

Elsevier eBooks: Modern Tools and Technologies to Support Researcher and Student

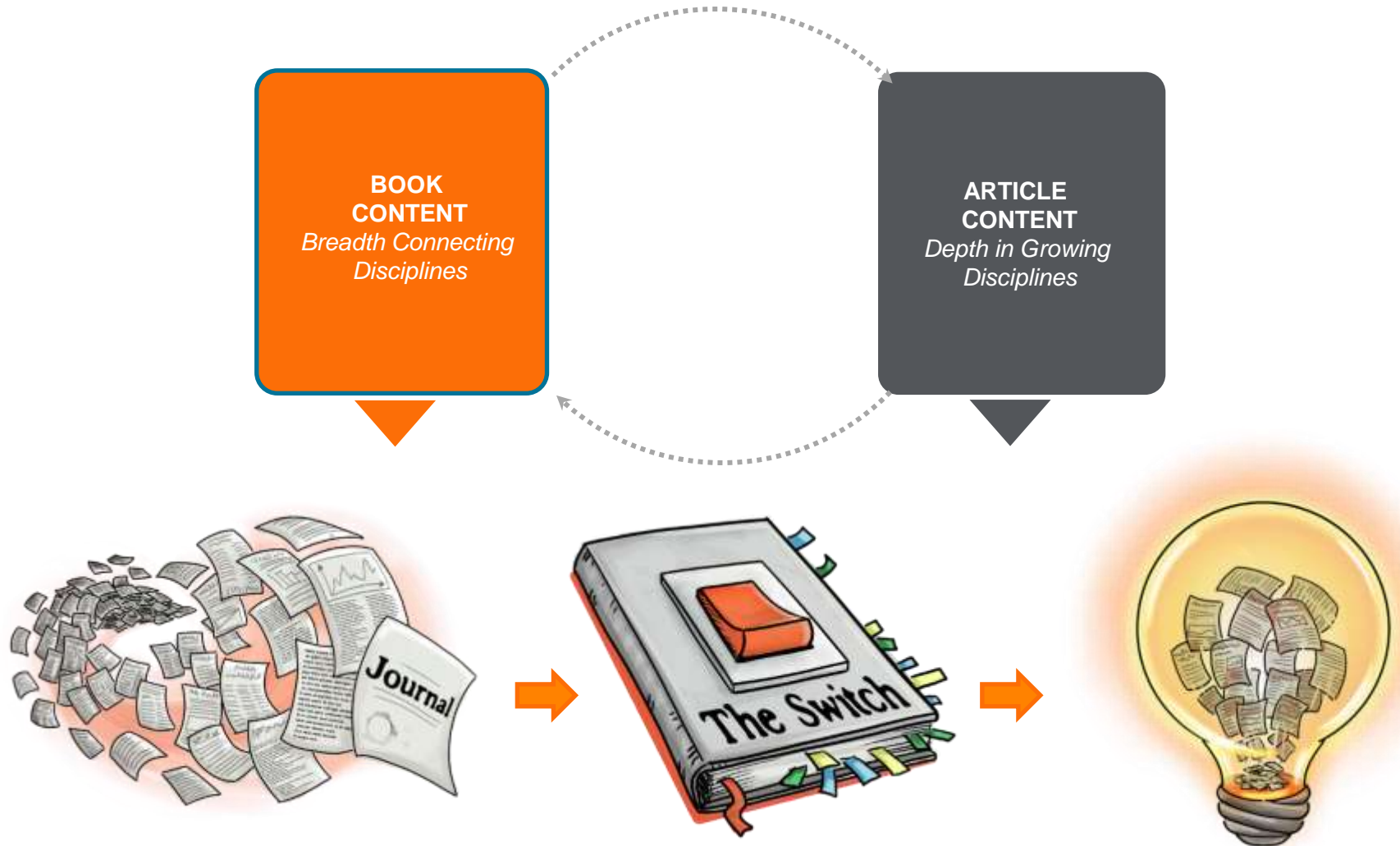


Pavel Milasevic

30 – 05 – 2018

Access to both Journals and eBook is crucial to researchers and discovery.

Books and journal articles provide different types of content, but for this reason they are fundamentally interlinked: **researchers/students need both to build their knowledge around a topic.**



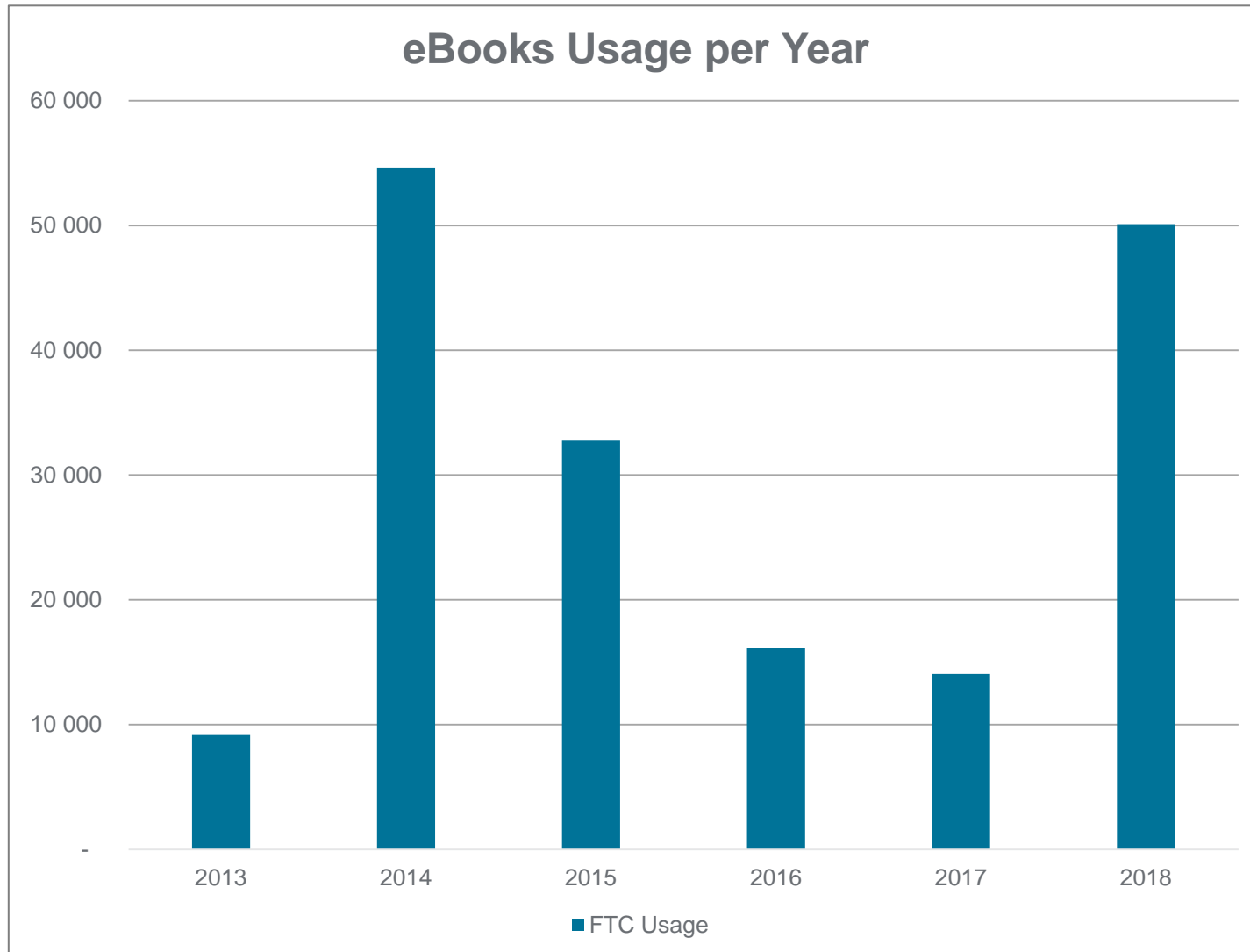
36,000 DRM-free titles across 24 subject areas

• 2018 Frontlist Collection* (# of Titles)

