Umar Hayat

List of Publications by Year
in descending order

18 papers	432 citations	840776 11 h-index	996975 15 g-index
18 all docs	18 docs citations	18 times ranked	240 citing authors

#	Article	IF	Citations
1	A novel image encryption scheme based on an elliptic curve. Signal Processing, 2019, 155, 391-402.	3.7	131
2	A Method of Generating 8â€‰Ã—â€‰8 Substitution Boxes Based on Elliptic Curves. Wireless Personal Communications, 2018, 101, 439-451.	2.7	68
3	Efficient construction of a substitution box based on a Mordell elliptic curve over a finite field. Frontiers of Information Technology and Electronic Engineering, 2019, 20, 1378-1389.	2.6	41
4	An Injective S-Box Design Scheme over an Ordered Isomorphic Elliptic Curve and Its Characterization. Security and Communication Networks, 2018, 2018, 1-9.	1.5	36
5	A substitution box generator, its analysis, and applications in image encryption. Signal Processing, 2021, 187, 108144.	3.7	35
6	A fast and secure public-key image encryption scheme based on MordellÂelliptic curves. Optics and Lasers in Engineering, 2021, 137, 106371.	3.8	27
7	A Truly Dynamic Substitution Box Generator for Block Ciphers Based on Elliptic Curves Over Finite Rings. Arabian Journal for Science and Engineering, 2021, 46, 8887-8899.	3.0	25
8	Image Encryption Using Elliptic Curves and Rossby/Drift Wave Triads. Entropy, 2020, 22, 454.	2.2	17
9	Efficient and secure substitution box and random number generators over Mordell elliptic curves. Journal of Information Security and Applications, 2021, 56, 102619.	2.5	15
10	A Novel Image Encryption Scheme Based on Elliptic Curves over Finite Rings. Entropy, 2022, 24, 571.	2.2	12
11	Designing an Efficient and Highly Dynamic Substitution-Box Generator for Block Ciphers Based on Finite Elliptic Curves. Security and Communication Networks, 2021, 2021, 1-14.	1.5	11
12	An Efficient Algorithm for Nontrivial Eigenvectors in Max-Plus Algebra. Symmetry, 2019, 11, 738.	2.2	5
13	A novel method to construct NSSD molecular graphs. Open Mathematics, 2019, 17, 1526-1537.	1.0	5
14	An Efficient Algorithm for Eigenvalue Problem of Latin Squares in a Bipartite Min-Max-Plus System. Symmetry, 2020, 12, 311.	2.2	3
15	Classification of Well Log Data Using Vanishing Component Analysis. Pure and Applied Geophysics, 2020, 177, 2719-2737.	1.9	1
16	A Note on the Canonical Divisor of Quasi-homogeneous Affine Algebraic Varieties. Communications in Algebra, 2016, 44, 1275-1279.	0.6	0
17	Fixed Points of Automorphisms of Certain Non-Cyclic p-Groups and the Dihedral Group. Symmetry, 2018, 10, 238.	2.2	0
18	Trivial and Nontrivial Eigenvectors for Latin Squares in Max-Plus Algebra. Symmetry, 2022, 14, 1101.	2.2	0