophage fd

WERNER ARBER

*Institute of Molecular Biology  
University of Geneva, Switzerland*

(Received 11 May 1966)

Host-controlled modification is shown to occur with four related male-specific bacteriophage strains containing single-stranded DNA: fd, f1, M13 and F12. All four phages are restricted and modified in bacteria with B host specificity, the first three also in P1-lysogenic cells. None of the phages is restricted in strains with K host specificity or carrying the episome RTF-2. The bacterial characters  $\lambda$  and  $\lambda$  which control the B host specificity of  $\lambda$  DNA, are also responsible for restriction and modification of phage fd. The apparent difference in K restriction, which is encountered by  $\lambda$ , but not by fd, is thought to find its explanation in the small molecular size of fd DNA, on which K specificity sites might be lacking. Indeed, restriction and modification act on the DNA of fd: DNA from fd phages which infect restricting host cells is partially broken down to acid-soluble products. On the other hand, one-cycle growth of fd.B on non-restricting and non-modifying  $Kr^+m^-$  bacteria yields, among a majority of progeny of fd  $Kr^+m^-$  phage, some phage particles with parental B host specificity, and they also have parental DNA as shown by density labelling of the infecting phage. The efficiency of such transfer of parental fd.B DNA was found to be 0.12 if measured after 18 minutes incubation of the infected cells. The implication of this transfer on the mechanism of phage DNA replication is discussed.

#### 1. Introduction

Occurrence of host-controlled modification with a bacteriophage strain carrying its genetic information on a single-stranded DNA molecule was recently observed by Hoffmann-Berling (personal communication), who found that his phage fd (Hoffmann-Berling, Marvin & Dürwald, 1963) is restricted in male strains of *Escherichia coli* B, in which the rare plaque formers undergo host-controlled modification. This means that fd.B, grown on B, is no longer restricted on B. In this respect, fd behaves like phage  $\lambda$  (Arber & Dussoix, 1962). However, fd.B does not encounter any restriction in *E. coli* K12, whereas  $\lambda$ .B is restricted in the host K12.

A number of independent isolates of male-specific bacteriophages has been shown to be very closely related to phage fd (Zinder, Valentine, Roger & Ssockenius, 1963; Hofschneider, 1963; Salivar, Tragoloff & Pratt, 1964). In particular, they all have the form of a flexible rod of some 9000 Å length and 50 Å diameter (Marvin & Hoffmann-Berling, 1963; Hofschneider, 1963; Zinder et al., 1963). They contain a single-stranded DNA molecule of some 5000 nucleotides only (Hoffmann-Berling, Marvin & Dürwald, 1963; Salivar et al., 1964), the molecular weight of which, namely about  $1.6 \times 10^6$ ,

483

## The Journal Backfiles Value Equation

$$\begin{array}{l} 10\% \text{ USAGE}^* \\ 17\% \text{ CITATION}^{**} \end{array} = \text{IMPACT}$$

# A significant sample to explore backfile usage and citation!

- Top Ranked Institutions provide a guide to smarter content selection
- 4 years (2008-2012) of usage and citation data from these institutions was analysed
- They are namely:

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**Harvard University**

**Imperial College London**

**MIT**

**Princeton University**

**Stanford University**

**University of California, Berkley**

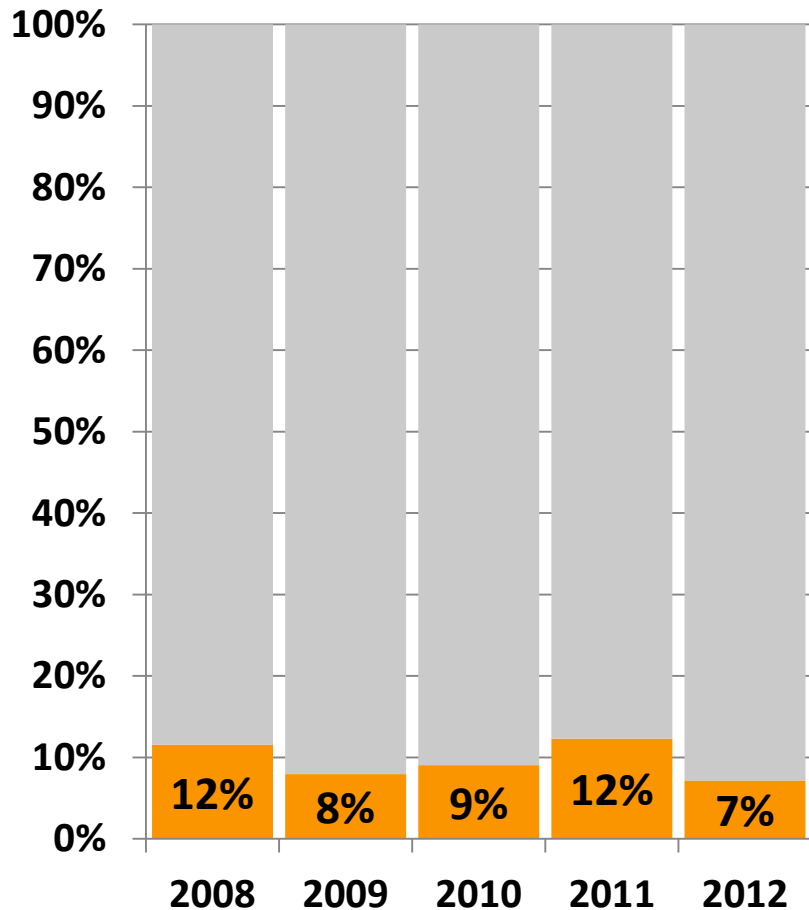
**University of Cambridge**

**University of Chicago**

**University of Oxford**

**USAGE OF PRE-1995 ARTICLES IN THE  
CONTEMPORARY ARTICLE OUTPUT (2008-  
2012) OF THE THES TOP 10\***

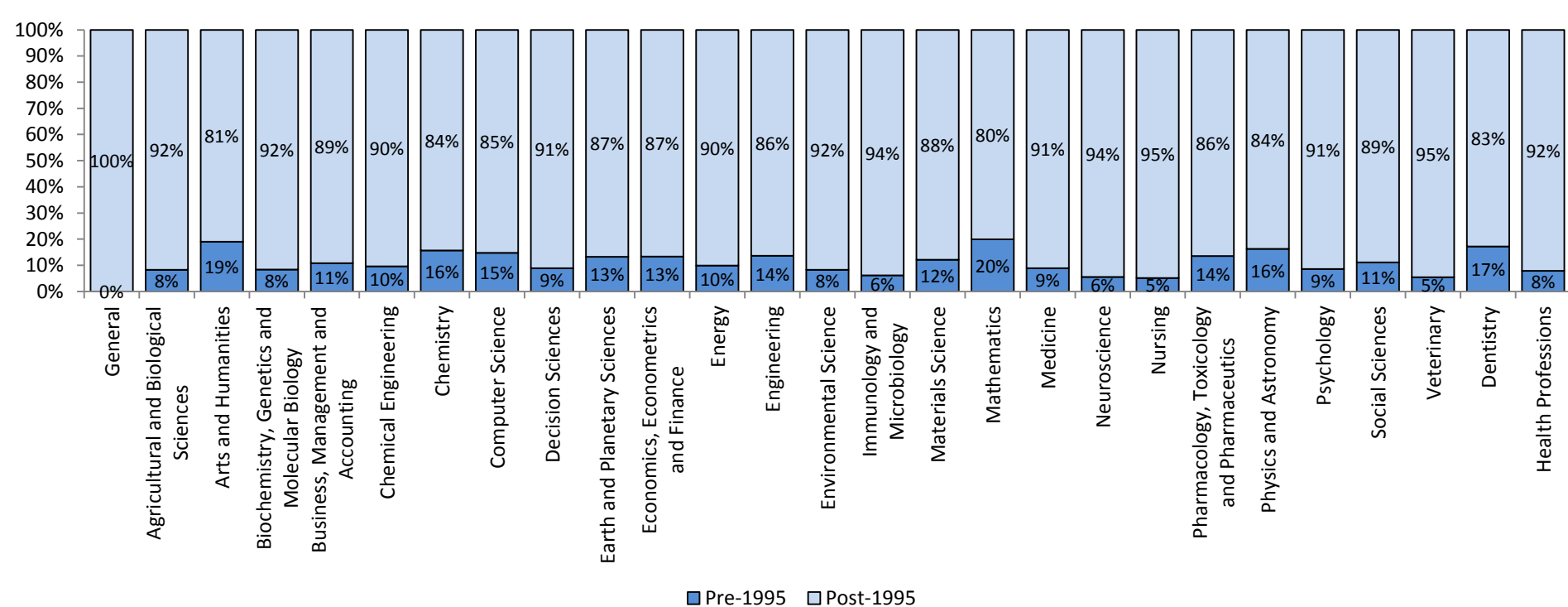
## Ratio of backfile articles used by these Top Ranked Institutions