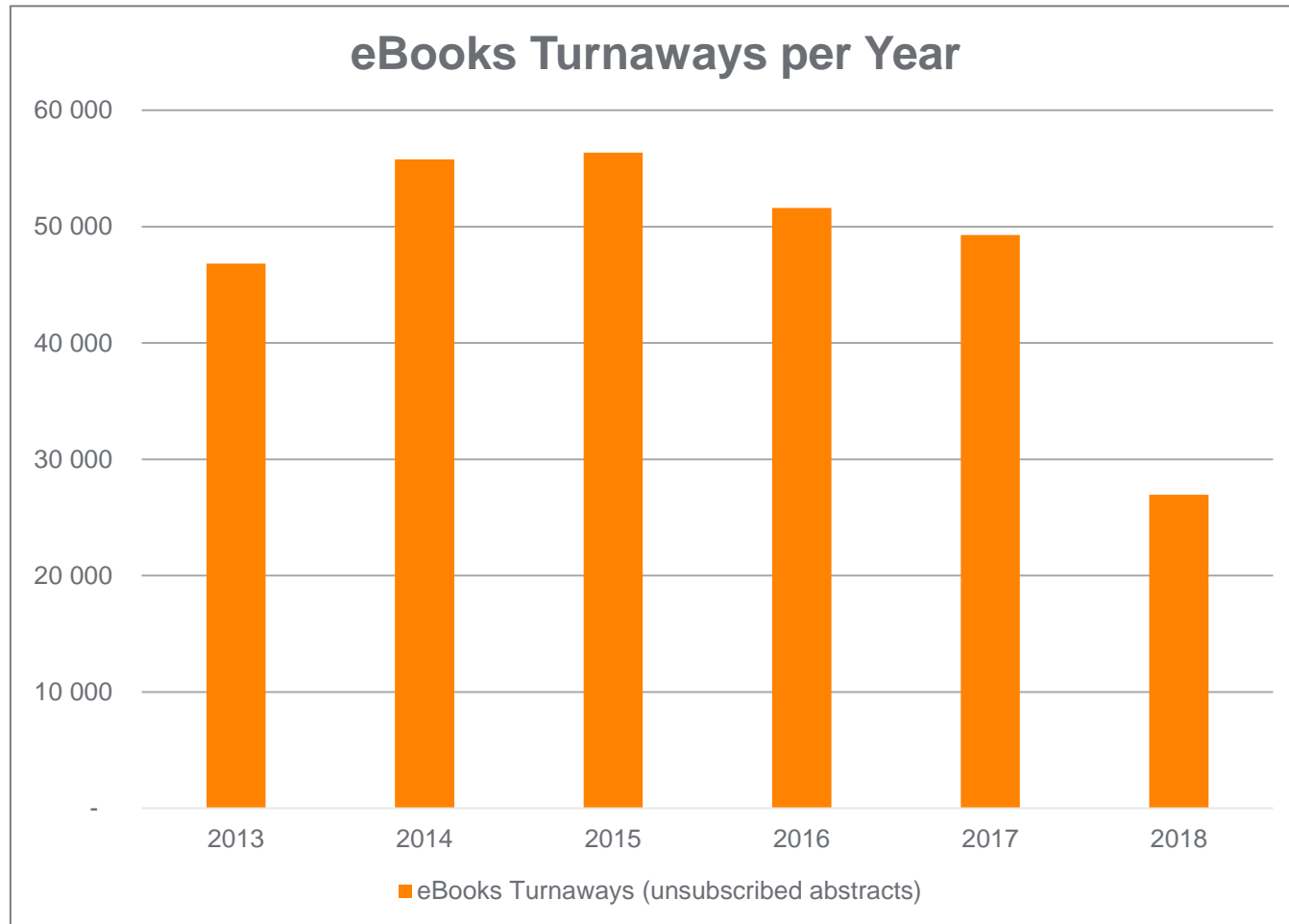
Agricultural, Biological and Food Sciences	118	Immunology and Microbiology	22
Biochemistry, Genetics and Molecular Biology	48	Materials Science	131
Biomedical Science and Medicine	78	Mathematics	10
Chemical Engineering	65	Neuroscience	56
Chemistry	47	Pharmacology, Toxicology and Pharmaceutical Science	38
Computer Science	7	Physics and Astronomy	4
Earth and Planetary Sciences	52	Psychology	28
Energy	86	Social Sciences	53
Engineering	197	Specialty Medicine	69
Environmental Science	38	Health Professions	9
Finance	25	Veterinary Medicine	7
Forensics, Security and Criminal Justice	25	Specialty Surgery	21
		Total # of Titles	1254

*Estimated number of titles for each subject package. Official # of titles published cannot be confirmed until the end of the year due to publishing changes.

Key eBook facts on ScienceDirect for institutions in Cz.

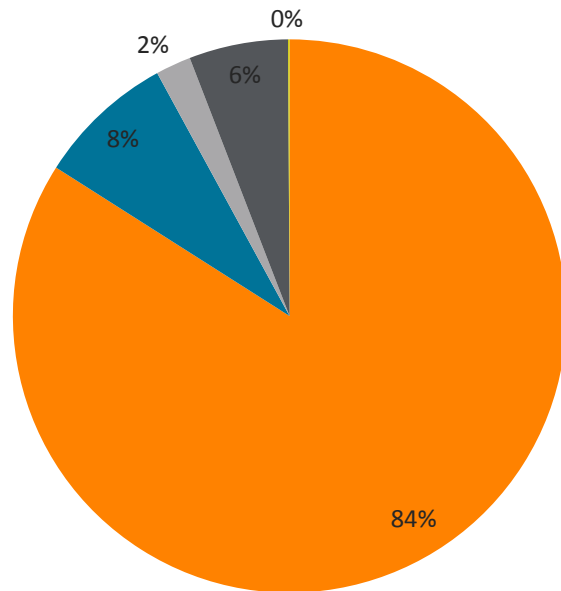


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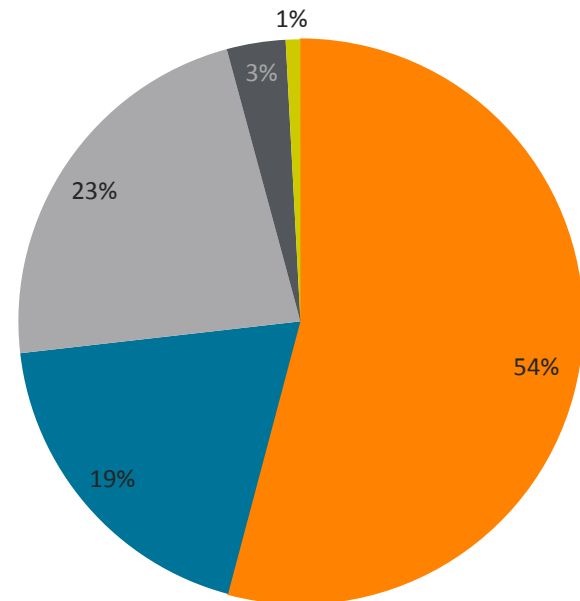
Key eBook facts on ScienceDirect for institution in Cz.

Usage per Books Product Type



- eBooks Packages
- Major Reference Works
- eBooks Series
- Handbooks
- Textbooks

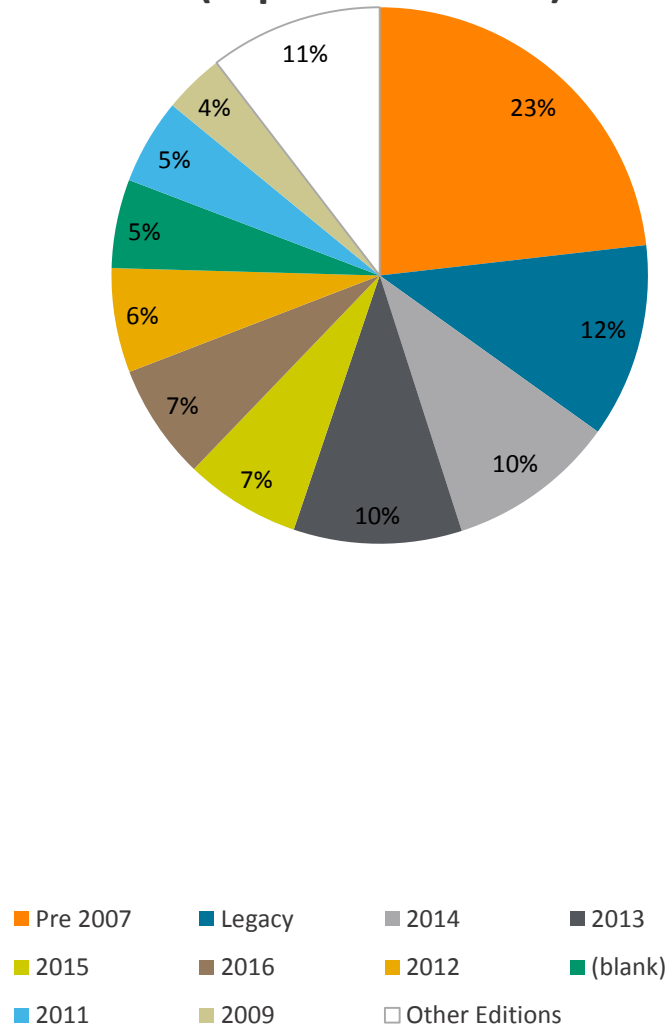
Turnaways per Books Product Type



- eBooks Packages
- Major Reference Works
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- Handbooks
- Textbooks

Key eBook facts on ScienceDirect for institution in Cz.

**Packages Turnaways
(Top Edition Years)**



Key eBook facts on ScienceDirect for institution in Cz.

