

Bibliography from ADS file: leka.bib
 September 14, 2022

- Bertello, L., Arge, N., De Wijn, A. G., et al., "Multi-height Measurements Of The Solar Vector Magnetic Field: A White Paper Submitted To The Decadal Survey For Solar And Space Physics (Heliophysics) 2024-2033", 2022arXiv220904453B [ADS](#)
- Leka, K. D., Wagner, E. L., Grinón-Marín, A. B., Bommier, V., & Higgins, R., "On Identifying and Mitigating Bias in Inferred Measurements for Solar Vector Magnetic Field Data", 2022arXiv220711572L [ADS](#)
- Higgins, R. E. L., Fouhey, D. F., Antiochos, S. K., et al., "SynthIA: A Synthetic Inversion Approximation for the Stokes Vector Fusing SDO and Hinode into a Virtual Observatory", 2022ApJS...259...24H [ADS](#)
- Leitzinger, M., Odert, P., Leka, K. D., Heinzel, P., & Dissauer, K., "Constraining stellar CMEs by solar observations", 2021AGUFM.U43B..06L [ADS](#)
- Lin, P. H., Kusano, K., & Leka, K. D., "Eruptivity in Solar Flares: The Challenges of Magnetic Flux Ropes", 2021ApJ...913..124L [ADS](#)
- Leka, K., Grinón-Marín, A., Higgins, R., & Fouhey, D., "On Measuring and Mitigating Bias in the Inferred Magnetic Field in the Helioseismic and Magnetic Imager and other Vector Magnetographs", 2021AAS...23821309L [ADS](#)
- DeRosa, M. L., Leka, K. D., Barnes, G., et al., "Enhancements to Hinode/SOT-SP Vector Magnetic Field Data Products", 2021AAS...23821305D [ADS](#)
- Dissauer, K., Leka, K. D., Barnes, G., & Wagner, E., "What do pre-event conditions of the upper solar atmosphere tell us about potential flaring of active regions?", 2021AAS...23812713D [ADS](#)
- Higgins, R. E. L., Fouhey, D. F., Zhang, D., et al., "Fast and Accurate Emulation of the SDO/HMI Stokes Inversion with Uncertainty Quantification", 2021ApJ...911...130H [ADS](#)
- Park, S.-H., Leka, K. D., & Kusano, K., "Magnetic Helicity Flux across Solar Active Region Photospheres. II. Association of Hemispheric Sign Preference with Flaring Activity during Solar Cycle 24", 2021ApJ...911...79P [ADS](#)
- Pevtsov, A. A., Liu, Y., Virtanen, I., et al., "On a limitation of Zeeman polarimetry and imperfect instrumentation in representing solar magnetic fields with weaker polarization signal", 2021JWS...11...14P [ADS](#)
- Rodríguez, S., Gilchrist, S. A., Leka, K. D., & Dissauer, K., "Modeling the Solar Corona: Testing Nonlinear Force-Free Methods with a Magneto-Hydrostatic Test Case", 2020AGUFMSH0370008R [ADS](#)
- Park, S.-H., Leka, K. D., & Kusano, K., "Magnetic Helicity Flux across Solar Active Region Photospheres. I. Hemispheric Sign Preference in Solar Cycle 24", 2020ApJ...904...6P [ADS](#)
- Gilchrist, S. A., Leka, K. D., Barnes, G., Wheatland, M. S., & DeRosa, M. L., "On Measuring Divergence for Magnetic Field Modeling", 2020ApJ...900...136G [ADS](#)
- Lin, P. H., Kusano, K., Shiota, D., et al., "A New Parameter of the Photospheric Magnetic Field to Distinguish Eruptive-flare Producing Solar Active Regions", 2020ApJ...894...20L [ADS](#)
- Paraschiv, A. R., Donea, A., & Leka, K. D., "The Trigger Mechanism of Recurrent Solar Active Region Jets Revealed by the Magnetic Properties of a Coronal Geyser Site", 2020ApJ...891...149P [ADS](#)
- Park, S.-H., Leka, K. D., Kusano, K., et al., "A Comparison of Flare Forecasting Methods. IV. Evaluating Consecutive-day Forecasting Patterns", 2020ApJ...890...124P [ADS](#)
- Hayashi, K., Arge, C. N., Barnes, G., et al., "Improving boundary B_r maps for global coronal magnetic field models", 2019AGUFMSH43E338H [ADS](#)
- Leka, K. D., "Realities, Challenges, and Innovation for Solar Flare Forecasting", 2019AGUFMSH34A...02L [ADS](#)
- Isola, B., Barnes, G., Leka, K. D., & Gilchrist, S. A., "The How and Why of Big Solar Flares", 2019AGUFMSH31D3336I [ADS](#)
- Cavins, A., Barnes, G., Leka, K. D., & Gilchrist, S. A., "Pathways to Coronal Magnetic Energy Storage in The NOAA AR11283", 2019AGUFMSH31D3332C [ADS](#)
- Lin, P. H., Kusano, K., Shiota, D., et al., "Critical Parameters of Photospheric Magnetic Field to Produce Eruptive Flares in Solar Active Regions", 2019AGUFMSH13D3426L [ADS](#)