The pre-1995 article usage is around 10% of the total article set used

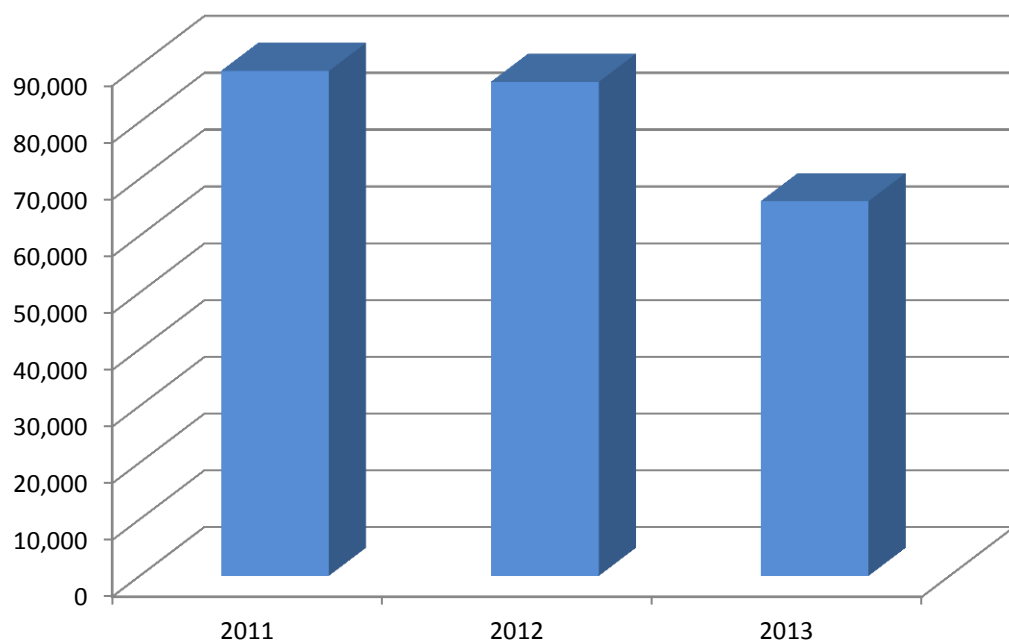
# Spread of journal backfile usage by Subject Area

Note that usage of journal backfiles is high in fast moving fields such as Computer Science and Pharmacology, Toxicology & Pharmaceutics



\*A journal may belong to several subject categories

## Backfiles rejected requests in Romania shows around 7% actual usage



### Top users are:

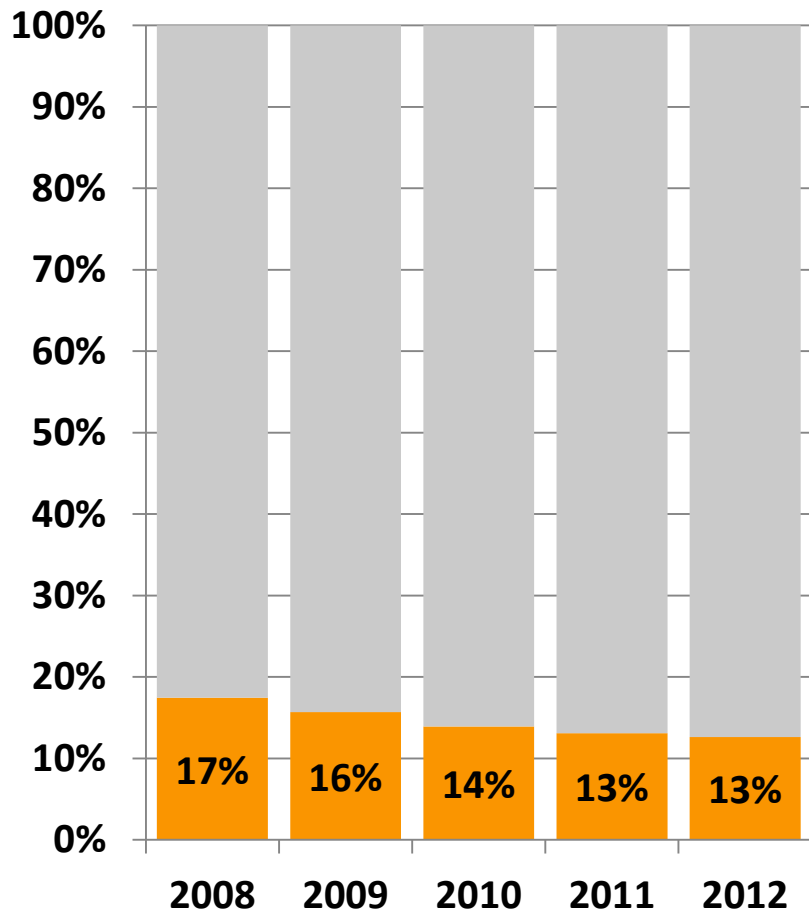
Polytechnica Bucharest  
Bucharest University  
Babes Bolyai  
IFIN  
UAIC  
Romanian Academy  
UMF Carol Davila  
National Institute For R&D  
of Isotopic And Molecular Technologies

## Usage of backfiles increases after getting actual access

**A total of 94 Romanian institutions are trying to get access to backfiles**

**CITATION OF PRE-1995 ARTICLES IN THE  
CONTEMPORARY ARTICLE OUTPUT (2008-  
2012) OF THE THES TOP 10**

# Backfile articles are cited heavily in contemporary research output



Publication Year	Number of articles referenced	Number of articles produced
2008	684,741	58,150
2009	872,277	60,014
2010	1,142,972	63,516
2011	1,747,991	67,648
2012	2,004,218	70,179

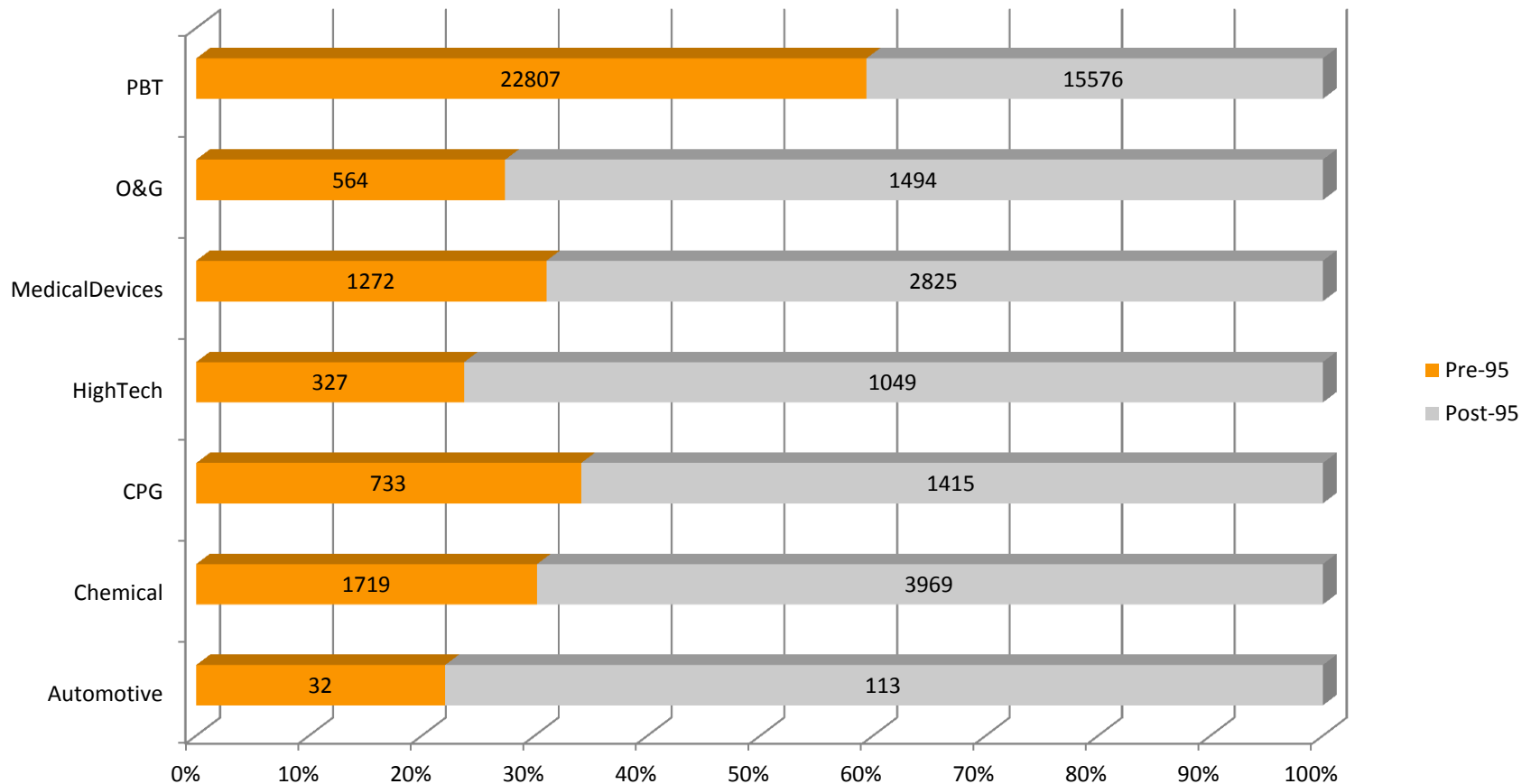
- **Having Backfiles is more than just having a sustainable archive of classic articles**
- **Pre-1995 journal articles have a sustainable value in terms of citation in the range of 13% - 17%**
- By 2020, the ratio of pre-1995 articles referenced in contemporary article output is projected to be about 10% of all articles referenced and 8% by 2030

