# Sami Barmada

List of Publications by Year
in descending order



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|---|---|---|---|
| 89 papers | 884 citations | 471509 17 h-index | 580821 25 g-index |
| 91 all docs | 91 docs citations | 91 times ranked | 578 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Wireless Power Transfer with Data Transfer Capability for Electric and Hybrid Vehicles: State of the Art and Future Trends. , 2021, , . | | 0 |
| 2 | Fault Prediction and Early-Detection in Large PV Power Plants Based on Self-Organizing Maps. Sensors, 2021, 21, 1687. | 3.8 | 14 |
| 3 | A Deep Learning Surrogate Model for Topology Optimization. IEEE Transactions on Magnetics, 2021, 57, 1-4. | 2.1 | 19 |
| 4 | A Regularized Procedure to Generate a Deep Learning Model for Topology Optimization of Electromagnetic Devices. Electronics (Switzerland), 2021, 10, 2185. | 3.1 | 11 |
| 5 | Wireless Power Transfer with Data Transfer Capability for Electric and Hybrid Vehicles: State of the Art and Future Trends. , 2021, , . | | 0 |
| 6 | An Accurate Equivalent Circuit Model of Metasurface-Based Wireless Power Transfer Systems. IEEE Open Journal of Antennas and Propagation, 2020, 1, 549-559. | 3.7 | 19 |
| 7 | Harmonic distortion considerations for an integrated WPT-PLC system. Wireless Power Transfer, 2020, 7, 33-41. | 1.1 | 1 |
| 8 | Deep Learning and Reduced Models for Fast Optimization in Electromagnetics. IEEE Transactions on Magnetics, 2020, 56, 1-4. | 2.1 | 34 |
| 9 | A Spiral Resonators Passive Array for Inductive Wireless Power Transfer Applications With Low Exposure to Near Electric Field. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1312-1322. | 2.2 | 24 |
| 10 | Short-Term Forecast of Emergency Departments Visits Through Calendar Selection. Contributions To Statistics, 2020, , 415-426. | 0.2 | 0 |
| 11 | Electric Near Field Reduction in Wireless Power Transfer Systems. , 2020, , . | | 0 |
| 12 | Design and Realization of a Multiple Access Wireless Power Transfer System for Optimal Power Line Communication Data Transfer. Energies, 2019, 12, 988. | 3.1 | 13 |
| 13 | Transmission Channel Analysis for Broadband Communication over Multiconductor UIC Cables Onboard Regional Trains. Energies, 2019, 12, 497. | 3.1 | 1 |
| 14 | Wireless Power Transfer and Data Communication Cognitive Radio through Two-Coil Inductive Channel. , 2019, , . | | 0 |
| 15 | Power Regulation in Inductive Power Transfer via Power Line Communication. , 2019, , . | | 1 |
| 16 | Fuzzy integral-based multi-sensor fusion for arc detection in the pantograph-catenary system. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 159-170. | 2.0 | 26 |
| 17 | Analysis of two/four coils WPT systems for embedded PLC communications. , 2018, , . | | 0 |
| 18 | Impulsive Noise Characterization in Narrowband Power Line Communication. Energies, 2018, 11, 863. | 3.1 | 16 |

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|---|---|---|---|
| 19 | Indirect monitoring and early detection of faults in trains' motors. IET Electrical Systems in Transportation, 2018, 8, 86-94. | 2.4 | 4 |
| 20 | A multiâ€objective optimization algorithm based on selfâ€organizing maps applied to wireless power transfer systems. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2017, 30, e2145. | 1.9 | 6 |
| 21 | Electromechanical analysis of an electrodynamic bearing. , 2017, , . | | 1 |
| 22 | Electromagnetic analysis of coils for wireless power transfer. , 2017, , . | | 0 |
| 23 | Analysis of noise in in-home channels for narrowband power line communications. , 2017, , . | | 2 |
| 24 | Design and experimental characterization of a combined WPTâ€“PLC system. Wireless Power Transfer, 2017, 4, 160-170. | 1.1 | 11 |
| 25 | Electromechanical analysis of a new PMs bearing. , 2016, , . | | 0 |
| 26 | Combining WPT and PLC: A review. , 2016, , . | | 0 |
| 27 | Experimental validation of a hybrid Wireless Power Transfer - Power Line Communication system. , 2016, , . | | 8 |
| 28 | Simulations and experiments for EMC compliance in automotive environment. , 2016, , . | | 2 |
| 29 | Clustering techniques applied to a high-speed train pantographâ€“catenary subsystem for electric arc detection and classification. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2016, 230, 85-96. | 2.0 | 10 |
| 30 | An evolutionary algorithm for global optimization based on self-organizing maps. Engineering Optimization, 2016, 48, 1740-1758. | 2.6 | 6 |
| 31 | Optimization of a magnetically coupled resonators system for Power Line Communication integration. , 2015, , . | | 10 |
| 32 | The Leaf Community: Control of an AC microgrid. , 2015, , . | | 0 |
| 33 | Arc detection in pantographâ€catenary systems by the use of support vector machinesâ€based classification. IET Electrical Systems in Transportation, 2014, 4, 45-52. | 2.4 | 45 |
| 34 | Power line communication integrated in a Wireless Power Transfer system: A feasibility study. , 2014, , . | | 14 |
| 35 | PLC systems for electric vehicles and Smart Grid applications. , 2013, , . | | 27 |
| 36 | Channel evaluation for power line communication in plug â€“ in electric vehicles. IET Electrical Systems in Transportation, 2012, 2, 195. | 2.4 | 8 |