Top 15 Major Reference Works sorted by Turnaways

Rank	Major Reference Work Title	ISBN	Subject Area
1	International Encyclopedia of Social and Behavioral Sciences Second Edition	9780080970875	Social Sciences
2	International Encyclopedia of Human Geography	9780080449104	Social Sciences
3	International Encyclopedia of the Social & Behavioral Sciences	9780080430768	Social Sciences
4	Encyclopedia of Neuroscience	9780080450469	Neuroscience
5	Encyclopedia of Biological Chemistry Second Edition	9780123786319	Biochemistry, Genetics and Molecular Biology
6	Encyclopedia of Biodiversity Second Edition	9780123847201	Agricultural and Biological Sciences
7	Encyclopedia of Language & Linguistics Second Edition	9780080448541	Social Sciences
8	Encyclopedia of Environmental Health	9780444522726	Environmental Science
9	xPharm: The Comprehensive Pharmacology Reference	9780080552323	Pharmacology, Toxicology and Pharmaceutical Science
10	Encyclopedia of Quaternary Science	9780444527479	Earth and Planetary Sciences
11	Encyclopedia of Analytical Science Second Edition	9780123693976	Chemistry
12	Treatise on Geomorphology	9780080885223	Earth and Planetary Sciences
13	Treatise on Geochemistry Second Edition	9780080983004	Earth and Planetary Sciences
14	Encyclopedia of Materials: Science and Technology	9780080431529	Materials Science
15	Encyclopedia of Separation Science	9780122267703	Chemistry



IESBS 2nd Edition:

**New and Updated Coverage, and a
more Representative Editorial Board**

IESBS, 2nd edition updates reflect dominant trends in the social and behavioral sciences over the past two decades

- The first edition of the International Encyclopedia of the Social and Behavioral Sciences was published in 2000

It has generated nearly **7,000** citations and about two million “hits” on ScienceDirect since publication and has stood as the reference volume of choice in social and behavioral science for fifteen years.

Globalization	Enhanced international coverage and increased diversity of editors and authors, as well as the coverage of subject matter
Specialization vs. Integration	Entire sections of IESBS 2 nd edition have been developed with interdisciplinarity as a central theme
Expert Curation	The authors and editors deployed in the creation of IESBS 2 nd edition comprise a small army of some 10,000 scholars
Coverage of Applications	Increased coverage of practical applications throughout, equipping readers with applied knowledge alongside theory
Integration of Social and Biological Sciences	Sections include a balanced mix of both the social and biological sciences, as well as coverage of their interaction

International Encyclopedia of Social and Behavioral Science, 2nd edition

Key New Sections:

Social Work

Gerontology and Aging

Life Course Studies

Sexuality

Criminology

Business, Marketing and Finance

Labor Studies

War, Peace, Violence and Conflict

Gay, Lesbian, Bisexual and Trans-sexual
Studies

Applied Social and Behavioral Sciences



- Over 90% of the content is new or updated, and the number of sections has increased from 39 to 54, to reflect disciplinary growth trends and support cutting edge research

In comparison to the First Edition, the Second Edition provides:

- IESBS incorporates comparative, cross-cultural, and international themes as well as perspectives into its research articles
- **33% more** nations represented in author base
- **3x** as many female editors
- **50%** fewer North American authors
- More international editorial board, author base, and more subject matter coverage

New countries represented on editorial board:



Key eBook facts on ScienceDirect for institution in Cz.

Top 15 Book Series sorted by Turnaways

Rank	Book Series Title	ISSN	Subject Area
1	Methods in Enzymology	0076-6879	Biochemistry, Genetics and Molecular Biology
2	International Review of Cell and Molecular Biology	1937-6448	Biochemistry, Genetics and Molecular Biology
3	Progress in Brain Research	0079-6123	Neuroscience
4	Methods in Cell Biology	0091-679X	Biochemistry, Genetics and Molecular Biology
5	Advances in Parasitology	0065-308X	Immunology and Microbiology
6	Progress in Molecular Biology and Translational Science	1877-1173	Biochemistry, Genetics and Molecular Biology
7	International Review of Neurobiology	0074-7742	Neuroscience
8	Current Topics in Developmental Biology	0070-2153	Biochemistry, Genetics and Molecular Biology
9	Vitamins & Hormones	0083-6729	Biochemistry, Genetics and Molecular Biology
10	Advances in Immunology	0065-2776	Immunology and Microbiology
11	Advances in the Study of Behavior	0065-3454	Psychology
12	Advances in Pharmacology	1054-3589	Pharmacology, Toxicology and Pharmaceutical Science
13	Advances in Clinical Chemistry	0065-2423	Biochemistry, Genetics and Molecular Biology
14	Advances in Applied Microbiology	0065-2164	Immunology and Microbiology
15	Advances in Protein Chemistry and Structural Biology	1876-1623	Biochemistry, Genetics and Molecular Biology

Methods in Enzymology



Methods in Enzymology is the Perfect Complement to Primary Research

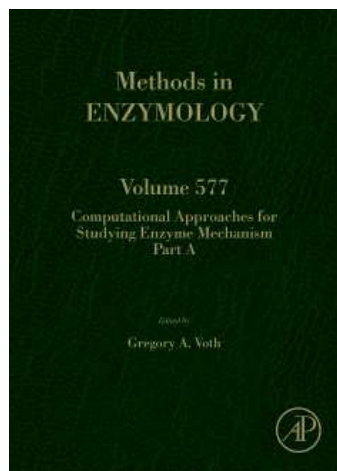
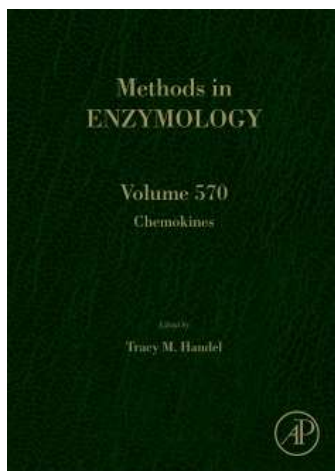
- The critically acclaimed gold standard of laboratory practices and the most highly respected publications in the molecular biosciences

Nearly
600 Volumes
published from 1955-2017

**#1 most
downloaded**
and used ebook series on
ScienceDirect

One of the most
highly respected publications
in the field of biochemistry and molecular biosciences

High-Profile Contributors and Authors



66 Nobel Laureates have contributed to the Methods in Enzymology series, including **five of the nine 2013 Nobel Laureate** winners in Physiology, Chemistry and Physics

Contributors and Authors

Arieh Warshel

James E. Rothman

Martin Karplus

Randy W. Schekman

Sir John B. Gurdon

Thomas C. Sudhof

Jack W. Szostak

Ralph M. Steinman

Avram Hershko

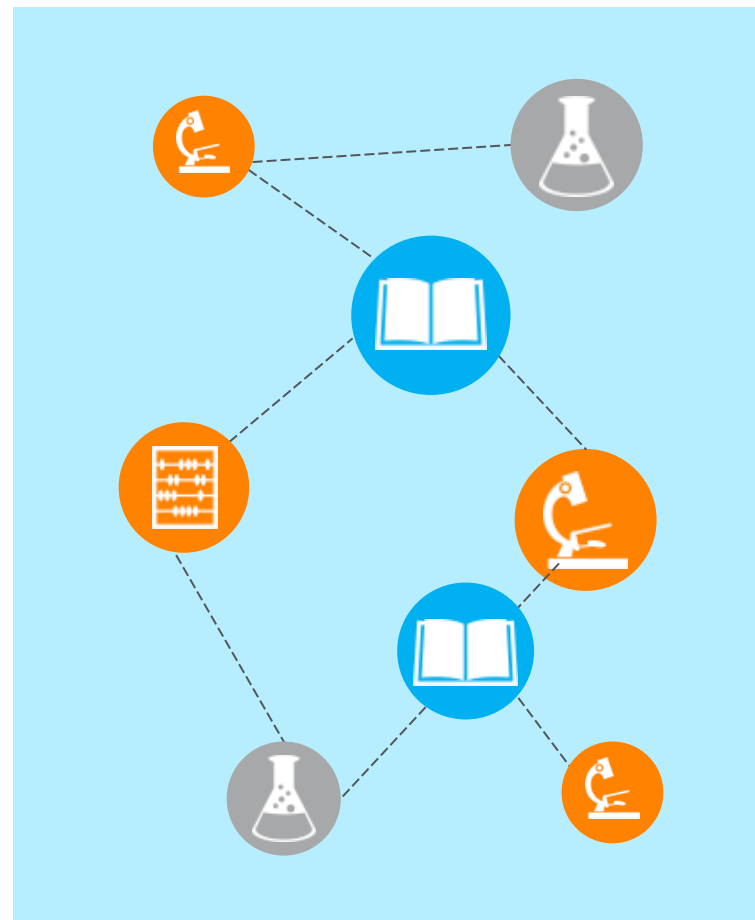
Peter Agre

Roger D. Kornberg

Osamu Shimomura

Includes Key Experimental Protocols

- Sample of Protocols with details on techniques critical knowledge for researchers in life sciences
- Separation and purification of the enzyme, enzyme kinetics mechanism
- Transgenic, RNA interference, microarray, gene therapy
- Crystallization of biological macromolecules, sequencing analysis of biomolecules
- Cell Culture
- Immunochemistry
- Cell Signal Transduction Technology
- Nuclear magnetic resonance, laser capture microscopy, confocal microscopy
- Genomics, proteomics, metabolomics, functional glycomics
- High performance liquid chromatography, mass spectrometry
- Computer simulation, drug design, drug and nucleic acid interactions, protein-protein interactions
- research techniques about Mouse developmental biology
- Biosynthesis of natural products
- Stem cell and tissue culture techniques
- Study important diseases such as: cancer, diabetes



