# Miguel LÃ³pez-BenÃ-tez

List of Publications by Year
in descending order



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|---|---|---|---|
| 101 papers | 1,597 citations | 535685 17 h-index | 511568 30 g-index |
| 102 all docs | 102 docs citations | 102 times ranked | 991 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Performance Analysis of Dual-Hop RF/FSO Relaying Systems With Imperfect CSI. IEEE Transactions on Vehicular Technology, 2022, 71, 4965-4976. | 3.9 | 9 |
| 2 | Iterative Pyramidal Filtering Method for Improved Signal Recognition in Radio Spectrograms. IEEE Wireless Communications Letters, 2022, 11, 1146-1150. | 3.2 | 0 |
| 3 | Enhanced Signal Area Estimation Based on Edge Detection and Flood Fill. IEEE Access, 2022, 10, 47179-47194. | 2.6 | 4 |
| 4 | A Review of Wavelet Analysis and Its Applications: Challenges and Opportunities. IEEE Access, 2022, 10, 58869-58903. | 2.6 | 87 |
| 5 | Towards Deep Radar Perception for Autonomous Driving: Datasets, Methods, and Challenges. Sensors, 2022, 22, 4208. | 2.1 | 31 |
| 6 | Deep Learning-based Fingerprinting for Outdoor UE Positioning Utilising Spatially Correlated RSSs of 5G Networks. , 2022, , . | | 4 |
| 7 | Modelling the Impact of Multiple Pro-inflammatory Cytokines Using Molecular Communication. , 2022, , . | | 0 |
| 8 | LSTM Autoencoder aided Estimation of Primary Activity Statistics under Imperfect Sensing. , 2021, , . | | 2 |
| 9 | Performance Analysis of Dual-Hop Wireless Systems Over Mixed FSO/RF Fading Channel. IEEE Access, 2021, 9, 85529-85542. | 2.6 | 19 |
| 10 | Feature-Based Deep Neural Networks for Short-Term Prediction of WiFi Channel Occupancy Rate. IEEE Access, 2021, 9, 85645-85660. | 2.6 | 4 |
| 11 | Comments and Corrections to â€œNew Results on the Fluctuating Two-Ray Model With Arbitrary Fading Parameters and Its Applicationsâ€. IEEE Transactions on Vehicular Technology, 2021, 70, 1938-1940. | 3.9 | 13 |
| 12 | Evaluation of the Impact of Thresholding and Frequency/Time Resolution on Signal Area Estimation Methods. , 2021, , . | | 4 |
| 13 | Cooperative Spectrum Sensing: A New Approach for Minimum Interference and Maximum Utilisation. , 2021, , . | | 4 |
| 14 | A Minesweeper Algorithm for Improved Signal Area Estimation in Spectrum Aware Systems. , 2021, , . | | 4 |
| 15 | Traffic Learning: A Deep Learning Approach for Obtaining Accurate Statistical Information of the Channel Traffic in Spectrum Sharing Systems. IEEE Access, 2021, 9, 124324-124336. | 2.6 | 5 |
| 16 | Impact of Mobility on the Estimation of Primary Channel Activity Statistics. , 2021, , . | | 1 |
| 17 | Improved likelihood ratio statisticâ€based cooperative spectrum sensing for cognitive radio. IET Communications, 2020, 14, 1675-1686. | 1.5 | 15 |
| 18 | Artificial neural network design for improved spectrum sensing in cognitive radio. Wireless Networks, 2020, 26, 6155-6174. | 2.0 | 12 |

