

1. Isaacson S., Ronen N., Chen E., Rottman S., Blumberg D.G., Ravan S., Goyal M.K., Kumar N., Rakkasagi S., Maman S, 2025. [Monitoring flash floods over the Thar and Negev deserts using remote sensing](#). **Eleventh International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2025)**. Proceedings Volume 13816, 2025, Paphos, Cyprus.
2. Geltser Y., Maman S., Rotman S., Blumberg D.G., [Deep internal learning for single SWIR satellite image super resolution](#). **Tenth International Conference on Remote Sensing and Geoinformation of the Environment**, Proceeding Volume 13212
Published: September 2024. DOI: 1321200.
3. Maman S., Porat N., Meged C., Blumberg, D.G., Tsoar H., Mamedov B., Roskin J., (2024) [The Karakum and Kyzylkum Sand Seas Linking Geomorphology and Paleoclimate](#) volume: 2, Characteristics, Dynamics and Provenance of Sand Dunes in the Northern Hemisphere. Sand Dunes in the Northern Hemisphere. DOI: 10.1201/9781003290629.
4. Isaacson, S., Ephrath, E.J., Rachmilevitch, S., Blumberg, D.G., Shalom B., Kats, O., Maman, S. (2023) [Long-Term Monitoring of Tree Population Dynamics in Desert Ecosystems: Integrating Field and Satellite Data](#). *Land* **2023**, 12(8), 1640.
Published: August 2023. DOI: 10.3390/land12081640.
5. Mishra, D., Dror, I., Hadar, O., Choukroun, D., Maman, S., Blumberg, D.G. , [A Fusion-Based Framework for Unsupervised Single Image Super-Resolution](#) *Lecture Notes in Computer Science* volume: 13914 Published: JUNE 2023. DOI: 10.1007/978-3-031-34671-2_7
6. Petrović, M.Z., Blumberg, D.G., Orlovsky, L., Maman S., [Spatiotemporal analysis of dune stabilization in the Kyzylkum and Karakum sandy deserts](#) *Frontiers in Earth Science* Volume: 11 -2023 Article Number: 1129360
Published: April 2023. DOI: 10.3389/feart.2023.1129360
7. Ronay, I.; Ephrath, J.E.; Eizenberg, H.; Blumberg, D.G.; Maman, S. , [Hyperspectral Reflectance and Indices for Characterizing the Dynamics of Crop-Weed Competition for Water](#) *Remote sensing* Volume: 13 Issue: 3 Article Number: 513 Published: FEB 2021. DOI: 10.3390/rs13030513
8. Lavi Bekin, Ofer; Crouvi, Onn; Blumberg, Dan G. (2020) [Areal Extent of Dust Emission Events and Source Geomorphology in Northern Africa from MSG-SEVIRI](#)

[Data](#), **Remote sensing**, Volume: 12 Issue: 17 Article Number: 2775 Published: SEP 2020. DOI: 10.3390/rs12172775

9. Isaacson, Sivan; Friedlander, Lonia; Meged, Chen; Blumberg, DG. (2020) [She Space: A multi-disciplinary, project-based learning program for high school girls](#), **ACTA astronautica**, Volume: 168 Pages: 155-163 Published: MAR 2020. DOI: 10.1016/j.actaastro.2019.12.005
10. Shmilovich, S; Oiknine, Y; AbuLeil, M; Abdulhalim, I; Blumberg, DG; Stern, A. (2020) [Dual-camera design for hyperspectral and panchromatic imaging, using a wedge shaped liquid crystal as a spectral multiplexer](#), **Scientific reports**, Volume: 10; Issue: 1 ; Article Number: 3455 Published: FEB 26 2020. DOI: 10.1038/s41598-020-60413-8
11. Isaacson, S, Friedlander, L, Meged, C, Havivi, S, Cohen Zada, AL, Ronay, I, Blumberg, DG. (2020) [She Space: A multi-disciplinary, project-based learning program for high school girls](#). **Acta Astronautica**, 168, 155-163. DOI: 10.1016/j.actaastro.2019.12.005.
