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ARTICLE

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SPARSE BASED IMAGE ENCRYPTION USING 6D-CHAOTIC SYSTEM AND RC6

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This paper proposes a symmetric key image encryption technique using 6D-chaotic system. Non-zero elements of the generated sparse matrix with the help of a well-trained dictionary for a greyscale image are only considered for encryption. The initial condition of the variates used in chaotic system has been generated from a 32-bit char user key after encrypting with RC6(32,16,12). The efficiency of the proposed cryptosystem, has been analyzed by performing the standard test like Entropy, SSIM, NPCR, UACI, Histogram analysis etc.