## ABSTRACT

The COVID-19 pandemic has caused a huge damage to global society, not only affecting health aspect but also economics. The development of effective vaccines and therapeutics has been a critical step in the fight against this pandemic, and much research has been committed to studying the causative virus, SARS-CoV-2. Pseudo virus, a valuable research tool that allows investigating SARS-CoV-2 in a safe and controlled environment, has gained significant attention in recent years. It is a promising tool for examining the behaviour of the viral envelope protein and the development of vaccines and therapeutics. Finding an optimized pseudo virus system is crucial for various scientific and medical research applications, especially in the study of viral infections, immune responses and vaccine development. It plays a crucial role in advancing our understanding of viral diseases to combat with the new variants. This minireview focuses on the concept of pseudo virus systems and factors affecting the pseudo virus yield.