Ring artifacts appears in low pass filter not in gaussian filter as low pass filter removes all the high frequency signals while in gaussian filter higher frequency gets weaken (not totally removed) .

The main cause of ringing artifacts is due to a signal being bandlimited (specifically, not having high frequencies) or passed through a low-pass filter; this is the frequency domain description. In terms of the time domain, the cause of this type of ringing is the ripples in the sinc function which is the impulse response (time domain representation) of a perfect low-pass filter. In the time domain, the cause is an impulse response that oscillates, assuming negative values. This can be resolved by using a filter whose impulse response is non-negative and does not oscillate, but shares desired traits. For example, for a low-pass filter, the Gaussian filter is non-negative and non-oscillatory, hence causes no ringing. a Gaussian filter "blurs" the signal