

Disruptor disrupted

How we are all (becoming) a technology business

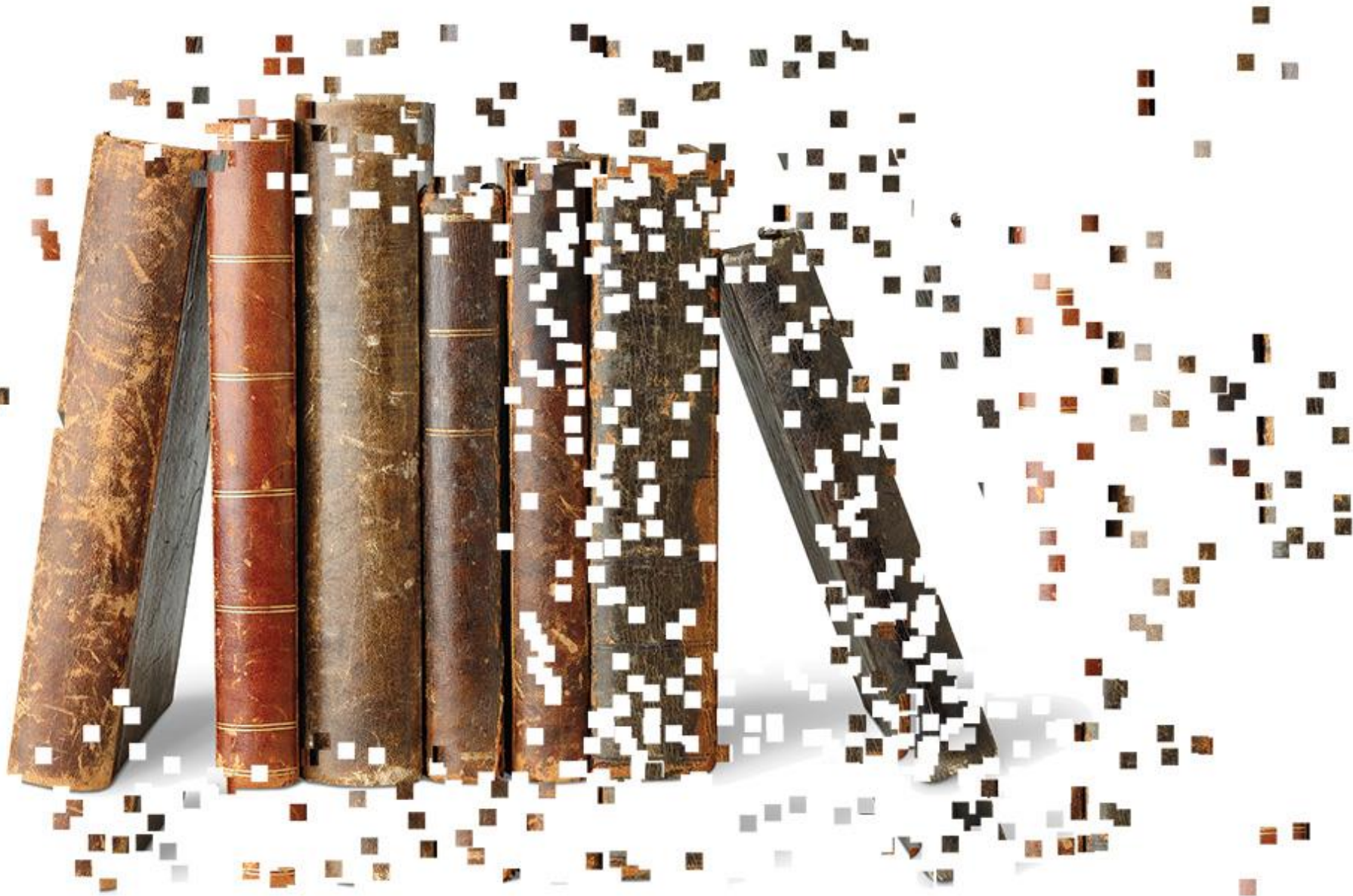


Empowering
Knowledge

Hello!

