Abstract

Information in the form of digital images circulated over the networks is gaining popularity and great concern due to its enormous applications and necessities. In many of the applications, the images contain confidential information. The best method to protect images from unauthorized access is image encryption. Recent researches of image encryption algorithms have been increasingly based on chaotic systems. With the research of DNA computing has began, DNA cryptography is born as a new cryptographic field, in which DNA is used as information carrier and the modern biological technology is used as an implementation tool. DNA cryptography can be applied along with chaotic encryption for better performance.

References


Xiaopeng Wei, Ling Guo, Qiang Zhang, Jianxin Zhang and Shiguo Lian, "A novel color image encryption algorithm based on DNA sequence operation and hyper-chaotic system," journals of systems and software, volume 85, issue 2, February 2012, Pages 290–299


Index Terms

Computer Science

Image Processing

Keywords

Image encryption  DNA cryptography  chaotic mapping.