Source: Elsevier Web Analytics Department, Scopus Data

**CITATION OF PRE-1995 ARTICLES IN THE  
INNOVATION OUTPUT THE WORLD'S TOP  
COMPANIES**

# The world's top companies create inventions based on classic articles

## Articles cited in patents by Industry - Global Top 20 Companies



## Summary of journal backfile value

- At top global academic institutions:
  - Backfile articles account for **ca. 10%** of articles used
  - Backfile articles account for **up to 17%** of citations in contemporary research output
- Backfile articles will still be cited at relatively high levels 20 years into the future
- The world's top companies base real inventions on backfile articles, up to 60% in the case of Pharma-Biotech
- **High ROI is guaranteed from an investment in journal backfiles...**

# Backfile ROI Calculator

SIS-ID		Usage		HQ - SIS			4	5	Size	Corporate	Full Text Article Usage	
3	1	Post 1994 Usage 2012 Full Year	Pre 1995 Usage 2012 Full Year	BF Abstract Usage	BF Sold	BF supp 1 Sold	BF supp 2 Sold	Offered	Medium	Applicable Discount %	ROI in years	Thousands
3M Company												
1	Agricultural and Biological Sciences	5,436	0	3	N	N		N	99,824	-		5
2	Biochemistry, Genetics and Molecular Biology	5,222	0	3	N	N		N	206,558	-		5
3	Business, Management and Accounting	1,931	0	15	N	N		N	26,340	-		2
4	Cell Press	12	0	3	N			N	20,768	-		1
5	Chemical Engineering	13,873	0	5	N	N		N	40,240	-		15
6	Computer Science	2,490	0	4	N	N		N	58,306	-		2
7	Decision Sciences	1,767	0	1	N			N	26,188	-		2
8	Earth and Planetary Sciences	2,747	0	7	N	N		N	106,962	-		2
9	Economics, Econometrics and Finance	394	0	2	N	N		N	27,440	-		1
10	Energy and Power	5,404	0	0	N			N	49,732	-		5
11	Engineering and Technology	9,951	0	1	N			N	154,880	-		10
12	Environmental Science	4,467	0	6	N	N		N	57,168	-		5
13	High Energy/Nuclear Physics and Astronomy	525	0	1	N	N		N	90,318	-		2
14	Immunology and Microbiology	1,789	0	0	N	N		N	70,304	-		1
15	Inorganic Chemistry	883	0	0	N	N		N	42,320	-		1
16	Materials Science	30,811	0	76	N			N	142,306	-		30
17	Mathematics	122	0	0	N	N		N	40,210	-		1
18	Medicine and Dentistry	15,652	0	89	N	N	N	N	324,634	-		15
19	Neuroscience	645	0	0	N	N		N	107,712	-		1
20	Nursing and Health Professions	865	0	19	N			N	12,506	-		1



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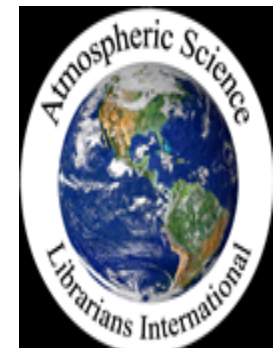
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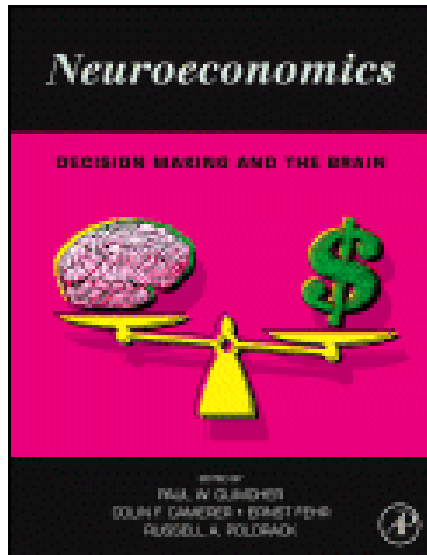
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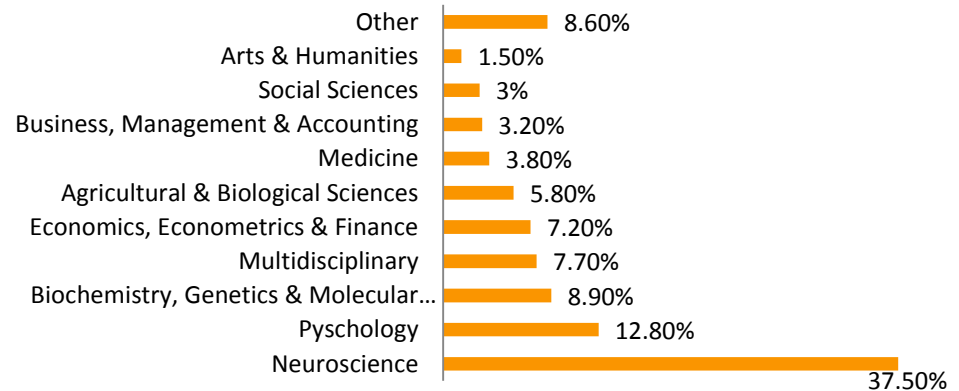
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- 4 BMA Medical Book Awards in 2013
- 3 Notable Computer Book Awards in 2013
- 8 **One of the Best In** InfoSec Book Awards in 2012
- 1 IChemE Basil Brennan Medal Award 2012
- 1 ASLI's Choice Award 2012
- 1 Best Publication Award 2013, Engineering Libraries Division
- 1 Jury Award for Enology



# Book - perfect entry point to a topic



## Journal article coverage (1928 – 2008) referenced in 1 book title



1235 journal articles from across 24 subject areas referenced on 1 book covering the inter discipline of Neuroeconomics

