List of publications

Peer-reviewed Journal Papers

1. Eshagh M. (2005) Step-variable numerical orbit determination of a low earth Orbiting Satellite, J Earth & Space Phys., 31(1): 1-12.
2. Eshagh M. and Najafi-Alamdari M. (2006) Comparison of different methods of orbit integration of a low Earth orbiting satellite, J Earth & Space Phys., 32(3): 41-57.
3. Eshagh M. and Najafi-Alamdari M. (2006) The effects of Solid Tide on an elastic and unelastic Earth, J Earth & Space Phys., 32(3):1-9.
4. Eshagh M. and Najafi-Alamdari M. (2007) Perturbations in orbital elements of a low Earth orbiting (LEO) satellite, J Earth & Space Phys., 33(1): 1-12.
5. Eshagh M., Sjöberg L. E. and Kiamehr R. (2007) Evaluation of robust techniques in suppressing the impact of outliers in a deformation monitoring network – A case study on the Tehran Milad tower network, Acta Geod. Geophys. Hung., 42(4): 449-463.
6. Eshagh M. and Kiamehr R. (2007) A strategy for optimum designing of the geodetic networks from the cost, reliability and precision views, Acta Geod. Geophys. Hung., 42(2): 297-308.
7. Eshagh M. and Sjöberg L.E. (2008) Impact of topography and atmosphere over Iran on validation and inversion of GOCE gradiometric data, J Earth & Space Phys., 34(3): 15-30.
8. Eshagh M. and Sjöberg L.E. (2008) The modified best quadratic unbiased non-negative estimator (MBQUNE) of variance components, Stud. Geophys. Geod., 52: 305-320. https://doi.org/10.1007/s11200-008-0023-1
9. Eshagh, M. and Sjöberg L.E. (2008) Interpretation of the general geophysical patterns of Iran based on the gradient components analysis of the GRACE, Acta Geophys., 56(2): 440-454.
10. Kiamehr R. and Eshagh M. (2008) Estimation of variance components Ellipsoidal, Geoidal and orthometrical heights, J Earth & Space Phys., 34(3):1-13.
11. Eshagh M. (2008) Non-singular expressions for vector and gradient tensor of gravitation in a geocentric spherical frame, Computers & Geosciences, 32: 1762-1768.
12. Kiamehr R. and Eshagh M. (2008) EGMlab, a scientific software for determining the gravity and gradient components from global geopotential models, Earth Sci. Inf., 1: 93-103. Link
13. Bagherbandi M., Eshagh M. and Sjöberg L.E. (2009) Multi-objective versus single-objective models in geodetic network optimization, Nordic J Surv. Real Stat., 6(1):7-20.
14. Eshagh M. and Sjöberg L. E. (2009) Atmospheric effects on satellite gravity gradiometry data, J Geodyn., 47:9-19. https://doi.org/10.1016/j.jog.2008.06.001
15. Eshagh M. (2009) Impact of vectorization in global synthesis and analysis in gradiometry, Acta Geod. Geophys. Hung., 44(3):1-20.
16. Eshagh M. and Sjöberg L.E. (2009) Topographic and atmospheric effects on GOCE gradiomeric data in local north oriented frame: A case study in Fennoscandia and Iran, Stud. Geophys. Geod., 53: 61-80. https://doi.org/10.1007/s11200-009-0004-z
17. Eshagh M. (2009) Orbit integration in non-inertial frame, J Earth & Space Phys., 35(1):1-8.
18. Eshagh M. (2009) Spherical harmonic expansion of the atmospheric gravitational potential based on exponential and power models of atmosphere, Artif. Satell., 43(1):26-43.
19. Eshagh M., Abdollahzadeh M. and Najafi-Alamdari M. (2009) Simplification of geopotential perturbing force acting on a satellite, Artif. Satell., 43(2):45-64.
20. Sjöberg L.E. and Eshagh M. (2009) A geoid solution for airborne gravity data, Stud. Geophys. Geod., 53:359-374.
21. Eshagh M. and Abdollahzadeh M. (2009) The effect of geopotential perturbations of GOCE on its observations: A numerical study, Acta Geod. Geophys. Hung., 44(4):385-398.

