# R Kumar

## List of Publications by Year in descending order

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|---|---|---|---|
| 86 papers | 570 citations | 759233<br>12 h-index | 794594<br>19 g-index |
| 89 all docs | 89 docs citations | 89 times ranked | 300 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 1 | A comprehensive survey on signal processing and machine learning techniques for non-invasive fetal ECG extraction. Multimedia Tools and Applications, 2023, 82, 1373-1400. | 3.9 | 10 |
| 2 | Variable-Stage Cascaded Adaptive Filter Technique for Signal De-Noising Application. Circuits, Systems, and Signal Processing, 2022, 41, 1972-2006. | 2.0 | 4 |
| 3 | Coefficient Permuted Adaptive Block Compressed Sensing for Camera Enabled Underwater Wireless Sensor Nodes. IEEE Sensors Journal, 2022, 22, 776-784. | 4.7 | 16 |
| 4 | Joint time-frequency analysis and non-linear estimation for fetal ECG extraction. Biomedical Signal Processing and Control, 2022, 75, 103569. | 5.7 | 8 |
| 5 | Radiological Analysis of COVID-19 Using Computational Intelligence: A Broad Gauge Study. Journal of Healthcare Engineering, 2022, 2022, 1-25. | 1.9 | 9 |
| 6 | Transmission spectra in one-dimensional Gaussian random multilayer photonic crystal. , 2022, , . | | 0 |
| 7 | A Low-Cost Multistage Cascaded Adaptive Filter Configuration for Noise Reduction in Phonocardiogram Signal. Journal of Healthcare Engineering, 2022, 2022, 1-24. | 1.9 | 4 |
| 8 | Emerging Feature Extraction Techniques for Machine Learning-Based Classification of Carotid Artery Ultrasound Images. Computational Intelligence and Neuroscience, 2022, 2022, 1-14. | 1.7 | 3 |
| 9 | Analysis of transmission spectra in one-dimensional ternary photonic crystals with complex unit cell. Optik, 2022, 261, 169169. | 2.9 | 7 |
| 10 | Humidity sensor based on fibre bragg grating for predicting microbial induced corrosion. Sustainable Energy Technologies and Assessments, 2022, 52, 102306. | 2.7 | 7 |
| 11 | Occlusion aware underwater object tracking using hybrid adaptive deep SORT -YOLOv3 approach. Multimedia Tools and Applications, 2022, 81, 44109-44121. | 3.9 | 7 |
| 12 | Noise reduction in speech signal of Parkinson's Disease (PD) patients using optimal variable stage cascaded adaptive filter configuration. Biomedical Signal Processing and Control, 2022, 77, 103802. | 5.7 | 4 |
| 13 | Adaptive block compressed sensing - a technological analysis and survey on challenges, innovation directions and applications. Multimedia Tools and Applications, 2021, 80, 4751-4768. | 3.9 | 11 |
| 14 | Fully Automated Integrated Segmentation of Carotid Artery Ultrasound Images Using DBSCAN and Affinity Propagation. Journal of Medical and Biological Engineering, 2021, 41, 260-271. | 1.8 | 12 |
| 15 | Comprehensive Study and Realizing an Enhanced Efficiency of the Thermoelectric Generator Along with Its Thermomechanical Properties. Journal of Electronic Materials, 2021, 50, 1726-1734. | 2.2 | 3 |
| 16 | Assembly of fibre bragg grating with optical tweezers for continuous detection and trapping of micro-particles. Optik, 2021, 228, 166215. | 2.9 | 1 |
| 17 | T-Count Optimized Quantum Circuit Designs for Single-Precision Floating-Point Division. Electronics (Switzerland), 2021, 10, 703. | 3.1 | 17 |
| 18 | Photonic bandgap characteristics of GaAs/AlAs-based one-dimensional quasi-periodic photonic crystal. Optik, 2021, 234, 166597. | 2.9 | 14 |

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|---|---------|----|-----------| 
| 19 | Review of Fiber Optical Sensors and Its Importance in Sewer Corrosion Factor Analysis. Chemosensors, 2021, 9, 118. | 3.6 | 14 |
