

• Scientific Publications

(a) Refereed articles and refereed letters in scientific journals.

1. Oiknine ,Y., August, I., Blumberg, D.G., Stern, A., D. 2017 [Compressive sensing resonator spectroscopy](#) Vol. 42, No. 1 / January 1 2017 / *Optics Letters*.
2. 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.2015.12.002.
3. 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](#). *JAG*, 46: 13-21, doi:10.1016/j.jag.2015.11.008
4. Isaacson ,S., Rachmilevitchb, S. ,Ephrath ,J.E., Maman ,S.,Blumberg D.G. 2016. [Monitoring tree population dynamics in arid zone through multiple temporal scales: integration of spatial analasis, change detection and field long term monitoring](#). *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLI-B7, XXIII ISPRS Congress, July 2016, Prague, Czech Republic*
5. 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
6. Kozhoridze, G., Orlovsky, N., Orlovsky, L., Blumberg, D. G., & Golan-Goldhirsh, A. 2015. [Geographic distribution and migration pathways of Pistacia–present, past and future](#), *Ecography*, 38: 001-014, doi: 10.1111/ecog.01496
7. 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.
8. 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.

9. Roskin, J., Katra, I., and Blumberg, D.G., 2014. [Particle-size fractionation of eolian sand along the Sinai-Negev erg of Egypt and Israel](#), **Geological Society of America Bulletin**, 126(1-2): 47-65, doi: 10.1130/B30811.1.
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11. 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.
12. 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.
13. 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.
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16. 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.
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- (b) Chapters in collective volumes - Conference proceedings, etc.
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 2. Hetz ,G., , Beyth ,M., , Baer, G., , Sagy, A., Blumberg, D. G.,Ginat,(2016) *Calibrated surface ages for desert pavements from spaceborne radar measurements of surface roughness and application of this new dating method for quantifying tectonic slip rates across the dead sea transform since ~1 MA*. In **GSA Annual Meeting in Denver**, Colorado, USA – 2016 Paper No. 281-3
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 13. Roskin, J., Muhs, D. R., Tsoar, H., Skipp, G., Budahn, J., Sneh, A., ... & Blumberg, D. G. (2014, May). *Origin of the Sinai-Negev erg, Egypt and Israel: Mineralogical and geochemical evidence for the importance of the Nile and sea level history*. In **EGU General Assembly Conference Abstracts** (Vol. 16, p. 496).
 14. Isaacson, S., Blumberg, D. G., Rachmilevitch, S., & Ephrath, J. E. (2014, May). *Long and short-term spatial processes analysis of an acacia tree population using a single aerial photograph with near infra-red band*. In **EGU General Assembly Conference Abstracts** (Vol. 16, p. 13312).
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