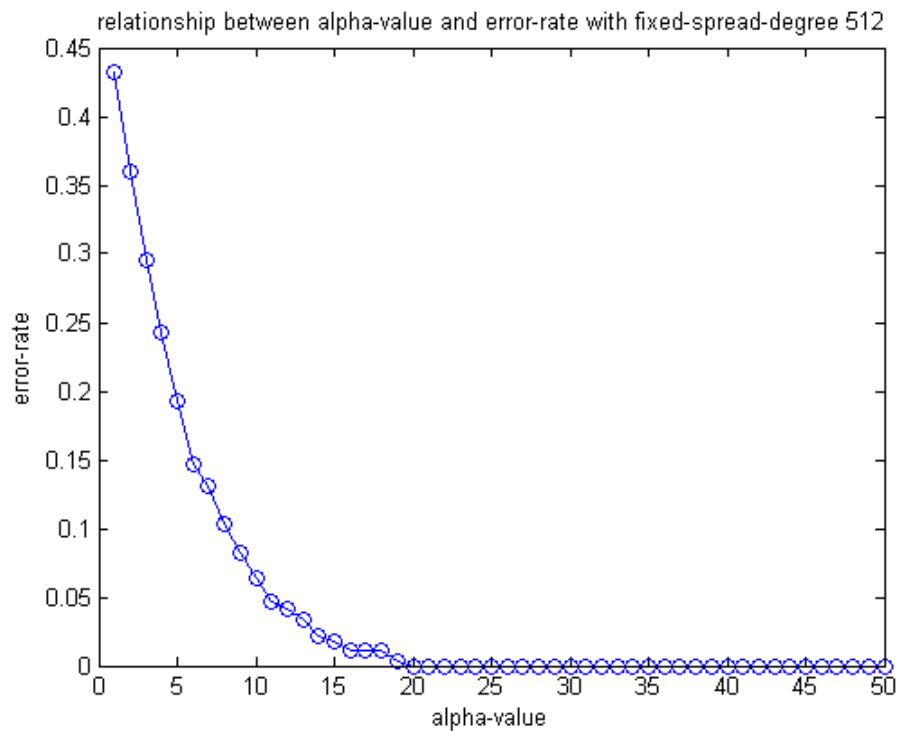# *Experiment*

1 relationship between alpha-value and error-rate with fixed-spread-degree

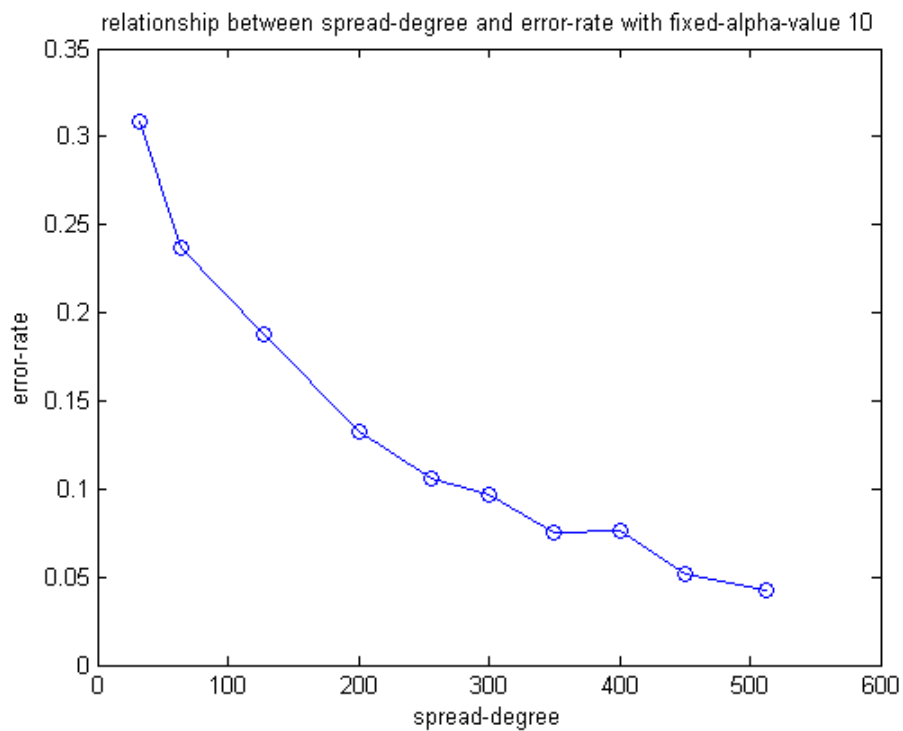| origin | alpha = 5 | alpha = 15 | alpha = 50 |

alpha-value ∝ (1/watermark extraction error rate)
　　　　　∝ (watermark extraction accuracy)
　　　　　∝ (1/image quality)

⇒ the alpha value involves watermark extraction accuracy / image quality trade-off

2 relationship between spread-degree and error-rate with fixed-alpha-value

relationship between spread-degree and error-rate with fixed-alpha-value 10

spread-degree ∝ (1/number of watermark bits)
∝ (1/watermark extraction error rate)
∝ (watermark extraction accuracy)

⇒ if more information is embedded, the watermark extraction accuracy is worse