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| 37 | Multi-resolution based sensitivity analysis of complex non-linear circuits. IET Circuits, Devices and Systems, 2012, 6, 176. | 1.4 | 18 |
| 38 | Global optimization algorithm based on self-organizing centroids. , 2012, , . | | 5 |
| 39 | Analysis of time-varying properties of Power Line Communication Channels in ships. , 2011, , . | | 2 |
| 40 | A Wavelet Based Method for the Analysis of Impulsive Noise Due to Switch Commutations in Power Line Communication (PLC) Systems. IEEE Transactions on Smart Grid, 2011, 2, 92-101. | 9.0 | 28 |
| 41 | A deltaâ€method technique in the wavelet domain to determine statistical quantities of the response of electromagnetic devices with uncertain parameters. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2011, 24, 357-374. | 1.9 | 2 |
| 42 | Analysis of Power-Line Communication Channels in Ships. IEEE Transactions on Vehicular Technology, 2010, 59, 3161-3170. | 6.3 | 45 |
| 43 | On the time invariance of PLC channels in complex power networks. , 2010, , . | | 5 |
| 44 | Analysis of Equivalent Circuit Sensitivity on Extraction Procedure. Electromagnetics, 2010, 30, 324-346. | 0.7 | 0 |
| 45 | Power Line Communication in a full electric vehicle: Measurements, modelling and analysis. , 2010, , . | | 26 |
| 46 | Didactic Considerations on Magnetic Circuits Excited by Permanent Magnets. IEEE Transactions on Education, 2009, 52, 532-537. | 2.4 | 3 |
| 47 | Response Bounds of Indoor Power-Line Communication Systems With Cyclostationary Loads. IEEE Transactions on Power Delivery, 2009, 24, 596-603. | 4.3 | 5 |
| 48 | Modeling of Nonlinearly Loaded Microwave Devices by a Wavelet Convolution Operator-Based Formulation. Electromagnetics, 2009, 29, 31-52. | 0.7 | 3 |
| 49 | Time domain sensitivity of non linear circuits via wavelet transform. , 2008, , . | | 0 |
| 50 | Design of a PLC system onboard trains: Selection and analysis of the PLC channel. , 2008, , . | | 16 |
| 51 | Nonlinear decision feedback estimation for multicarrier power line communication. , 2008, , . | | 2 |
| 52 | Blind Channel Estimation for Power-line Communications by a Kohonen Neural Network. , 2007, , . | | 12 |
| 53 | Analysis of Power Lines Uncertain Parameter Influence on Power Line Communications. IEEE Transactions on Power Delivery, 2007, 22, 2163-2171. | 4.3 | 18 |
| 54 | Analysis of Integrated Circuit System s by An Innovative Wavelet-Based Scattering Matrix Approach. IEEE Transactions on Advanced Packaging, 2007, 30, 86-96. | 1.6 | 17 |

