

## Vladimir Vulfin

### Publications – Journals and Conferences:

1. V. Vulfin and R. Shavit, "Surface Impedance Extraction of a Cylindrical Metasurface Structure", The 11th Antenna Symposium, Tel Aviv, Israel, March 2023
2. V. Vulfin, "Design and Simulation of FSS and Metasurfaces for Antenna Applications", IEEE COMCAS Conference, WirelessApps, Tel Aviv, Israel, Nov. 2021
3. V. Vulfin, "MIMO-SAR mmWave Imaging Using Ansys HFSS", IEEE COMCAS Conference, WirelessApps, Tel Aviv, Israel, Nov. 2021
4. N. Verhovskiy, V. Vulfin, S. Sayfan-Altman, O. Yannay and R. Shavit, "Phased Array Antenna Design for Hyperthermia Purpose", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2021
5. O. Tutian, V. Vulfin and R. Shavit, "The Quadrature 90° Hybrid Miniaturization at 24 GHz Band", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2021
6. V. Vulfin, "Design of Medical Devices Using Simulation Tools", The 13th French Israel Winter Medical Meeting, The Association Franco Israelienne de Chirurgie Plastique, Peisey Vallandry, France, Jan. 2020
7. V. Vulfin, N. Verhovskiy, S. Sayfan – Altman and R. Ianconescu, "An Analysis of the Power Balance in Systems Described by S Parameters", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2019
8. V. Vulfin, H. Leibovich and S. Sayfan – Altman, "Automotive Radar Simulation Flow at 77 GHz Using HFSS FEM, IE and SBR+ Solvers", IEEE COMCAS Conference, WirelessApps, Tel Aviv, Israel, Nov. 2019
9. V. Vulfin and Y. Kagan, "Sense, Avoid, Act – Principles of Sensing Techniques, Using mmWAVE and Imaging Radar", The 6th Israeli Conference on Robotics, Israel, July 2019
10. R. Ianconescu and V. Vulfin, "Radiation from Free Space TEM Transmission Lines", Journal IET Microwaves, Antennas & Propagation, July 2019
11. V. Vulfin and I. Madar "Different Methods of Mutual Coupling Reduction in Planar Antenna Arrays", IEEE / Israel EMC Conference, May 2019
12. V. Vulfin, N. Verhovskiy and R. Shavit, "Antenna Array Design for Ablation Applications", Antennas Symposium, Tel Aviv University, Israel, March 2019
13. R. Ianconescu and V. Vulfin, "Radiation from Quasi-TEM Insulated Transmission Lines", Journal IET Microwaves, Antennas & Propagation, Jan 2019
14. V. Vulfin, N. Verhovskiy, S. Sayfan-Altman, and R. Ianconescu, "Efficiency of Differential Receiving Antenna Interfaced to a Three-Port Network", ICSEE International Conference on the Science of Electrical Engineering, Eilat, Israel, Dec. 2018
15. V. Vulfin "Miniaturized Antennas Design for Communication, Wearable, and Biomedical Applications", IEEE / Israel EMC Conference, May 2018
16. V. Vulfin and R. Shavit, "Monostatic Super-Scattering Using DNG Metamaterials", Antennas Symposium, Tel Aviv University, Israel, March 2018
17. V. Vulfin and R. Ianconescu, "Quasi-TEM Insulated Transmission Line Radiation Losses Analysis", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2017
18. P. Schilingovski, V. Vulfin, S. Sayfan-Altman, and R. Shavit, "Wearable Antennas Design for Wireless Communication", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2017
19. S. Sayfan-Altman, V. Vulfin, R. Ianconescu, R. Heinrich and H. Leibovich, "Lighting Strike Analysis for Drones", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2017
20. V. Vulfin, H. Leibovich and S. Sayfan-Altman, "Design of Electromagnetic Devices in Interaction with the Human Body", IEEE COMCAS Conference, Microapps Session, Tel Aviv, Israel, Nov. 2017
21. V. Vulfin and R. Shavit, "Radar Cross Section Enhancement Using Metamaterials Technology", IEEE / Israel EMC Conference, May 2017
22. V. Vulfin, S. Sayfan-Altman and R. Ianconescu, "Wireless Power Transfer for a Pacemaker Application", Journal of Medical Engineering & Technology, Feb. 2017
23. V. Vulfin and R. Ianconescu, "Simulation and Theory of TEM Transmission Lines Radiation Losses", ICSEE International Conference on the Science of Electrical Engineering, Eilat, Israel, Nov. 2016