**Source: Scopus data**

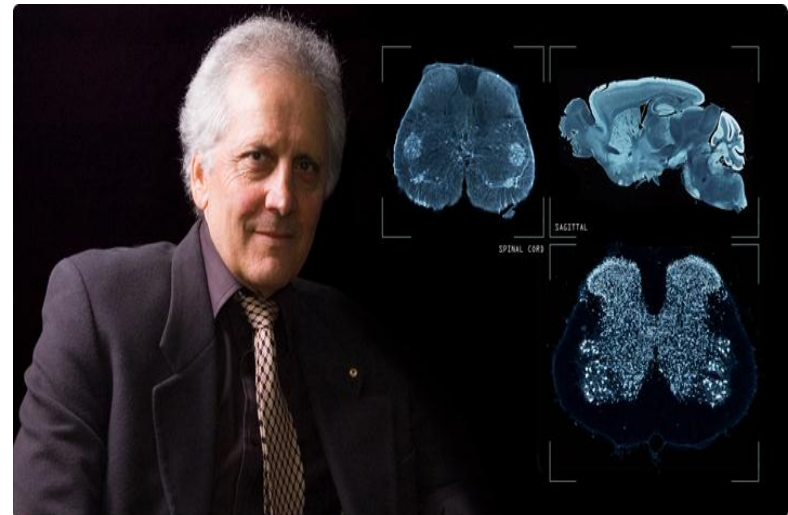
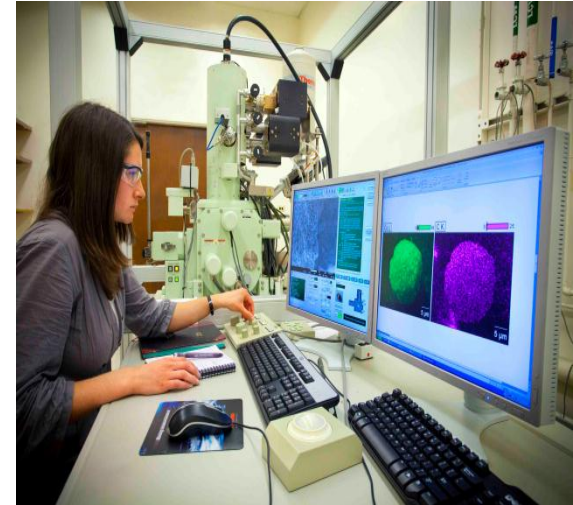
# Nothing is missed – e.g. *Neuroeconomics*

Subject area	# of journal articles referenced	Subject area	# of journal articles referenced
Neuroscience	636	Business, Mgmt & Accounting	54
Psychology	216	Social Sciences	51
Biochem, Genetics & Mol. Biology	150	Arts & Humanities	26
Multidisciplinary	130	Mathematics	24
Economics, Econometrics & Finance	122	<b>Computer Science</b>	<b>23</b>
Agri & Bio Sciences	99	Decision Sciences	19
Medicine	64	<b>Pharma, Toxic &amp; Pharmaceuticals</b>	<b>18</b>
Undefined	13	Engineering	13
<b>Environmental Science</b>	<b>12</b>	Physics & Astronomy	10
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<b>Material Sciences</b>	<b>2</b>	<b>Immunology and Microbiology</b>	<b>2</b>

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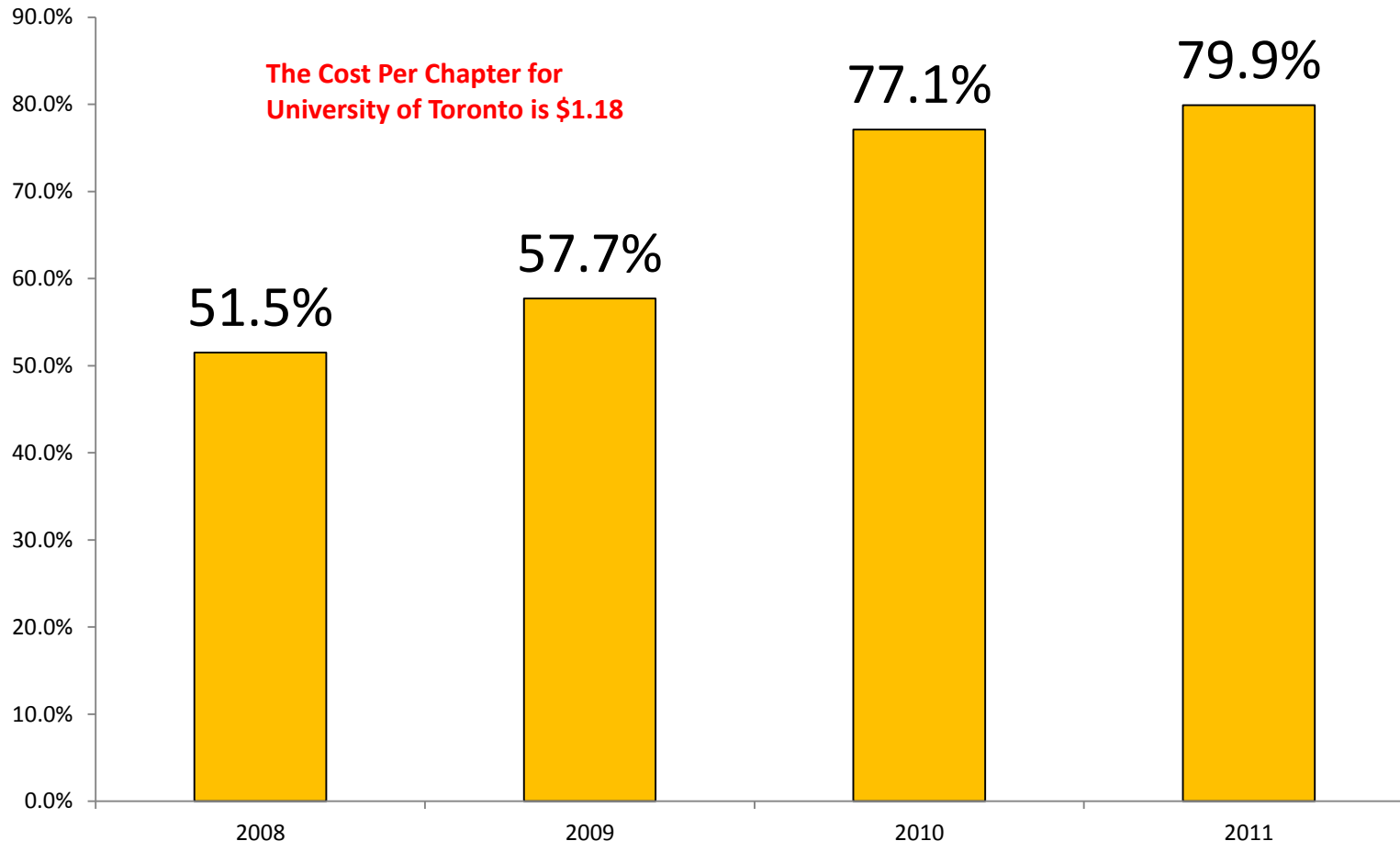
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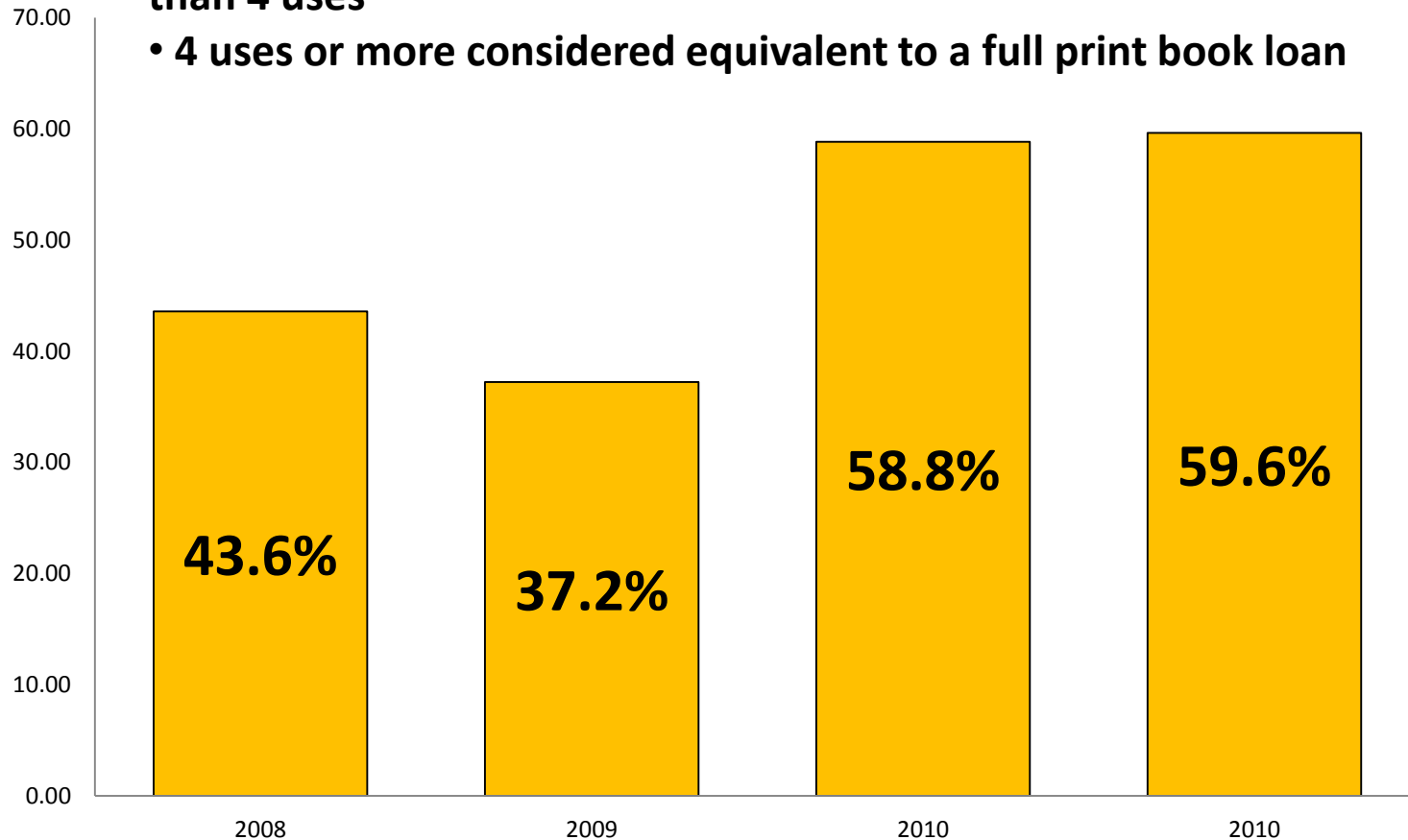
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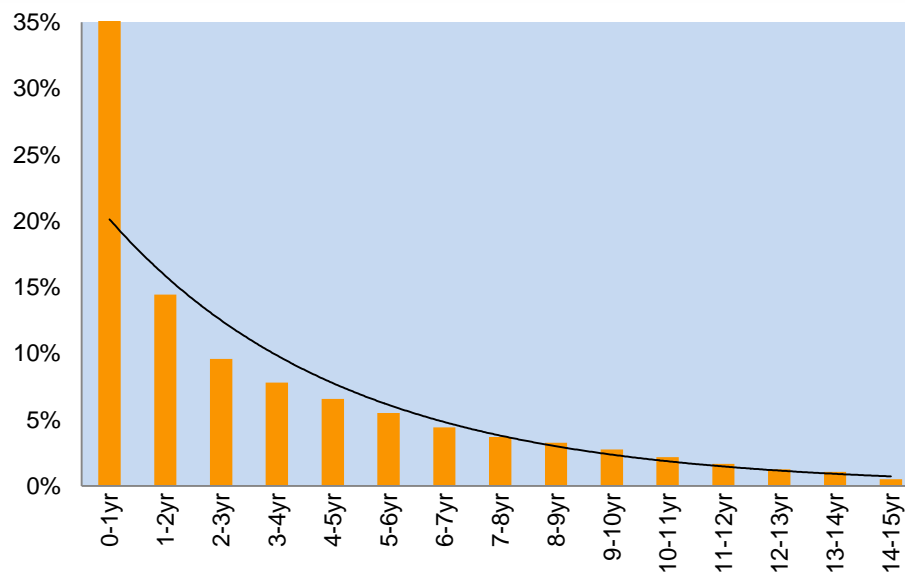
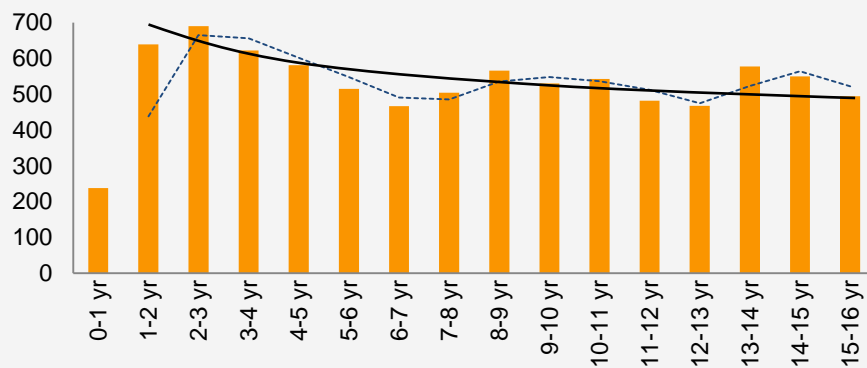
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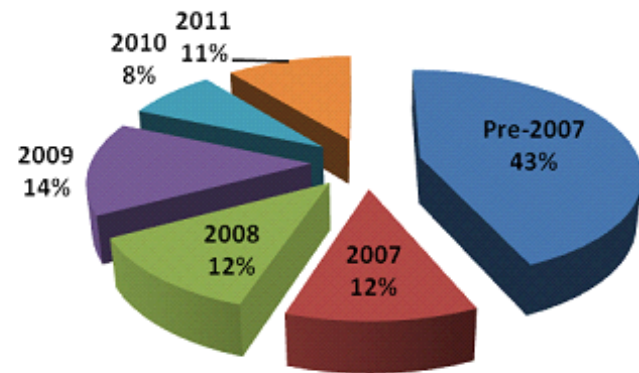