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| 19 | Reconstruction Algorithm for Primary Channel Statistics Estimation Under Imperfect Spectrum Sensing. , 2020, , . | | 8 |
| 20 | Methods for Fast Estimation of Primary Activity Statistics in Cognitive Radio Systems. , 2020, , . | | 1 |
| 21 | Analysis of the Sample Size Required for an Accurate Estimation of Primary Channel Activity Statistics under Imperfect Spectrum Sensing. , 2020, , . | | 3 |
| 22 | Novel LAA Waiting and Transmission Time Configuration Methods for Improved LTE-LAA/Wi-Fi Coexistence Over Unlicensed Bands. IEEE Access, 2020, 8, 162373-162393. | 2.6 | 10 |
| 23 | Long Short-Term Memory Based Spectrum Sensing Scheme for Cognitive Radio Using Primary Activity Statistics. IEEE Access, 2020, 8, 97437-97451. | 2.6 | 66 |
| 24 | Aggregated Traffic Models for Real-World Data in the Internet of Things. IEEE Wireless Communications Letters, 2020, , 1-1. | 3.2 | 10 |
| 25 | Applying Deep Neural Networks for Duty Cycle Estimation. , 2020, , . | | 6 |
| 26 | Real Smart Home Data-Assisted Statistical Traffic Modeling for the Internet of Things. IEEE Internet of Things Journal, 2020, 7, 4761-4776. | 5.5 | 9 |
| 27 | Estimation of Primary Channel Activity Statistics in Cognitive Radio Based on Imperfect Spectrum Sensing. IEEE Transactions on Communications, 2020, 68, 2016-2031. | 4.9 | 35 |
| 28 | A Comparative Study of RTL-SDR Dongles from the Perspective of the Final Consumer. , 2020, , . | | 4 |
| 29 | Design of Spectrum Usage Detection in Wideband Spectrum Measurements. IEEE Access, 2019, 7, 133725-133737. | 2.6 | 3 |
| 30 | On the estimation of primary user activity statistics for long and short time scale models in cognitive radio. Wireless Networks, 2019, 25, 5099-5111. | 2.0 | 8 |
| 31 | Accurate Modelling of IoT Data Traffic Based on Weighted Sum of Distributions. , 2019, , . | | 4 |
| 32 | Performance Evaluation of Improved Energy Detection under Signal and Noise Uncertainties in Cognitive Radio Networks. , 2019, , . | | 8 |
| 33 | Experimental Evaluation of the Poissoness of Real Sensor Data Traffic in the Internet of Things. , 2019, , . | | 5 |
| 34 | Experimental Performance Evaluation of Improved Energy Detection under Noise Uncertainty in Low SNR Regime. , 2019, , . | | 2 |
| 35 | Primary Channel Duty Cycle Estimation under Imperfect Spectrum Sensing Based on Mean Channel Periods. , 2019, , . | | 6 |
| 36 | Long Short-Term Memory based Spectrum Sensing Scheme for Cognitive Radio. , 2019, , . | | 10 |

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| 37 | A Spectrum Analyzer Based on a Low-Cost Hardware-Software Integration. , 2019, , . | | 5 |
| 38 | Dynamic Contention Window Methods for Improved Coexistence Between LTE and Wi-Fi in Unlicensed Bands. , 2019, , . | | 7 |
| 39 | Time and Frequency Varying Noise Floor Estimation for Spectrum Usage Measurement. , 2019, , . | | 6 |
| 40 | Estimation of Primary Channel Activity Statistics in Cognitive Radio Based on Periodic Spectrum Sensing Observations. IEEE Transactions on Wireless Communications, 2019, 18, 983-996. | 6.1 | 25 |
| 41 | On the Sample Size for the Estimation of Primary Activity Statistics Based on Spectrum Sensing. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 59-72. | 4.9 | 9 |
| 42 | Efficient Time Domain Deterministic-Stochastic Model of Spectrum Usage. IEEE Transactions on Wireless Communications, 2018, 17, 1518-1527. | 6.1 | 23 |
| 43 | Coexistence Mechanisms for LTE and Wi-Fi Networks over Unlicensed Frequency Bands. , 2018, , . | | 17 |
| 44 | Cooperative Estimation of Primary Traffic Under Imperfect Spectrum Sensing and Byzantine Attacks. IEEE Access, 2018, 6, 61651-61664. | 2.6 | 7 |
| 45 | Performance analysis of SNR threshold-setting strategies for adaptive modulation and coding under fading channels. Physical Communication, 2018, 30, 154-166. | 1.2 | 4 |
| 46 | Performance Analysis of Selection Diversity Combining Using Improved Energy Detection over Rayleigh Fading Channel. , 2018, , . | | 1 |
| 47 | Accurate estimation of primary user traffic based on periodic spectrum sensing. , 2018, , . | | 6 |
| 48 | A study on time domain deterministic-stochastic model of spectrum usage in WLAN. , 2018, , . | | 0 |
| 49 | Improving primary statistics prediction under imperfect spectrum sensing. , 2018, , . | | 11 |
| 50 | A Study on False Alarm Cancellation for Spectrum Usage Measurements. , 2017, , . | | 7 |
| 51 | Investigating the Estimation of Primary Occupancy Patterns under Imperfect Spectrum Sensing. , 2017, , . | | 7 |
| 52 | PECAS: A Low-Cost Prototype for the Estimation of Channel Activity Statistics in Cognitive Radio. , 2017, , . | | 8 |
| 53 | Prototype for multidisciplinary research in the context of the Internet of Things. Journal of Network and Computer Applications, 2017, 78, 146-161. | 5.8 | 12 |
| 54 | Analytical study on the estimation of primary activity distribution based on spectrum sensing. , 2017, , . | | 7 |

