

N°162 / PC

TOPIC(s) : Enzyme discovery and engineering / Biocatalytic cascade reactions

Bright and Flashy Figures of the Inclusive Kind

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PURPOSE OF THE ABSTRACT

Biocatalysis has its roots in chemistry and microbiology; visual sciences. In biocatalysis, we use schemes to illustrate chemical transformations, protein structures to depict complex 3-dimensional architectures and graphs to convey complex relationships and datasets. In doing so, we often use color to highlight certain parts of a figure, guide the reader's eye or transmit information. Colors are often easier to perceive and differentiate than shapes and can be particularly helpful to enhance recognition of recurring elements or intuitively link to concepts. Colors are incredibly useful. However, improper color choices can lead to a misrepresentation or inaccessibility of the underlying information. This can either bias the reader's perception of the displayed data and/or make the figure inaccessible to readers with color vision deficiencies. This contribution discusses how a mindful and informed use of color in scientific illustrations – in particular through scientific color maps – yields more inclusive, accessible and accurate papers, grant proposals and talks. This one is not about enzymes and chemical transformations. It is about how to visualize them for everyone.

FIGURES

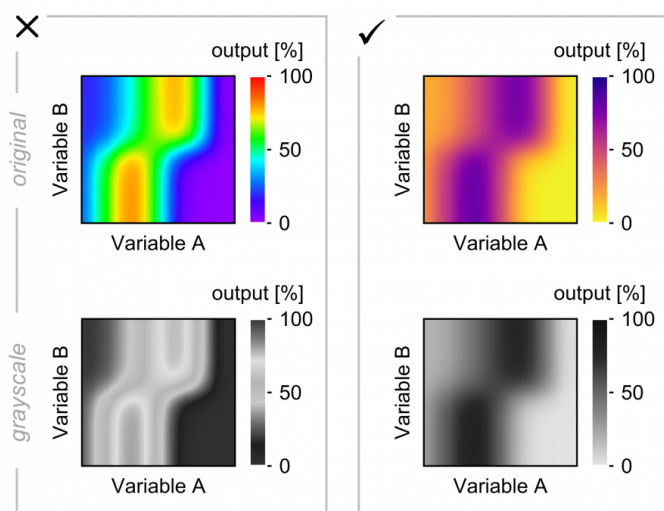


FIGURE 1

Figure 1.

Improper color choices misrepresent the underlying data.

FIGURE 2

KEYWORDS

data | inclusive | color vision deficiency

BIBLIOGRAPHY

[1] Kaspar, F., Crameri, F., Angew. Chem. Int. Ed. 2022, e202114910