

## Refereed publications related to SOLAMG

1. *Smitha, H. N., & Solanki, S. K. (2017). Probing photospheric magnetic fields with new spectral line pairs. *Astronomy and Astrophysics*, 608: A111. doi:10.1051/0004-6361/201731261.*
2. *Oba, T., Riethmüller, T. L., Solanki, S. K., Iida, Y., Noda, C. Q., & Shimizu, T. (2017). The Small-scale Structure of Photospheric Convection Retrieved by a Deconvolution Technique Applied to Hinode/SP Data. *Astrophysical Journal*, 849(1): 7. doi:10.3847/1538-4357/aa8e44.*
3. *Yeo, K. L., Solanki, S. K., Norris, C. M., Beeck, B., Unruh, Y. C., & Krivova, N. A. (2017). Solar Irradiance Variability is Caused by the Magnetic Activity on the Solar Surface. *Physical Review Letters*, 119: 091102. doi:10.1103/PhysRevLett.119.091102.*
4. *Quintero Noda, C., Villanueva, G. L., Katsukawa, Y., Solanki, S. K., Orozco Suárez, D., Ruiz Cobo, B., Shimizu, T., Oba, T., Kubo, M., Anan, T., Ichimoto, K., & Suematsu, Y. (2018). Solar polarimetry in the K I D2 line: A novel possibility for a stratospheric balloon. *Astronomy and Astrophysics*, 610: A79. doi:10.1051/0004-6361/201732111.*
5. *Siu-Tapia, A. L., Rempel, M., Lagg, A., & Solanki, S. K. (2018). Evershed and Counter-Evershed Flows in Sunspot MHD Simulations. *Astrophysical Journal*, 852(2): 66. doi:10.3847/1538-4357/aaa007.*
6. *Tian, H., Yurchyshyn, V., Peter, H., Solanki, S. K., Young, P. R., Ni, L., Cao, W., Ji, K., Zhu, Y., Zhang, J., Samanta, T., Song, Y., He, J., Wang, L., & Chen, Y. (2018). Frequently Occurring Reconnection Jets from Sunspot Light Bridges. *Astrophysical Journal*, 854: 92. doi:10.3847/1538-4357/aaa89d.*
7. *Löptien, B., Lagg, A., van Noort, M., & Solanki, S. K. (2018). Measuring the Wilson depression of sunspots using the divergence-free condition of the magnetic field vector. *Astronomy and Astrophysics*, 619: A42. doi:10.1051/0004-6361/201833571.*
8. *Zhang, J. W., Tian, H., Solanki, S. K., Wang, H. M., Peter, H., Ahn, K., Xu, Y., Zhu, Y. J., Cao, W. D., He, J. S., Wang, L. H. (2018). Dark Structures in Sunspot Light Bridges. *Astrophysical Journal*, 865, 29. doi:10.3847/1538-4357/aada0a.*
9. *Chitta, L. P., Peter, H., Solanki, S. K. (2018). Nature of the energy source powering solar coronal loops driven by nanoflares. *Astronomy and Astrophysics*, 615, L9. doi:10.1051/0004-6361/201833404.*
10. *Smitha, H. N., Chitta, L. P., Wiegmann, T., & Solanki, S. K. (2018). Observations of solar chromospheric heating at sub-arcsec spatial resolution. *Astronomy and Astrophysics*, 617, A128. doi:10.1051/0004-6361/201833276.*
11. *Manrique, S. J. G., Kuckein, C., Collados, M., Denker, C., Solanki, S. K., Gomory, P., Verma, M., Balthasar, H., Lagg, A., Diercke, A. (2018). Temporal evolution of arch filaments as seen in He I 10 830 Å. *Astronomy and Astrophysics*, 617, A55. doi:10.1051/0004-6361/201832684.*
12. *Barczynski, K., Peter, H., Chitta, L. P., Solanki, S. K. (2018). Emission of solar chromospheric and transition region features related to the underlying magnetic field. *Astronomy and Astrophysics*, 619, A5. doi:10.1051/0004-6361/201731650.*