12. Cohen Zada, AL, Maman, S, Blumberg, DG. (2019) [Comparison of remote sensing observations of planetary wind streaks](#), **Remote Sensing of Environment**, 232: 111342. DOI: 10.1016/j.rse.2019.111342.
13. Sadeh, Y, Cohen, H, Maman, S, Blumberg DG. (2018) [Evaluation of manning's roughness coefficient in arid environments by using SAR backscatter](#), **Remote Sensing**, 10(10):1505. DOI: 10.3390/rs10101505.
14. Kozhoridze, G, Orlovsky, N, Orlovsky, L, Blumberg, DG, Golan-Goldhirsh, A. (2018) [Classification-based mapping of trees in commercial orchards and natural forests](#), **International Journal of Remote Sensing**, 39:23, 8784-8797. DOI: 10.1080/01431161.2018.1492178.
15. Havivi, S, Schwartzman, I, Maman, S, Rotman, SR Blumberg, DG. (2018) [Combining Terra SAR-X and Landsat Images for Emergency Response in Urban Environments](#). **Remote Sens.** 2018, 10(5), 802. DOI: 10.3390/rs10050802.
16. Havivi, S, Amir, D, Schwartzman, I, August, Y, Maman, S, Rotman, SR, Blumberg, DG. (2018) [Mapping dune dynamics by InSAR coherence](#). **Earth Surf. Process. Landforms**. January 23, 2018. DOI: 10.1002/esp.4309.
17. Oiknine, Y, August, I, Blumberg, DG, Stern, A. (2018) [NIR hyperspectral compressive imager based on a modified Fabry-Perot resonator](#). **Journal of Optics**. March 2, 2018.
18. Fan, C., Myint, S.W., Kaplan, S., Middel, A., Zheng, B., Rahman, A., Huang, H., Brazel, A and Blumberg, DG (2017) [Understanding the Impact of Urbanization on Surface Urban Heat Islands—A Longitudinal Analysis of the Oasis Effect in](#)

- [*Subtropical Desert Cities*](#) *Remote Sensing*, 2017, 9(7), 672. DOI: 10.3390/rs9070672
19. Cohen-Zada, A.L., Maman, S & Blumberg, D.G. (2017) [*Earth Aeolian wind streaks: Comparison to wind data from model and stations*](#) *J. Geophys. Res. Planets*, 122 DOI: 10.1002/2016JE005242.
 20. Isaacson, S., Ephrath, J.E., Rachmilevitch, S., Maman, S., Ginat, H., Blumberg, D.G. (2017) [*Long and short term population dynamics of acacia trees via remote sensing and spatial analysis: Case study in the southern Negev Desert*](#) *Remote Sensing of Environment*, 198, 95–104 DOI:10.1016/j.rse.2017.05.035.
 21. Gedalin, D., Oiknine, Y., August, I., Blumberg, D.G., Rotman, S.R., Stern, A. (2017) [*Performance of target detection algorithm in compressive sensing miniature Ultraspectral imaging compressed sensing system*](#) *Optical Engineering*, Vol 56, Issue 4, Special Section on Optical Computational Imaging, DOI:10.1117/1.OE.56.4.041312.
 22. Oiknine, Y., August, I., Blumberg, D.G., Stern, A. (2017) [*Compressive sensing resonator spectroscopy*](#) *Optics Letters*. Vol. 42, No. 1 .January. DOI: 10.1364/OL.42.000025.
 23. Kozhoridze, G., Orlovsky, N., Orlovsky, L., Blumberg, D.G., Golan-Goldhirsh, A. 2016. [*Remote sensing models of structure-related biochemical and pigments for classification of trees*](#) DOI:10.1364/OL.42.000025 *Remote Sensing of Environment*, 186, 184-195.
 24. Cohen-Zada A.L., Blumberg, D.G., & Maman, S. (2016). [*Earth and Planetary Aeolian Streaks: A Review*](#) *Aeolian Research*, 20: 108-125, DOI:10.1016/j.aeolia.2016.04.002.
