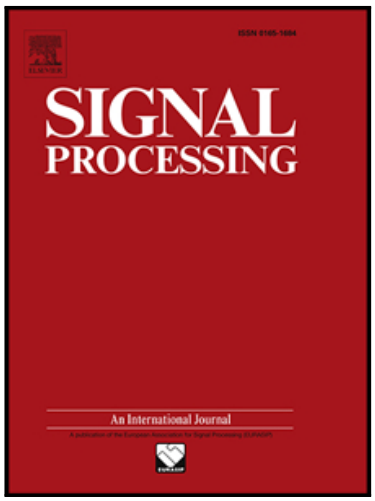


# A color image cryptosystem based on dynamic DNA encryption and chaos

Xiuli Chai , Xianglong Fu , Zhihua Gan , Yang Lu , Yiran Chen

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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.