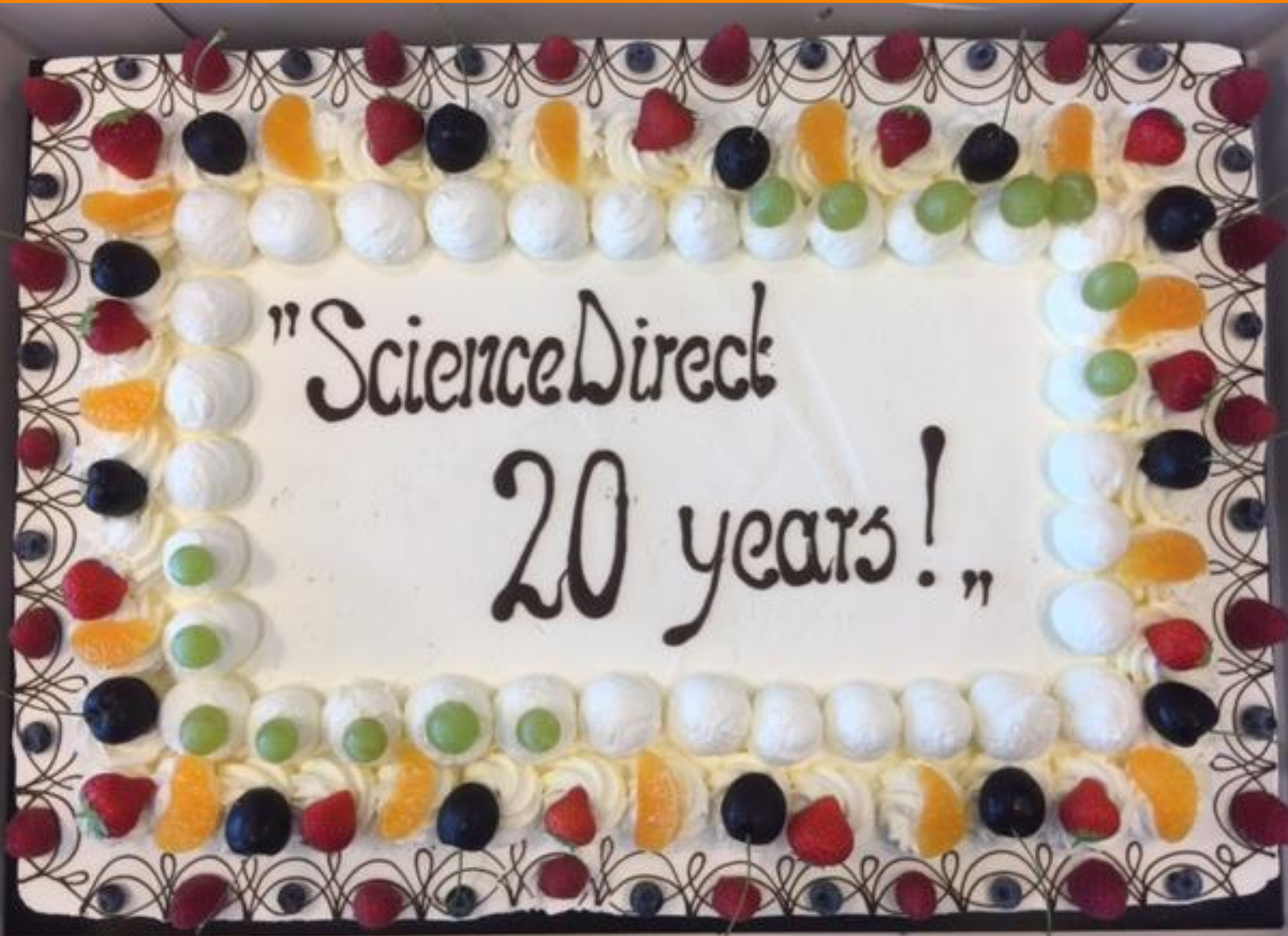
Maarten Cleeren

*Director of Product Management, Enriched Content
Research Products at Elsevier*

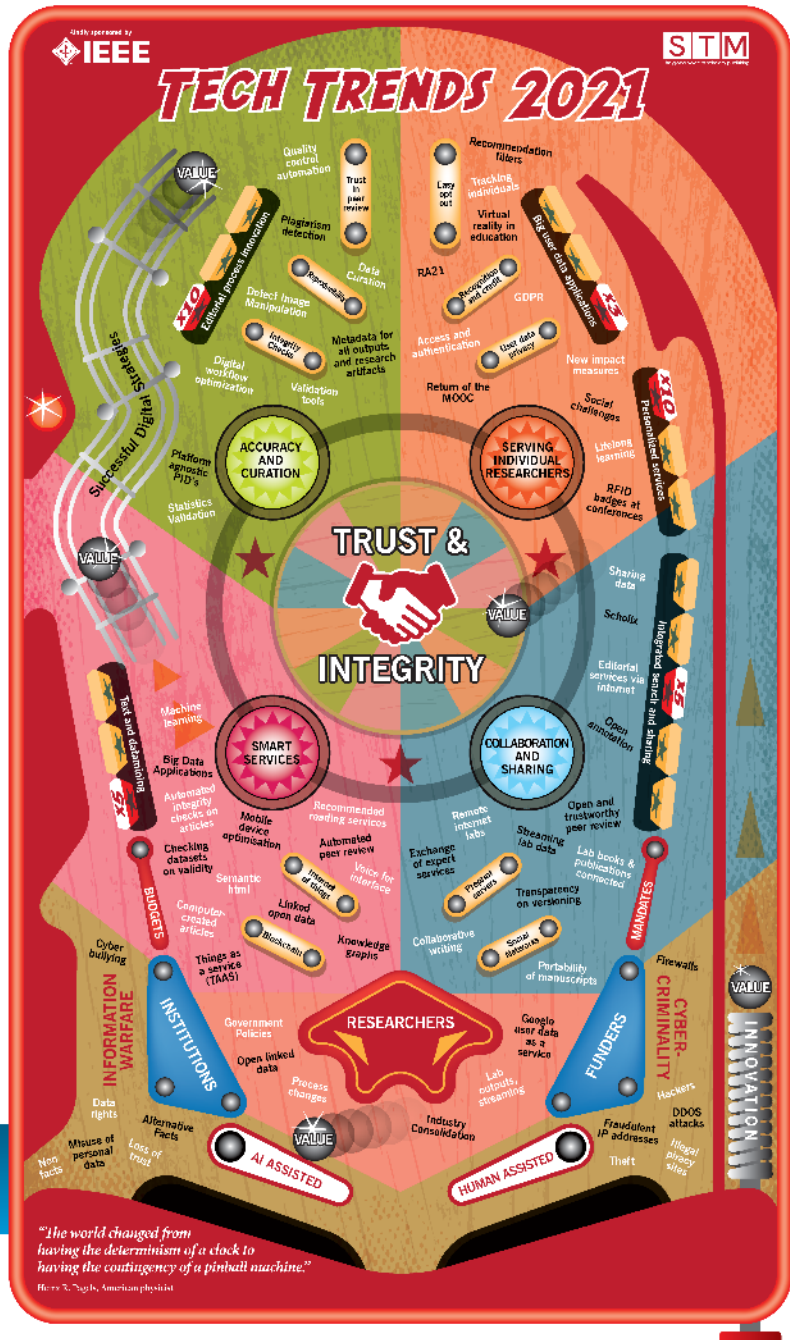


“Although basically built around the content of the printed journals, ScienceDirect is likely to fuel the controversy about the acceptance of the Internet as a venue for publication of original scientific works. This is a highly sensitive issue going directly to the core of the scientific validation process.”

Bruno Giussani, NY Times




"ScienceDirect
20 years!"



Affect vs Transform

*Information analytics
business specializing in
Science and Medicine*

- 
- ① How we are **organized** and who we **hire**
 - ② How we **produce** data and manage information
 - ③ How we **maintain** our **existing business**
 - ④ How we create and build **new services and products**