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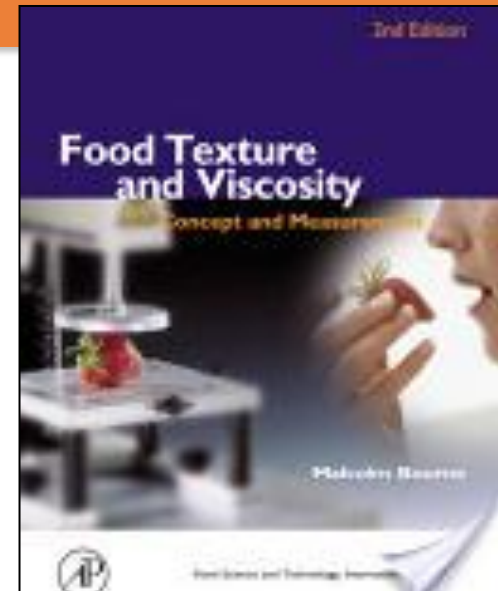


# Notable Titles and Authors



# Agricultural and Biological Sciences

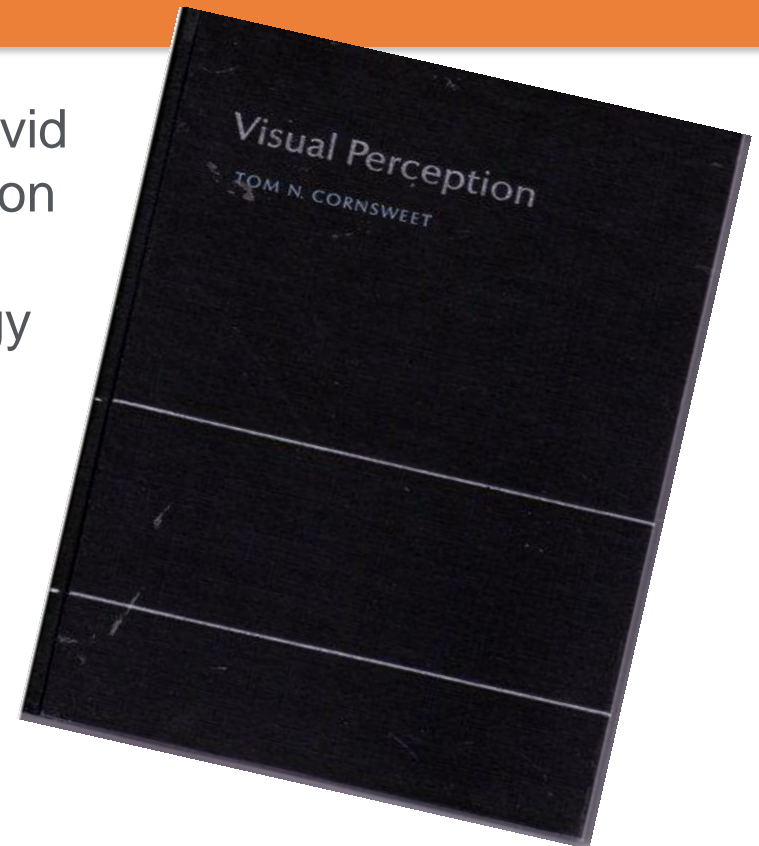
- Malcolm Bourne author of *Food Texture and Viscosity* and recipient of the 2011 IFT Nicholas Appert Award
- T.T. Kozlowski is the 1971 International Society of Arboriculture R.W. Harris Author's Citation Award Winner and has authored or edited numerous books in this collection, such as *Shedding of Plants Parts and Water and Plant Disease*
- John G. Vandenberg, *Pheromones and Reproduction in Mammals*, 1983, by recipient of the prestigious 2002 Holladay Award at NC State