Data Driven and Impact Focused Publishing Strategy



Scopus & SciVal

- Track all journal activity
- Article citation
- Research/subject growth
- Citation impact
- Influential authors and institutions
- Research funding
- Book usage trends



Analysis

- Identify hot growth areas and correlate with high-performing authors
- Identify research gaps
- Quantify an idea

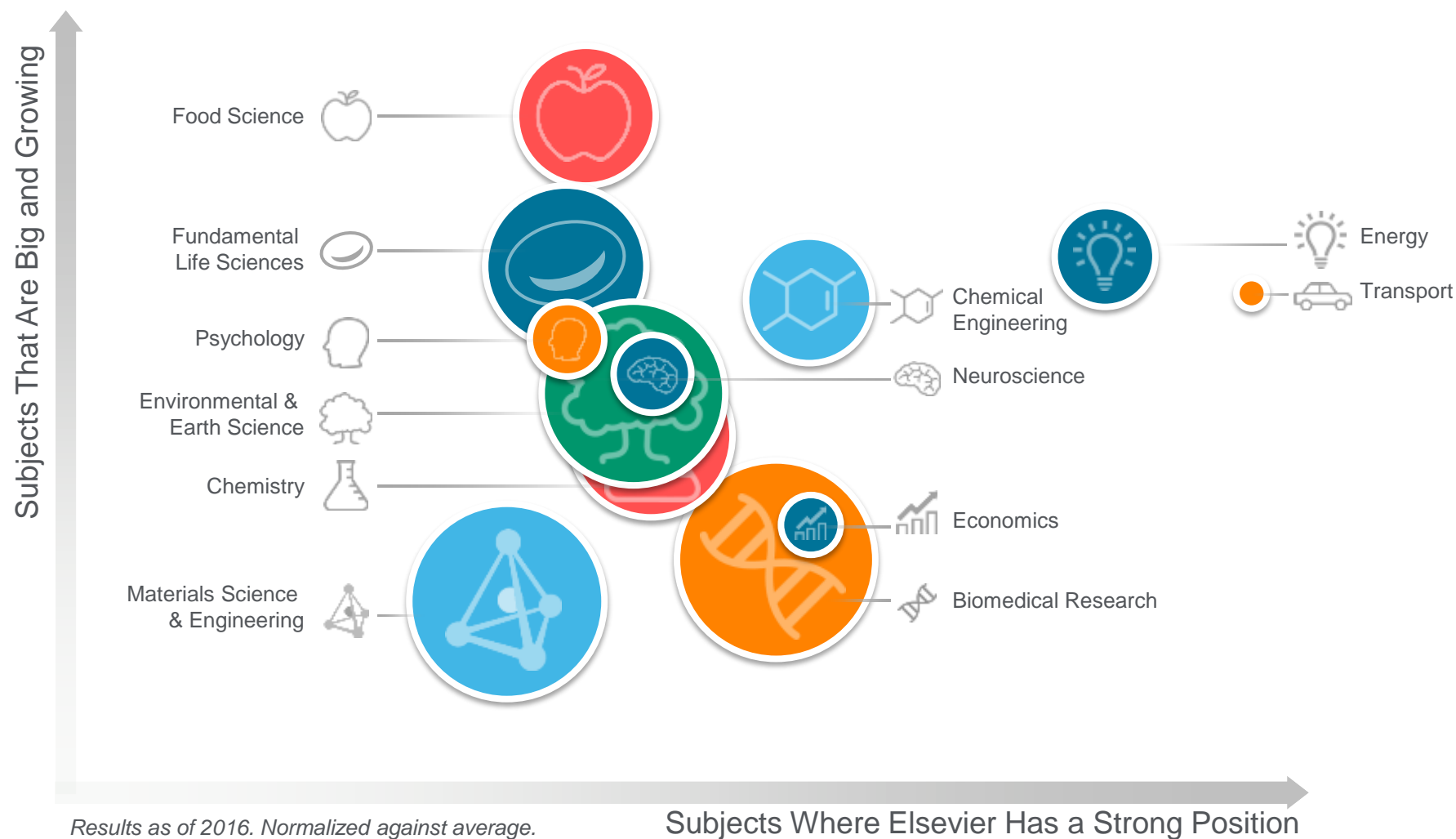


Results

- Create annual strategic plan
- Create 'hit' lists
- Profile and prospect for 'best fit' authors
- Publish content for comprehensive research coverage

Knowledge gaps are identified to ensure decision-making for subject matter is driven by valid and informed sources

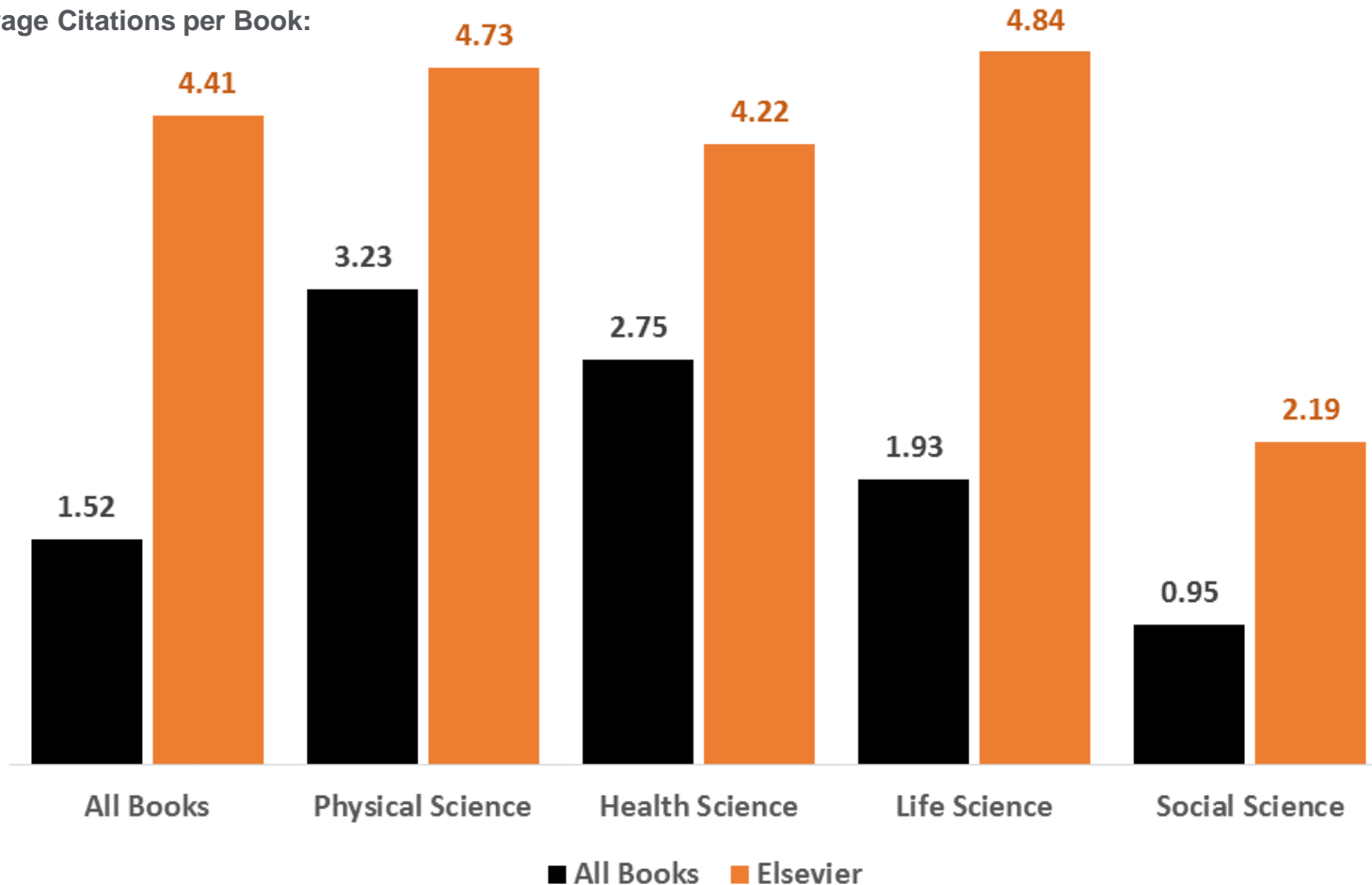
Strategy focusing on the largest fastest growing research areas where Elsevier has a leading position



A smart editorial strategy leading to the top-notch eBook content.