 25. Ronen-Eliraz, G, Ginat, H, Dody, A, Blumberg, DG, Dahan, O (2016) [*Flood hydrograph reconstruction from the peak flow value in ephemeral streams using a simplified robust single-parameter model*](#) DOI: 10.1002/hyp.10831 *Hydrological Processes*, 30 (17), 3004-3013.
 26. Rozenstein, O., Zehava, S., Blumberg, D.G., & Adamowski, J. (2016). [*Investigating the backscatter contrast anomaly in synthetic aperture radar \(SAR\) imagery of the dunes along the Israel–Egypt border.*](#) , *International Journal of Applied Earth Observation and Geoinformation* 46: 13-21 DOI:10.1016/j.jag.2015.11.008.
 27. Hetz, G., Mushkin, A., Blumberg, D.G., Baer, G., Ginat. (2016). [*Estimating the age of desert alluvial surfaces with spaceborne radar data*](#) DOI:10.1016/j.rse.2016.07.006 *Remote Sensing of Environment*, Volume 184, Oct 2016, Pages 288–301.
 28. Indoitu, R. Kozhoridze, G. Batyrbaeva, M. Vitkovskaya, I. Orlovsky, N. Blumberg D.G, Orlovsky, L. (2015). [*Dust emission and environmental changes in the dried*](#)

- [bottom of the Aral Sea](#). *Aeolian Research*, 17: 101-115, DOI:10.1016/j.aeolia.2015.02.004
29. Kozhoridze, G., Orlovsky, N., Orlovsky, L., Blumberg, D. G., & Golan-Goldhirsh, A. (2015). [Geographic distribution and migration pathways of Pistacia—present, past and future](#), *Echography*, 38: 001-014, DOI: 10.1111/ecog.01496.
 30. Panagopoulos, T., de Jesus, J., Blumberg, D., & Ben-Asher, J. (2014) [Spatial Variability of Durum Wheat Yield as Related to Soil Parameters in an Organic Field](#). *Communications in Soil Science and Plant Analysis* 45(15): 2018-2031, DOI: 10.1080/00103624.2014.919311.
 31. Roskin, J., Blumberg, D.G., and Katra, I. (2014) [Last millennium development and dynamics of vegetated linear dunes inferred from ground-penetrating radar and optically stimulated luminescence ages](#), *Sedimentology*, 61(5): 1240-1260, DOI:10.1111/sed.12099.
 32. Roskin, J., Katra, I., and Blumberg, D.G., (2014). [Particle-size fractionation of Aeolian sand fgg the Sinai-Negev erg of Egypt and Israel](#), *Geological Society of America Bulletin*, 126(1-2): 47-65, DOI: 10.1130/B30811.1.
 33. Kaplan, S., Blumberg, D. G., Mamedov, E., & Orlovsky, L. (2014). [Land-use change and land degradation in Turkmenistan in the post-Soviet era](#), *Journal of Arid Environments*, 103: 96-106, DOI: 10.1016/j.jaridenv.2013.12.004.
 34. Genis, A., Vulfson, L., Blumberg, D.G., Sprinstin, M., Kotlyar, A., Freilikher, V., & Ben-Asher, J. (2013) [Retrieving parameters of bare soil surface roughness and soil water content under arid environment from ERS-1,-2 SAR data](#), *International Journal of Remote Sensing*, 34: 6202-6215, DOI:10.1080/01431161.2013.793862.
 35. Danilina, I., Gillespie, A. R., Balick, L., Mushkin, A., Smith, M., & Blumberg, D.G. 2013. [Compensation for subpixel roughness effects in thermal infrared images](#), *International Journal of Remote Sensing*, 34(9-10): 3425-3436, DOI:10.1080/01431161.2012.716919.
 36. Muhs, D.R., Ruskin, J., Tsoar, H., Skipp, G., Budahn, J.R., Sneh, A., Porat, N., Stanley, J.D., Katra, I., & Blumberg, D.G. 2013. [Origin of the Sinai-Negev erg, Egypt and Israel: mineralogical and geochemical evidence for the importance of the Nile and sea level history](#), *Quaternary Science Reviews*, 69: 28-48, DOI:10.1016/j.quascirev.2013.02.022.
