qu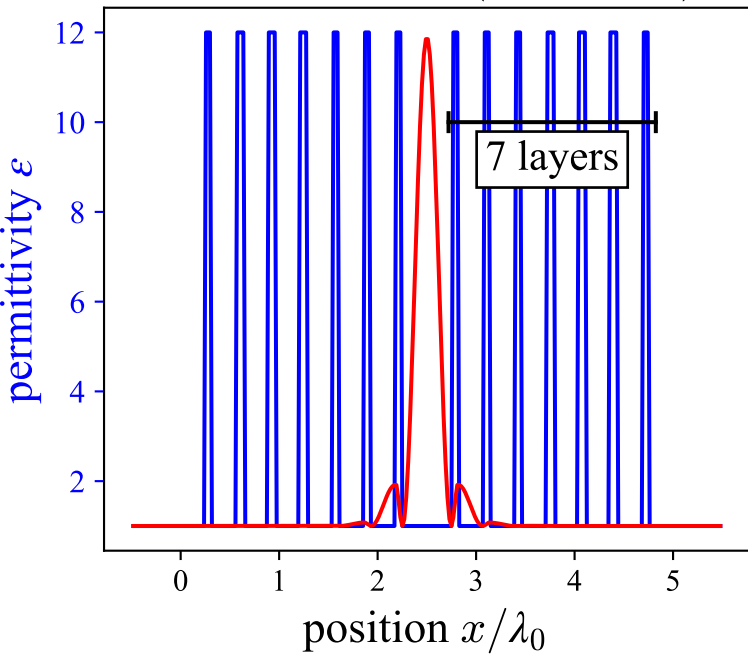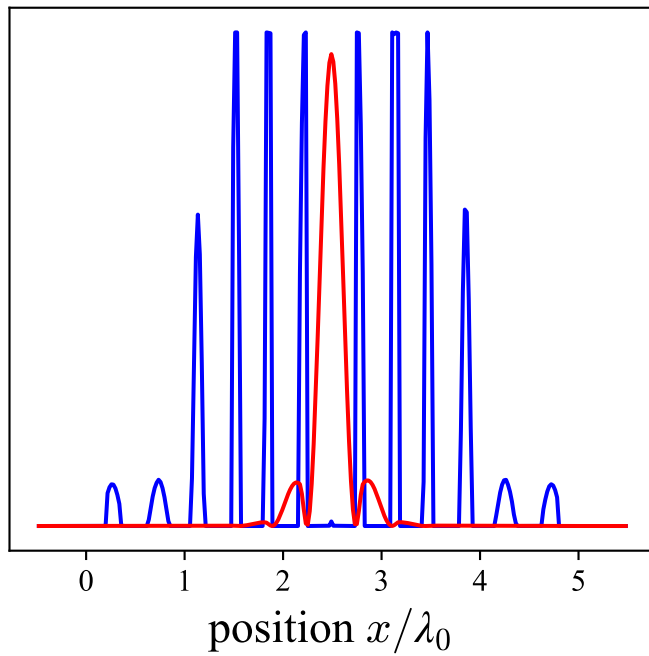arter-wave stack ($Q \approx 4.0 \times 10^7$)   unshifted refined optimum ($Q \approx 32000$)   shifted refined optimum ($Q \approx 4.4 \times 10^8$)