| 20 | An improved parallel sub-filter adaptive noise canceler for the extraction of fetal ECG. Biomedizinische Technik, 2021, 66, 503-514. | 0.8 | 25 |
| 21 | Development of a High Sensitive Refractive Index Sensor Based on Evanescent Wave Absorbance effect in Reflective Mode for Ocean Observation. Wireless Personal Communications, 2021, 121, 411-427. | 2.7 | 3 |
| 22 | Tunable properties of one-dimensional GaAs/AlAs-based photonic crystal containing two defect layers. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 2141. | 2.1 | 5 |
| 23 | T-Count Optimized Wallace Tree Integer Multiplier for Quantum Computing. International Journal of Theoretical Physics, 2021, 60, 2823-2835. | 1.2 | 6 |
| 24 | Investigation of Peak Detection Algorithms for Fiber Bragg Grating Interrogation based Sensing Systems for Temperature, Depth and Salinity Measurements. Journal of Physics: Conference Series, 2021, 2007, 012057. | 0.4 | 3 |
| 25 | Linear Temperature Distribution Sensor Using FBG in Liquids—Local Heat Transfer Examination Application. IEEE Sensors Journal, 2021, 21, 16651-16658. | 4.7 | 4 |
| 26 | Fetal heart rate estimation using fractional Fourier transform and wavelet analysis. Biocybernetics and Biomedical Engineering, 2021, 41, 1533-1547. | 5.9 | 17 |
| 27 | Underwater object detection based on bi-dimensional empirical mode decomposition and Gaussian Mixture Model approach. Ecological Informatics, 2021, 66, 101469. | 5.2 | 18 |
| 28 | T-count optimized quantum circuit for floating point addition and multiplication. Quantum Information Processing, 2021, 20, 1. | 2.2 | 2 |
| 29 | Variable tap-length non-parametric variable step-size NLMS adaptive filtering algorithm for acoustic echo cancellation. Applied Acoustics, 2020, 159, 107074. | 3.3 | 40 |
| 30 | Enhancing Sensitivity of Fiber Bragg Grating-Based Temperature Sensors through Teflon Coating. Wireless Personal Communications, 2020, 110, 593-604. | 2.7 | 22 |
| 31 | Sensitivity enhancement analysis due to different coating materials of Fibre Bragg Grating-based depth sensor for underwater applications. Optical and Quantum Electronics, 2020, 52, 1. | 3.3 | 8 |
| 32 | Effect of Surface Roughness during Peristaltic Movement in a Nonuniform Channel. Mathematical Problems in Engineering, 2020, 2020, 1-8. | 1.1 | 3 |
| 33 | A High Capacity 1D-Chaotic-Collaborative-CDMA Scheme for Shared Band 5G-IoT Operation. Wireless Personal Communications, 2020, 115, 307-314. | 2.7 | 1 |
| 34 | Corrigendum to "Mathematical Analysis of Heat Transfer in Peristaltic Transport through a Rough Nonuniform Inclined Channel". Mathematical Problems in Engineering, 2020, 2020, 1-1. | 1.1 | 0 |
| 35 | n-GaAs based extrinsic Dodecanacci photonic quasicrystal. Physica B: Condensed Matter, 2020, 595, 412340. | 2.7 | 13 |
| 36 | Mathematical Analysis of Heat Transfer in Peristaltic Transport through a Rough Nonuniform Inclined Channel. Mathematical Problems in Engineering, 2020, 2020, 1-16. | 1.1 | 1 |

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| 37 | UF0MC-IOTA Based Cognitive Radio Transceiver. Wireless Personal Communications, 2020, 114, 2105-2119. | 2.7 | 2 |
| 38 | Implementation of quantum teleportation of photons across an air – water interface. Optical and Quantum Electronics, 2020, 52, 1. | 3.3 | 1 |
| 39 | Development and experimental validation of a Nuttall apodized fiber Bragg Grating sensor with a hydrophobic polymer coating suitable for monitoring sea surface temperature. Optical Fiber Technology, 2020, 56, 102176. | 2.7 | 7 |
| 40 | Carotid artery ultrasound image analysis: A review of the literature. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 417-443. | 1.8 | 28 |