 37. Roskin, J., Katra, I., & Blumberg, D.G. 2013. [Late Holocene dune mobilizations in the northwestern Negev dune field, Israel: A response to combined anthropogenic activity and short-term intensified windiness](#), *Quaternary International*, 303: 10-23, DOI: 10.1016/j.quaint.2012.10.034.
 38. Vulfson, L., Genis, A., Blumberg, D.G., Kotlyar, A., Freilikher, V., & Ben-Asher, J. 2013. [Remote sensing in microwave and gamma ranges for the monitoring of soil water content of the root zone](#), *International Journal of Remote Sensing*, 34: 6182-6201, DOI:10.1080/01431161.2013.793863.

39. Zheng, X., Shen, F., Zheng, S., Argaman, E., Blumberg, D., Ben-Asher, J., & Amir, S. 2012. [Estimation of regional evapotranspiration and biomass production from remote sensing data by artificial neural network \(ANN\) method](#), *Journal of Food Agriculture & Environment*, 10: 1558-1561.
40. Cohen, Y., Blumberg, D.G., and S.R. Rotman., 2012. [Subpixel hyperspectral target detection using local spectral and spatial information](#), *J. Appl. Remote Sens.*, 6: 16 pages, DOI:10.1117/1.JRS.6.063508.
41. Gorelik, N., Blumberg, D.G., Rotman, S.R., and D. Borghys, 2012. [Target detection using non-singular approximations for a singular covariance matrix](#), *Journal of Electrical and Computer Engineering*, 7 pages, DOI:10.1155/2012/628479.
42. Cohen, Y., Blumberg, D.G., and S.R. Rotman and Y. August, 2012. [Evaluating sub-pixel target detection algorithms in hyper-spectral imagery](#), *Journal of Electrical and Computer Engineering*, Article ID 103286, 15 pages, DOI:10.1155/2012/103286.
43. L. Vulfson, A. Genis, D.G. Blumberg, M. Sprintsin, A. Kotlyar, V. Freilikher, J. Ben-Asher, 2012. [Retrieval of surface roughness parameters of bare soil from the radar satellite data](#), *Journal of Arid Environments*, 87: 77-84, ISSN 0140-1963, DOI:10.1016/j.jaridenv.2012.07.006.
44. Melamed, G., Rotman, S.R., Blumberg, D.G., and Weiss, A.J, 2012. [Anomaly detection in polarimetric radar images](#), *International Journal of Remote Sensing*, 33(4): 1164-1189, DOI:10.1080/01431161.2010.550650.
45. Gorelik, N., Blumberg, D.G., Rotman, S.R., Borghys, D. 2012. [Target Detection Using Nonsingular Approximations for a Singular Covariance Matrix](#), *Journal of Electrical and Computer Engineering* Volume 2012, Article ID 628479, 7 pages
46. Roskin, J., Blumberg, D.G., Porat, N., Tsoar, H., & Rozenstein, O. 2012. [Do dune sands redden with age? The case of the northwestern Negev dune field, Israel](#), *Aeolian Research*, 5: 63-75, DOI:10.1016/j.aeolia.2011.11.004.
47. Maman, S., Blumberg, D.G., Tsoar, H., Mamedov, B., and N. Porat, 2011. [The Central Asian ergs: A study by remote sensing and geographic information systems](#), *Aeolian Research*, 3 (3): 353-366, ISSN 1875-9637, DOI:10.1016/j.aeolia.2011.09.001.
48. Roskin, J., Porat, N., Tsoar, H., Zander, A.M., and D.G. Blumberg, 2011. [Age, Origin and climatic controls on vegetated linear dunes in the northwestern Negev Desert \(Israel\)](#), *Quaternary Science Reviews*, 30(13-14): 1649-1674, DOI:10.1016/j.quascirev.2011.03.010.