Elsevier eBooks receive more citations than the market as a whole and has the highest relative impact in research

Average Citations per Book:



*Comparison of books published in 2014 that are indexed in Scopus

Integrating eBook and journal content to create an interactive and seamless reading experience

ScienceDirect

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Refine filters

Year

- ☐ 2018 (243)
- ☐ 2017 (123,993)
- ☐ 2016 (245,157)
- ☐ 2015 (228,134)
- ☐ 2014 (221,253)

[View more >>](#)

Publication title

- ☐ The Lancet (67,390)
- ☐ Biochemical and Biophysical Research Communication... (64,899)
- ☐ Gastroenterology (56,546)
- ☐ Brain Research (46,920)
- ☐ FEBS Letters (41,523)

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Topic

- ☐ patient (246,062)
- ☐ cell (190,537)
- ☐ dna (118,791)
- ☐ protein (40,493)
- ☐ ma (36,746)

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Content type

- ☐ Journal (4,768,519)
- ☐ Book (349,375)
- ☐ Reference Work (38,953)

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Related books

- ☐ Outcome of Hematopoietic **Cell** Transplantation for DNA-Double Strand Breakage Repair Disorders: Original Research Article

Journal of Allergy and Clinical Immunology, **In Press, Accepted Manuscript**. Available online 7 April 2017

James Slack, Michael H. Albert, Dmitry Balashov, Bernd H. Belohradsky, Ali Rebeca H. Buckley, Marie Ouachée-Chardin, Elena Deripapa, Katarzyna T. Bobby Gaspar, Sujal Ghosh, Alfred Gillio, Luis I. Gonzalez-Granado, Eyal G. [Abstract](#) [PDF \(1183 K\)](#)

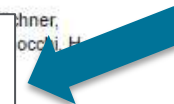
Hematopoietic **cell** transplant cures DNA breakage-repair disorders. Cernunnos-XLF alkylator or radiotherapy pre-conditioning have worse survival than those receiving re

- ☐ Repeated subarachnoid administrations of autologous mesenchymal stromal cells improve quality of life in patients suffering incomplete spinal cord injury *Cytotherapy*, Volume 19, Issue 3, March 2017, Pages 349-359
Jesús Vaquero, Mercedes Zurita, Miguel A. Rico, Celia Bonilla, Concepción Sevilla, Carlos Morejón, Jesús Montilla, Francisco Martínez, Esperanza Mar Carbalido, Alicia Rodríguez, Paula Martínez, Coral García, Mercedes Ovejuna Group, et al.

Related books



Stem Cells
1997
C.S. Potten



receiving

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Stem Cells

1997
C.S. Potten



Cell Hybrids

1976
Nils R. Ringertz



Cell Biology

2017
Thomas D. Pollard

Content type

- ☐ Journal (4,768,519)
- ☐ Book (349,375)
- ☐ Reference Work (38,953)

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- ☐ Cell Carcinoma: 5-Year Results of the SINS Randomized

614-619

g, Graham B. Colver, William Perkins, Paul S.J. Miller, Surgery (SINS) Study Group

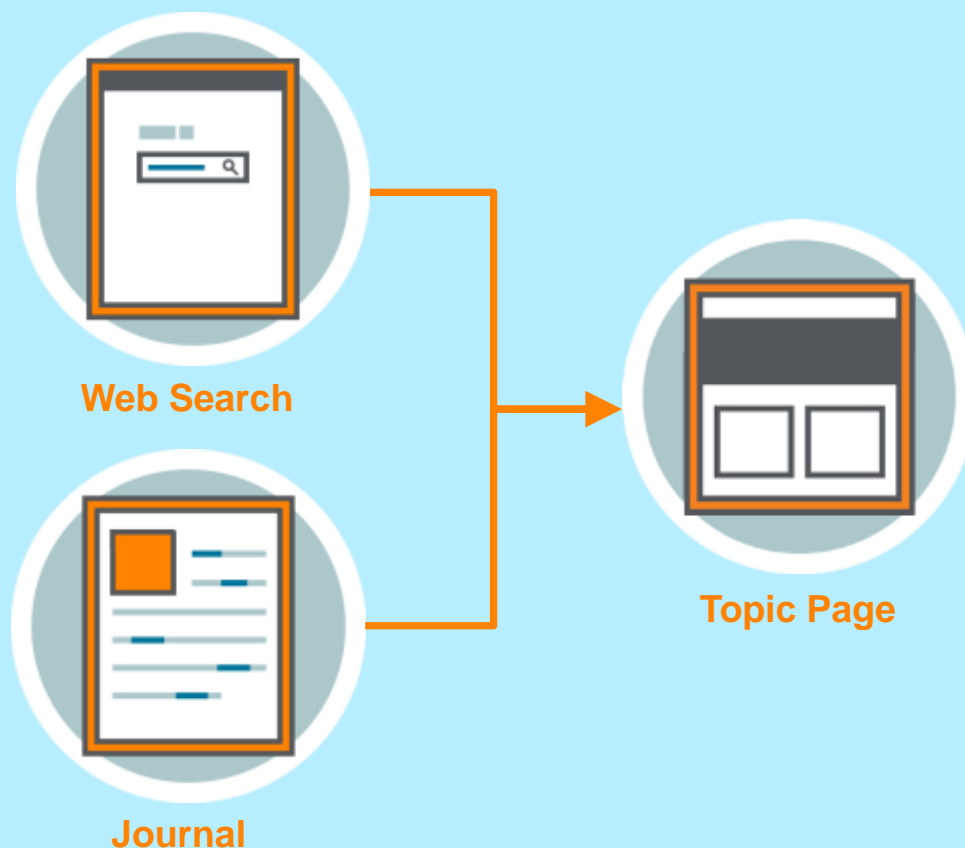
- ☐ T3 Activation in Anaplastic Large **Cell** Lymphoma

[Open Archive](#)

Marcello Gaudiano, Nicoletta Chiesa, Filomena Maria Todaro, Michela Boi, Andrea Acquaviva, Elisa Rosenwald, Lukas Kenner, Lorenzo Cerroni,

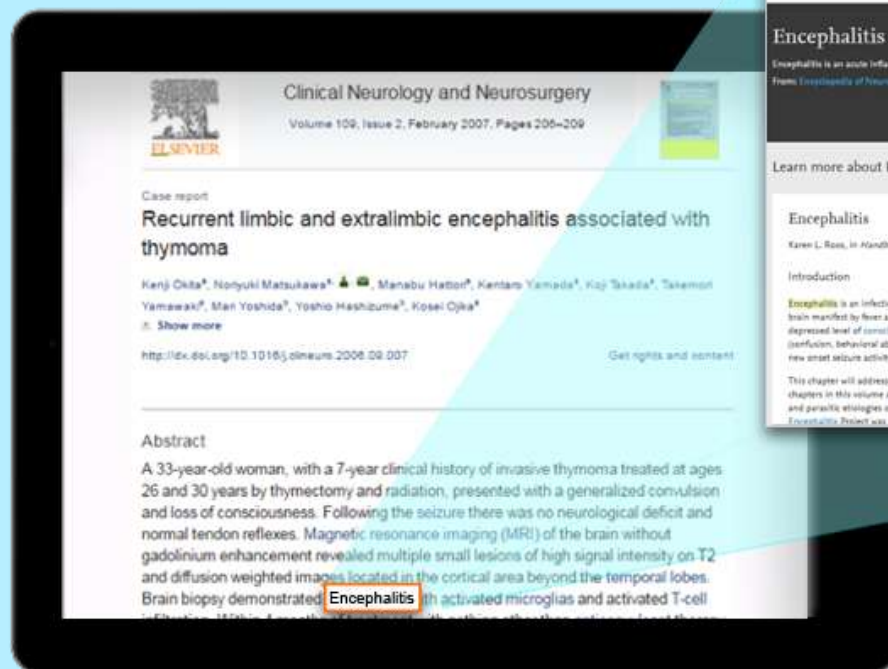
ScienceDirect Topics guides researchers to relevant content no matter where they begin

- Researchers can access ScienceDirect Topics via both search and Journal articles
- **80% of traffic comes from Google** and other organic search engines
- Most pages **hit the first page of Google results** (page rank avg = 8.3)