# Biochemistry, Genetics, and Molecular Biology

Tom N. Cornsweet, author of the vivid scientific text: *Visual Perception*, won the UC Berkeley Distinguished Teaching award in 1961 Psychology and the 1984 Charles F. Prentice Medal Award from the American Academy of Optometry





# Chemical Engineering

- *Interfacial Phenomena* by J.T. Davies and E.K. Rideal;
- *The Corrosion Guide* by Erich Rabald
- *Adsorptive Bubble Separation Techniques* by Robert Lemlich
- *Over the Counter Pharmaceutical Formulations* by David D. Braun
- Wolfgang Merzkirch is the author of *Flow Visualization* and the 1998/International Symposium on Flow Visualization Leonardo da Vinci Award Winner





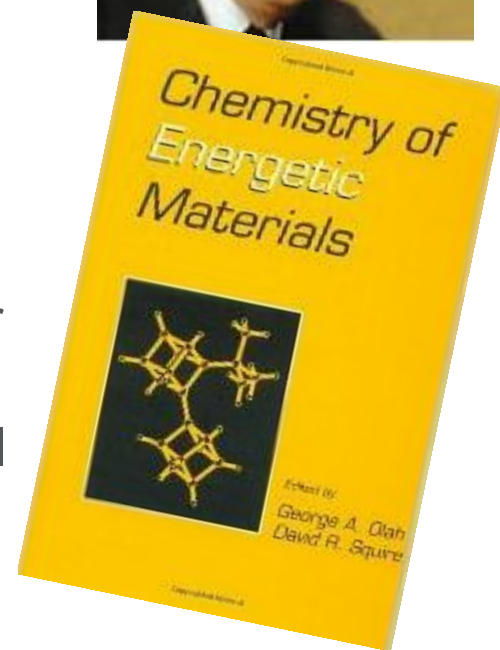
# Chemistry

George A. Olah is the primary editor of the *Chemistry of Energetic Materials*, and recipient of the 1994 Nobel Prize in Chemistry



“In this one book are contributions from three Nobel Laureates and seven members of the National Academy of Science which speaks for itself that this is a very active field of fundamental science with far reaching practical importance.”

-- George A. Olah, 1994 Nobel Laureate in Chemistry and Founding Director of the USC Loker Hydrocarbon Research Institute

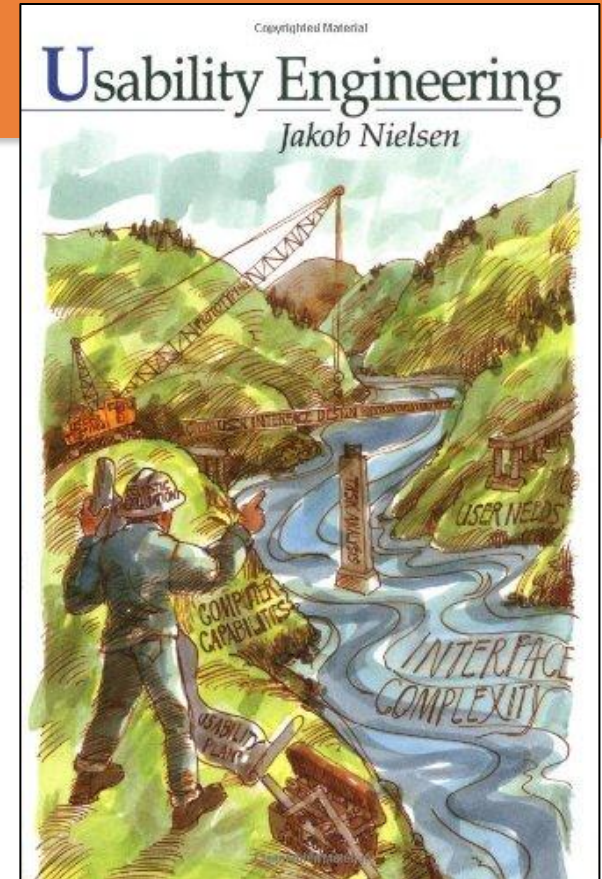




# Engineering

With more than 1,800 titles available and more coming soon, this is a robust collection!

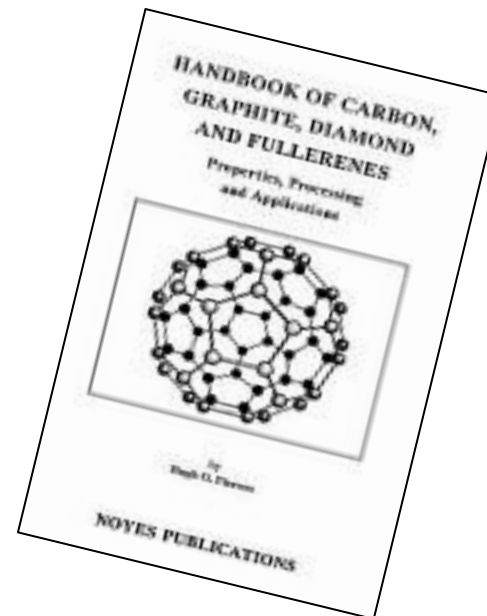
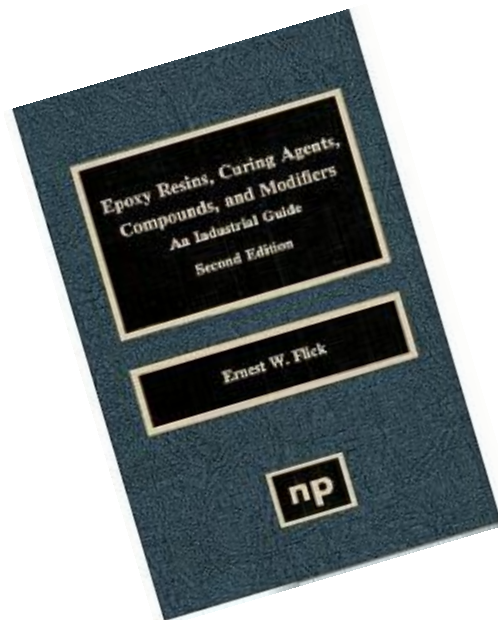
Important titles like *Usability Engineering*, a landmark guide to software design by Jakob Nielsen, are included in the collection





# Materials Science

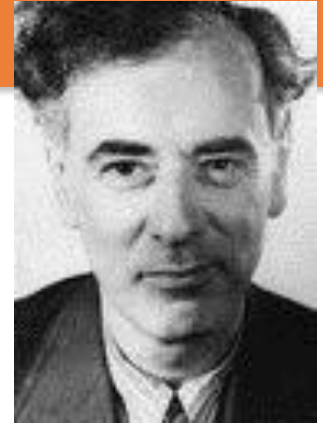
- *Handbook of Carbon, Graphite, Diamonds and Fullerenes* by distinguished teacher and engineer, Hugh O. Pierson
- Second edition of the Ernest W. Flick book, *Epoxy Resins, Curing Agents, Compounds, and Modifiers*



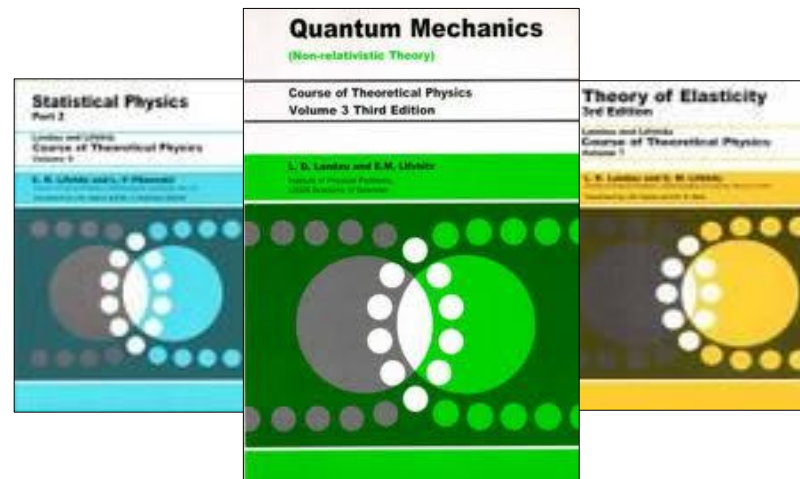


# Physics and Astronomy

- Titles by 1962 Nobel Prize Winner in Physics, Lev Davidovich Landau
  - *Statistical Physics*
  - *Quantum Mechanics*
  - *Theory of Elasticity*
- The collection includes the bestselling book *Quantum Mechanics* by Landau and Lifshitz



