MATTERS OF RECENCY

A. Cuneyt Tas, *Ph.D.*

It almost became the norm these days that newly published peer-reviewed Journal articles come with references mostly not older than the year 2000. The journal powers put this limitation in favor of this myth: “materials science is a fast-moving field of science, so, today’s work to be published must be built on the state-of-the-art, and state-of-the-art goes down to the year 2015, 2010, 2005, or 2000.”

I am sure one could easily realize that this opens the door to paper mill, mafioso authors so that they can pick a strong article published, *e.g.*, in 1991, add some minor or noninventive and iterative work on it and publish it with their names, without possessing the will to cite that 1991 article.

(Watch & listen/Prof. Bernhard A. Sabel: https://www.youtube.com/watch?v=CMxu7ja68vA)

Publication date does not alone define the state-of-the-art. Example: Werner Stober *et al.*, “Controlled growth of monodisperse silica spheres in the micron size range,” J. Colloid and Interface Science, 26, 62-69 (1968). This was solid science with an inventive step and will always stay there and shine.

Can any author cite today the above article, when he/she worked on the synthesis of monodisperse silica spheres, and what happens if the REVIEWER of his/her article WASN’T EVEN AWARE OF the Stober article and would OPPOSE the inclusion of a reference dated back to 1968?

Dr. Michael D. Sacks came in 1984 (16 years after the original Stober article of 1968) and properly cited the Stober article in his follow-up experimental study. Dr. Sacks decreased the monosize, monodisperse SiO2 sphere size down to around 200 nanometers only by varying the reactant concentrations (from those of the Stober article of 1968). The Sacks study thus made an important contribution to the state-of-the-art, which still remains as so. This was (and still is) how science proceeds. (One more interesting point, although Dr. Sacks was reporting opal like nanoparticles of X-ray amorphous silica in his 1984 article, he and his co-author were not using the word “nanoparticle,” essentially since back in 1984 “nanotechnology” was not a selling item, although “nature uses nanotechnology in everything it does since its beginning.”)

Putting a limit to the date of publication of the references of an article does not make any sense and it is therefore a misbehavior of the current Journal editors, especially when the articles are nowadays published in the digital domain (with the hardcopy versions of Journals becoming needless or being limited only to “specialized” or “print-on-demand” hardcopy subscriptions) with inflated number of pages, like 17-20 pp..

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