- Leka, K. D., Park, S.-H., Kusano, K., et al., "A Comparison of Flare Forecasting Methods. II. Benchmarks, Metrics, and Performance Results for Operational Solar Flare Forecasting Systems", 2019ApJS...243...36L [ADS](#)
- Leka, K. D., Park, S.-H., Kusano, K., et al., "A Comparison of Flare Forecasting Methods. III. Systematic Behaviors of Operational Solar Flare Forecasting Systems", 2019ApJ...881...101L [ADS](#)
- Halford, A. J., Kellerman, A. C., García-Sage, K., et al., "Application usability levels: a framework for tracking project product progress", 2019JWS...9A...34H [ADS](#)
- Leka, K. D., Barnes, G., & McAteer, R. T. J., "A Potential Field is Unique $\text{textrm{t}}$ telli $\text{psisRight}??$ Summary of Evaluation Methodology and Initial Results", 2019shin.confE.151L [ADS](#)
- Barnes, G., Cavins, A. S., Isola, B., Gilchrist, S. A., & Leka, K. D., "Understanding the Where and the How Big of Solar Flares", 2019shin.confE.141B [ADS](#)
- Gilchrist, S. A. & Leka, K. D., "Quantitative assessment of coronal NLFFF extrapolations as initial conditions to coronal MHD simulations", 2019shin.confE.136G [ADS](#)
- Hayashi, K., Leka, K. D., & Barnes, G., "Effects of particular smoothing processes for global synoptic maps on PFSS solutions", 2019shin.confE.135H [ADS](#)
- Barnes, G., Leka, K. D., & Wagner, E., "New HMI Data Series: temporally consistent disambiguation for HARP vector magnetic field timeseries data", 2018csc...confE.116B [ADS](#)
- Barnes, G., Gilchrist, S. A., & Leka, K. D., "The Unusually Flare-UnProductive region NOAA AR 10978: Energy Estimations", 2018shin.confE..86B [ADS](#)
- Gilchrist, S. A. & Leka, K. D., "The Unusually Flare-UnProductive region NOAA AR 10978: Achieving Accurate Coronal Models", 2018shin.confE..85G [ADS](#)
- Leka, K. D. & Park, S.-H., "Operational Flare Forecasting Benchmarks and Initial Performance Comparisons", 2018cosp...42E1978L [ADS](#)
- Leka, K. D., "The Magnetic Needs for Understanding (and Predicting) Solar Energetic Events", 2018cosp...42E1977L [ADS](#)
- Leka, K. D., Park, S.-H., & Barnes, G., "Operational Flare Forecasting Benchmarks and Initial Performance Comparisons", 2018tess.conf41407L [ADS](#)
- Barnes, G., Gilchrist, S. A., & Leka, K. D., "Understanding the Where and the How Big of Solar Flares", 2018tess.conf30495B [ADS](#)
- Leka, K. D., "Understanding and Forecasting The Solar Origins of Space Weather", 2018tess.conf10001L [ADS](#)
- Leka, K. D., Barnes, G., & Wagner, E., "The NWRA Classification Infrastructure: description and extension to the Discriminant Analysis Flare Forecasting System (DAFFS)", 2018JWS...8A...25L [ADS](#)
- Barnes, G. & Leka, K. D., "Inferring Currents from the Zeeman Effect at the Solar Surface", 2018GMS...235...81B [ADS](#)
- Barnes, G., Leka, K. D., & Gilchrist, S., "Predicting the Where and the How Big of Solar Flares", 2017SPD...4810825B [ADS](#)
- Barnes, G., Birch, A. C., Leka, K. D., & Braun, D. C., "VizieR Online Data Catalog: Statistical analysis of solar active regions (Barnes+, 2014)", 2017yCat...17860019B [ADS](#)
- Leka, K. D., Barnes, G., Gilchrist, S., & Wheatland, M., "Predicting the Where and the How Big of Solar Flares", 2017shin.confE..87L [ADS](#)
- Barnes, G., Schanche, N., Leka, K. D., Aggarwal, A., & Reeves, K., "A Comparison of Classifiers for Solar Energetic Events", 2017IAUS..325..201B [ADS](#)
- Leka, K. D., Barnes, G., & Wagner, E. L., "Evaluating (and Improving) Estimates of the Solar Radial Magnetic Field Component from Line-of-Sight Magnetograms", 2017SoPh..292...36L [ADS](#)
- Schuck, P. W., Antiochos, S. K., Scherrer, P. H., et al., "Achieving Consistent Vector Magnetic Field Measurements from SDO/HMI", 2016AGUFMSH31B2575S [ADS](#)
- Mullinix, R., Mays, M. L., Kuznetsova, M. M., et al., "Community-wide space weather Scoreboards: Facilitating the Validation of Real-time CME, Flare, and SEP Forecasts", 2016AGUFMSH11C2256M [ADS](#)
- Barnes, G., Leka, K. D., Schrijver, C. J., et al., "A Comparison of Flare Forecasting Methods. I. Results from the textquotedblleftAll-Cleartextquotedblright Workshop", 2016ApJ...829...89B [ADS](#)