| 41 | Photonic transmission spectra in an extrinsic semiconductor based Gaussian random multilayer. Optical Materials, 2020, 102, 109799. | 3.6 | 14 |
| 42 | Development of a highly accurate and fast responsive salinity sensor based on Nuttall apodized Fiber Bragg Grating coated with hygroscopic polymer for ocean observation. Optical Fiber Technology, 2019, 53, 102036. | 2.7 | 21 |
| 43 | Computational analysis of thermally induced stress in corrosion-resistant metal coated fiber optic sensors for oceanographic application. Optik, 2019, 195, 163097. | 2.9 | 7 |
| 44 | Saturable Absorbers for Mode-Locking of Lasers Operating at Ultraviolet Wavelengths. , 2019, , . | | 0 |
| 45 | Multiple Sub-Filter Adaptive Noise Canceller for Fetal ECG Extraction. Procedia Computer Science, 2019, 165, 182-188. | 2.0 | 20 |
| 46 | Fiber optic sensors in ocean observation: A comprehensive review. Optik, 2019, 179, 351-360. | 2.9 | 55 |
| 47 | Perturbation Analysis of Decentralized Estimators. , 2018, , . | | 0 |
| 48 | A Diversity Enhanced-Particle Filter based Multiple Carrier Frequency Offset Estimation Using Hadamard Matching in CA-OFDM Based LTE-A System. Wireless Personal Communications, 2018, 101, 87-99. | 2.7 | 3 |
| 49 | Sub-Band Filter in Universal Filtered Multi-Carrier Transceiver for Cognitive Radio Network. Wireless Personal Communications, 2018, 103, 1587-1602. | 2.7 | 1 |
| 50 | 1D-Bernoulli Chaos Sequences Based Collaborative-CDMA: A Novel Secure High Capacity CDMA Scheme. Wireless Personal Communications, 2017, 96, 2077-2086. | 2.7 | 4 |
| 51 | Multigroup Synchronization in 1D-Bernoulli Chaotic Collaborative CDMA. Wireless Communications and Mobile Computing, 2017, 2017, 1-7. | 1.2 | 1 |
| 52 | OPTIMAL POSITIONING OF BASE STATION IN WIRELESS SENSOR NETWORKS. Far East Journal of Electronics and Communications, 2017, 17, 229-249. | 0.2 | 0 |
| 53 | Co-operative cyclo-stationary feature detection with universal filtered multi-carrier spectrum sensing for cognitive radio network. , 2016, , . | | 4 |
| 54 | A Diversity Enhanced Particle Filter for Carrier Frequency Offset Estimation in Nonlinear OFDM System. Wireless Personal Communications, 2016, 89, 15-26. | 2.7 | 3 |

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| 55 | Performance Evaluation of a Low Complexity Row-Column Transform Approach for SLM Based OFDM Transmission System. Wireless Personal Communications, 2016, 87, 1357-1369. | 2.7 | 5 |
| 56 | Performance Enhancement of Multi Band-OFDM Based Ultra Wide Band Systems for WPAN. Wireless Personal Communications, 2015, 82, 183-200. | 2.7 | 4 |
| 57 | Particle Filter with Novel Resampling Algorithm: A Diversity Enhanced Particle Filter. Wireless Personal Communications, 2015, 84, 3171-3177. | 2.7 | 6 |
| 58 | Reduction in Complexity in Maximum Likelihood Estimation and Correction of Fractional CFO in OFDM Systems. Wireless Personal Communications, 2015, 82, 1567-1584. | 2.7 | 1 |
| 59 | An efficient spectrum sensing using compressive measurements in Cognitive Radio. , 2015, , . |  | 0 |
| 60 | An Efficient Low Complexity Transform for DCT-OFDM Based Wireless Communication System. Wireless Personal Communications, 2015, 82, 201-214. | 2.7 | 1 |
| 61 | A Novel Algorithm to Improve Indoor Localization Accuracy and Path-Loss Reduction Using Real Time RSSI. International Review on Computers and Software, 2015, 10, 332. | 0.1 | 4 |
| 62 | ANALYSIS OF REDUCTION IN COMPLEXITY OF MULTIPLE INPUT- MULTIPLE OUTPUT-ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING SYSTEMS WITH CARRIER FREQUENCY OFFSET ESTIMATION AND CORRECTION. Journal of Computer Science, 2014, 10, 198-209. | 0.6 | 2 |