49. Maman, S., Orlovsky, L. and D.G Blumberg, 2011. [A Landover change study of takyr surfaces in Turkmenistan](#), *Journal of Arid Environments*, 75(9): 842-850, DOI:10.1016/j.jaridenv.2011.04.002.
50. Roskin J., Tsoar, H., Porat, N. and D.G Blumberg, 2011. [Palaeoclimate interpretations of Late Pleistocene vegetated linear dune mobilization episodes:](#)

- [*evidence from the northwestern Negev dune field*](#), *Quaternary Science Reviews*, 30 (23-24): 3364-3380, DOI:10.1016/j.quascirev.2011.08.014.
51. Tsoar, H, and D.G, Blumberg, 2009. [*Dynamics of nebkhas superimposed on a parabolic dune and their effect on the dune dynamics*](#), *Journal of Arid Environments*, **73**(11): 1014-1022, DOI:10.1016/j.jaridenv.2009.04.021.
 52. Rubin, D.M., Tsoar, H., and Blumberg, D.G, 2008, [*A second look at western Sinai seif dunes and their lateral migration*](#), *Geomorphology*, **93**(3-4): 335-342, DOI:10.1016/j.geomorph.2007.03.004.
 53. Ben Asher, J., Ephrath, J.E., Shomron, M., Blumberg, D.G, 2008. [*Cooling of Leafy Vegetables in Greenhouses*](#) In: C. Kubota and M Kachira (eds) Proceeding of the international workshop On greenhouse environmental control and crop production in semi-arid regions. *ACTA Horticulture*, 797:87-95.
 54. Katra, I., Blumberg, D.G, and H. Lavee, 2008. [*Soil moisture patterns in semiarid hillslopes: Linkage to surface water redistribution*](#), *Israel Journal of Earth Sciences*, **57**(3-4): 281-289, DOI:10.1560/IJES.57.3-4.281.
 55. Katra, I., D.G. Blumberg., H. Lavee and P. Sarah, 2007. [*Topsoil moisture patterns on arid hillsides – Micro-scale mapping by thermal infrared images*](#), *J. of Hydrology*, **334** (3-4): 359-367, DOI:10.1016/j.jhydrol.2006.10.023.
 56. Blumberg, D.G. and G. Zhu, 2007. [*Using a hierarchical multi-resolution mechanism for classification and semantic extraction of land-use maps for Beer-Sheva, Israel*](#), *International Journal of Remote Sensing*, **28**(15): 3273-3289, DOI:10.1080/01431160600993371.
 57. Orlovsky L, Kaplan, S. Orlovsky. Blumberg. and Mamedov,E. 2006. [*Monitoring Land Use and Land Cover Changes in Turkmenistan using Remote Sensing*](#), *WIT Transactions on Ecology and the Environment*, **99**: 463-471, DOI:10.2495/RAV060461.
 58. Ohel, E., Rotman, S.R. and D.G Blumberg, 2006. [*Anomaly gas remote sensing and tracking using a field-portable imaging thermal radiometric spectrometer*](#), *IEEE Convention of Electrical and Electronics Engineers in Isreal*, DOI: [10.1109/EEEL.2006.321072](#).
 59. Katra, I., D.G. Blumberg., H. Lavee and P. Sarah, 2006. [*Spatial distribution dynamics of topsoil moisture in shrub microenvironment after rain events in arid and semi-arid areas by means of high-resolution maps*](#), *Geomorphology*, **86** (3-4): 455-464, DOI:10.1016/j.geomorph.2006.09.020.
 60. Jesus, J., Panagopoulos, T., Blumberg, D., Orlovsky, L. and Ben-Asher, J, 2006. [*Monitoring Dust Storms in Central Asia with Open-Source WebGIS Assistance*](#). *WSEAS Transactions on Environment and Development*, **2**(6): 895-898.
 61. Blumberg, D.G., V. Freilikher, J. Ben-Asher, J. Daniels, Yu. Kaganovskii, A. Kotlyar, L. Vulfson, 2006. [*Microwave subsurface remote sensing in the Negev desert: monitoring of soil water content*](#), *Waves in Random and Complex Media*, **16** (3): 179-203, DOI: 10.1080/17455030600703558.