- Leka, K. D., Barnes, G., & Wagner, E. L., "Lessening the Effects of Projection for Line-of-Sight Magnetic Field Data", 2016shin.confE.147L [ADS](#)
- Schuck, P. W., Antiochos, S. K., Leka, K. D., & Barnes, G., "Achieving Consistent Doppler Measurements from SDO/HMI Vector Field Inversions", 2016ApJ...823...101S [ADS](#)
- Leka, K. D., Barnes, G., Wagner, E., Hill, F., & Marble, A. R., "The Discriminant Analysis Flare Forecasting System (DAFFS)", 2016SPD...4720701L [ADS](#)
- Schuck, P. W., Antiochos, S. K., Leka, K. D., & Barnes, G., "Achieving Consistent Doppler Measurements from SDO/HMI Vector Field Inversions", 2016SPD...47...1207S [ADS](#)
- Leka, K. D., Barnes, G., & Wagner, E., "Lessening the Effects of Projection for Line-of-Sight Magnetic Field Data", 2016SPD...47...1008L [ADS](#)
- Leka, K. D., "Searching for Missing Pieces for Solar Flare Forecasting", 2015AGUFMSH51B2446L [ADS](#)
- DeRosa, M. L., Wheatland, M. S., Leka, K. D., et al., "The Influence of Spatial resolution on Nonlinear Force-free Modeling", 2015ApJ...811...107D [ADS](#)
- Hanson, C. S., Donea, A. C., & Leka, K. D., "Enhanced Acoustic Emission in Relation to the Acoustic Halo Surrounding Active Region 11429", 2015SoPh..290.2171H [ADS](#)
- Leka, K. D., "Skill Scores and Evaluation Tools for SHINE-related Phenomena", 2015shin.confE.168L [ADS](#)

- Schuck, P. W., Antiochos, S. K., Barnes, G., & Leka, K. D., “Measuring Coronal Energy and Helicity Buildup with SDO/HMI”, 2014AGUFMSH44A..08S [ADS](#)
- Bobra, M. G., Sun, X., Hoeksema, J. T., et al., “The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: SHARPs - Space-Weather HMI Active Region Patches”, 2014SoPh..289..3549B [ADS](#)
- Centeno, R., Schou, J., Hayashi, K., et al., “The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: Optimization of the Spectral Line Inversion Code”, 2014SoPh..289..3531C [ADS](#)
- Hoeksema, J. T., Liu, Y., Hayashi, K., et al., “The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: Overview and Performance”, 2014SoPh..289..3483H [ADS](#)
- Leka, K. D., Barnes, G., Braun, D. C., & Wagner, E. L., “Studies on Forecasting Solar Flares”, 2014shin.confE.171L [ADS](#)
- Braun, D., Leka, K. D., & Barnes, G., “A Helioseismic Survey to Investigate Relationships between Subsurface Flows beneath Large Active Regions and Solar Flares”, 2014AA...22421815B [ADS](#)
- Higgins, P. A., Perez-Suarez, D., Parrish, M., et al., “Sunspotter: Using Citizen Science to Determine the Complexity of Sunspots”, 2014AA...22411203H [ADS](#)
- Barnes, G., Birch, A. C., Leka, K. D., & Braun, D. C., “Helioseismology of Pre-emerging Active Regions. III. Statistical Analysis”, 2014ApJ...786..19B [ADS](#)
- Leka, K. D., Barnes, G., & Crouch, A.: 2014, *AMBIG: Automated Ambiguity-Resolution Code*, Astrophysics Source Code Library, record ascl:1404.007 2014ascl.soft04007L [ADS](#)
- Leka, K. D., Birch, A., Barnes, G., et al., “A Search for Pre-Emergence Helioseismic Signatures of Active Regions: Study Design and some Average Results”, 2013SPD...44..91L [ADS](#)
- Leka, K. D. & Barnes, G., “Solar Flare Forecasting: a “State of the Field” Report for Researchers”, 2013SPD...44..82L [ADS](#)
- Leka, K. D., Barnes, G., & Flare Forecasting Comparison Group, “The Second NWRA Flare-Forecasting Comparison Workshop: Methods Compared and Methodology”, 2013SPD...44..81L [ADS](#)
- Barnes, G., Leka, K. D., & Flare Forecasting Comparison Group, “The Second NWRA Flare-Forecasting Comparison Workshop: Preliminary Results”, 2013SPD...44..80B [ADS](#)
- Hayashi, K., Liu, Y., Sun, X., et al., “Making global map of the solar surface B_r from the HMI vector magnetic field observations”, 2013JPhCS.440a2036H [ADS](#)
- Birch, A. C., Braun, D. C., Leka, K. D., Barnes, G., & Javornik, B., “Helioseismology of Pre-emerging Active Regions. II. Average Emergence Properties”, 2013ApJ...762..131B [ADS](#)
- Leka, K. D., Barnes, G., Birch, A. C., et al., “Helioseismology of Pre-emerging Active Regions. I. Overview, Data, and Target Selection Criteria”, 2013ApJ...762..130L [ADS](#)
