Accepted Manuscript

A color image cryptosystem based on dynamic DNA encryption and chaos

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PII: S0165-1684(18)30313-X

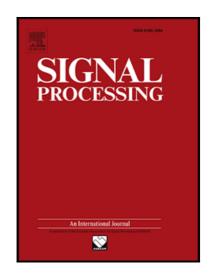
DOI: https://doi.org/10.1016/j.sigpro.2018.09.029

Reference: SIGPRO 6939

To appear in: Signal Processing

Received date: 27 June 2018

Revised date: 18 September 2018 Accepted date: 19 September 2018



Please cite this article as: Xiuli Chai , Xianglong Fu , Zhihua Gan , Yang Lu , Yiran Chen , A color image cryptosystem based on dynamic DNA encryption and chaos, *Signal Processing* (2018), doi: https://doi.org/10.1016/j.sigpro.2018.09.029

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Highlights

- 1 A color image cryptosystem based on dynamic DNA encryption and a four-wing hyperchaotic system is presented.
- 2 Dynamic DNA encoding and decoding rules for all the pixels are generated and dependent on the plain image.
- 3 A novel diffusion mechanism based on random numbers related to plaintext
 (DMRNRP) is introduced to diffuse the DNA sequences of the plain image.
- 4 The image encryption method is highly sensitive to the plain image.
- 5 Experimental results demonstrate that the proposed encryption algorithm has good security performance.

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