“Drastic” and “drastically” are often used mistakenly for “dramatic” and “dramatically” in scientific writing.

“Drastic” has the connotation of causing an adverse outcome or being particularly severe or harsh. So adjusting a process to significantly improve some effect does not result in a “drastic” enhancement.

“Dramatic” strictly means “filled with emotion,” although it is sometimes used to mean “remarkable” or “significant.” Ms. Particular, however, distrusts drama in science. Instead of using an imprecise, qualitative description, specify the quantitative effect if you can.

Here’s an example taken from a 2012 Physical Review Letter: “The parity effect is drastic in fermion systems.” What in the world does this sentence mean?