- Leka, K. D., Mickey, D. L., Uitenbroek, H., Wagner, E. L., & Metcalf, T. R., “The Imaging Vector Magnetograph at Haleakalā IV: Stokes Polarization Spectra in the Sodium D_1 589.6 nm Spectral Line”, 2012SoPh..278..471L [ADS](#)
- Liu, Y., Scherrer, P. H., Hoeksema, J. T., et al., “A First Look at Magnetic Field Data Products from SDO/HMI”, 2012ASPC..455..337L [ADS](#)
- Barnes, G., Leka, K., & Crouch, A., “Ambiguity Resolution of Multiple Height Magnetic Field Observations”, 2012AA...22020609B [ADS](#)
- Barnes, G., Birch, A., Leka, K., et al., “A Search for Pre-Emergence Helioseismic Signatures of Active Regions”, 2012AA...22020510B [ADS](#)
- Leka, K. D., “Spectropolarimetry in the Sodium 589.6nm D_1 line: Evaluating the Resulting Chromospheric (?) Vector Field Maps.”, 2012AA...22020305L [ADS](#)
- Leka, K. D., Barnes, G., Stockwell, R. G., et al., “Spectropolarimetry in the Sodium 589.6nm D_1 line: Evaluating the Resulting Chromospheric (?) Vector Field Maps.”, 2012decs.confE..79L [ADS](#)
- Hayashi, K., Hoeksema, J. T., Liu, S., et al., “The synoptic maps of Br from HMI observations”, 2012decs.confE..69H [ADS](#)
- Leka, K. D. & Barnes, G., “Modeling and Interpreting the Effects of Spatial Resolution on Solar Magnetic Field Maps”, 2012SoPh..277..89L [ADS](#)
- Leka, K. D., Barnes, G., Gary, G. A., Crouch, A. D., & Liu, Y., “Response to “Comment on ‘Resolving the 180 deg Ambiguity in Solar Vector Magnetic Field Data: Evaluating the Effects of Noise, Spatial Resolution, and Method Assumptions’””, 2012SoPh..276..441L [ADS](#)
- Gilchrist, S. A., Wheatland, M. S., & Leka, K. D., “The Free Energy of NOAA Solar Active Region AR 11029”, 2012SoPh..276..133G [ADS](#)
- Centeno, R., Barnes, G., Borrero, J., et al., “HMI vector magnetic field products: the long-awaited release has come! Now what?”, 2011AGUFMSH31A1985C [ADS](#)
- Leka, K. D., “Interpreting Vector Magnetic Field Data in the Context of Modeling Results (and vice-versa)”, 2011sdmi.confE..67L [ADS](#)
- Barnes, G., Birch, A., Leka, K. D., et al., “A Search for Pre-Emergence Helioseismic Signatures of Active Regions”, 2011sdmi.confE..58B [ADS](#)
- Barnes, G., Leka, K. D., & Stockwell, R., “Statistical Analysis of Pre-CME Coronal Activity”, 2011shin.confE.138B [ADS](#)
- Leka, K. D. & Barnes, G., “A Comparison of Methods for Manipulating SpectroPolarimetric and Magnetic Field Data for Heliospheric Models, Data Comparisons, and Physical Interpretation”, 2011shin.confE..22L [ADS](#)
- Leka, K. D., “Effects of Limited Resolution on SpectroPolarimetric data, from the Subtle to the Supreme”, 2011ASPC..437..157L [ADS](#)
- Komm, R., Ferguson, R., Hill, F., Barnes, G., & Leka, K. D., “Subsurface Vorticity of Flaring versus Flare-Quiet Active Regions”, 2011SoPh..268..389K [ADS](#)
- Wheatland, M. S. & Leka, K. D., “Achieving Self-consistent Nonlinear Force-free Modeling of Solar Active Regions”, 2011ApJ...728..112W [ADS](#)
- Wheatland, M. S. & Leka, K. D., “Modelling magnetic fields in the corona using nonlinear force-free fields”, 2011ASInC..2..203W [ADS](#)
- Lee, J. Y., Barnes, G., Leka, K. D., et al., “The Role of Magnetic Topology in the Heating of Active Region Coronal Loops”, 2010ApJ...723..1493L [ADS](#)
- Barnes, G. & Leka, K. D., “The Effects of Different Implementations of Potential Field Extrapolations”, 2010shin.confE..54B [ADS](#)
- Derouich, M., Leka, K. D., Mickey, D. L., Uitenbroek, H., & Metcalf, T. R., “Observing and Interpreting Na D_1 589.6nm Stokes Spectra with the Imaging Vector Magnetograph II: The Magnetic Maps”, 2010shin.confE..5D [ADS](#)
- Leka, K. D., Mickey, D. L., Uitenbroek, H., Derouich, M., & Metcalf, T. R., “Observing and Interpreting Na D_1 589.6nm Stokes Spectra with the Imaging Vector Magnetograph I: Polarization Spectra”, 2010shin.confE..4L [ADS](#)
- Lee, J.-Y., Barnes, G., Leka, K., et al., “Coronal Loop Evolution and Inferred Coronal Magnetic Energy in a Quiet Active Region”, 2010AA...21640514L [ADS](#)
- Barnes, G. & Leka, K. D., “Comparison of Solar Flare Forecasting Methods”, 2010cosp...38.4173B [ADS](#)