22. Eshagh M. (2009) The effect of lateral density variation of crustal and topographic masses on GOCE gradiometric data: A study in Iran and Fennoscandia, Acta Geod. Geophys. Hung., 44(4): 399-418.
23. Eshagh M. (2009) The effect of polar gaps on the solutions of gradiometric boundary value problems, Artif. Satell., 43(3):97-108.
24. Eshagh M. (2009) Contribution of 1st-3rd order terms of a binomial expansion of topographic heights in topographic and atmospheric effects on satellite gravity gradiometric data, Artificial Artif. Satell., 44(1):21-31. link
25. Eshagh M. (2009) Alternative expressions for gravity gradients in local north-oriented frame and tensor spherical harmonics, Acta Geophys., 58:215-243.
26. Eshagh M. (2009) Least-squares modification of Stokes' formula with EGM08, Geod. & Cart., 35(4):111-117. https://doi.org/10.3846/1392-1541.2009.35.111-117
27. Eshagh M. (2009) On the convergence of spherical harmonic expansion of topographic and atmospheric biases in gradiometry, Contr. Geophys. Geod., 39(4):273-299.
28. Sjöberg L.E. and Eshagh M. (2010) Considering data gaps in geoid modelling by modifying Stokes' formula, Acta Geod. Geophys. Hung., 45:165-183.
29. Eshagh M. (2010) Variance component estimation in linear ill-posed problems: TSVD issue, Acta Geod. Geophys. Hung., 45:184-194.
30. Eshagh M. (2010) Comparison of two approaches for considering laterally varying density in topographic effect on satellite gravity gradiometric data, Acta Geophys., 58(4):661-686.
31. Eshagh M. (2010) Least-squares modification of extended Stokes' formula and its second-order radial derivative for validation of satellite gravity gradiometry data, J Geodyn., 49:92-104.
32. Eshagh M. (2010) Optimal combination of integral solutions of gradiometric boundary value problem using variance component estimation in the Earth gravitational modelling, EPS, 62:1-12.
33. Eshagh M. (2010) Inversion of gravity gradients for determination of gravity anomaly in the polar gaps, Acta Geod. Geophys. Hung., 45(4):440-451.
34. Eshagh M. (2010) Error calibration of quasi-geoid, normal and ellipsoidal heights of Sweden using variance component estimation, Contr. Geophys. Geod., 40(1):1-30. https://doi.org/10.2478/v10126-010-0001-9
35. Eshagh M. (2010) Spatially restricted integrals in gradiometric boundary value problems, Artif. Satell., 44(4):131-148. link
36. Eshagh M. (2010) Towards validation of satellite gradiometric data using modified version of 2nd order partial derivatives of extended Stokes' formula, Artif. Satell., 44(4):103-129. link
37. Eshagh M. and Abdollahzadeh M. (2010) Semi-vectorization: an efficient technique for synthesis and analysis of gravity gradiometry data, Earth Sci. Inf., 3:149-158.
38. Eshagh M. (2011) On integral approach to regional gravity field modelling from satellite gradiometric data, Acta Geophys., 59(1):29-54.
39. Eshagh M. (2011) Inversion of satellite gradiometry data using statistically modified integral formulas for local gravity field recovery, Adv. Space Res., 47(1):74-85.
40. Eshagh M., Bagherbandi M. and Sjöberg L.E. (2011) A combined global Moho model based on seismic and gravimetric data, Acta Geod. Geophys. Hung., 46:25-38.
41. Eshagh M. (2011) Semi-stochastic modification of second-order radial derivative of Abel-Poisson integral for validating satellite gradiometric data, Adv. Space Res., 47:757-767.
42. Eshagh M. and Sjöberg L. E. (2011) Determination of gravity anomaly at sea level from inversion of satellite gravity gradiometric data, J Geodyn., 51:366-377. Link
43. Eshagh M. (2011) Sequential Tikhonov Regularization: an alternative way for inverting satellite gradiometric data, ZfV., 136:113-121. Download
44. Eshagh M. (2011) The effect of spatial truncation error on integral inversion of satellite gravity gradiometry data, Adv. Space Res., 47:1238-1247.
45. Eshagh M. (2011) On the estimation of variance in unstable condition adjustment models, Acta Geod. Geophys. Hung., 46:71-83.Download
46. Eshagh M. (2011) Spectral combination of vector gravimetric boundary value problems, Eng. J Geospatial Inf. Sys.(in Persian), 1(3):33-50.