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| 55 | Improving the performance of the boundary element method with time-dependent fundamental solutions by the use of a wavelet expansion in the time domain. International Journal for Numerical Methods in Engineering, 2007, 71, 363-378. | 2.8 | 6 |
| 56 | Study of nonlinearly loaded microwave circuits by an innovative multiresolution time-frequency analysis. , 2007, , . | | 1 |
| 57 | Innovative model for time-varying power line communication channel response evaluation. IEEE Journal on Selected Areas in Communications, 2006, 24, 1317-1326. | 14.0 | 75 |
| 58 | Comments on "Deficiencies in the way scattering parameters are Taught". IEEE Transactions on Education, 2006, 49, 176-178. | 2.4 | 0 |
| 59 | Wavelet-Based Time-Domain Solution of Multiconductor Transmission Lines With Skin and Proximity Effect. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 774-780. | 2.2 | 15 |
| 60 | Time domain surface impedance concept for low frequency electromagnetic problemsâ€”Part II: Application to transient skin and proximity effect problems in cylindrical conductors. IET Science, Measurement and Technology, 2005, 152, 207-216. | 0.7 | 15 |
| 61 | Influence of Parameters Uncertainties in Equivalent Circuit Modeling of 3D Electromagnetic Devices. Journal of Electromagnetic Waves and Applications, 2005, 19, 2049-2058. | 1.6 | 0 |
| 62 | Two-port equivalent of PCB discontinuities in the wavelet domain. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 907-918. | 4.6 | 21 |
| 63 | Simulation of high frequency signal transmission on power lines. , 2005, , . | | 1 |
| 64 | Numerical simulation of a complete generator-rail launch system. IEEE Transactions on Magnetics, 2005, 41, 369-374. | 2.1 | 19 |
| 65 | Equivalence Theorem Boundary Conditions for FDTD Formulations. IEEE Transactions on Magnetics, 2004, 40, 1049-1052. | 2.1 | 1 |
| 66 | Analysis of the performance of a combined coil-rail launcher. IEEE Transactions on Magnetics, 2003, 39, 103-107. | 2.1 | 23 |
| 67 | Field analysis in tubular coilguns by wavelet transform. IEEE Transactions on Magnetics, 2003, 39, 120-124. | 2.1 | 5 |
| 68 | Analysis of a homopolar disk generator via equivalent network. IEEE Transactions on Magnetics, 2003, 39, 125-128. | 2.1 | 5 |
| 69 | Efficiency improvement of integral formulation via multiresolution analysis. IEEE Transactions on Magnetics, 2003, 39, 1417-1420. | 2.1 | 0 |
| 70 | Analysis of transmission lines with frequency-dependent parameters by wavelet-FFT method. IEEE Transactions on Magnetics, 2003, 39, 1602-1605. | 2.1 | 2 |
| 71 | New wavelet based approach for time domain simulations. IEEE Transactions on Antennas and Propagation, 2003, 51, 1590-1598. | 5.1 | 1 |
| 72 | Wavelet multiresolution analysis for monitoring the occurrence of arcing on overhead electrified railways. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2003, 217, 177-187. | 2.0 | 26 |

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| 73 | Algebraic solution of time-domain nonuniform transmission-line equations by 2-D wavelet transform. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2002, 49, 504-508. | 0.1 | 5 |
| 74 | Analysis of PCB Discontinuities Using FD-TD and Wavelets. , 2002, , . | | 1 |
| 75 | Numerical solution of Maxwell's equations by wavelets on the interval and equivalence theorem. IEEE Transactions on Magnetics, 2002, 38, 381-384. | 2.1 | 1 |
| 76 | Force and torque evaluation in hybrid FEM-MOM formulations. IEEE Transactions on Magnetics, 2001, 37, 3108-3111. | 2.1 | 10 |
| 77 | Fieldâ€excited multiconductor transmission lines: a wavelet approach. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2001, 20, 380-394. | 0.9 | 0 |
| 78 | Space-time wavelet expansion iterative solution of non-uniform transmission lines with arbitrary loads. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2001, 14, 219-235. | 1.9 | 1 |
| 79 | Analysis of the performance of a multi-stage pulsed linear induction launcher. IEEE Transactions on Magnetics, 2001, 37, 111-115. | 2.1 | 27 |
| 80 | A general tool for circuit analysis based on wavelet transform. International Journal of Circuit Theory and Applications, 2000, 28, 461-480. | 2.0 | 25 |
| 81 | Hybrid FEM/MOM formulation for eddy current problems with moving conductors. IEEE Transactions on Magnetics, 2000, 36, 827-830. | 2.1 | 7 |
| 82 | Field analysis in axisymmetric actuators. IEEE Transactions on Magnetics, 2000, 36, 1906-1909. | 2.1 | 11 |
| 83 | Hybrid F.E.-wavelet method for nonlinear analysis of nonuniform MTL transients. IEEE Transactions on Magnetics, 2000, 36, 977-981. | 2.1 | 5 |
| 84 | Transient numerical solutions of nonuniform MTL equations with nonlinear loads by wavelet expansion in time or space domain. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2000, 47, 1178-1190. | 0.1 | 33 |
| 85 | Solution of electromagnetic transients by wavelet expansion in the time domain. , 0, , . | | 0 |
| 86 | Response Bounds Analysis for Transmission Lines Characterized by Uncertain Parameters. , 0, , . | | 0 |
| 87 | Analysis of parameters' uncertainty effects on equivalent circuit macromodels. , 0, , . | | 0 |
| 88 | A wavelet approach for the discrimination of buried objects. , 0, , . | | 0 |
| 89 | Efficient method to treat parameters' uncertainties in complex circuits. , 0, , . | | 0 |