- Crouch, A. D., Barnes, G., & Leka, K. D., “Resolving the Azimuthal Ambiguity in Vector Magnetogram Data with the Divergence-Free Condition: Application to Discrete Data”, 2009SoPh..260..271C [ADS](#)
- Ferguson, R., Komm, R., Hill, F., Barnes, G., & Leka, K. D., “Subsurface Flow Properties of Flaring versus Flare-Quiet Active Regions”, 2009ASPC..416..127F [ADS](#)
- Leka, K. D., Barnes, G., & Crouch, A., “An Automated Ambiguity-Resolution Code for Hinode/SP Vector Magnetic Field Data”, 2009ASPC..415..365L [ADS](#)
- Lee, J. Y., Leka, K. D., Barnes, G., et al., “Evolution of Magnetic Properties for Two Active Regions Observed by Hinode/XRT and TRACE”, 2009ASPC..415..279L [ADS](#)
- Lee, J., Barnes, G., Leka, K. D., et al., “Magnetic energy build-up and coronal brightness evolution”, 2009AGUFMSH41B1664L [ADS](#)
- Leka, K. D., Barnes, G., Crouch, A. D., et al., “Resolving the 180 deg Ambiguity in Solar Vector Magnetic Field Data: Evaluating the Effects of Noise, Spatial Resolution, and Method Assumptions”, 2009SoPh..260..83L [ADS](#)
- De Rosa, M. L., Schrijver, C. J., Barnes, G., et al., “Nonlinear Force-Free Magnetic Field Modeling of AR 10953: A Critical Assessment”, 2009SPD...40.3102D [ADS](#)
- Ferguson, R. M., Komm, R., Hill, F., Barnes, G., & Leka, K. D., “Subsurface Flow Properties of Flaring Versus Flare-quiet Active Regions”, 2009SPD...40.1908F [ADS](#)
- Lee, J.-Y., Barnes, G., Leka, K., et al., “Magnetic Topology and Coronal Brightness Evolution: A Case Study”, 2009SPD...40.1209L [ADS](#)
- Crouch, A. D., Leka, K., & Barnes, G., “Resolving the Azimuthal Ambiguity in Vector Magnetogram Data with the Divergence-Free Condition”, 2009SPD...40.0915C [ADS](#)
- Leka, K. D., Dunn, T., Gonzalez-Hernandez, I., et al., “Detecting, Selecting, And Controlling For Emerging ActiveRegions In The Search For Helioseismic Pre-emergence Signatures.”, 2009SPD...40.0708L [ADS](#)
- Birch, A., Braun, D. C., Leka, K. D., et al., “A Search for Pre-Emergence Signatures of Active Regions”, 2009SPD...40.0402B [ADS](#)
- De Rosa, M. L., Schrijver, C. J., Barnes, G., et al., “A Critical Assessment of Nonlinear Force-Free Field Modeling of the Solar Corona for Active Region 10953”, 2009ApJ...696..1780D [ADS](#)
- Lundquist, L. L., Fisher, G. H., Metcalf, T. R., Leka, K. D., & McTiernan, J. M., “Forward Modeling of Active Region Coronal Emissions. II. Implications for Coronal Heating”, 2008ApJ...689..1388L [ADS](#)
- Barnes, G. & Leka, K. D., “Evaluating the Performance of Solar Flare Forecasting Methods”, 2008ApJ...688L.107B [ADS](#)
- De Rosa, M. L., Schrijver, C. J., Barnes, G., et al., “Nonlinear Force-Free Magnetic Field Modeling of the Solar Corona: A Critical Assessment”, 2008AGUFMSH41A1604D [ADS](#)
- Leka, K., Barnes, G., Knoll, J., & Tassein, J. A., “Statistical Prediction of Solar Flares Using Magnetic Field Data: A Status Report”, 2008AGUFMSA51A1535L [ADS](#)

- Leka, K. D., "Obituary: Thomas Robert Metcalf, 1961-2007", [2007BAAS...39.1074L](#) [ADS](#)
- Barnes, G. & Leka, K., "A Comparison of Flare Forecasting Parameters Derived From Photospheric Magnetograms", [2007AGUFMSM41A0314B](#) [ADS](#)
- MacDonald, R., Fisher, G. H., & Leka, K., "Testing a possible scenario for delta-spot formation", [2007AGUFMSH13A1110M](#) [ADS](#)
- Barnes, G., Leka, K. D., Schumer, E. A., & Della-Rose, D. J., "Probabilistic forecasting of solar flares from vector magnetogram data", [2007SpWea...5.9002B](#) [ADS](#)
- Leka, K. D. & Barnes, G., "Photospheric Magnetic Field Properties of Flaring versus Flare-quiet Active Regions. IV. A Statistically Significant Sample", [2007ApJ...656.1173L](#) [ADS](#)
- Moradi, H., Donea, A., Besliu-Ionescu, D., et al., "Magnetohelioseismic Analysis of AR10720 Using Helioseismic Holography", [2006ASPC..354..168M](#) [ADS](#)
- Metcalf, T. R., Leka, K. D., Barnes, G., et al., "An Overview of Existing Algorithms for Resolving the 180° Ambiguity in Vector Magnetic Fields: Quantitative Tests with Synthetic Data", [2006SoPh..237..267M](#) [ADS](#)