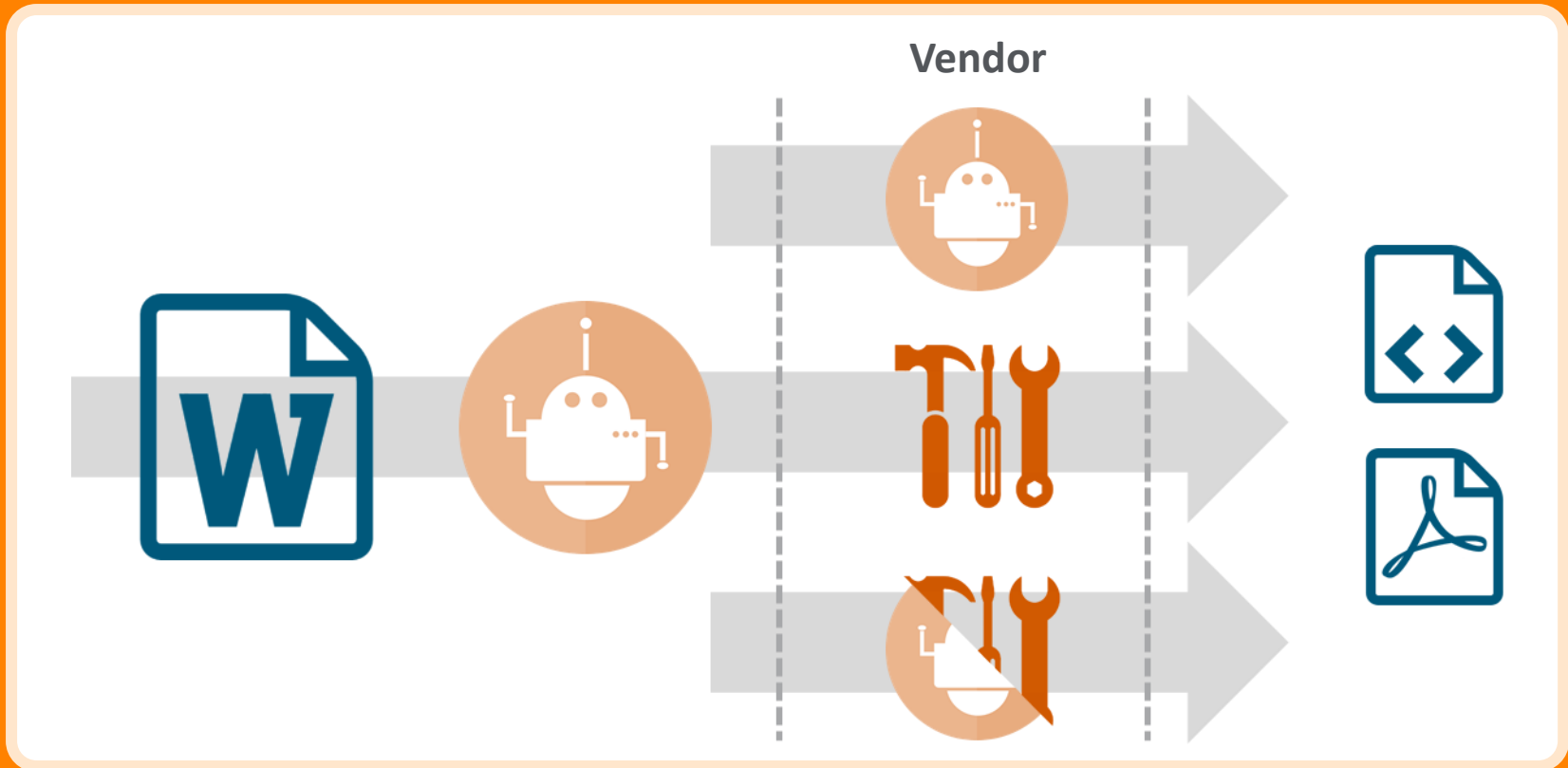
Manual



Machine-aided



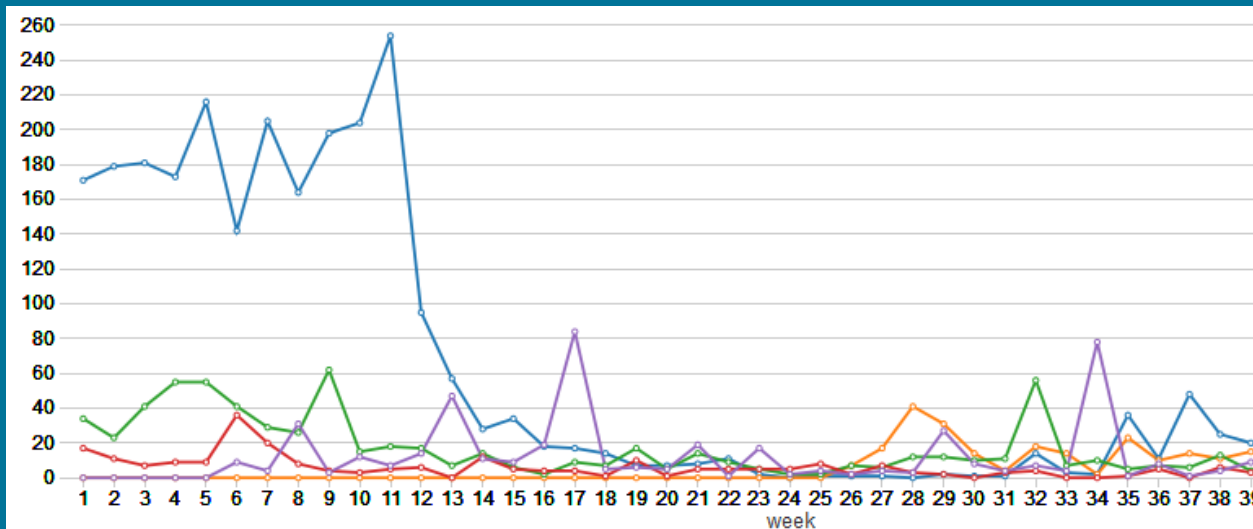
Human-aided





Data analytics on new incoming records we can now flag suspicious data and identify and implement preventive actions

Scopus



Wierczyński, Sławomir

Polish Naval Academy, , Poland

Author ID: 56925454000

Golegondowski, B.

Aarhus Universitet, Department of Geosciences,
Aarhus, Denmark

Author ID: 54990855300

Ehsani1, Mohammad R.

Isfahan University of Technology, Department of Chemical
Engineering, Isfahan, Iran

Author ID: 57046079200

How we create and build **new services and products**

ScienceDirect



When you are signed in to ScienceDirect, our state-of-the-art adaptive algorithm analyses the type of research you do, the articles you view, and the papers you download. This analysis enables us to find articles and papers relevant to your research that you may not have considered. We will email you a list of a 3-5 recommended articles.

