

## [Publications in Local and International Journals](#)

1. S.W. Samwel, Yousry S.Hanna, Makram Ibrahim, A.T. Roman " Overlap technique for fitting the range residuals of the SLR data ", NRIAG Journal of Astronomy and Geophysics, Vol. 4, PP. 293-297, 2015.
2. Makram Ibrahim, Yousry S.Hanna, S.W. Samwel, M. Marawan " Satellite Laser Ranging in Egypt ", NRIAG Journal of Astronomy and Geophysics, Vol. 4, PP. 123-129, 2015.
3. Yousry S.Hanna, Makram Ibrahim, Samwel, S.W. " Spline and Overlap Techniques for Analysing SLR data ", Space Research Journal, Vol. 5, No. 1, PP. 1-9, 2012.
4. Makram Ibrahim "17 years of ranging from the Helwan-SLR station" Astrophysics and Space Science Journal, Vol. 335, PP.379-387, 2011.
5. Makram Ibrahim, Afaf M. Abd-Elhameed, Gamal F. Attia" Analytical studies of laser parameters for ranging and illuminating satellites from H-SLR station", Space Research Journal, Vol. 4, No. 2, PP. 71-78, 2011.
6. Yousry S.Hanna, Makram Ibrahim, Samwel, S.W. (2010): Comparative Studies of Overlap and Spline Techniques for Fitting SLR Data", , NRIAG journal of Astronomy and Astrophysics, Special Issue, PP. 267 -278.
7. Petr Matlas, Josef Blazej, Makram Ibrahim, Khalil I. Khalil, Yousry S. Hanna (2010): Diagnostic Improvement of Laser System at NRIAG SLR Station in Helwan, NRIAG journal of Astronomy and Astrophysics, Special Issue, PP. 435 - 444.
8. Yousry S. Hanna, Makram Ibrahim, Josef Blazej, (2008) : Data fitting using different methods", NRIAG journal of Astronomy and Astrophysics, Special Issue, PP.203-217.
9. M. Y. Helali, Makram Ibrahim and H. M. M. Mansour, (2008) : Effect of dye transmission and input pumping energy on nd:yag mode-locked train of laser pulses stability, NRIAG journal of Astronomy and Astrophysics, Special Issue, PP.193-201.

10. S.W. Samwel, A.A. Hady, J.S. Mikhail, Hanna, Y.S. Hanna, Makram Ibrahim, (2008) : Studying the space solar cell power performance for different orbital trajectories, NRIAG journal of Astronomy and Astrophysics, Special Issue, PP.219-231.
11. Afaf M. Abd Elhameed and Makram Ibrahim, (2006) : investigation of some quantities related to the expansion phase in laser-produced plasma for different targets, NRIAG journal of Astronomy and Astrophysics, Vol.5 , No.1, pp.11-24.
12. S.W. Samwel, H.B. Garrett , Y.S. Hanna, Makram Ibrahim, J.S Mikhail, and A.A. Hady, (2006) : Comparative Study of The Energetic Particle Fluences For Different Orbital Trajectories, NRIAG journal of Astronomy and Astrophysics, No.11, pp.139-150.
13. S.W.Samwel, Z. Metwally, J. S. Mikhail, Yousry S. Hanna, and Makram Ibrahim, (2005): Analyzing the range residuals of the SLR data using two different methods. NRIAG Journal of Astronomy and astrophysics, Vol. 4 , No. 1, pp. 1 – 14.
14. Makram Ibrahim , (2005): Ranging to new satellites from Helwan laser tracking station. Journal of the Astronomical Society of Egypt. vol. 13. No I , pp. 52-66.
15. S. W. Samwel, Yousry S. Hanna, and Makram Ibrahim, (2004): On applying the spline technique for fitting different kinds of data. NRIAG Journal of Astronomy and astrophysics, Special Issue, pp. 335 - 345.
16. M. El-saftawy and Makram Ibrahim, (2004): The laser shots as a perturbing force on spacecraft's orbit. NRIAG Journal of Astronomy and astrophysics, Special Issue, pp. 325 – 333.
17. Makram Ibrahim, Yousry S. Hanna, and S. W. Samwel , (2004): Statistical and comparative studies for the observations of Helwan-SLR station. International Journal of nonlinear sciences and numerical simulation, Vol. 5(2), pp.135 -147.
18. Yousry. s. Hanna, Makram Ibrahim and S.W. Samwel , (2004): On using Chebyshev polynomial for fitting SLR data of artificial satellites. Applied Mathematics and Computation” Vol. 158 , No.3 , pp. 655 - 666.

