Thomas J Naughton

List of Publications by Year
in descending order

50 papers	3,343 citations	236925 25 h-index	377865 34 g-index
50 all docs	50 docs citations	50 times ranked	3454 citing authors

#	Article	IF	Citations
1	Assessment of methods for amino acid matrix selection and their use on empirical data shows that ad hoc assumptions for choice of matrix are not justified. BMC Evolutionary Biology, 2006, 6, 29.	3.2	977
2	Resistance of the double random phase encryption against various attacks. Optics Express, 2007, 15, 10253.	3.4	443
3	A known-plaintext heuristic attack on the Fourier plane encryption algorithm. Optics Express, 2006, 14, 3181.	3.4	213
4	Compression of digital holograms for three-dimensional object reconstruction and recognition. Applied Optics, 2002, 41, 4124.	2.1	195
5	Photonic neural networks. Nature Physics, 2012, 8, 257-259.	16.7	128
6	Reduction of speckle in digital holography by discrete Fourier filtering. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2007, 24, 1617.	1.5	119
7	Synthesis and display of dynamic holographic 3D scenes with real-world objects. Optics Express, 2010, 18, 8806.	3.4	118
8	Efficient compression of Fresnel fields for internet transmission of three-dimensional images. Applied Optics, 2003, 42, 4758.	2.1	90
9	Multi-heuristic dynamic task allocation using genetic algorithms in a heterogeneous distributed system. Journal of Parallel and Distributed Computing, 2010, 70, 758-766.	4.1	85
10	Flexible optical encryption with multiple users and multiple security levels. Optics Communications, 2011, 284, 735-739.	2.1	82
11	Key-space analysis of double random phase encryption technique. Applied Optics, 2007, 46, 6641.	2.1	79
12	Compression of digital holograms of three-dimensional objects using wavelets. Optics Express, 2006, 14, 2625.	3.4	67
13	Extended focused imaging for digital holograms of macroscopic three-dimensional objects. Applied Optics, 2008, 47, D71.	2.1	66
14	Microparticle characterization using digital holography. Chemical Engineering Science, 2010, 65, 1037-1044.	3.8	62
15	Introducing secure modes of operation for optical encryption. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 2608.	1.5	61
16	MultiPhyl: a high-throughput phylogenomics webserver using distributed computing. Nucleic Acids Research, 2007, 35, W33-W37.	14.5	59
17	Framework for Task Scheduling in Heterogeneous Distributed Computing Using Genetic Algorithms. Artificial Intelligence Review, 2005, 24, 415-429.	15.7	54
18	Depth-independent segmentation of macroscopic three-dimensional objects encoded in single perspectives of digital holograms. Optics Letters, 2007, 32, 1229.	3.3	51

#	Article	IF	Citations
19	Histogram Approaches for Lossy Compression of Digital Holograms of Three-Dimensional Objects. IEEE Transactions on Image Processing, 2007, 16, 1548-1556.	9.8	49
20	Three dimensional digital holographic profiling of micro-fibers. Optics Express, 2009, 17, 2938.	3.4	47
21	A companding approach for nonuniform quantization of digital holograms of three-dimensional objects. Optics Express, 2006, 14, 5129.	3.4	43
22	Collision in double random phase encoding. Optics Communications, 2008, 281, 5122-5125.	2.1	36
23	Role of phase key in the double random phase encoding technique: an error analysis. Applied Optics, 2008, 47, 3808.	2.1	35
24	Compression of Optically Encrypted Digital Holograms Using Artificial Neural Networks. Journal of Display Technology, 2006, 2, 401-410.	1.2	30
25	Compression defects in different reconstructions from phase-shifting digital holographic data. Applied Optics, 2007, 46, 4579.	2.1	26
26	Analysis of phase encoding for optical encryption. Optics Communications, 2009, 282, 482-492.	2.1	21
27	Statistical investigation of the double random phase encoding technique. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 2033.	1.5	16
28	Visually lossless compression of digital hologram sequences. Proceedings of SPIE, 2010, , .	0.8	14
29	Low memory distributed reconstruction of large digital holograms. Optics Express, 2008, 16, 1990.	3.4	13
30	Digital Fresnel hologram watermarking. , 2010, , .		9
31	Measurement of compression defects in phase-shifting digital holographic data. , 2006, , .		7
32	Stereoscopic Viewing of Digital Holograms of Real-World Objects. , 2007, , .		7
33	Compression strategies for digital holograms in biomedical and multimedia applications. , 2022, 3, 1.		7
34	Holographic display of synthetic 3D dynamic scene. 3D Research, 2010, 1, 31.	1.8	6
35	Superposition of digital holograms. AIP Conference Proceedings, 2006, , .	0.4	4
36	Building Large Phylogenetic Trees on Coarse-Grained Parallel Machines. Algorithmica, 2006, 45, 285-300.	1.3	4

#	ARTICLE	IF	CITATIONS
37	A comparison of wavelet analysis techniques in digital holograms. Proceedings of SPIE, 2008, , .	0.8	4
38	Heterotic Computing Examples with Optics, Bacteria, and Chemicals. Lecture Notes in Computer Science, 2012, , 198-209.	1.3	4
39	Capture, processing, and display of real-world 3D objects using digital holography. , 2010, , .		3
40	Numerical reconstruction of digital holograms for conventional 3D display. , 2010, , .		3
41	Evaluation of perceived quality attributes of digital holograms viewed with a stereoscopic display. , 2010, , .		3
42	Combined optimal quantization and lossless coding of digital holograms of three-dimensional objects. , 2006, , .		2
43	Using traditional glass plate holograms to study visual perception of future digital holographic displays. , 2016, , .		1
44	Cryptanalysis of optical encryption: a heuristic approach. AIP Conference Proceedings, 2006, , .	0.4	0
45	Analysis of double random phase encryption from a key-space perspective. , 2007, , .		0
46	Cost function statistical analysis in double random phase encoding. , 2008, , .		0
47	Displaying digital holograms of real-world objects on a mobile device using tilt-based interaction. , 2010, , .		0
48	Phase in Optical Image Processing. , 2010, , .		0
49	3D perception of numerical hologram reconstructions enhanced by motion and stereo. , 2010, , .		0
50	3D capture, processing, display, and perception with digital holography: results from a European-funded project. , 2011, , .		0