62. Genis, A., D.G. Blumberg and J. Ben-Asher, 2006. [Optimizing Application of Image Analysis Tools to Determine Physical Characteristics of Fine Roots](#), **Environment Control in Biology**, 44: 11-20, DOI:10.2525/ecb.44.11.
63. Blumberg, D.G, 2006. [Analysis of large Aeolian \(wind-blown\) bed forms using the Shuttle Radar Topography Mission \(SRTM\) digital elevation data](#), **Remote Sensing of Environment**, 100: 179-189, DOI: 10.1016/j.rse.2005.10.011.
64. Katra, I., D.G. Blumberg, H. Lavee and Sarah, P., A, 2006. [A method for estimating the spatial distribution of soil moisture of arid microenvironments by close range thermal infrared imaging](#), **International Journal of Remote Sensing**, 27 (12): 2599-2611, DOI: 10.1080/01431160500522684.
65. Blumberg, D. G., G. Ronen, J. Ben-Asher, V. Freilikher, L. D. Vulfson, and A. L. Kotlyar, 2006. [Utilizing a P-band scatterometer to assess soil water saturation percent of a bare sandy soil](#), **Journal of Hydrology**, 318: 374-378, DOI:10.1016/j.jhydrol.2005.06.023.
66. Ohel, E., S.R. Rothman and D.G. Blumberg, 2006. [Multi-pixel anomaly detection in noisy multi-spectral images](#), **Optical Engineering**, 45(2), 023604, DOI:10.1117/12.557627.
67. Blumberg, D.G., T. Neta, N. Margalit, M. Lazar, V. Freilikher, 2004. [Mapping Exposed and Buried Drainage Systems Using Remote Sensing in the Negev Desert, Israel](#), **Geomorphology**, 61(3-4): 239-250, DOI:10.1016/j.geomorph.2003.12.008.
68. Blumberg, D., Freilikher, V., Kaganovskii, Y.S, et al., 2004. [Backscattering of light from a dielectric layer on a reflecting substrate](#), **Optics Letters**, 29 (12): 1372-1374, DOI:10.1364/OL.29.001372.
69. Goubin, Z. and D.G. Blumberg, 2004. [An urban open space extraction method: combining spectral and geometric characteristics](#), **Geo-Spatial information science**, 7: 249-254, DOI:10.1007/BF02828547.
70. Tsoar, H., D.G. Blumberg, and Y. Stoler, 2004. [Elongation and Migration of Sand Dunes](#), **Geomorphology**, 57(3-4): 293-302, DOI:10.1016/S0169-555X(03)00161-2.
71. Arbel, D., E. Cohen., M. Citroen., D.G. Blumberg and N.S. Kopeika, 2004. [LandSat TM Satellite Image Restoration Using Kalman Filters\[Implementation of atmospheric filters based on atmospheric MTF \(Modulation Transfer Function\) for satellite image restoration\]](#). **Photogrammetric Engineering and Remote Sensing**, 70(1): 91-100.
72. Daniels, J., D. G. Blumberg., L. D. Vulfson., A. L. Kotlyar, V. Freiliker, G. Ronen, and J. Ben-Asher, 2003. [Microwave remote sensing of physically buried objects in the Negev desert: Implications for subsurface Martian exploration](#), **J. Geophys. Res.**, 108 (E4), 8033, DOI:10.1029/2002JE001868.
73. Daniels, J., D.G. Blumberg., M. Linetsky., L. D. Vulfson., A. L. Kotlyar., V. Freiliker., G. Ronen, 2003. [Microwave Remote Sensing of Physically Buried Objects: Implications for Environmental Research](#), **Remote Sensing of Environment**, 86: 243-256, DOI:10.1016/s0034-4257(03)00111-1.

74. Blumberg, D.G., Y. Lehahn., Y.Z. Yacobi, 2003. [Utilizing FenYeng 1C \(FY-1C\) to monitor ocean color and water quality: a demonstration experiment in the Eastern Mediterranean](#), *International Journal of Remote Sensing*, 24: 1393-1399, DOI:10.1080/0143116021000047398.
