

Research & Publications

(a) Paper in International Journals:

I. SCI/SCIE

- [1] Manoj Shukla, Vinay Kumar Srivastava, and Sudarshan Tiwari, "Analysis and Design of Optimum Interleaver for Iterative Receivers in IDMA Scheme" in Proceedings of Journal Wireless Communications and Mobile Computing, Wiley InterScience Vol 9. Issue 10, pp. 1312-1317, 2009. SCIE WIRELESS COMMUNICATIONS & MOBILE COMPUTING WILEY-HINDAWI 1530-8669 1530-8677 ENGLAND)
- [2] M.K. Hota and Vinay Kumar Srivastava, "Improvement in protein-coding region identification based on sliding window trigonometric fast transforms using Singular Value Decomposition," International Journal of Data Mining and Bioinformatics, Inderscience Publishers, Vol. 5, No. 1, pp. 110-127, 2011. Indexed in SCIE, Scopus
- [3] M.K. Hota and Vinay Kumar Srivastava, "Multistage filters for identification of eukaryotic protein coding regions," International Journal of Biomathematics, World Scientific Publishing Company. Volume: 5, Issue: 2(2012) 1250018 (18 pages) DOI No: 10.1142/S179352451100160X, Impact Factor of 1.667 (SCIE, Scopus impact 0.938 (1793-5245 1793-7159 SINGAPORE English)
- [4] M.K. Hota, and Vinay Kumar Srivastava, "Identification of protein coding regions using antinotch filters", Digital Signal Processing, Elsevier, Volume 22, Issue 6, December 2012, Pages 869-877. www.elsevier.com/locate/dsp (Abstracted & Indexed in SCIE, Scopus IF: 2.9)
- [5] Falgun Thakkar and Vinay Kumar Srivastava, "A fast watermarking algorithm with enhanced security using compressive sensing and principle components and its performance analysis against a set of standard attacks" in International Journal of Multimedia tools and application - Springer Group of Journal. pp.1-29, DOI : 10.1007/s11042-016-3744-0. SCIE IF: 3.6
- [6] Falgun Thakkar and Vinay Kumar Srivastava, "A blind medical image watermarking: DWT-SVD based robust and secure approach for telemedicine applications" in International Journal of Multimedia tools and application - Springer Group of Journal, pp.1-29, DOI 10.1007/s11042-016-3928-7.(SCIE) IF: 3.6

- [7] Falgun Thakkar and Vinay Kumar Srivastava, “A particle swarm optimization and block-SVD based watermarking for digital images” in Turkish Journal of Electrical Engineering and Computer Sciences, DOI: 10.3906/elk-1603-17, E-ISSN:1303-6203, ISSN: 1300-0632. SCIE IF: 1.1
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- [9] Falgun Thakkar and Vinay Kumar Srivastava. “Performance comparison of recent optimization algorithm Jaya with particle swarm optimization for digital image watermarking in complex wavelet domain”, *Multidim Syst Sign Process* 30, 1769–1791(2019) <https://doi.org/10.1007/s11045-018-0627-8>(SCOPUS,SCI/SCIE)IF: 2.5
- [10] Priyank Khare and Vinay Kumar Srivastava, “A reliable and secure image watermarking algorithm using homomorphic transform in DWT domain.” *Multidim Syst Sign Process* 32, 131–160 (2021). <https://doi.org/10.1007/s11045-020-00732-1> (SCImago, SCOPUS, SCI, SCIE) IF: 2.5
- [11] Priyank Khare and Vinay Kumar Srivastava, “A Secured and Robust Medical Image Watermarking Approach for Protecting Integrity of Medical Images” *Trans. on Emerging Telecommunications Technologies* Vol. 32, Issue 2 DOI: 10.1002/ett.3918 (SCIE)
- [12] Falgun Thakkar and Vinay Kumar Srivastava,. (2021). “An adaptive, secure and imperceptible image watermarking using swarm intelligence, Arnold transform, SVD and DWT.” *Multimedia Tools and Applications*. 80. 1-18, 12275-12292. 10.1007/s11042-020-10220-0. SCIE, IF:3.6
- [13] Divyanshu Awasthi and Vinay Kumar Srivastava, “LWT-DCT-SVD and DWT-DCT-SVD based watermarking schemes with their performance enhancement using Jaya and Particle swarm optimization and comparison of results under various attacks” *Multimedia Tools and Applications* 81 (18), 25075-25099, March 2022 DOI: 10.1007/s11042-022-12456-4,(SCOPUS, SCIE) IF:3.6
- [14] Divyanshu Awasthi and Vinay Kumar Srivastava, “Robust, imperceptible and optimized watermarking of DICOM image using Schur decomposition, LWT-DCT-SVD and its authentication using SURF,” *Multimedia Tools and Applications*, 27 published on September 2022, Vol. 82, 16555–16589 (2023). <https://doi.org/10.1007/s11042-022-14002-8> (SCOPUS, SCIE) IF:3.6