- Barnes, G., Longcope, D. W., Beveridge, C., Ravindra, B., & Leka, K. D., "Estimating Active Region Free Energy and Helicity from the Minimum Current Corona Model", [2006IAUJD...3E..80B](#) [ADS](#)
- Leka, K. D., Metcalf, T. R., Mickey, D. L., & Barnes, G., "Observations of The Chromospheric Magnetic Field In Solar Active Regions", [2006IAUJD...3E..53L](#) [ADS](#)
- Barnes, G. & Leka, K. D., "Photospheric Magnetic Field Properties of Flaring versus Flare-quiet Active Regions. III. Magnetic Charge Topology Models", [2006ApJ...646.1303B](#) [ADS](#)
- Leka, K. D. & Barnes, G., "Progress on Determining What Makes a Flare-Producing Active Region", [2006SPD...37.2203L](#) [ADS](#)
- Metcalf, T. R., Leka, K. D., Mickey, D. L., & Barnes, G., "Measuring the Magnetic Free Energy Available for Solar Flares", [2006SPD...37.0903M](#) [ADS](#)
- Barnes, G., Leka, K. D., & Wheatland, M. S., "Quantifying the Performance of Force-free Extrapolation Methods Using Known Solutions", [2006ApJ...641.1188B](#) [ADS](#)
- Barnes, G., Longcope, D. W., & Leka, K. D., "Implementing a Magnetic Charge Topology Model for Solar Active Regions", [2005ApJ...629..561B](#) [ADS](#)
- Leka, K. D., Fan, Y., & Barnes, G., "On the Availability of Sufficient Twist in Solar Active Regions to Trigger the Kink Instability", [2005ApJ...626.1091L](#) [ADS](#)
- Lundquist, L. L., Fisher, G. H., Leka, K. D., Metcalf, T. R., & McTieran, J. M., "Predicting Coronal Emissions with Multiple Heating Rates", [2005AGUSMSP14A..02L](#) [ADS](#)
- Leka, K. D., "Chromospheric Vector Magnetic Field Measurements of Active Regions", [2005AGUSMSH53B..02L](#) [ADS](#)
- Leka, K. D., Metcalf, T. R., & Mickey, D. L., "Another Piece of the Elephant: Chromospheric Vector Field Observations", [2005AGUSMSH13C..10L](#) [ADS](#)
- Metcalf, T. R., Leka, K. D., & Mickey, D. L., "Magnetic Free Energy in NOAA Active Region 10486 on 2003 October 29", [2005ApJ...623L..53M](#) [ADS](#)
- Barnes, G., Longcope, D. W., & Leka, K. D., "Magnetic Topology, Flux Emergence/Reconnection and Velocities from a Magnetic Charge Topology Model for Solar Active Regions", [2004AAS...204.3906B](#) [ADS](#)
- Leka, K. D. & Barnes, G., "Photospheric Magnetic Field Properties of Flaring vs. Flare-Quiet Active Regions III: Discriminant Analysis of a Statistically Significant Database", [2004AAS...204.3905L](#) [ADS](#)
- Longcope, D. & Leka, K. D., "Inferring a Photospheric Velocity Field from a Sequence of Vector Magnetograms: The Minimum Energy Fit", [2004AAS...204.3704L](#) [ADS](#)
- Metcalf, T. R., Leka, K. D., & Mickey, D. L., "The Magnetic Free Energy in AR0486", [2004AAS...204.0208M](#) [ADS](#)
- Gibson, S., Barnes, G., Demoulin, P., et al., "Observational consequences of a magnetic flux rope topology", [2003AGUFMSH42B0516G](#) [ADS](#)
- Leka, K. D. & Barnes, G., "Photospheric Magnetic Field Properties of Flaring versus Flare-quiet Active Regions. II. Discriminant Analysis", [2003ApJ...595.1296L](#) [ADS](#)
- Leka, K. D. & Barnes, G., "Photospheric Magnetic Field Properties of Flaring versus Flare-quiet Active Regions. I. Data, General Approach, and Sample Results", [2003ApJ...595.1277L](#) [ADS](#)
- Barnes, G., Leka, K. D., & Longcope, D. W., "Photospheric Magnetic Field Properties of Flaring vs. Flare-Quiet Active Regions II: A Magnetic Charge Topology Model and Statistical Results", [2003SPD...34.1616B](#) [ADS](#)
- Leka, K. D. & Barnes, G., "Photospheric Magnetic Field Properties of Flaring vs. Flare-Quiet Active Regions I: Data, General Approach, and Statistical Results", [2003SPD...34.1615L](#) [ADS](#)
- Leka, K. D. & Metcalf, T. R., "Active-Region Magnetic Structure Observed in the Photosphere and Chromosphere", [2003SoPh..212..361L](#) [ADS](#)
- Bleybel, A., Amari, T., van Driel-Gesztelyi, L., & Leka, K. D., "Global budget for an eruptive active region. I. Equilibrium reconstruction approach", [2002A&A...395..685B](#) [ADS](#)
- Gibson, S. E., Low, B. C., Leka, K. D., Fan, Y., & Fletcher, L., "Magnetic flux ropes: Would we know one if we saw one?", [2002ESASP..505..265G](#) [ADS](#)