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| 55 | Artificial neural network based hybrid spectrum sensing scheme for cognitive radio. , 2017, , . | | 50 |
| 56 | Study on simple signal area estimation for efficient spectrum measurements. , 2017, , . | | 8 |
| 57 | Welch FFT Segment Size Selection Method for Spectrum Awareness System. IEICE Transactions on Communications, 2016, E99.B, 1813-1823. | 0.4 | 8 |
| 58 | Smart Spectrum Technologies for Mobile Information Systems. Mobile Information Systems, 2016, 2016, 1-2. | 0.4 | 0 |
| 59 | Outage probability and average error performance of modulation schemes under Nakagami-q (Hoyt) and Nakagami-n (Rice) fading channels. , 2016, , . | | 4 |
| 60 | Throughput performance models for adaptive modulation and coding under fading channels. , 2016, , . | | 10 |
| 61 | Energy detection based estimation of primary Channel Occupancy Rate in Cognitive Radio. , 2016, , . | | 4 |
| 62 | Outage probability and average error performance of modulation schemes under Î·-Î¼ and Î¹-Î¼ fading channels in terms of elementary functions. , 2016, , . | | 0 |
| 63 | On the sensing sample size for the estimation of primary channel occupancy rate in cognitive radio. , 2016, , . | | 4 |
| 64 | Space-dimension models of spectrum usage for cognitive radio networks. IEEE Transactions on Vehicular Technology, 2016, , 1-1. | 3.9 | 13 |
| 65 | Simple Primary User Signal Area Estimation for Spectrum Measurement. IEICE Transactions on Communications, 2016, E99.B, 523-532. | 0.4 | 26 |
| 66 | Average of arbitrary powers of Gaussian Qâ€function over Î· â€“ Î¼ and Î¹ â€“ Î¼ fading channels. Electronics Letters, 2015, 51, 869-871. | 0.5 | 8 |
| 67 | Improved Channel Occupancy Rate Estimation. IEEE Transactions on Communications, 2015, 63, 643-654. | 4.9 | 32 |
| 68 | Sensing-based spectrum awareness in Cognitive Radio: Challenges and open research problems. , 2014, , . | | 11 |
| 69 | A framework for multidimensional modelling of spectrum occupancy in the simulation of cognitive radio systems. , 2014, , . | | 2 |
| 70 | Spectrum Usage in Cognitive Radio Networks: From Field Measurements to Empirical Models. IEICE Transactions on Communications, 2014, E97.B, 242-250. | 0.4 | 25 |
| 71 | Signal Uncertainty in Spectrum Sensing for Cognitive Radio. IEEE Transactions on Communications, 2013, 61, 1231-1241. | 4.9 | 50 |
| 72 | Can primary activity statistics in Cognitive Radio be estimated under imperfect spectrum sensing?. , 2013, , . | | 23 |