47. Eshagh M. and Bagherbandi M. (2011) Smoothing impact of isostatic crustal thickness models on local integral inversion of satellite gravity gradiometry data, Acta Geophys., 59(5):891-906. https://doi.org/10.2478/s11600-011-0017-1
48. Eshagh M. and Abdollahzadeh M. (2011) Software for generating gravity gradients using a geopotential model based on irregular semi-vectorization algorithm, Comp. & Geosci., 32:152-160.
49. Eshagh M. and Romeshkani M. (2011) Generation of vertical-horizontal and horizontal-horizontal gravity gradients using stochastically modified integral estimators. Adv. Space Res., 48:1341-1358.
50. Sjöberg L.E. and Eshagh M. (2012) A theory on geoid modeling by spectral combination of data from satellite gravity gradiometry, terrestrial gravity and an Earth gravitational model, Acta Geod. Geophys. Hung., 47(1):13-28.
51. Bagherbandi M. and Eshagh M. (2012) Recovery of Moho's undulations based on the Vening Meinesz-Moritz theory from satellite gravity gradiometry data: A simulation study, Adv. Space Res., 49(6):1097-1111.
52. Eshagh M. and Bagherbandi M. (2012) Quality description for gravimetric and seismic Moho models of Fennoscandia through a combined adjustment, Acta Geod. Geophys. Hung., 47(4): 388-401.
53. Eshagh M. (2012) Spectral combination of spherical gradiometric boundary-value problems: a theoretical study, Pure Appl. Geophys., 169: 2201-2215.
54. Bagherbandi M. and Eshagh M. (2012) Crustal thickness recovery using an isostatic model and GOCE data, EPS, 64(11): 1053-1057.
55. Eshagh M. (2012) A strategy towards an EGM08-based Fennoscandian geoid model, J Appl. Geophys. 87: 53-59.
56. Eshagh M., Lemoine J.M., Gegout P. and Biancale R. (2013) On regularized time varying gravity field models based on GRACE data and their comparisons with hydrological models, Acta Geophys. 61(1): 1-17. Link
57. Novak P., Tenzer R., Eshagh M. and Bagherbandi M. (2013) Evaluation of gravity gradients generated by Earth crustal structure, Comp. Geosci. 51:22-33.
58. Eshagh M. and Romeshkani M. (2013) Quality assessment of terrestrial gravity anomalies from GOCE gradiometric data and Earth's gravity models using variance component estimation, Stud. Geophys. Geod. 57(1):67-83.
59. Eshagh M. and Ghorbannia M. (2013) The use of Gaussian equations of motions of a satellite for local gravity anomaly recovery, Adv. Space Res. 52(1):30-38.
60. Eshagh M. (2013) On the reliability and error calibration of some recent Earth's gravity models of GOCE with respect to EGM08, Acta Geod. Geophys. Hung., 48(2): 199-208.
61. Eshagh M. (2013) An integral approach to regional gravity field refinement using Earth gravity models, J Geodyn. 68: 18-28.
62. Eshagh M. and Ebadi S. (2013) Geoid modelling based on EGM08 and the recent Earth gravity models of GOCE, Earth Sci. Inf. 6:113-125.
63. Eshagh M. (2013) Numerical aspects of EGM08-based geoid computations in Fennoscandia regarding the applied reference Surface and error propagation, J Appl. Geophys, 96: 28-32.
64. Eshagh M. (2014) A theoretical study on terrestrial gravimetric data refinement by Earth gravity models, Geophys. Prosp. 62: 158-171.
65. Nozari M. and Eshagh M. (2014) An alternative approach to Eulerian Pole determination and unification of velocity fields of tectonic motions, Tectonophys. 617:79-87.
66. Eshagh M. (2014) Determination of Moho discontinuity from satellite gradiometry data: linear approach, GRIB. 1(2):1-13.
67. Eshagh M. and Ebadi S. (2014) A strategy to calibrate errors of Earth gravity models, J Appl. Geophys. 103:215-220.
68. Eshagh M. and Bagherbandi M. (2014) Combined Moho estimators, GRIB, 1(3): 1-11.
69. Eshagh M. (2014) From tensor to vector of gravitation, Artif. Satell. 49 (2): 63-80.
70. Eshagh M. and Ghorbannia M. (2014) The effect of the spatial truncation error on the variance of gravity anomalies derived from inversion of satellite orbital and gradiometric data, Adv. Space Res. 54(2): 261-271.
71. Eshagh M. (2014) From satellite gradiometry data to the sub-crustal stress due to the mantle convection, Pure Appl. Geophys., 171, 2391-2406.