13. Zeuner, F., Feller, A., Iglesias, F. A., & Solanki, S. K. (2018). Detection of spatially structured scattering polarization of Sr I 4607.3 Å with the Fast Solar Polarimeter. *Astronomy and Astrophysics*, 619, A179. doi:10.1051/0004-6361/201833241.
14. Riethmüller, T. L., & Solanki, S. K. (2019). The potential of many-line inversions of photospheric spectropolarimetric data in the visible and near UV. *Astronomy and Astrophysics*, 622, A36. doi:10.1051/0004-6361/201833379.
15. Milić, I., Smitha, H. N., & Lagg, A. (2019). Using the infrared iron lines to probe solar subsurface convection. *Astronomy and Astrophysics*, 630, A133. doi:10.1051/0004-6361/201935126.
16. Buehler, D., Lagg, A., van Noort, M., & Solanki, S. K. (2019). A comparison between solar plage and network properties. *Astronomy and Astrophysics*, 630, A86. doi:10.1051/0004-6361/201833585.
17. Al-Janabi, K., Antolin, P., Baker, D., Bellot Rubio, L. R., Bradley, L., Brooks, D. H., Centeno, r., Culhane, J., Zanna, G., Doschek, G., Fletcher, L., Hara, h., Harra, L., Hillier, A., Imada, S., Klimchuk, J., Mariska, J., Pereira, T. M., Reeves, K., Sakao, T., Sakurai, T., Shimizu, T., Shimojo, M., Shiota, D., Solanki, S. K., Sterling, A. Su, Y., Suematsu, Y., Tarbell, T. D., Tiwari, S., Toriumi, S., Ugarte-Urra, I., Warren, H., Watanabe, T., Young, P. (2019). Achievements of Hinode in the first eleven years. *Publications of The Astronomical Society of Japan*, 71, R1. doi:10.1093/pasj/psz084.
18. L. P. Chitta, L. P., Peter, H., Priest, E. R., and Solanki, S. K. (2020). Impulsive coronal heating during the interaction of surface magnetic fields in the lower solar atmosphere. *Astronomy and Astrophysics*, 644, A130. doi:10.1051/0004-6361/202039099.
19. Castellanos Durán, J. S., Lagg, A., Solanki, S. K., and van Noort, M. (2020), Detection of the Strongest Magnetic Field in a Sunspot Light Bridge. *Astrophysical Journal*, 895:129. doi:10.3847/1538-4357/ab83f1.
20. Guglielmino, S. L., Martínez Pillet, V., Ruiz Cobo, B., Bellot Rubio, L. R., J del Toro Iniesta, J. C., Solanki, S. K., Riethmüller, T., and Zuccarello, F. (2020). On the Magnetic Nature of an Exploding Granule as Revealed by Sunrise/IMaX. *Astrophysical Journal*, 896:62, doi: 10.3847/1538-4357/ab917b.
21. Löptien, B., Lagg, A., van Noort, M., and Solanki, S. K. (2020). Connecting the Wilson depression to the magnetic field of sunspots. *Astronomy and Astrophysics*, 635, A202. doi: 10.1051/0004-6361/201936975.
22. Löptien, B., Lagg, A., van Noort, M., and Solanki, S. K. (2020). No universal connection between the vertical magnetic field and the umbra-penumbra boundary in sunspots. *Astronomy and Astrophysics*, 639, A106. doi: 10.1051/0004-6361/202037974.
23. Panja, M., Cameron, R., and Solanki, S. K. (2020). 3D Radiative MHD Simulations of Starspots. *Astrophysical Journal*, 893:113. doi:10.3847/1538-4357/ab8230.
24. Prabhu, A., Lagg, A., Hirzberger, J., and Solanki, S. K. (2020). The magnetic fine structure of the Sun's polar region as revealed by Sunrise. *Astronomy and Astrophysics*, 644, A86. doi:10.1051/0004-6361/202038704.

25. Smitha, H. N., Holzreuter, R., van Noort, M., and Solanki, S. K. (2020). The influence of NLTE effects in Fe I lines on an inverted atmosphere. I. 6301Å and 6302Å lines formed in 1D NLTE. *Astronomy and Astrophysics*, 633, A157. doi: 10.1051/0004-6361/201937041.
26. Yadav, N., Cameron, R. H., and Solanki, S. K. (2020). Simulations Show that Vortex Flows Could Heat the Chromosphere in Solar Plage. *Astrophysical Journal Letters*, 894:L17. doi: 10.3847/2041-8213/ab8dc5.
27. Chaouche, L. Y., Cameron, R. H., Solanki, S. K., Riethmüller, T., Anusha, L. S., Witzke, V., Shapiro, A. I., Barthol, P., Gandorfer, A., Gizon, L., Hirzberger, J., van Noort, M., Blanco Rodríguez, J., Del Toro Iniesta, J. C., Orozco Suárez, D., Schmidt, W., Martínez Pillet, V., and Knölker, M. (2020). Power spectrum of turbulent convection in the solar photosphere. *Astronomy and Astrophysics*, 644, A44. doi:10.1051/0004-6361/202037545.
28. Yeo, K. L., Solanki, S. K., and Krivova, N. A. (2020). How faculae and network relate to sunspots, and the implications for solar and stellar brightness variations. *Astronomy and Astrophysics*, 639, A139, doi: 10.1051/0004-6361/202037739.
29. Yeo, K. L., Solanki, S. K., and Krivova, N. A., Rempel, M., Anusha, L. S., Shapiro, A. I., Tagirov, R. V., and Witzke, R. V. (2020). The Dimmest State of the Sun. *Geophysical Research Letters*, 47, e2020GL090243. doi:10.1029/2020GL090243.
30. Zeuner, F., Manso Sainz, R., Feller, A., van Noort, M., Solanki, S. K., Francisco, I. A., Reardon, K., Martinez Pillet, V. (2020). Solar Disk Center Shows Scattering Polarization in the Sr I 4607 Å Line. *Astrophysical Journal Letters*. 893:L44. doi:10.3847/2041-8213/ab86b8.
31. Zhu, X., Wiegmann, T., and Solanki, S. K. (2020). Magnetohydrostatic modeling of AR11768 based on a Sunrise/IMaX vector magnetogram. *Astronomy and Astrophysics*, 640, A103. doi.org/10.1051/0004-6361/202037766.
32. Panja, M., Cameron, R., and Solanki, S. K. (2021). Sunspot Simulations: Penumbra Formation and the Fluting Instability. *Astrophysical Journal*, 907:102. doi:10.3847/1538-4357/abccbf.
33. Smitha, H. N., Holzreuter, R., van Noort, M., and Solanki, S. K. (2021). The influence of NLTE effects in Fe I lines on an inverted atmosphere. II. 6301Å and 6302Å lines formed in 3D NLTE. *Astronomy and Astrophysics*, 647, A46. doi:10.1051/0004-6361/202039107.
34. Yadav, N., Cameron, R. H., and Solanki, S. K. (2021). Vortex flow properties in simulations of solar plage region: Evidence for their role in chromospheric heating. *Astronomy and Astrophysics*, 645, A3. doi:10.1051/0004-6361/202038965.
35. Anusha, L. S., van Noort, M., and Cameron, R. H. (2021). Nonequilibrium Equation of State in Stellar Atmospheres. *Astrophysical Journal*, 911:71. doi:10.3847/1538-4357/abe45d.