19. Makram Ibrahim, G. Fahim, and A. S. Gerges , (2003): Unconventional laser speckles observed at the Fraunhofer diffraction plane. Sci. Bull. Fac. Eng. Ain Shams Univ. Vol. 38 No. 4., pp. 591-602.
20. Afaf M. Abd El-Hameed, Y.E. El-D. Gamal Y.E. Helali, Makram Ibrahim, and E.E. Azzouz , (2003): Theoretical investigation of some properties for the expansion of Ti-plasma produced by laser radiation. NRIAG Journal of Astronomy and Astrophysics, Vol. 2, No. 1, pp. 37-45.
21. Adel T. Roman, Makram Ibrahim, Yousry S. Hanna and G. fahim, (2003): A Visual Search for Galaxies at a Milky Way Region between Galactic Longitude – 7° and 68°. Chaos, Soliton & Fractal, vol. 16(1) pp. 47-51.
22. Makram Ibrahim, G. Fahim, A. S. Gerges, Y. S. Hanna, Adel T. Roman and Kh. I. Khalil, (2002): Snake- like laser speckle. Generation and properties. Technology & armament magazine for egyptian armed forces. Volume 2002-semi-annually.
23. Makram Ibrahim, M. Y. Tawadrous, Y. E. Helali, M. Elsaftawy, G. Fahim and Y. S. Hanna, (2001): Results of on-site data processing after upgrading of Helwan SLR station. Bulletin of NRIAG, Ser A, pp. 51-67.
24. G.Fahim, Makram Ibrahim, S. Mahmoud, M. Y. Tawdros and J. Klokocnik, (2001): Offset of coordinate frame between Geosat and Topex from dual crossover residuals. Bulletin of NRIAG, Ser A, pp. 1-9.
25. G.Fahim, S. Mahmoud, Makram Ibrahim, Adel T. Roman, and H. Khalil , (2000): Studying The Tectonic Motion Using Satellite Geodetic Techniques. Bulletin of NRIAG, Ser A, pp. 41-49.
26. Yousry S. Hanna, Makram Ibrahim and Samya Felobos Ragheb, (2000): Fitting satellite laser ranging Data using spline techniques. Egyptian Computer Science Journal (ECSJ) Vol. 22, No.1, pp. 35-46.
27. Aboul Ella Hassanien, Makram Ibrahim and El Sayed M. El Horabaty, (1999): Fractal Theory and its prospective in future. Egyptian computer Journal (ISSR), Cairo Univ., Vol. 27 No. 2, pp. 145-162.

28. Aboul Ella Hassanien, Makram Ibrahim and Hussein Karam, (1999): Efficient linear fractal algorithm for computing continuous escape-time classifications. Egyptian computer Science Journal (ECSJ), Vol. 21 No. 2, pp. 17-37.
29. Jun Uozumi, Makram Ibrahim and Toshimitsu Asakura, (1998): Fractal speckles. Opt. Commun. Vol. 156, pp. 350-358 .
30. Makram Ibrahim, Jun Uozumi and Toshimitsu Asakura, (1998): Longitudinal correlation properties of speckles produced by ring-slit illumination. Optical Review Vol. 5, No. 3, pp. 129-137.
31. Jun Uozumi and Makram Ibrahim , (1997): Generation of optical scattering fields with fractal properties. Research on Electronic Science, Vol. 5, pp. 82-83 (in Japanese).
32. Makram Ibrahim, Jun Uozumi and Toshimitsu Asakura, (1997): On the generation of clustered speckles due to ring-slit illumination. Optik, Vol. 106, No. 1, pp. 33-41.
33. J.S. Mikhail, B.B. Baghos, M.Y. Tawadrous, Y.E. Helali, H. Awad, Kh.I. khalil, M. El-Saftawy, Makram Ibrahim, (1995): Decrease in the Clear Air Transmission at Helwan Observatory Site. Earth, Moon and Planets, Vol. 70, pp. 143 - 149.
34. Makram Ibrahim and B. B. Baghos, (1992): The developing techniques of Helwan laser ranging station. Bulletin of NRIAG, Vol. 9, N0. 3, Ser. A, pp. 1-15.