72. Eshagh M. (2014) Integral development of Vening Meinesz-Moritz formula for local determination of Moho discontinuity with applications in Iran, GRIB, 2(3): I-IX.

73. Eshagh M. and Alizadeh K. M. A (2015) The effect of constraints on bi-objective optimization of geodetic networks, Acta Geod. Geophy., 50, 449–459. https://doi.org/10.1007/s40328-014-0085-1

74. Eshagh M. (2015) On the relation between Moho and sub-crustal stress induced by mantle convection, J Geophys. Eng. 12,1-11.

75. Eshagh M. and Tenzer R. (2015) Sub-crustal stress determined using gravity and crust structure models, Computational Geoscience, 19, 115-125.

76. Tenzer R. and Eshagh M (2015) Subduction generated sub-crustal stress in Taiwan. Terr. Atm. Oceanic Sci. 26, 3, 261-268.

77. Romeshkani M. and Eshagh M. (2015) Deterministically-modified integral estimators of tensor of gravitation, Boletim de Ciências Geodésicas, 21, 1, 189-212.

78. Alizadeh-Khameneh, MA, Eshagh M. and Sjöberg L.E. (2015) Optimisation of Lilla Edet Landslide GPS Monitoring Network, Journal of Geodetic Science, 5:57-66. https://doi.org/10.1515/jogs-2015-0005

79. Eshagh M. and Alizadeh-Khameneh M.A (2015) Two-epoch optimal design of displacement monitoring networks, Boletim de Ciências Geodésicas, 21,3, 484-497. https://doi.org/10.1590/S1982-21702015000300027

80. Tenzer R., Eshagh M. and Jin S. (2015) Martian sub-crustal stress from gravity and topographic models, Earth and Planetary Science Letters, 425:84-92.

81. Eshagh M. and Romeshkani M. (2015) Determination of sub-lithospheric stress due to mantle convection using GOCE gradiometric data over Iran, J Appl. Geophysics, 122: 11-17.

82. Eshagh M. and Hussain M. (2015) Relationship amongst gravity gradients, deflection of vertical, Moho deflection and the stresses derived by mantle convections-a case study over Indo-Pak and surroundings, Geodynamics, Research International Bulletin, 3 (4): I-XIII.

83. Alizadeh-Khameneh, M. A., Eshagh M. and Sjöberg L.E. (2016) The effect of instrumental precision on optimisation of displacement monitoring networks, Acta Geodaeitica et Geophysica, 51:761–772. https://doi.org/10.1007/s40328-015-0150-4

84. Sprlak M. and Eshagh M. (2016) Local recovery of sub-crustal stress determination from satellite-to-satellite tracking data, Acta Geophysica, 64(4): 904-929.