- [15] Divyanshu Awasthi and Vinay Kumar Srivastava. "Performance enhancement of SVD based dual image watermarking in wavelet domain using PSO and JAYA optimization and their comparison under hybrid attacks." *Multimed Tools Appl* (2023). <https://doi.org/10.1007/s11042-023-14723-4>. (SCOPUS, SCIE) IF:3.6
- [16] Anurag Tiwari and Vinay Kumar Srivastava, "Novel schemes for the improvement of lifting wavelet transform-based image watermarking using Schur decomposition." *J Supercomput* (2023). <https://doi.org/10.1007/s11227-023-05167-6>. (SCImago, SCOPUS, SCI, SCIE) IF:3.3
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- [20] Anurag Tiwari and Vinay Kumar Srivastava "Image watermarking techniques based on Schur decomposition and various image invariant moments: a review", *Multimedia Tools and Applications*, July 2023. (SCImago, SCOPUS, SCIE) IF:3.6
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- [22] Ranjana Dwivedi, Divyanshu Awasthi and Vinay Kumar Srivastava, "An Optimized Dual Image Watermarking Scheme based on Redundant DWT and Randomized SVD with Henon Mapping Encryption," *Circuits Systems and Signal Processing*, August 2023. (SCOPUS, SCIE) IF: 2.3

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- [29] Divyanshu Awasthi, Priyank Khare and Vinay Kumar Srivastava, BNHWA: NifTI image watermarking with aid of PSO and BO in wavelet domain with its authentication for telemedicine applications, *Multimedia Tools and Applications*, August 2024 (SCOPUS, SCIE)
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II. Scopus and Others International Journals

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- [34] Vinay Kumar Srivastava, "A SVD based Scheme for Postprocessing of DCT Coded Images" Electronic Letters on Computer Vision and Image Analysis, ELCVIA ISSN:1577-5097, 8(3): 1- 14, 2009.(ELCVIA is ranked with SJR (SCImago Journal Rank) indicator: 0.12 and Scopus)
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(b) Research & Publications: Book Chapters

- [1] Manjot Singh Bilkhu, Samarth Gupta, and Vinay Kumar Srivastava, Emotion Classification from Facial Expressions Using Cascaded Regression Trees and SVM, *Advances in Intelligent Systems and Computing*, September 2019 In book: *Computational Intelligence: Theories, Applications and Future Directions - Volume II*, DOI: 10.1007/978-981-13-1135-2_44
- [2] Priyank Khare and Vinay Kumar Srivastava, Homomorphic transform-based dual image watermarking using IWT-SVD for secure e-healthcare applications In book: *Intelligent Data Security Solutions for e-Health Applications*, January 2020, DOI: 10.1016/B978-0-12-819511-6.00005-4
- [3] Ayush Kumar Nigam, Priyank Khare, and Vinay Kumar Srivastava, Image Compression Using Hybrid Approach and Adaptive Scanning for Color Images, In book: *Advances in VLSI, Communication, and Signal Processing*, January 2020, DOI: 10.1007/978-981-32-9775-3_69

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- [6] Ranjana Dwivedi and Vinay Kumar Srivastava, Geometrically Robust Digital Image Watermarking Based on Zernike Moments and FAST Technique, In book: Advances in VLSI, Communication, and Signal Processing, October 2022, DOI: 10.1007/978-981-19-2631-0_58
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(c) Research & Publications: Articles in proceedings (International)

- [1] Vinay Kumar Srivastava and G.C. Ray, "Design of 2D multiple notch filter and its application in reducing blocking artifacts from DCT coded images." in the proceedings of the International Conference of IEEE Engineering in Medicine and Biology, Chicago, USA, TH-G301-06, July 23-28, 2000.
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- [30] Ramkrishna P. and Vinay Kumar Srivastava “A Simple De-blocking Method for Reduction of Blocking Artifacts” in proceedings of the IEEE SCEECs, March 1-2, 2012, held at MANIT, Bhopal.
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