| 63 | Comparisons of low complexity transforms for multi carrier schemes. , 2014, , . |  | 1 |
| 64 | Application of the Joint Fast Walsh Hadamard-Inverse Fast Fourier Transform in a LDPC Coded OFDM Wireless Communication System: Performance and Complexity Analysis. Wireless Personal Communications, 2014, 77, 3177-3192. | 2.7 | 4 |
| 65 | Alamouti Space Time Coded Design for OFDMA Systems Based Layered FFT Structure. Advances in Intelligent Systems and Computing, 2014, , 427-434. | 0.6 | 0 |
| 66 | An Overview of Localization for Wireless Sensor Networks. IOSR Journal of Computer Engineering, 2014, 16, 91-99. | 0.1 | 0 |
| 67 | Load Balancing Clustering in WSN using MABC. Research Journal of Information Technology, 2014, 6, 389-398. | 0.4 | 1 |
| 68 | A modified preamble structure based carrier frequency offset (CFO) compensation in an OFDM system. , 2013, , . |  | 1 |
| 69 | Performance evaluation of LDPC coded MIMO transceiver with equalization. , 2013, , . |  | 3 |
| 70 | A joint clipping and logarithmic based companding for the reduction of peak-to-average power ratio in OFDM system. , 2013, , . |  | 2 |
| 71 | Performance analysis of &#x03BC;-law companding &amp; SQRT techniques for M-QAM OFDM systems. , 2013, , . |  | 5 |
| 72 | Capacity maximization in spectrum sensing for Cognitive Radio Networks thru Outage Probability. AEU - International Journal of Electronics and Communications, 2013, 67, 35-39. | 2.9 | 5 |

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| 73 | A modified preamble structure based carrier frequency offset (CFO) and phase noise compensation in an OFDM system. , 2013, , . | | 0 |
| 74 | Analysis of OFDMA receiver with carrier frequency offset and common carrier frequency offset (CCFO). Proceedings of SPIE, 2013, , . | 0.8 | 0 |
| 75 | A study analysis of cooperative spectrum sensing in cognitive radio networks. Proceedings of SPIE, 2013, , . | 0.8 | 0 |
| 76 | A NOVEL TWO STAGE CARRIER FREQUENCY OFFSET ESTIMATION AND COMPENSATION SCHEME IN MULTIPLE INPUT MULTIPLE OUTPUT-ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING SYSTEM USING EXPECTATION AND MAXIMIZATION ITERATION. Journal of Computer Science, 2013, 9, 1526-1533. | 0.6 | 5 |
| 77 | PAPR reduction for OFDM systems using clipping and square rooting techniques. , 2012, , . | | 4 |
| 78 | LDPC coding proposal for pulsed-OFDM modulation for WPAN systems using UWB communication in indoor propagation channels. International Journal of Innovative Computing and Applications, 2012, 4, 52. | 0.2 | 0 |
| 79 | Performance of comparison metrics on M-QAM OFDM systems with high power amplifier. , 2012, , . | | 4 |
| 80 | Performance analysis of OFDMA receiver with common carrier frequency offset (CCFO). , 2012, , . | | 1 |
| 81 | Efficacy of 16-APSK modulation for Multiband Pulsed-OFDM UWB-communication systems. , 2012, , . | | 3 |
| 82 | LDPC Coding Proposal for Pulsed-OFDM Modulation for WPAN Systems Using UWB Communication in Indoor Propagation Channels. Lecture Notes in Electrical Engineering, 2012, , 99-106. | 0.4 | 0 |
| 83 | Performance Analysis of OFDM Systems with Gaussian Distributed Phase and Frequency Offsets. International Journal of Computer Applications, 2012, 47, 42-49. | 0.2 | 2 |
| 84 | Time-Domain Equalization Technique for Intercarrier Interference Suppression in OFDM Systems. , 2007, , . | | 4 |
| 85 | Spectral Analysis of Atmospheric Radar Echoes Using a Non-Stationary Approach. Wireless Personal Communications, 0, , 1. | 2.7 | 1 |
| 86 | An efficient adaptive compressive sensing technique for underwater image compression in IoUT. Wireless Networks, 0, , 1. | 3.0 | 6 |