85. Eshagh M. (2016) Integral approaches to determine sub-crustal stress from terrestrial gravimetric data, Pure and Applied Geophysics, 173, 805–825.

86. Eshagh M. and Sprlak M. (2016) On the integral inversion of satellite-to-satellite velocity differences for local gravity field recovery: A theoretical study, Celestial Mechanics and Dynamical astronomy, 124:127–144.

87. Eshagh M., Hussain M., Tenzer R. and Romeshkani M. (2016) Moho density contrast in central Eurasia from GOCE gravity gradients, Remote Sensing, 8(418):1-18..

88. Eshagh M. and Zoghi S. (2016) Local error calibration of EGM08 geoid using GNSS/levelling data, Journal of Applied Geophysics 130:209-217. https://doi.org/10.1016/j.jappgeo.2016.05.002

89. Eshagh M. and Hussain M. (2016) An approach to Moho discontinuity recovery from on-orbit GOCE data with application over Indo-Pak region, Tectonophysics 690,B, 253-262.

90. Hussain M., Eshagh M., Zulfiqar A., Sadiq M. and Fatolazadeh F. (2016) Changes in gravitational parameters inferred from time-variable GRACE-data-A case study for October 2005 Kashmir Earthquake, Journal of Applied Geophysics 132:174-183.

91. Eshagh M., Hussain M. and Tiampo K.F (2016) Towards sub-lithospheric stress determination from seismic Moho, topographic heights and GOCE data, Journal of Asian Earth Sciences, 169(1):1-12. https://doi.org/10.1016/j.jseaes.2016.07.024

92. Eshagh M. (2016) A theoretical discussion on Vening Meinesz-Moritz inverse problem of isostasy, Geophysical Journal International, 207, 1420-1431.

93. Eshagh M. (2016) On Vening Meinesz-Moritz and flexural theories of isostasy and their comparison over Tibet Plateau, Journal of Geodetic Science, 6: 139-151.

94. Tenzer R., Eshagh M. and Shen W. (2017) The subcrustal stress estimation in central Eurasia from gravity, terrain and crustal structure models, Geoscience Journal 21(1):47-54.

95. Eshagh M. (2017) Local recovery of lithospheric stress tensor from GOCE gravitational tensor, Geophysical Journal International, 209, 317–333.

96. Eshagh M., Ebadi S. and Tenzer R. (2017) Isostatic GOCE Moho model for Iran, Journal of Asian Earth Sciences, 138:12-24.

97. Eshagh M. and Tenzer R. (2017) Lithospheric stress tensor from gravity and lithospheric structure models, Pure and Applied Geophysics, 174, 2677–2688 .

98. Eshagh M. (2017) On the approximations in formulation of the Vening Meinesz-Moritz inverse problem of isostasy, Geophysical Journal International, 210, 500–508.

99. Eshagh M. (2018) Elastic thickness determination based on Vening Meinesz-Moritz and flexural theories of isostasy, Geophysical Journal International, 213, 3, 1682-1692.

100. Eshagh M., Steinberger B., Tenzer R. and Tassara A. (2018) Comparison of gravimetric and mantle flow solutions for lithospheric stress modelling and their combination, Geophysical Journal International, 213, 2, 1013–1028.

101. Eshagh M., Johansson F., Karlsson L. and Horemuz M. (2018) A case study on displacement analysis of Vasa warship, Journal of geodetic Science 8:43–54. https://doi.org/10.1515/jogs-2018-0006

102. Eshagh M., Ashagrie A. and Bedada T. B. (2018) Regional recovery of gravity anomaly from the inversion of diagonal components of GOCE gravitational tensor: A Case Study in Ethiopia, Artificial Satellites 53,2, 55-74. ,

103. Zampal L., Tenzer R., Eshagh M. and Pitonak M. (2018) Evidence of mantle upwelling/downwelling and localised subduction on Venus from the body-force vector analysis, Planetary and Space Science, 157, 48-62.