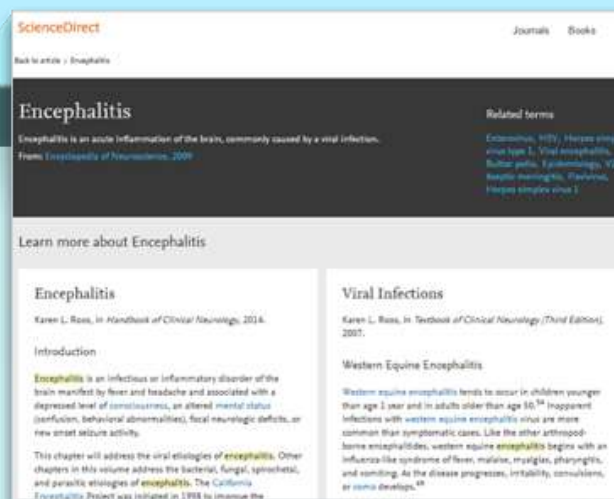


Hyperlinked Journal concepts enhance speed, selectivity and serendipity of the research workflow

JOURNAL ARTICLE



TOPIC PAGE



Users stay on page 5.5 minutes longer than average stay on Article page

ScienceDirect Topics help researchers get a quick overview on a topic and related content

The screenshot shows the ScienceDirect Topics interface for the topic 'Sanger sequencing'. The page is divided into several sections. Callout 1 points to the 'Short definition*' section, which provides a concise explanation of the process and its source. Callout 2 points to the 'Related terms' section, which lists related concepts like DNA sequencing, Polymerase chain reaction, and Nucleotide. Callout 3 points to the 'Excerpts from relevant Book content' section, which displays excerpts from two books: 'Somatic Mosaicism and Neurological Diseases' and 'Overview of Technical Aspects and Chemistries of Next-Generation Sequencing'.

1 Short definition*

2 Related terms

3 Excerpts from relevant Book content

*When a short definition is not available, the longer definition can be found in Book excerpts

Topic pages connect key terms with their broader context



Journal Content

- Specialized knowledge
- Narrow focus
- Extreme depth
- Cutting-edge research



Topic Pages

- Summary knowledge
- Overview
- Connects topics and content
- Provide context



Book Content

- Gateway knowledge
- General focus
- Comprehensive breadth
- Established quality

Unique in applying cutting-edge technologies to content within the research workflow

Data Science Technologies

- Data-mining
- Taxonomy building
- Algorithmic information extraction
- Relevancy ranking
- Quality confirmation



Topic Pages



Book Content

Committed to investment and innovation in a breadth of disciplines

PHASE 1

Life Sciences



- Neuroscience



- Biochemistry, Genetics & Molecular Biology



- Medicine & Dentistry



- Pharmaceutical Sciences



- Veterinary Science & Medicine

PHASE 2

Physical Sciences



- Chemical Engineering



- Chemistry



- Environmental & Earth Science



- Food Science



- Materials Science & Engineering

The Researcher Journey: Understanding Journal Content to Move Research Forward

The screenshot shows a web browser window with the URL [sciencedirect.com/science/article/pii/S0169409X1730090X](https://www.sciencedirect.com/science/article/pii/S0169409X1730090X). The page is for an article titled "Engineering challenges for brain tumor immunotherapy" by Johnathan G. Lyon, Nassir Mokazram, Tarun Saxena, Sheridan L. Carroll, and Ravi V. Bellamkonda. The article is published in "Advanced Drug Delivery Reviews", Volume 114, 15 May 2017, Pages 19-32. The page includes a table of contents on the left, a list of keywords, a list of other articles from the same issue on the right, and a full abstract at the bottom. The abstract states: "Malignant brain tumors represent one of the most devastating forms of cancer with abject survival rates that have not changed in the past 60 years. This is partly because the brain is".

Engineering challenges for brain tumor immunotherapy ☆

Johnathan G. Lyon ^{*, 1}, Nassir Mokazram ^{*, 1}, Tarun Saxena ^{*, 1}, Sheridan L. Carroll ^{*, 1}, Ravi V. Bellamkonda ^{*, 2}

<https://doi.org/10.1016/j.addr.2017.06.006>

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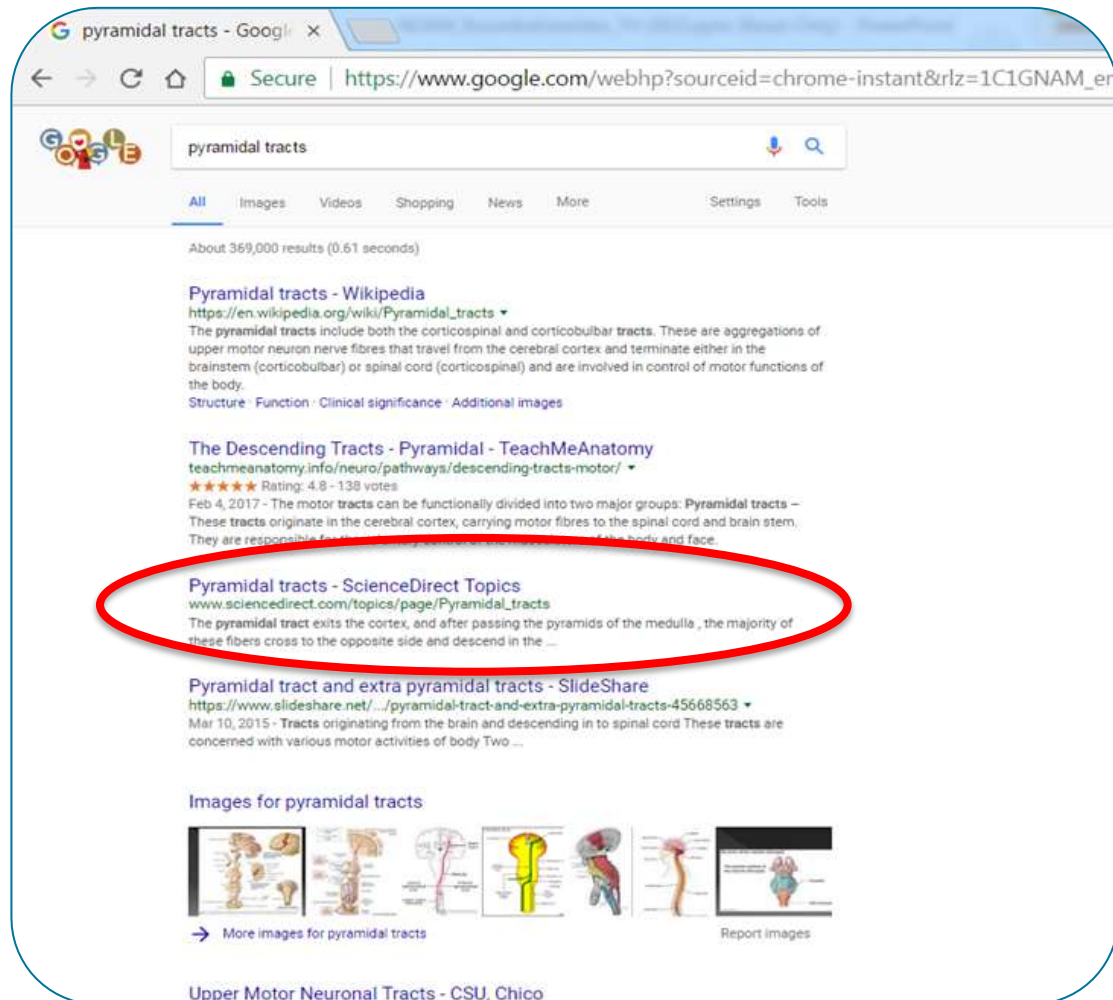
Abstract

Malignant brain tumors represent one of the most devastating forms of cancer with abject survival rates that have not changed in the past 60 years. This is partly because the brain is

Article: [Engineering challenges for brain tumor immunotherapy](#)

Journal: [Advanced Drug Delivery Reviews, Volume 114](#)

Increased Discoverability



Unfamiliar term often results in Wikipedia search



Advanced Drug Delivery Reviews

Volume 114, 15 May 2017, Pages 19-32



Engineering challenges for brain tumor immunotherapy ☆

Johnathan G. Lyon ^{a, b, 1}, Nassir Mokarram ^{a, 1}, Tarun Saxena ^{a, 1}, Sheridan L. Carroll ^a, Ravi V. Bellamkonda ^{a, *}

✉

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Abstract

Malignant brain tumors represent one of the most devastating forms of cancer with abject survival rates that have not changed in the past 60 years. This is partly because the brain is a critical organ, and poses unique anatomical, physiological, and immunological barriers. The unique interplay of these barriers also provides an opportunity for creative engineering solutions. Cancer **immunotherapy**, a means of harnessing the host immune system for anti-tumor efficacy, is becoming a standard approach for treating many cancers. However, its use in brain tumors is not widespread. This review discusses the current approaches, and hurdles to these approaches in treating brain tumors, with a focus on immunotherapies. We identify critical barriers to immunoengineering brain tumor therapies and discuss possible

Unfamiliar
term may
result in
Wikipedia
search

Searching and sifting required; content built for wrong audience: time lost and quality questionable

The screenshot shows the Wikipedia article for "Immunotherapy". The browser address bar displays "en.wikipedia.org/wiki/immunotherapy". The article title is "Immunotherapy" with the subtitle "From Wikipedia, the free encyclopedia". A sidebar on the left contains a "Contents [hide]" section with the following links: 1 Immunomodulators, 2 Activation immunotherapies (with sub-links for 2.1 Cancer, 2.2 Immune recovery, and 2.3 Vaccination), 3 Suppression immunotherapies (with sub-links for 3.1 Immunosuppressive drugs, 3.2 Immune tolerance, and 3.3 Allergies), 4 Helminthic therapies, 5 See also, 6 References, and 7 External links. The main text of the article begins with "by inducing, enhancing, or suppressing an immune response" and discusses "activation immunotherapies" and "suppression immunotherapies". A small table on the right side of the article provides information about "Immunotherapy", including its MeSH code (D007167) and CAS code (8-03-07).