24. N. Shimonov, V. Vulfin, S. Sayfan-Altman, and R. Ianconescu, "Design of an Implanted Antenna Inside the Human Body for a Pacemaker Application", ICSEE International Conference on the Science of Electrical Engineering, Eilat, Israel, Nov. 2016
25. S. Dan, V. Vulfin and R. Shavit, "Design of Reflectarray Antenna Based on Fresnel Zone Plates with AMC Structure", ICSEE International Conference on the Science of Electrical Engineering, Eilat, Israel, Nov. 2016
26. V. Vulfin, "Antenna Design Using Periodic Structures", Antennas Symposium, Tel Aviv University, Israel, Nov. 2016
27. R. Ianconescu and V. Vulfin, "TEM Transmission Line Radiation Losses Analysis", The 46th European Microwave Conference, UK, Oct. 2016
28. R. Ianconescu and V. Vulfin, "Analysis of Lossy Multiconductor Transmission Lines and Application of a Crosstalk Cancelling Algorithm", IET Microwaves, Antennas & Propagation, Sep. 2016
29. V. Vulfin and R. Ianconescu, "Non-Destructive Testing (NDT) Sensor Development Using Eddy Currents", 16th Annual Conference of Non-Destructive Testing, Israel, Sept. 2016
30. V. Vulfin and R. Shavit, "Design of a Directive Antenna with a Highly Effective Aperture, Using Active Frequency Selective Surface", IEEE / Israel EMC Conference, May 2016
31. V. Vulfin, "Design of Reflector Antennas Using FEM, MoM, and PO", European School of Antennas – ESoA, Beams and High-Frequency Methods for Large Antennas, Tel Aviv, Israel, Dec. 2015
32. V. Vulfin and S. Sayfan-Altman, "Design of Antennas for Operation in the Human Body", Antennas Symposium, Tel Aviv University, Israel, Dec. 2015
33. S. Sayfan-Altman and V. Vulfin, "Common-Mode Noise Suppression Using Metamaterials", DGCON Conference, Herzlia, Israel, Nov. 2015
34. V. Vulfin, "Introducing HFSS Component Model Libraries to Support Enterprise-Level Product Development and the IoT Design Chain", IEEE COMCAS Conference, Microapps Session, Tel Aviv, Israel, Nov. 2015
35. V. Vulfin and R. Shavit, "Design of a High Gain Open Waveguide Antenna Combined with an Active Frequency Selective Surface", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2015
36. S. Sayfan-Altman and V. Vulfin, "Biomedical Monitoring Using Electronic Capsule", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2015
37. R. Ianconescu and V. Vulfin, "Simulation of Lossy Multiconductor Transmission Lines and Application of an Algorithm to Reduce Crosstalk", IEEE COMCAS Conference, Tel Aviv, Nov. 2015
38. V. Vulfin and R. Ianconescu, "Transmission of the Maximum Number of Signals Through a Multiconductor Transmission Line Without Crosstalk or Return Loss: Theory and Simulation", IET Microwaves, Antennas & Propagation, July 2015
39. V. Vulfin, S. Sayfan-Altman, and R. Shavit, "Design of Artificial Periodic Absorbers for L-Band", IEEE / Israel EMC Conference, Apr. 2015
40. V. Vulfin and R. Shavit, "Constitutive Parameters Extraction for Thin Two-Dimensional Cylinders Based on Scattering Field Measurements", Microwaves, Antennas & Propagation, IET, Apr. 2015, vol. 9, Issue 6, pp. 585 – 592
41. V. Vulfin, S. Sayfan-Altman, and R. Shavit, "Design of a Broadband Periodic Absorber for Microwave Frequencies", IEEE Conference – 28th Convention, Eilat, Israel, Dec. 2014
42. V. Vulfin, S. Sayfan-Altman, and M. Haridim, "Designing High-Speed Signal Distribution for Multi-Drop Connection Using Simulations", IEEE Conference – 28th Convention, Eilat, Israel, Dec. 2014
43. R. Ianconescu and V. Vulfin, "Simulation of a Crosstalk Avoiding Algorithm in Multi-Conductor", IEEE Conference – 28th Convention, Eilat, Israel, Dec. 2014
44. V. Vulfin and S. Sayfan-Altman, "PCB EMI Simulation", IEEE Conference – 28th Convention, Eilat, Israel, Dec. 2014
45. V. Vulfin and S. Sayfan-Altman, "Design of Electrically Small Antennas with Decoupling Network for MIMO Communication", GlobeSpace – EMC & SI PI Symposium, Tel Aviv, Israel, Nov. 2014
46. V. Vulfin and S. Sayfan-Altman, "Simulation and Design for CEI-28G PCB Compliance", GlobeSpace – EMC & SI PI Symposium, Tel Aviv, Israel, Nov. 2014