104. Alizadeh-Khameneh M.A., Eshagh M., Jensen A.O. (2018) Optimization of deformation monitoring networks using finite element strain analysis, Journal of Applied Geodesy, 12, 2, 187–197. https://doi.org/10.1515/jag-2017-0040

105. Seif M. R., Sharifi M. A. and Eshagh M. (2018) Polynomial approximation for fast generation of Associated Legendre functions, Acta Geodetica et Geophysica Hungarica, 53:275–293.

106. Pitoňák M., Eshagh M., Sprlak M., Tenzer R. and Novak P. (2018) Spectral combination of spherical gravitational curvature boundary-value problems, Geophysical Journal International 214, 773–791.

107. Eshagh M., Pitonak M. and Tenzer R. (2019) Lithospheric elastic thickness estimates in central Eurasia, Terrestrial, Atmospheric and Oceanic Sciences, 30(1): 73-84.

108. Eshagh M. and Pitonak M. (2019) Elastic thickness determination from on-orbit GOCE data and CRUST1.0, Pure and Applied Geophysics, 176, 685-696.

109. Rathnayake S., Tenzer R., Eshagh M. and Pitonak M. (2019) Gravity maps of lithospheric structure beneath the Indian Ocean, Surveys in Geophysics, 40, 5, 1055-1093.

110. Eshagh M., Tenzer R. and Eshagh M. (2019) Elastic thickness of the Iranian lithosphere from gravity and seismic data, Tectonophysics, 774, 228186.

111. Eshagh M. and Berntsson J. (2019) On quality of NKG2015 geoid model over the Nordic countries, Journal of Geodetic Science, 9, 97-110. https://doi.org/10.1515/jogs-2019-0010

112. Ashagrie Gedamu A., Eshagh M and Bedada T B (2020) Moho Determination from GOCE Gradiometry Data over Ethiopia, Journal of African Earth Science, 163, 103741.

113. Fatolazadeh F., Eshagh M., Goita K. (2020) A new approach for generating optimal GLDAS hydrological products and uncertainties, Science of the Total Environment, 730, 138932.

114. Eshagh M., Fatolazadeh F. and Tenzer R. (2020) Lithospheric stress, strain and displacement changes from GRACE-FO time-variable gravity: case study for Sar-e-Pol Zahab Earthquake 2018, Geophysical Journal International, 223, 379–397.

115. Pitonak M., Novak P., Eshagh M., Tenzer R. and Sprlak M. (2020) Downward continuation of gravitational field quantities to an irregular surface by spectral weighting, Journal of Geodesy, **94,** 62.

116. Rathnayake S., Tenzer R., Chen W., Eshagh M. and Pitonak M. (2021) Comparison of different methods for a Moho modelling under oceans and marginal areas-A case study over Indian Ocean, Surveys in Geophysics, 42, 839–897.

117. Ashagrie A., Eshagh M. and Bedada T.B. (2021) Effects of Mantle Dynamics on Estimating Effective Elastic Thickness of the Lithosphere, Journal of African Earth Sciences, 183, 104318.

118. Eshagh M. and Tenzer R. (2021) The temporal viscoelastic model of flexural isostasy for estimating the elastic thickness of the lithosphere, Geophysical Journal International, 227,3, 1700-1714.