Immunotherapy	
MeSH	D007167
CAS code	8-03-07
[edit on Wikidata]	

Contents built
for general,
non-research
audience

Challenging to
sift through to
find high-quality
answers

Topic Pages: Linking to High-Quality Book Content on ScienceDirect



Advanced Drug Delivery Reviews

Volume 114, 15 May 2017, Pages 19–32



Engineering challenges for brain tumor immunotherapy ☆

All link
out to
Topic
Pages

Current clinical standard of care for brain tumors is maximal [safe surgical](#) resection, followed by concomitant fractionated radiotherapy, and [chemotherapy](#) (oral Temozolomide, and/or implanted [Carmustine wafer](#)) [3]. Surgical resection, however, is not always possible due to the location of the tumor corresponding to sensitive or inoperable regions of the brain [4,5]. Further, recurrence after surgery is common, as many brain tumors have invasion fronts that penetrate into healthy tissue beyond the primary tumor core, making it often impossible to remove all malignant cells [6]. Systemic chemotherapy is also less efficacious in the treatment of brain tumors, as the ability for these drugs to efficiently reach some brain tumor tissues is hindered by the transport-restrictive properties of the [blood-brain barrier](#) (BBB), adaptive resistance to the drug, exacerbation of side effects due to increased [effective dose](#) requirements and sensitivity of neural tissue, and an inability to fully obliterate resident tumor renewing populations [7–9]. Even with all the continued advances in drug discovery and delivery that have improved substantially improved outcomes in systemic cancers, there has been disappointingly little impact on tumors of the brain.

Any questions?

Thank you

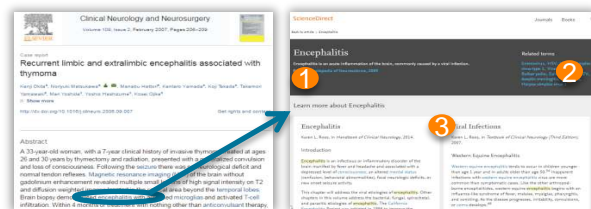
Pavel Milasevic
p.milasevic@elsevier.com

ScienceDirect Topics Brings Speed, Selectivity, and Serendipity to the Researcher Workflow

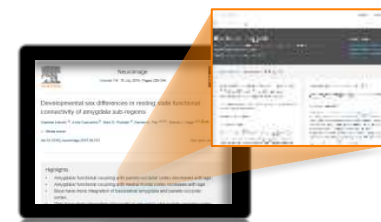
- 1 Researchers **trust ScienceDirect** for **high-quality Journal content** across the researcher lifecycle (student -> expert). Users rely on **Books** to **support the Journals workflow**. **Many Journals customers already have Books turnaways.**



- 2 With this feature, the Book content researchers already crave will be **more highly-discoverable** via their Journal article at hand, selected for **high-relevance**, and **linked to myriad resources**. **18% of topic page users click through to Book chapters, indicating the utility of the content to researchers.**



- 3 Hyperlinks **embedded directly in Journal content** surface the **right Book content at point-of-need**. Finding scholarly information is **quicker and easier, freeing up time** for researchers to progress the core aspects of their projects. **84% of users found topic pages helpful when they came across an unfamiliar term in a journal article**



- 4 Facilitate a **better research experience** for your users, by equipping them with **supporting reference content at point-of-need** on the platform they trust. Trust user data as your guide. **82% of users said they found topic pages helpful for background reading in a new area**

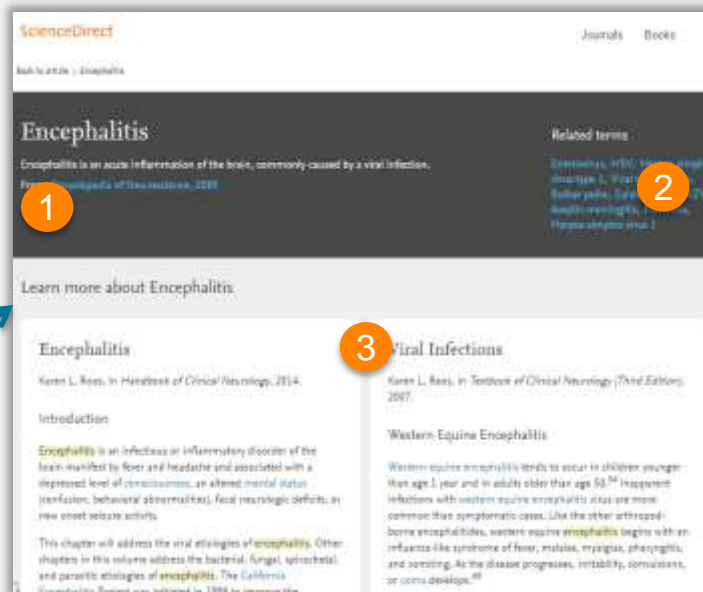
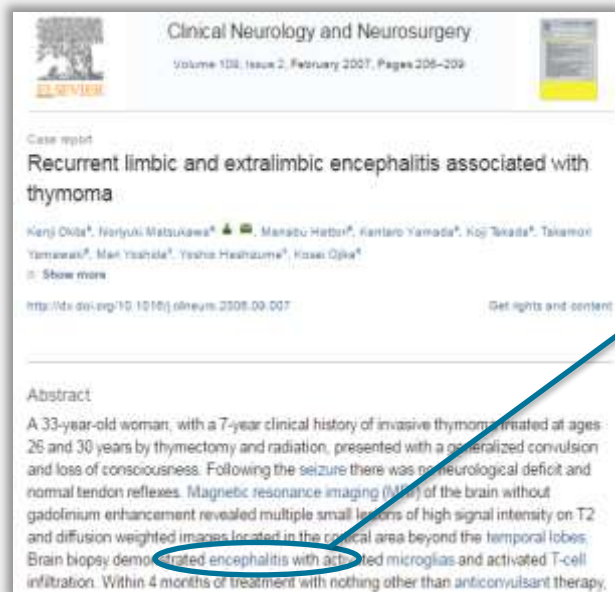


ScienceDirect Topics Has Wide Variety of Benefits to End Users

- **Seamlessly links** book chapters and journal articles to enhance co-usage
- Provides definitions from book content to help users **understand** and **interpret scientific literature**
- Provides **authoritative and relevant overviews** for users navigating new areas
- Delivers and surfaces answers to users **at their point of need**
- Fundamental knowledge taken from books brings researchers and students **quickly up to speed**
- Content links to a **wealth of knowledge in connected disciplines** to support interdisciplinary research



Topic Pages Simplify and Improve Journals Workflow on ScienceDirect



Key Features:

1. Clear definition
2. Related terms (to topic pages)
3. Learn more on topic
 - 10 longer definitions
 - Related/ relevant reading