75. Ben-Dor, E., N. Goldshleger., Y. Benyamini., M. Agassi, and D. G. Blumberg, 2003. [The Spectral Reflectance Properties of Soil's Structural Crust in the SWIR spectral region \(1.2-2.5 \$\mu\$ m\)](#), *Soil Sciences Society of America*, 67: 289-299, DOI:10.1046/j.1365-3121.2001.00294.x.
76. Blumberg, D.G., 2002. [Geographic Information Technologies in Israel and Availability of Spatial Data in Israel](#), *Geographic Research Forum*, 22: 92-90.
77. Tsoar, H., and D.G. Blumberg, 2002. [Formation of Parabolic Dunes from Barchan and Transverse dunes along Israel's Mediterranean Coast](#), *Earth Surface Processes and Landforms*, 27 (11): 1147-1161, DOI:10.1002/esp.417.
78. McHone, J.F., R. Greeley, K.K. Williams, D.G. Blumberg, and R.O. Kuzmin, 2002. [Space Shuttle Observations of Terrestrial Impact Structures Using SIR-C and X-SAR Radars](#), *Meteoritics and Planetary Sciences*, 37 (3): 407-420, DOI:10.1111/j.1945-5100.2002.tb00824.x.
79. Blumberg, D.G., V. Freilikher., I. Fuks., Y. Kaganovskii., A.A. Maradudin, and M. Rosenbluh, 2002. [Effects of roughness on the retroreflection from dielectric layers](#), *Waves in Random Media*, 12 (3): 279-292, DOI:10.1088/0959-7174/12/3/302.
80. Blumberg, D.G., V. Freilikher., Y. Kaganovskii., and A. A. Maradudin, 2002. [Subsurface microwave remote-sensing of soil water content: field studies in the Negev Desert and optical modelling](#), *International Journal of Remote Sensing*, 23 (19): 4039-4054, DOI:10.1080/01431160110116329.
81. Goldshleger, N., E., Ben-Dor, Y., Benyamini, D.G., Blumberg, and M., Agassi, 2002. [Spectral properties and hydraulic conductance of soil crusts formed by raindrop impact](#), *International Journal of Remote Sensing*, 23 (19): 3909-3920, DOI:10.1080/01431160110115942.
82. Zhu, G., and D.G. Blumberg, 2002. [Classification Using ASTER Data and SVM Algorithms; the Case Study of Beer Sheva, Israel](#), *Remote Sensing of Environment*, 80(2): 233-240, DOI:10.1016/S0034-4257(01)00305-4.
83. Blumberg, D.G., and A. Sasson., 2001. [Municipal Hotlines, and Automated Weather Stations as a Tool for Monitoring Bad Odour Dispersion: The Northern Negev Case](#), *J. of Environmental Management*, 63:103-111, DOI:10.1006/jema.2001.0472.
84. Blumberg, D.G., and V. Freilikher., 2001. [Soil Water-Content and Surface Roughness Retrieval Using ERS-2 SAR Data](#), *Journal of Arid Environments*, 49 (3): 449-464, DOI:10.1006/jare.2001.0809.
85. Goldshleger, N., Ben-Dor, E., Benyamini, Y., Blumberg, D.G., and M. Agassi., 2001. [Characterization of Soil's structural crust by spectral reflectance in the SWIR region \(1.2-2.5mm\)](#), *Terra Nova*, 13(1): 12-17, DOI:10.1046/j.1365-3121.2001.00294.x.

86. Serbin, G., Or, D., and D.G., Blumberg, 2001. [Thermodielectric Effects on Radar backscattering from Wet Soils](#). *IEEE Transactions on Geoscience and Remote Sensing*, 39 (4): 897-901, DOI:10.1109/36.917920.