47. V. Vulfin and R. Shavit, "Superscattering in 2D Cylindrical Structures", APS/URSI Conference, Memphis, USA, July 2014
48. V. Vulfin, "Design of Antennas and Microwave Devices Using Periodic Structures", IEEE / Israel EMC Conference, Radio Systems Session, Feb. 2014
49. V. Vulfin and R. Shavit, "Monostatic Superscattering in Cylindrical Structures", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2013
50. V. Vulfin and R. Shavit, "Constitutive Parameters Extraction in a Cylindrical Structures", IEEE Conference, Orlando, July 2013
51. V. Vulfin and R. Shavit, "Constitutive Parameters Extraction in a Curved Metamaterial Structure", IEEE Conference – 27th Convention, Eilat, Israel, Nov. 2012
52. V. Vulfin and R. Shavit, "A Dual-Band Bat – Shaped Microstrip Antenna", IEEE Conference – 27th Convention, Eilat, Nov. 2012
53. V. Vulfin, M. Haridim, O. Benisho, G. Malul, and S. Tapuchi, "Directive Fractal Antenna for Scanning Applications", IEEE Conference – 27th Convention, Eilat, Israel, Nov. 2012
54. V. Vulfin, M. Haridim, T. Ryabov, E. Ginzburg, and S. Goldberg, "Use of Split Ring Resonators for Reducing Antennas' Mutual Coupling", IEEE COMCAS Conference, Tel Aviv, Israel, Nov. 2011
55. V. Vulfin, M. Haridim, S. Goldberg, S. Tapuchi and J. Gavan, "Design of Microstrip Antenna Array for 77 GHz Anticollision Radar Applications", SEEEI Conference, Eilat, Israel, Dec. 2008
56. J. Gavan, S. Tapuchi and V. Vulfin, "Low Interference Wideband Wireless Systems Using High Altitude Platforms", URSI Conference, Chicago, Illinois, USA, Aug. 2008
57. M. Haridim, M. Bank and V. Vulfin, "Investigation of the Impact of Pilot Signals on the Performance of OFDMA Systems", International Journal of Applied Mathematics, vol. 1, Nov. 2007
58. Y. Ben-Ezra, U. Mahlab, B. Lembrikov, and V. Vulfin, "Analysis and Identification of Fast Transients in Optical Networks", Transparent Optical Networks, ICTON '07. 9th International Conference, Jul. 2007, vol. 1, pp.309-312