- Barnes, G., Leka, K. D., & Longcope, D. W., "Photospheric Magnetic Fields Complexity Variations and Solar Flares", [2002AAS...200.6808B](#) [ADS](#)
- Leka, K. D., "Stokes Asymmetries In and Around Sunspots", [2002AAS...200.3802L](#) [ADS](#)
- Leka, K. D. & Rangarajan, K. E., "Effects of 'Seeing' on Vector Magnetograph Measurements", [2001SoPh..203..239L](#) [ADS](#)
- Leka, K. D. & Steiner, O., "Understanding Small Solar Magnetic Structures: Comparing Numerical Simulations to Observations", [2001ApJ...552..354L](#) [ADS](#)
- Metcalf, T. R. & Leka, K. D., "A Comparison of the Active Region Magnetic Field in the Photosphere and Chromosphere", [2001AGUSM..SP41B07M](#) [ADS](#)
- Leka, K. D. & Rangarajan, K. E., "The Effect of "Seeing" on Imaging Vector Magnetograph Measurements of Solar Active Regions", [2001AGUSM..SP41B06L](#) [ADS](#)
- Leka, K. D., White, S., Mikic, Z., & Lee, J., "Coronal Sunspot Magnetic Fields: Extrapolation vs. Direct Observation", [2001AGUSM..SH31D03L](#) [ADS](#)
- Leka, K. D., "Applying a Two-Component Inversion to Stokes Spectra from a Sunspot Penumbra", [2001ASPC..236..571L](#) [ADS](#)
- Leka, K. D. & Socas-Navarro, H., "Untangling Sunspot Penumbrae: New Stokes Profile Analyses", [2000SPD...31.0119L](#) [ADS](#)
- Leka, K. D., "Summary: The Sun, the stars, and total eclipses", [2000ssls.work..129L](#) [ADS](#)
- Bleybel, A., Amari, T., van Driel-Gesztelyi, L., & Leka, K. D., "Non Linear Force-Free Reconstruction of a Flaring Active Region", [1999ESASP.448..709B](#) [ADS](#)
- LaBonte, B. J., Mickey, D. L., & Leka, K. D., "The Imaging Vector Magnetograph at Haleakala - II. Reconstruction of Stokes Spectra", [1999SoPh..189...1L](#) [ADS](#)
- Leka, K. D., "On the value of 'αAR' from Vector Magnetograph data - II. Spatial Resolution, Field of View, and Validity", [1999SoPh..188..21L](#) [ADS](#)
- Leka, K. D. & Skumanich, A., "On the value of 'αAR' from vector magnetograph data - I. Methods and Caveats", [1999SoPh..188..3L](#) [ADS](#)
- Leka, K. D., Steiner, O., & Grossmann-Doerth, U., "Understanding Small Solar Magnetic Elements: Comparing Models and Observations", [1999AA...394.5507L](#) [ADS](#)
- Leka, K. D., Mickey, D. L., & Labonte, B. J., "Stokes profile reconstruction with the imaging vector magnetograph", [1999ASSL..243..305L](#) [ADS](#)
- Leka, K. D. & Skumanich, A., "The Evolution of Pores and the Development of Penumbrae", [1998ApJ...507..454L](#) [ADS](#)
- Leka, K. D.: 1998a, *The Vector Magnetic Fields and Thermodynamics of Sunspot Light Bridges: The Case for Field-free Disruptions in Sunspots: Erratum*, The Astrophysical Journal, Volume 495, Issue 1, pp. 508-509. [1998ApJ...495..508L](#) [ADS](#)
- Leka, K. D., "Some Questions on Emerging Flux Addressable with Synoptic Observations", [1998ASPC..140..91L](#) [ADS](#)
- Leka, K. D., "The Vector Magnetic Fields and Thermodynamics of Sunspot Light Bridges: The Case for Field-free Disruptions in Sunspots", [1997ApJ...484..900L](#) [ADS](#)
- Leka, K. D. & Skumanich, A., "On the Development of a Sunspot Penumbra", [1997SPD...28.1702L](#) [ADS](#)
- Mickey, D. L., Canfield, R. C., LaBonte, B. J., et al., "Erratum: "The imaging vector magnetograph at Haleakala" [Sol. Phys., Vol. 168, No. 2, p. 229 - 250 (Oct 1996).]", [1997SoPh..170..455M](#) [ADS](#)
- Mickey, D. L., Canfield, R. C., LaBonte, B. J., et al., "The Imaging Vector Magnetograph at Haleakala", [1996SoPh..168..229M](#) [ADS](#)
- Canfield, R. C., Reardon, K. P., Leka, K. D., et al., "H alpha Surges and X-Ray Jets in AR 7260", [1996ApJ...464.1016C](#) [ADS](#)
- Leka, K. D., Canfield, R. C., McClymont, A. N., & van Driel-Gesztelyi, L., "Evidence for Current-carrying Emerging Flux", [1996ApJ...462..547L](#) [ADS](#)
- Leka, K. D., "The New Emerging Flux Paradigm", [1996AA...188.3301L](#) [ADS](#)
- Lites, B. W., Leka, K. D., Skumanich, A., Martínez Pillet, V., & Shimizu, T., "Small-Scale Horizontal Magnetic Fields in the Solar Photosphere", [1996ApJ...460.1019L](#) [ADS](#)
- Nitta, N., van Driel-Gesztelyi, L., Leka, K. D., & Shibata, K., "Emerging flux and flares in NOAA 7260", [1996AdSpR..17d.201N](#) [ADS](#)