119. Mahbooby H., American Y., Nikoofard A. and Eshagh M. (2021) Application of the nonlinear optimisation in regional gravity field modelling using spherical radial base functions, Studia Geophysica et Geodaetica, 65, 261–290.
120. Scotti A., Batista M. A. and Eshagh M. (2022) Inaccuracy in arc power calculation through a product of voltage and current averages, Journal of Brazilian Society of Mechanical Science and Engineering, 4,11.
121. Eshagh M. (2022) Optimisation of basepoints' configuration in localisation of signal interference device, Journal of Surveying Engineering, 149(1): 04022019. DOI:10.1061/(ASCE)SU.1943-5428.0000416.
122. Fatolazadeh F., Eshagh M. and Goita K. (2022) New spectro-spatial downscaling approach for terrestrial and groundwater storage variations estimated by GRACE models, Journal of Hydrology, 615, A, 128635.https://doi.org/10.1016/j.jhydrol.2022.128635
123. Eshagh M. (2022) An optimal design of GNSS interference localisation wireless security network based on time-difference of arrival for the Arlanda international airport, Journal of Geodetic Science, 12, 154-164. https://doi.org/10.1515/jogs-2022-0142
124. Fatolazadeh F., Eshagh M., Goita K. and Wang S. (2022) A new spatio-temporal estimator for downscaling GRACE gravity models for terrestrial and groundwater storage variation estimation, Remote Sensing,14,5991.https://doi.org/10.3390/rs14235991
125. Gedamu A. A., Eshagh M. and Bedada T.B. (2023) Lithospheric stress due to mantle convection and mantle plume over East Africa using GOCE and seismic data, Remote Sensing, 15, 462. https://doi.org/10.3390/rs15020462
126. Eshagh M. (2023) Optimal configuration for monitoring stations in a wireless localisation network based on received signal strength differences, Sensors, 23, 1150. https://doi.org/10.3390/s23031150
127. Eshagh M., Fatolazadeh F. and Goita K. (2023) Impact of uncertainties estimation of hydrological models on spectral downscaling of GRACE-based Terrestrial and groundwater storage variations estimation, Remote Sensing, 15, 16, 3967, 3967; https://doi.org/10.3390/rs15163967.
128. Habte A. N. and Eshagh M. (2024) Combination of PSInSAR and GPS to estimate three-dimensional crustal displacements over the Afar region, Journal of African Earth Sciences, 209, 105119. https://doi.org/10.1016/j.jafrearsci.2023.105119
129. Habte A. N. and Eshagh M. (2024) Combination of PSInSAR and GNSS to estimate stress and strain tensor over the Afar region, Journal of Geodetic Science (accepted)
130. Eshagh M., Jin S. G., Pail R., Barzaghi R. Tsoulis D., Tenzer R. and Novak Pavel (2024) Satellite Gravimetry: methods, products, applications and future trends, Earth Science Reviews, 253, 104783, https://doi.org/10.1016/j.earscirev.2024.104783.
131. Novak P., Eshagh M., and Pitonak M. (2024) Uncertainties associated with integral-based solutions to geodetic boundary-value problems, Journal of Geodesy, 98, 54, https://doi.org/10.1007/s00190-024-01858-x.

Books

1. **Eshagh M. (2020)** Satellite Gravimetry and the Solid Earth, Mathematical Foundations Elsevier
2. **Eshagh M.** (2002) Basis and principles of geometrical geodesy, Parastooyeh Mohajer publishing company (in Persian).
3. **Eshagh M.** and Sjöberg L.E. (2009) Satellite Gravity Gradiometry: An approach to high resolution gravity field modelling from space, VDM Verlag, 244 p., ISBN-13: 978-3639203509. (In English).

Edited Proceedings

1. Sundararajan, N., **Eshagh, M.**, Saibi, H., Mustapha, M., Al-Garni, M., Giroux, B. (Eds.) (2018) On significant application of geophysical methods, Springer, Berlin.