87. Blumberg, D.G., Freilikher, V., Lyalko, I.V., Vulfson, L.D., Kotlyar, A.L., Shevchenko, V.N., and A.D. Ryabokononko., 2000. [Soil moisture \(water-content\) assessment by an airborne scatterometer; The Chernobyl disaster area and the Negev Desert](#), *Remote Sensing of Environment*, 71: 309-319, DOI:10.1016/s0034-4257(99)00087-5.
88. Anderson, F.S., Greeley, R., Xu, P., Lo, E., Blumberg, D.G., Haberley, R.M., and J. R. Murphy., 1999. [Assessing the Martian Surface Distribution of Aeolian Sand Using a Mars general Circulation Model](#), *Journal of Geophysical Research*, 104 (E8): 18,891-19,002, DOI:10.1029/1999je900024.
89. Blumberg, D.G., 1998. [Remote Sensing of Desert Dune Forms by Polarimetric Synthetic Aperture Radar \(SAR\)](#), *Remote Sensing of Environment*, 65 (2): 204-216, DOI:10.1016/S0034-4257(98)00028-5.
90. Blumberg, D.G. and Ronald Greeley., 1997. Corrigendum to: [A Comparison of General Circulation Model Predictions to Sand Drift and Dune Orientations](#), *Journal of Climate*, 10: 1134, DOI:10.1175/1520-0442(1996)009<3248:ACOGCM>2.0.CO;2.
91. Blumberg, D.G. and D. Jacobson., 1997. [New Frontiers: Remote Sensing in Social Science Research](#), *The American Sociologist*, 28(3): 61-68, DOI:10.1007/s12108-997-1014-3.
92. Greeley, R., Blumberg, D.G., McHone, J.F., Dobrovolskis, A., Iversen, J.D., Lancaster, N., Rasmussen, K.R., Wall, S.D., and B.R. White., 1997. [Applications of Spaceborne Radar Laboratory data to the Study of Aeolian Processes](#), *Journal of Geophysical Research*, 102 (E5):10,971-10,983, DOI:10.1029/97je00518.
93. Blumberg, D.G. and R. Greeley., 1996. [A Comparison of General Circulation Model Predictions to Sand Drift and Dune Orientations](#), *Journal of Climate*, 9: 3248-3259, DOI:10.1175/1520-0442(1996)0092.0.CO;2.
94. Greeley, R., Blumberg, D.G., and S.H. Williams., 1996. [Field Measurements of the Flux and Speed of Wind-blown Sand](#), *Sedimentology*, 43: 41-52, DOI:10.1111/j.1365-3091.1996.tb01458.x.
95. Greeley, R., and D.G. Blumberg., 1995. [Preliminary Analysis of Shuttle Radar Laboratory \(SRL-1\) Data to study Aeolian Features and Processes](#), *IEEE Transactions on Geoscience and Remote Sensing*, 33 (4): 927-933, DOI:10.1109/36.406678.
96. Mchone, J.F., Blumberg, D.G., Greeley, R., and Underwood, JR., 1995. [Space Shuttle Radar Images of Terrestrial Impact Structures- SIR-C/X-SAR](#), *Meteoritics*, 30 (5): 543-543.
97. Edgett, K.S. and D.G. Blumberg., 1994. [Star and Linear Dunes on Mars](#), *ICARUS*, 112 (2): 448-464, DOI:10.1006/icar.1994.1197.

98. Blumberg, D.G. and R. Greeley., 1993. [*Field Studies of Aerodynamic Roughness Length*](#), *Journal of Arid Environments*, 25: 39-48, DOI:10.1006/jare.1993.1041.
99. Tsoar, H. and D.G. Blumberg., 1991. [*The Effect of the Beach Cliff on Encroachment of Aeolian Sands*](#), *Acta Mechanica*, Suppl. 2: 131-146, DOI:10.1007/978-3-7091-6703-8_10.
100. Tsoar, H. and D.G. Blumberg., 1990. *The Effect of the Beach Cliff on Encroachment of Aeolian Sands Inland Along the Israeli Ashqelon-Ashdod Beach*. (In Hebrew), *Offaqim Begiographia, Horizons in Geography*, Haifa, IL, 31: 155-168.