- Nitta, N., van Driel-Gesztelyi, L., Leka, K. D., & Hudson, H. S., "Active Region Evolution and Flare Activity", [1996mpsa.conf..515N](#) [ADS](#)
- Canfield, R. C., Reardon, K. P., Leka, K. D., et al., "H alpha Surges and X-ray Jets in AR7260", [1996mpsa.conf...49C](#) [ADS](#)
- Leka, K. D.: 1995, "Are Solar Emerging Flux Regions Carrying Electric Current?", Ph.D. thesis, University of Hawaii, Manoa [1995PhDT.....L](#) [ADS](#)

- Leka, K. D., Lites, B. W., Skumanich, A., Martínez Pillet, V., & Shimizu, T., “*Small scale horizontal magnetic fields in the solar photosphere*”, 1995IAUS..176P.120L [ADS](#)
- Leka, K. D., Canfield, R. C., Mickey, D. L., et al., “*The Magnetic Evolution of the Activity Complex AR:7260 - a Roadmap*”, 1994SoPh..155..301L [ADS](#)
- Nitta, N., Driel-Gesztelyi, L. V., Leka, K. D., et al., “*Flares in Active Region NOAA 7260 - Role of Emerging Flux*”, 1994kofu.symp..385N [ADS](#)
- Shibasaki, K., Enome, S., Nakajima, H., et al., “*A Purely Polarized S-Component at 17 GHz*”, 1994PASJ...46L..17S [ADS](#)
- Nitta, N., van Driel-Gesztelyi, L., Leka, K. D., et al., “*Flares in Active Region NOAA 7260*”, 1994xspy.conf..111N [ADS](#)
- Leka, K. D., van Driel-Gesztelyi, L., Anwar, B., et al., “*Diagnostics of Twisted Flux Emergence (noaa AR7260)*”, 1994xspy.conf..25L [ADS](#)
- Leka, K. D., van Driel-Gesztelyi, L., & Canfield, R. C., “*Evidence for Twisted Emerging Flux in NOAA AR 7260*”, 1994ASPC..68..145L [ADS](#)
- van Driel-Gesztelyi, L. & Leka, K. D., “*Emerging Flux Tube Geometry and Sunspot Proper Motions*”, 1994ASPC..68..138V [ADS](#)
- de La Beaujardiere, J. F., Canfield, R. C., & Leka, K. D., “*The Morphology of Flare Phenomena, Magnetic Fields, and Electric Currents in Active Regions. III. NOAA Active Region 6233 (1990 August)*”, 1993ApJ...411..378D [ADS](#)
- Leka, K. D., Canfield, R. C., McClymont, A. N., et al., “*The Morphology of Flare Phenomena, Magnetic Fields, and Electric Currents in Active Regions. II. NOAA Active Region 5747 (1989 October)*”, 1993ApJ...411..370L [ADS](#)
- Canfield, R. C., de La Beaujardiere, J. F., Fan, Y., et al., “*The Morphology of Flare Phenomena, Magnetic Fields, and Electric Currents in Active Regions. I. Introduction and Methods*”, 1993ApJ...411..362C [ADS](#)
- Leka, K. D., van Driel-Gesztelyi, L., Canfield, R. C., et al., “*Evidence for Twisted Emerging Flux: NOAA AR 7260*”, 1993BAAS...25R1187L [ADS](#)
- Nitta, N., Drel-Gesztelyi, L. V., Leka, K. D., et al., “*Flares in Active Region NOAA 7260 - Role of Emerging Flux and Reconnection*”, 1993BAAS...25.1223N [ADS](#)
- Wang, H., Varsik, J., Zirin, H., et al., “*Joint vector magnetograph observations at BBSO, Huairou Station and Mees Solar Observatory*”, 1992SoPh..142..11W [ADS](#)
- Canfield, R. C., Hudson, H. S., Leka, K. D., et al., “*The X Flare of 1991 November 15: Coordinated Mees/Yohkoh Observations*”, 1992PASJ...44L.111C [ADS](#)
- Herbig, G. H. & Leka, K. D., “*The Diffuse Interstellar Bands. VIII. New Features between 6000 and 8650 Angstrom*”, 1991ApJ...382..193H [ADS](#)
- Canfield, R. C., de La Beaujardiere, J. F., & Leka, K. D., “*Flare Energy Release: Observational Consequences and Signatures*”, 1991RSPTA.336..381C [ADS](#)
- Leka, K. D. & Canfield, R. C., “*The Magnetic Morphology of High-Pressure Plasmas in Three October 1989 (AR5747) Flares*”, 1991BAAS...23.1066L [ADS](#)
- Canfield, R. C., de La Beaujardiere, J. F., & Leka, K. D., “*Flare energy release: observational consequences and signatures.*”, 1991psf..conf..381C [ADS](#)
- Canfield, R. C., Leka, K. D., & Wülser, J.-P., “*Magnetic Morphology of Nonthermal Electron Precipitation During Three Flares in a Highly Non-potential Active Region*”, in Y. Uchida, R. C. Canfield, T. Watanabe, and E. Hiei (Eds.), Flare Physics in Solar Activity Maximum 22, Vol. 387, 96 1991LNP...387..96C [ADS](#)
- Leka, K. D., Canfield, R. C., Wülser, J. P., & Fan, Y., “*The Magnetic Morphology of Chromospheric Particle Precipitation in Three October 1989 (AR 5747) Flares*”, 1990BAAS...22..824L [ADS](#)