The value of early research to
new innovations

*Dr. Bor-Ming Jahn was an academician of Academia Sinica, Taiwan, and
Distinguished Chair Professor of the Department of Geosciences, National Taiwan
University. He conducted research on geochemistry and was the chief editor of

Articles published by Dr. Jahn
between 2010–2015:

• 29% cite backfiles from before 1995
• 21% of cited backfiles come from
Elsevier Journals

Citing earlier works from ScienceDirect’s Pre–1995 Backfiles
Among the articles published by Dr. Bor-Ming Jahn between 2010 and 2015,
29% of them cited backfiles before 1995, with 21% of the cited backfiles
coming from Elsevier’s Journals. His article entitled “Emplacement Ages,
Geochemical and Sr-Nd-Hf Isotopic Characterization of Mesozoic to Early
Cenozoic Granitoids of the Sikhote-Alin Orogenic Belt, Russian Far East:
Crustal Growth and Regional Tectonic Evolution” among others, appeared in

Earlier papers and articles are very popular among other research fellows
in the field of Earth and planetary science at National Taiwan University
(NTU). Among the work published by the faculty members of NTU between
2010 and 2015, 25% of the citations are from papers published before 1995,
and 20% of these citations rely on backfile papers published by Elsevier.
“Researchers should do more comprehensive reading about related and
cross disciplinary subjects because earlier articles are valuable and catalysts
for new areas of research,” Dr. Jahn said.

Prior research continues to affect global research work after many years
According to analysis by Elsevier’s research team on the five top-10 world
universities in Asia ranked by The Times, 15% of research papers contain
citations from pieces published before 1995 and 14% of them are papers
published by Elsevier. By understanding the importance of earlier articles—
more specifically those before 1995—aclade will be better able to achieve
successful results.

In 2013, 21% of citations were to articles 245 years old with an increase of
30% since 1990, and 13% of citations were to articles 220 years old with
an increase of 36% over the same period. Now that finding and reading
relevant older articles is about as easy as finding and reading recently
published articles, significant advances aren’t getting lost on the shelves and
are influencing work worldwide for years after.

Researchers should do more comprehensive reading about related and
cross disciplinary subjects because earlier articles are valuable and catalysts
for new areas of research.”

—Dr. Bor-Ming Jahn

Renowned for his studies in the field of geochemistry, Dr. Bor-Ming Jahn
independently or jointly published more than 200 peer-reviewed academic
articles and has been cited over 14,800 times.
Among the articles written by Dr. Jahn, 54% are published in Elsevier’s
Journals, including Lithos, Journal of Asian Earth Sciences, Precambrian
Research, Chemical Geology, Tectonophysics and other high-impact journals.
Dr. Jahn’s research was in geochemistry, where he employed the principles
and techniques of element and isotope geochemistry to explore important
issues like the evolution of the upper mantle of the Earth, continental crust
growth, genesis of magmatic rocks, geochemistry of sedimentary rocks and
composition of the upper crust, evolution of Archean craton, continental
crust subduction and ultrahigh pressure metamorphism, geochemistry
of loess and paleoclimate change, and carbonate Pb-Pb dating. He had
undoubtedly opened a new research field, inspiring numerous research
articles on the subject. Published papers related to this new field have grown
20 times since 1999.

Elsevier’s Journals are pertinent to the field of Earth and planetary science
Approximately 54% of Dr. Bor-Ming Jahn’s articles and 80% of high impact
articles on the research of loess geochemistry on paleoclimate change are
published with Elsevier.

The 2012 Impact Factor figures for Earth and planetary science show that in
terms of total citations, 80% of journals in the category of geochemistry and
geophysics are published by Elsevier. These include influential publications
such as Geochimica et Cosmochimica Acta, Earth and Planetary Science Letters,
Chemical Geology, and Tectonophysics.

*Though Dr. Jahn has passed away in
2016, we are grateful for the opportunity
to highlight excerpts from a 2015 case
study featuring Dr. Jahn’s impressive
research work, and the ways that he has
contributed to his field.

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