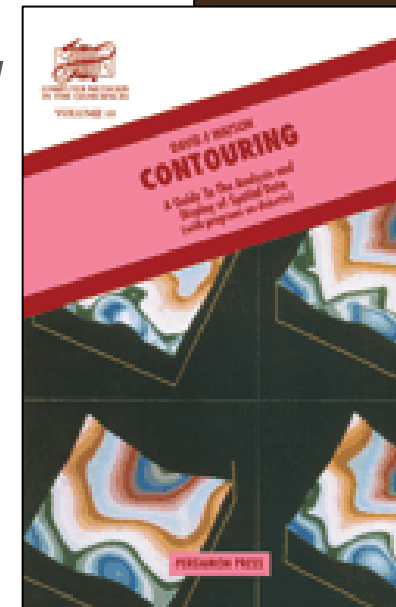
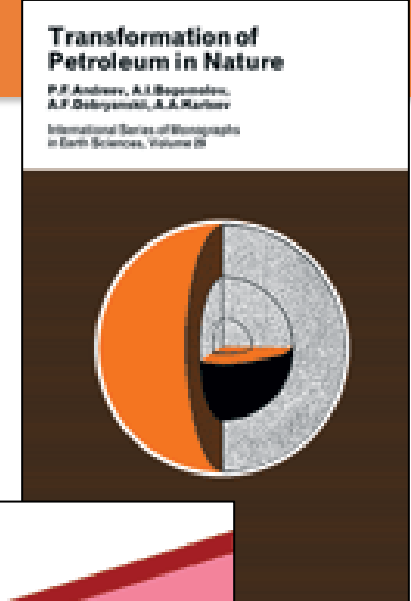
Lev Davidovich Landau





# Earth and Planetary Sciences

- *Transformation of Petroleum in Nature* by P.F. Andreev, including early work in thermocatalytic conversions of hydrocarbons and processes of spontaneous alteration of organic matter
- *Contouring, A Guide to the Analysis and Display of Spatial Data* by David F. Watson, an intriguing piece on how Contouring allows a three dimensional view in two dimensions, and is a fundamental technique to represent spatial data





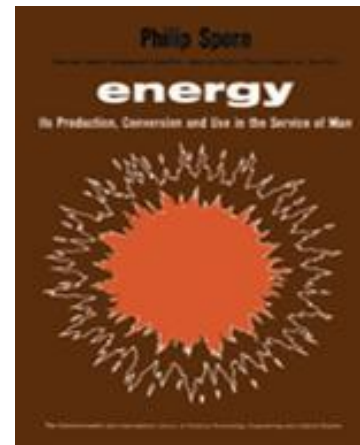
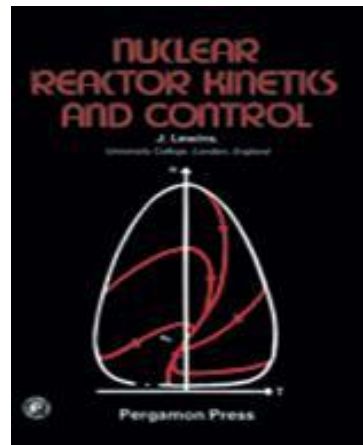
# Energy

Nobel Prize winners and experts in nuclear power, including:

- *Energy Storage* by J. Hans D. Jensen, recipient of the Nobel Prize in Physics, 1963
- *Nuclear Reactor Kinetics and Control* by Jeffrey Lewins who specializes in the application and interpretation of mathematical methods to nuclear power problems



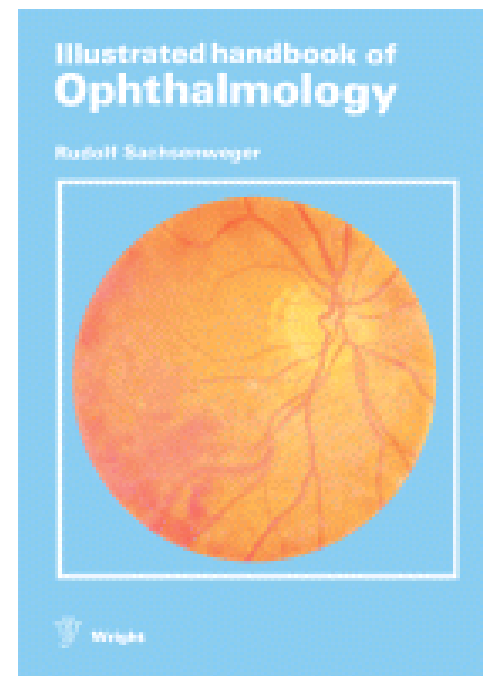
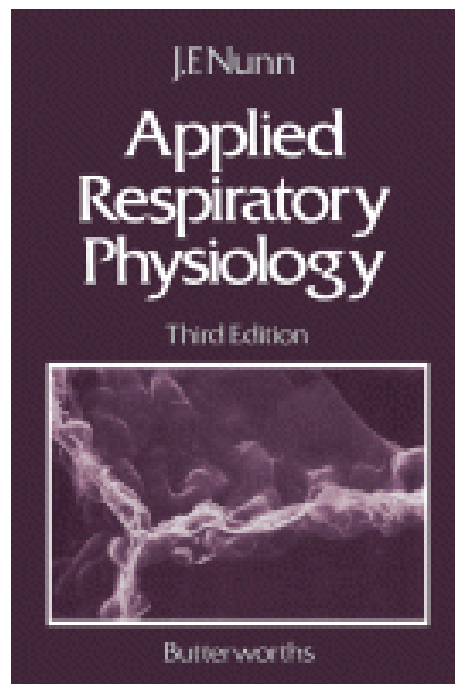
J. Hans D. Jensen,





# Biomedical Science and Engineering

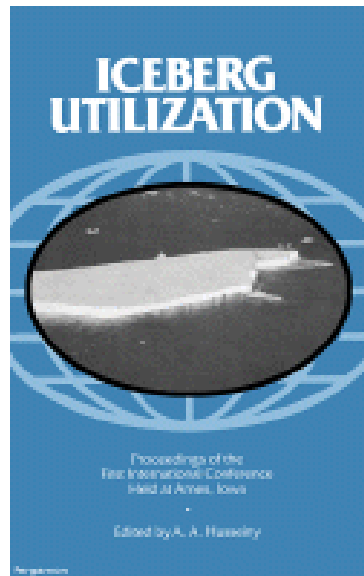
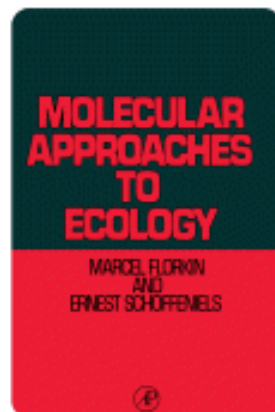
- *Applied Respiratory Physiology* by John F. Nunn, known for his groundbreaking work in Anesthesia.
- *Illustrated Handbook of Ophthalmology* by Rudolf Sachsenweger, renowned Doctor of Medicine





# Environmental Science

- Early Research in Critical Areas
- Aquatic Pollutants: Transformation and Biological Effects by O. Hutzinger, who dedicated his career to chemical substance and its interaction with the environment and humans
- Iceberg Utilization by A.A. Husseiny, an accounting of the first international conference and workshops on iceberg utilization for fresh water production and weather