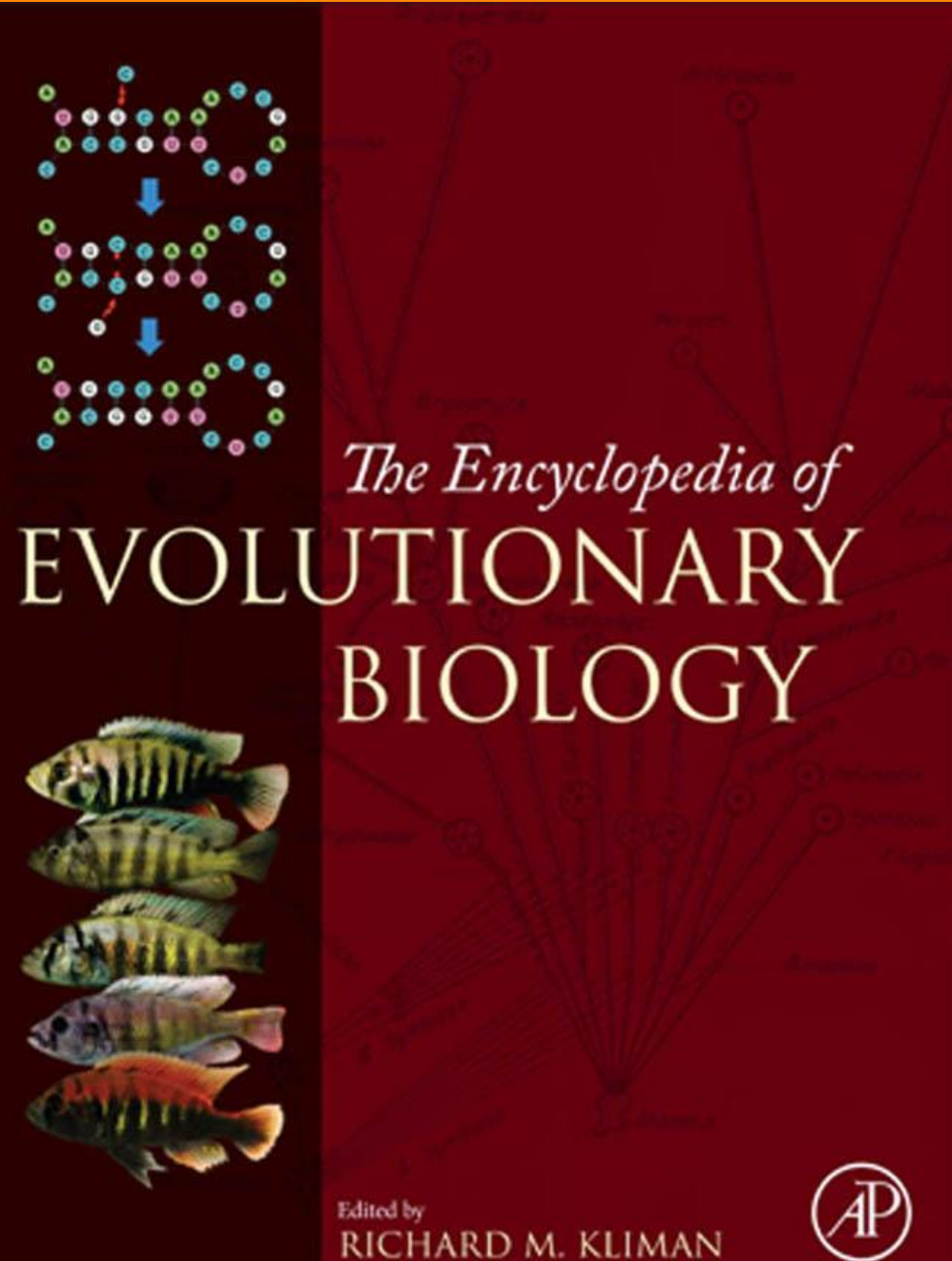
Key Use Case: Understand the Article

User Study:

What are tasks associated with reading content on-screen?

Observation:

When users come across an unfamiliar term or concept in an article, they stop reading, open up new browser tab and search for definitions and background information



Reference Content

A delta fiber

The A δ fibers are a group of faster conducting PANs, slightly larger than the small-caliber C fibers, and have a thin covering of myelin to speed conduction velocity.

From: *Nerves and Nerve Injuries*, 2015

1

Related terms:

Group C nerve fiber, Myelin, Nociceptor, Nociception, Axon, Afferent nerve fiber, Type II sensory fiber, TRPV1, Calcitonin gene-related peptide, Analgesic

2

Learn more about A delta fiber

Pathophysiology of Pain in the Peripheral Nervous System

Rachel Milner^{1*}, Cahir Doherty², in *Nerves and Nerve Injuries*, 2015

A δ Fibers

The A δ fibers are a group of faster conducting PANs, slightly larger than the small-caliber C fibers, and have a thin covering of myelin to speed conduction velocity. Consequently, the subjective nature of pain described when A δ fibers are stimulated is often described as immediate and well-localized pain. A δ fibers typically respond to a discrete type of stimulus, such as mechanical stimuli or damaging hot or cold temperatures. They are less likely to be polymodal receptors than are C fibers (Gold & Gebhart, 2010; Julius & Basbaum, 2001; Schmidt et al., 1995; Woolf & Ma, 2007).

[Read full chapter](#)

3

Adenovirus Replication

Diana Guimet, Patrick Hearing, in *Virus Infection: Molecular Biology and Therapy (Second Edition)*, 2016

Virus Infection

The Ad fiber protein binds to the coxsackie and adenovirus receptor (CAR), which is the primary receptor for both Ad5 and coxsackie B virus.⁶ Attachment to the receptor occurs in concert with the binding of the RGD peptide on the penton base to cellular integrins ($\alpha_v\beta_3$ and $\alpha_v\beta_5$). Ad may enter cells using heparin sulfate proteoglycans as an alternative receptor, likely through interaction with blood factors such as factor IX, factor X, or complement component C4-binding protein.⁷ CD46 also is used as a receptor for subgroup B human Ad.⁶ Ad is internalized by receptor-mediated endocytosis via clathrin-coated pits.⁸ Endosome acidification alters virus topology and the capsid components partly disassemble. The partially degraded virion is transported through the cytoplasm to the nucleus along the

1. Clear definition
2. Related terms
3. Links to relevant Book content

100,000

Neural Networks

1. Receive an input
2. Run a series of hidden calculations
3. Output = answer to your question

Machine Learning

Training data is *key*...

Backpropagation is *crucial* ...

Publishers have a *wealth* of training data



m.cleeren@elsevier.com