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| 73 | Time-Dimension Models of Spectrum Usage for the Analysis, Design, and Simulation of Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2013, 62, 2091-2104. | 3.9 | 90 |
| 74 | Cognitive radio. , 2013, , 383-425. | | 29 |
| 75 | Spectrum Usage Models for the Analysis, Design and Simulation of Cognitive Radio Networks. Lecture Notes in Electrical Engineering, 2012, , 27-73. | 0.3 | 23 |
| 76 | A Radio Spectrum Measurement Platform for Spectrum Surveying in Cognitive Radio. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 59-74. | 0.2 | 6 |
| 77 | Discrete-time spectrum occupancy model based on Markov Chain and duty cycle models. , 2011, , . | | 34 |
| 78 | Common Radio Resource Management Algorithms for Multimedia Heterogeneous Wireless Networks. IEEE Transactions on Mobile Computing, 2011, 10, 1201-1213. | 3.9 | 30 |
| 79 | Modeling and simulation of joint time-frequency properties of spectrum usage in cognitive radio. , 2011, , . | | 10 |
| 80 | Modeling and Simulation of Time-Correlation Properties of Spectrum Use in Cognitive Radio. , 2011, , . | | 21 |
| 81 | Empirical Time-Dimension Model of Spectrum Use Based on a Discrete-Time Markov Chain With Deterministic and Stochastic Duty Cycle Models. IEEE Transactions on Vehicular Technology, 2011, 60, 2519-2533. | 3.9 | 55 |
| 82 | Versatile, Accurate, and Analytically Tractable Approximation for the Gaussian Q-Function. IEEE Transactions on Communications, 2011, 59, 917-922. | 4.9 | 73 |
| 83 | Statistical Prediction of Spectrum Occupancy Perception in Dynamic Spectrum Access Networks. , 2011, , . | | 16 |
| 84 | An Overview of Spectrum Occupancy Models for Cognitive Radio Networks. Lecture Notes in Computer Science, 2011, , 32-41. | 1.0 | 16 |
| 85 | Real-Time Emulation of Heterogeneous Wireless Networks with End-to-Edge Quality of Service Guarantees: The AROMA Testbed. Eurasip Journal on Wireless Communications and Networking, 2010, 2010, . | 1.5 | 5 |
| 86 | Link adaptation algorithms for improved delivery of delay- and error-sensitive packet-data services over wireless networks. Wireless Networks, 2010, 16, 593-606. | 2.0 | 3 |
| 87 | Methodological aspects of spectrum occupancy evaluation in the context of cognitive radio. European Transactions on Telecommunications, 2010, 21, 680-693. | 1.2 | 67 |
| 88 | Spatial duty cycle model for Cognitive Radio. , 2010, , . | | 13 |
| 89 | Performance of spectrum sensing for cognitive radio based on field measurements of various radio technologies. , 2010, , . | | 23 |
| 90 | On the spectrum occupancy perception of cognitive radio terminals in realistic scenarios. , 2010, , . | | 27 |

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| 91 | Methodological aspects of spectrum occupancy evaluation in the context of cognitive radio. , 2009, , . | | 28 |
| 92 | Evaluation of Spectrum Occupancy in Spain for Cognitive Radio Applications. , 2009, , . | | 100 |
| 93 | Spectral occupation measurements and blind standard recognition sensor for cognitive radio networks. , 2009, , . | | 40 |
| 94 | Quality of experience evaluation under QoS-aware mobility mechanisms. , 2008, , . | | 10 |
| 95 | Advanced and versatile real-time emulation platform for heterogeneous radio access systems. , 2008, , . | | 1 |
| 96 | Real-time evaluation of radio access technology selection policies in heterogeneous wireless systems. , 2008, , . | | 0 |
| 97 | End-to-edge QoS across Heterogeneous Wireless and Wired Domains. , 2008, , . | | 0 |
| 98 | Real-time HSPA emulator for end-to-edge QoS evaluation in all-IP beyond 3G heterogeneous wireless networks. , 2008, , . | | 4 |
| 99 | The real-time AROMA testbed for all-IP heterogeneous wireless access networks. , 2008, , . | | 3 |
| 100 | QoS provisioning in beyond 3G heterogeneous wireless systems through common radio resource management algorithms. , 2006, , . | | 5 |
| 101 | Link adaptation algorithm for improved wireless transmission of delay-sensitive packet data services. Electronics Letters, 2005, 41, 813. | 0.5 | 8 |