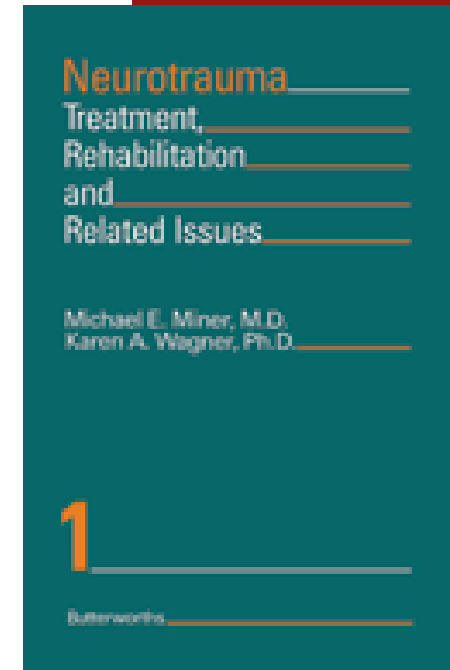
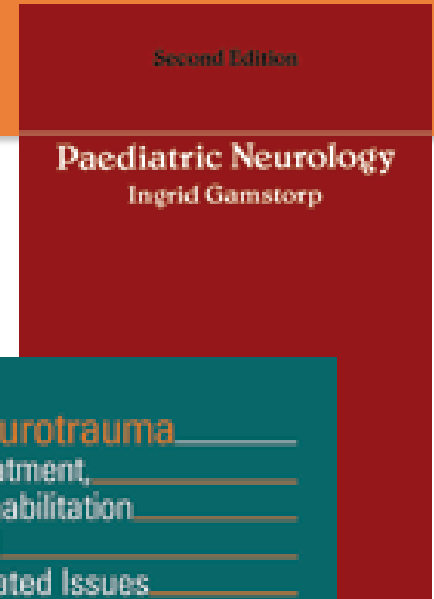




# Neuroscience

Groundbreaking work from the 1970's and 1980's, including:

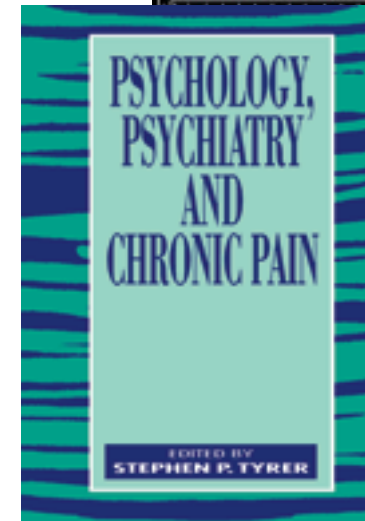
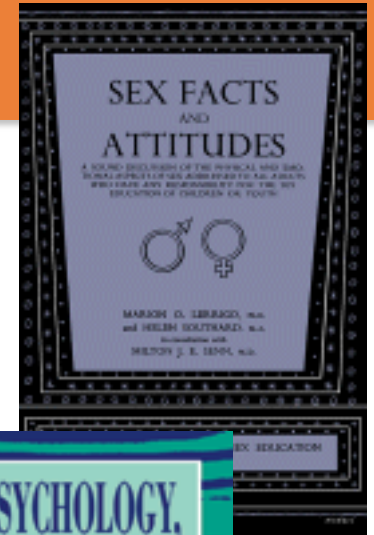
- *Paediatric Neurology* by Ingrid Gamstorp, who was an instrumental founder of the International Child Neurology Association
- *Neurotrauma: Treatment, Rehabilitation, and Related Issues* by Michael E. Miner, including chapters on acute treatment of brain injury and post acute and rehabilitation methods





# Psychology

- *Sex Facts and Attitudes* by Marion O. Lerrigo, who was on the forefront in researching the topic of sex and development in young children and adolescents
- *Psychology, Psychiatry, and Chronic Pain* by Stephen P. Tyrer, that delves into the basic concepts and classifications of pain and further assessment techniques



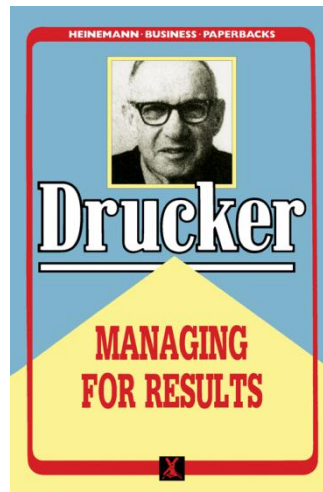


# Social Science

- *Managing for Results* by Peter F. Drucker, whose writings contributed to the philosophical and practical foundations of today's modern business corporation
- *Papers in Economics and Sociology* by Oskar Lange, most known for advocating the use of market pricing tools in socialist systems and providing a model of market socialism



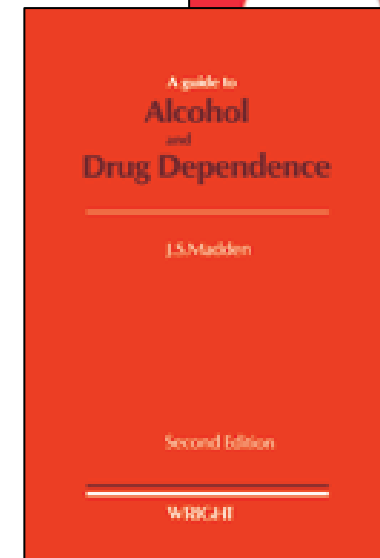
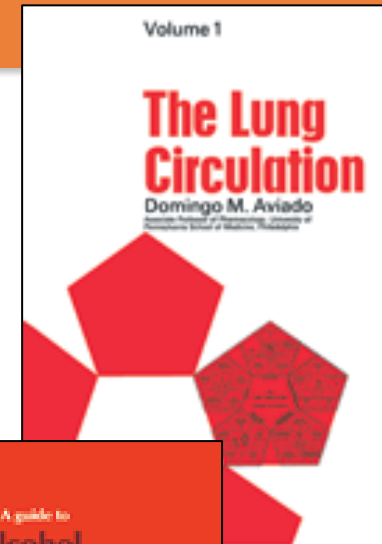
**Peter F.  
Drucker**





# Pharmacology, Toxicology, and the Pharmaceutical Sciences

- *The Lung Connection* by Domingo M. Aviado, recipient of numerous international awards including a Guggenheim Fellowship Award, the Lindback Teaching Award, and the Oliver Memorial Award
- *A Guide to Alcohol and Drug Dependence* by J.S. Madden, who devoted much of his professional career to treating individuals with alcohol and drug related-problems and advocating improved services



# National Journal Archives

Elsevier National Archives on ScienceDirect (prior to 1995) and Elsevier Urban & Fischer Journal Archives (prior to 2001) are historical packages of journals, many going back to Volume 1, Issue 1.

Together with more recent National Archives there are more than five million articles in the portfolio.

Complete historical collection where available

Contains 1543 unique journal titles

Efficient, time-saving access on one platform, immediately available at the desktop

Full citation linking to and from other published articles

Immediate access to ground breaking papers

Excellent support tool for teaching and research

Sophisticated search options and personalization features

Direct linking through PubMed (where applicable)

Approx. 10%-15% of usage is generated by the Archive in other neighbouring countries like **Hungary, Serbia, who already have access to this valuable content.**

## Intermediate backfiles

On October 1, Elsevier launched 23 new ScienceDirect Intermediate Backfile Collections, covering the years 1995-2004. Initiated in 2000, the ScienceDirect Backfiles initiative was the largest digitization project in STM publishing. The aim was to give researchers online access to articles published prior to 1995, a date beyond which it was considered journal content would be difficult to obtain, although the program frequently entailed the digitization of the full run of issues back to Volume 1, Issue 1. The Lancet, for example, was digitized back to 1823.

With the completion of the project more than a decade ago, the ScienceDirect Deep Back File Collections became a highly successful product, selling to major institutional customers worldwide, although the post-1995 backfiles were never formally made available. In the absence of a product definition or pricing structure, any sales requests we did receive have had to be handled on an ad hoc basis, or via a recurring proposition (for each content year a 10% higher collection fee was charged), so as not to conflict with existing backfile models. In the face of continuing demand, however, the Intermediate Back File collections are now finally being made available as a saleable product.

## Legacy collection

We are committed to the most rigorous publishing cycle and we partner with the most renowned contributors to their fields to ensure top quality book content from top quality authors.

**ScienceDirect eBooks collections include 200 Nobel Prize winners.**

Elsevier eBooks Legacy Collections provide comprehensive access to the Classics of Science. It is a deep backlist scanning and digitization project, bringing often unavailable books from the mid-20<sup>th</sup> century to the present.

Spanning 20 Subject Areas, the Legacy Collections provides access to over 12,000 titles, out of which many are not available in print anymore.



*Source: Elsevier Web Analytics Team & Innodata, Oct 2013*

**Thank you for kind attention.**

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