2. Meghraoui M., Sundarajan N., Banerjee S., Hinzen K.G., **Eshagh M.,** Roure F., Chaminé H.I., Maouche S., Michard A. and Alamri A. (2021) Advances in Geophysics, Tectonics and Petroleum Geosciences - Proceedings of the 2nd Springer Conference of the Arabian Journal of Geosciences (CAJG-2), Tunisia 2019, Springer Nature.
3. Erguler Z.A., Hadji R., Chamine H.I., Rodrigo-Comino J., Kallel A., Merkel B., **Eshagh M.**, Chenchouni H., Grab S., Karakus M., Khomsi S., Knight S., Bezzeghoud M., Berbeiri M., Panda S., Benim A. C. and El-Askary H. (2023) Selected Studies in Geotechnics, Geo-Informatics and Remote Sensing - Proceedings of the 3rd Conference of the Arabian Journal of Geosciences (CAJG-3), Sousse, Tunisia on November 2–5, Springer nature, 2020.
4. Kallel A., Barbieri M., Rodrigo-Comino J., Chaminé H. I., Merkel B., Chenchouni H., Knight J., Panda S., Khélifi N., Benim A. C., Grab S., El-Askary H., Banerjee S., Hadji R., **Eshagh M.** (2023) Selected Studies in Environmental Geosciences and Hydrogeosciences, Proceedings of the 3rd Conference of the Arabian Journal of Geosciences (CAJG-3) Sousse, Tunisia on November 2–5, 2020, Springer nature, link.
5. Ciner A., Erguller Z.A., Bezzeghoud M., Ustuner M., **Eshagh M.**, El-Askary, Biswas A., Gasperini L., Hinzen K. G., Karaus M., Karrech A., Polonia A., and Chamine H. I. (2023) Recent Research on Geotechnical Engineering, Remote Sensing, Geophysics and Earthquake Seismology - Proceedings of the 1st MedGU, Istanbul 2021 (Volume 3), Springer nature, link
6. Khomsi S., Bezzeghoud M., Banerjee S., **Eshagh M.**, Benim A.C., Merkel B., Kallel A., Panda S., Chenchouni H., Grab S. and Barbieri M. (2023) Selected Studies in Geophysics, Tectonics and Petroleum Geosciences, Proceedings of the 3rd Conference of the Arabian Journal of Geosciences (CAJG-3) Sousse, Tunisia on November 2–5, 2020, Springer nature, link.

Edited Special Issues

1. Eshagh M (2014) NKG2014 General Assembly, Journal of Geodetic Science, de Gruyter
2. Eshagh M., Pail R., Barzaghi R., Tsoulis D. and Jin S. (2022) The Earth's Gravity Field: Recent Methodologies and Applications, Frontiers in Earth Sciences, Frontiers
3. Eshagh M., Braitenberg C. and Reguzonni M. (2023) Geophysical Applications of GOCE measurements, Remote Sensing, MDPI

Book Chapters

1. Tenzer R. and Eshagh M. (2016) Global sub-crustal Stress field, *In:* Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment / [ed] Raju, N. Janardhana, Springer International Publishing , 2016, p. 461-465
2. Eshagh M. (2021) The Earth's gravity field and its role in Geodesy and large-scale Geophysics, Geodetic Sciences, Theory, Applications and recent developments, Book Chapter In "Geodetic Sciences - Theory, Applications and Recent Developments," 978-1-83962-767-5, v. Eds, Erol B, and Erol S.

Book reviews

1. Eshagh M. (2022) Analysis of the gravity field, direct and inverse problems, by Fernando Sanso and Daniele Sampietro published by Birkhäuser 2022, Journal of Geodetic Science, vol. 12, no. 1, 2022, pp. 244-245. https://doi.org/10.1515/jogs-2022-0149
2. Eshagh M. (2023) Physical Geodesy, by Martin Vermeer, published by Aalto University Press 2020, Journal of Geodetic Science, vol. 13, no. 1, 2023, pp. 20220150. https://doi.org/10.1515/jogs-2022-0150

National reports

1. Norin D., Mårtensson S.G., **Eshagh M.** (2014) National report of Sweden to the NKG general assembly 2014-geodetic activities in Sweden 2010-2014.
2. Norin D., Jensen A.B.O., Bagherbandi M. and **Eshagh M.** (2018) Geodetic Activities in Sweden 2014-2018, Reports in Geodesy and Geographic Information System, Lantmäterirapprt 2018:4.
3. Stefen H., Bagherbandi M., **Eshagh M.**, Horemuz M. and Johansson J. (2022) Geodetic activities in Sweden 2018-2022, Geodetic Report, Lantmäterirapport 2203.

Lecture Notes

1. Eshagh M. (2018) Geodetic Measurement Theory" in Swedish, 200 pages
2. Eshagh M. (2019) Global Navigation Satellite Systems and measurement techniques in Swedish, 100 pages.