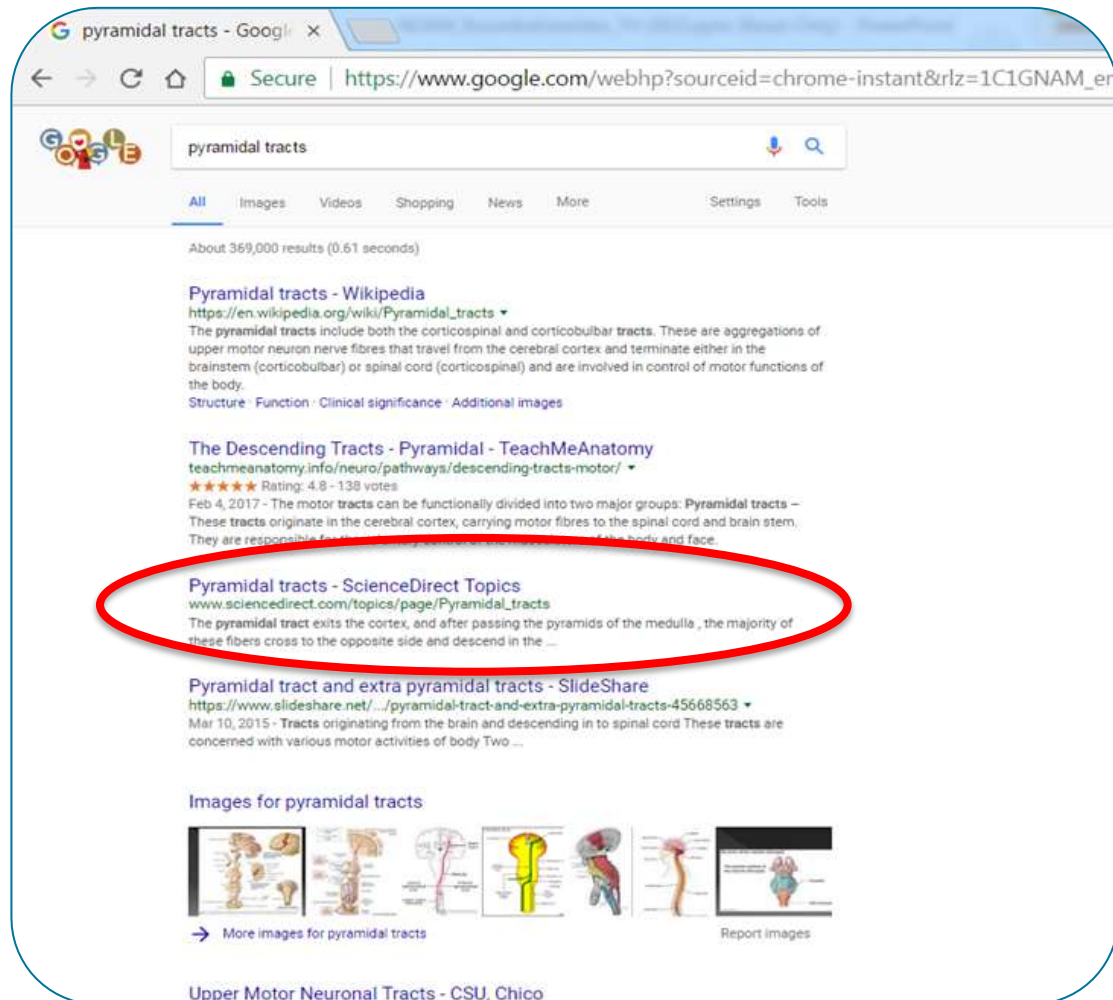
Key Outcomes for Researchers & Students

1. Decrease time spent jumping across platforms, searching for and validating info
2. Increase time spent progressing research
3. Increase confidence in information reliability and likelihood of serendipitous connections made in research process

Key Outcomes for Librarians

1. Substantiate business case for investment in Reference budget (via usage views)
2. Decrease resource spent on user outreach re: Reference solutions
3. Drive acquisitions business case with behavioral-usage-data-driven support of Reference solutions

Increased Discoverability



The Researcher Journey: Understanding Journal Content to Move Research Forward

The screenshot shows a web browser window with the ScienceDirect website. The article title is "Engineering challenges for brain tumor immunotherapy" by Johnathan G. Lyon, Nassir Mokazram, Tarun Saxena, Sheridan L. Carroll, and Ravi V. Bellamkonda. It is published in "Advanced Drug Delivery Reviews", Volume 114, 15 May 2017, Pages 19-32. The page includes a table of contents on the left, a list of keywords, and a list of other articles from the same issue on the right. The abstract is partially visible at the bottom.

Engineering challenges for brain tumor immunotherapy ☆

Johnathan G. Lyon ^{*, 1}, Nassir Mokazram ^{*, 1}, Tarun Saxena ^{*, 1}, Sheridan L. Carroll ^{*, 1}, Ravi V. Bellamkonda ^{*, 2}

<https://doi.org/10.1016/j.addr.2017.06.006>

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Abstract

Malignant brain tumors represent one of the most devastating forms of cancer with abject survival rates that have not changed in the past 60 years. This is partly because the brain is

Outline

- Abstract
- Graphical abstract
- Abbreviations
- Keywords
- 1. Introduction
- 2. Neuroimmune anatomy & physiology
- 3. Neuro-onco-immunology
- 4. Current therapies
- 5. Opportunities for engineers to address challenges of b...
- 6. Conclusion
- Acknowledgements
- References

Show full outline

Figures (8)

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Part of special issue:

Immuno-engineering: The Next Frontier in Therapeutics Delivery

Edited by Dr. Ankur Singh Dr. Krishnendu Roy

Other articles from this issue

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- Progress and opportunities for enhancing the deli... Advanced Drug Delivery Reviews, Volume 114, 15 M... Download PDF View details
- Exploiting lymphatic vessels for immunomodulatio... Advanced Drug Delivery Reviews, Volume 114, 15 M...

Article: [Engineering challenges for brain tumor immunotherapy](#)

Journal: [Advanced Drug Delivery Reviews, Volume 114](#)

Unfamiliar term often results in Wikipedia search



Advanced Drug Delivery Reviews

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Engineering challenges for brain tumor immunotherapy ☆

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✉

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Abstract

Malignant brain tumors represent one of the most devastating forms of cancer with abject survival rates that have not changed in the past 60 years. This is partly because the brain is a critical organ, and poses unique anatomical, physiological, and immunological barriers. The unique interplay of these barriers also provides an opportunity for creative engineering solutions. Cancer immunotherapy, a means of harnessing the host immune system for anti-tumor efficacy, is becoming a standard approach for treating many cancers. However, its use in brain tumors is not widespread. This review discusses the current approaches, and hurdles to these approaches in treating brain tumors, with a focus on immunotherapies. We identify critical barriers to immunoengineering brain tumor therapies and discuss possible

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Searching and sifting required; content built for wrong audience:
time lost and quality questionable

The screenshot shows the Wikipedia page for "Immunotherapy". The table of contents is highlighted with a blue box, and the main text is highlighted with a light blue box. The table of contents lists the following sections:

- 1 Immunomodulators
- 2 Activation immunotherapies
 - 2.1 Cancer
 - 2.2 Immune recovery
 - 2.3 Vaccination
- 3 Suppression immunotherapies
 - 3.1 Immunosuppressive drugs
 - 3.2 Immune tolerance
 - 3.3 Allergies
- 4 Helminthic therapies
- 5 See also
- 6 References
- 7 External links

The main text of the article is also visible, discussing the use of immunotherapies in cancer treatment and the challenges of finding high-quality answers.

Contents built
for general,
non-research
audience

Challenging to
sift through to
find high-quality
answers

Topic Pages: Linking to High-Quality Book Content on ScienceDirect



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All link
out to
Topic
Pages

Current clinical standard of care for brain tumors is maximal [safe surgical](#) resection, followed by concomitant fractionated radiotherapy, and [chemotherapy](#) (oral Temozolomide, and/or implanted [Carmustine wafer](#)) [3]. Surgical resection, however, is not always possible due to the location of the tumor corresponding to sensitive or inoperable regions of the brain [4,5]. Further, recurrence after surgery is common, as many brain tumors have invasion fronts that penetrate into healthy tissue beyond the primary tumor core, making it often impossible to remove all malignant cells [6]. Systemic chemotherapy is also less efficacious in the treatment of brain tumors, as the ability for these drugs to efficiently reach some brain tumor tissues is hindered by the transport-restrictive properties of the [blood-brain barrier](#) (BBB), adaptive resistance to the drug, exacerbation of side effects due to increased [effective dose](#) requirements and sensitivity of neural tissue, and an inability to fully obliterate resident tumor renewing populations [7–9]. Even with all the continued advances in drug discovery and delivery that have improved substantially improved outcomes in systemic cancers, there has been disappointingly little impact on tumors of the brain.

Value of Books: Content Built to Support Understanding within the Research Workflow

Definition from Reference content

Context from Reference content

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Immunotherapy

Immunotherapy is a developing treatment that is being used, especially in patients suffering from chronic inflammatory demyelinating polyneuropathy (CIDP) concomitant with DSPN.
From: *Oxidative Stress and Neurodegenerative Disorders*, 2007

Related terms:
[Chemotherapy](#), [Cytotoxicity](#), [Monoclonals](#), [Radiation](#), [Adjuvant](#), [Venom](#), [HIV](#), [Intravenous therapy](#), [Apoptosis](#), [Steroids](#)

Learn more about Immunotherapy

Effects of Glucocorticoid Suppressor Mechanisms

Maria Julia Bevilacqua Felipe, in *Equine Infectious Diseases (Second Edition)*, 2014

Immunotherapy for Hyposensitization
Immunotherapy may be used in treatment of immunoglobulin E (IgE)-mediated allergies to induce long-term tolerance by the administration of small but increasing concentrations of the

Immunotherapy

Phillip J. Bergman, in *Cancer Management in Small Animal Practice*, 2010

The term immunity is derived from the Latin word *immunitas*, which refers to the legal protection afforded to Roman senators holding office. Although the immune system is normally thought of as providing protection against infectious disease, the immune system's ability to recognize and eliminate cancer is the fundamental rationale for the *immunotherapy of cancer*.

Related terms

Links to full Book chapters

*Linked to from Full Text Article via term: Immunotherapy

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Any questions?

Thank you