

Bibliography from ADS file: bommier.bib

September 14, 2022

- Joshi, R., Vilmer, N., Chandra, R., et al., “*Mini solar flare and jet due to small scale surface motions*”, 2022cosp...44.2535J [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](#)
- Bommier, V., “*Electron thermal escape inside the Sun*”, 2021sf2a.conf..181B [ADS](#)
- Schmieder, B., Joshi, R., Chandra, R., et al., “*Empirical atmosphere model in a mini flare during magnetic reconnection*”, 2021arXiv211206790S [ADS](#)
- Bommier, V., “*Electron thermal escape in the Sun*”, 2021csss.confE..4B [ADS](#)
- Bommier, V., Leroy, J. L., & Sahal-Bréchot, S., “*24 synoptic maps of average magnetic field in 296 prominences measured by the Hanle effect during the ascending phase of solar cycle 21*”, 2021A&A...647A..60B [ADS](#)
- Bommier, V., Leroy, J. L., & Sahal-Bréchot, S., “*VizieR Online Data Catalog: Prominence average magnetic fields in cycle XXI (Bommier+, 2021)*”, 2021yCat..36470060B [ADS](#)
- Joshi, R., Schmieder, B., Aulanier, G., Chandra, R., & Bommier, V., “*Twist transfer to a solar jet from a big flux rope detected in the HMI magnetogram*”, 2021cosp...43E1752J [ADS](#)
- Bommier, V., “*Master equation theory applied to the redistribution of polarized radiation in the weak radiation field limit. VI. Application to the second solar spectrum of the Na I D1 and D2 lines: convergence*”, 2020A&A...644A..65B [ADS](#)
- Joshi, R., Schmieder, B., Aulanier, G., Bommier, V., & Chandra, R., “*The role of small-scale surface motions in the transfer of twist to a solar jet from a remote stable flux rope*”, 2020A&A...642A.169J [ADS](#)
- Bommier, V., “*Solar photosphere magnetization*”, 2020A&A...634A..40B [ADS](#)
- Kalewicz, T. & Bommier, V., “*Magnetic field vector ambiguity resolution in a quiescent prominence observed on two consecutive days*”, 2019A&A...629A.138K [ADS](#)
- Bommier, V., “*Self-consistent Multilevel PRD*”, 2019ASPC..519...39B [ADS](#)
- Sahal-Bréchot, S. & Bommier, V., “*Collisional Line Broadening and Collisional Depolarization of Spectral Lines: Similarities and Differences*”, 2019ASPC..526...35S [ADS](#)
- Bommier, V., “*Non-Perturbative Theory of Radiative Scattering in the Weak Radiation Field Limit: Resolution of Egidio Landi’s “Paradox”*”, 2019ASPC..526...17B [ADS](#)
- Bommier, V., “*Master equation theory applied to the redistribution of polarized radiation in the weak radiation field limit. V. The two-term atom (Corrigendum)*”, 2018A&A...619C...1B [ADS](#)
- Bommier, V. & Kalewicz, T., “*Disambiguated magnetic field measurements in a quiescent prominence*”, 2018cosp...42E.396B [ADS](#)
- Bommier, V., “*Interpretation of Hanle effect measurements in the Solar Corona: promises and difficulties*”, 2018cosp...42E.395B [ADS](#)
- Musset, S., Fleishman, G. D., Bommier, V., & Glesener, L., “*Ion traps at the Sun: observational evidence*”, 2018tess.conf20955M [ADS](#)
- Fleishman, G. D., Musset, S., Bommier, V., & Glesener, L., “*Ion Traps at the Sun: Implications for Elemental Fractionation*”, 2018ApJ...857...85F [ADS](#)
- Bommier, V., “*Master equation theory applied to the redistribution of polarized radiation in the weak radiation field limit. V. The two-term atom*”, 2017A&A...607A..50B [ADS](#)
- Schmieder, B., Aulanier, G., Janvier, M., et al., “*Evidence of flux rope and sigmoid in Active Regions prior eruptions*”, 2016cosp...41E1750S [ADS](#)
- Musset, S., Vilmer, N., & Bommier, V., “*Energetic electrons and photospheric electric currents during solar flares*”, 2016cosp...41E1373M [ADS](#)
- Georgoulis, M. K., Pariat, E., Massone, A. M., et al., “*Enabling Solar Flare Forecasting at an Unprecedented Level: the FLARECAST Project*”, 2016cosp...41E.657G [ADS](#)
- Bommier, V., “*Interpretation of Hanle effect measurements in the Solar Corona: promises and difficulties*”, 2016cosp...41E.227B [ADS](#)
- Janvier, M., Savcheva, A., Pariat, E., et al., “*Evolution of flare ribbons, electric currents, and quasi-separatrix layers during an X-class flare*”, 2016A&A...591A.141J [ADS](#)
- Bommier, V., “*Milne-Eddington inversion for unresolved magnetic structures in the quiet Sun photosphere*”, 2016JGRA..121.5025B [ADS](#)
- Mein, P., Uitenbroek, H., Mein, N., Bommier, V., & Faurobert, M., “*Fast inversion of Zeeman line profiles using central moments. II. Stokes V moments and determination of vector magnetic fields*”, 2016A&A...591A..64M [ADS](#)
- Bommier, V., “*Master equation theory applied to the redistribution of polarized radiation in the weak radiation field limit. IV. Application to the second solar spectrum of the Na I D1 and D2 lines*”, 2016A&A...591A..60B [ADS](#)
- Bommier, V., “*Master equation theory applied to the redistribution of polarized radiation in the weak radiation field limit. III. Theory for the multilevel atom*”, 2016A&A...591A..59B [ADS](#)
- Musset, S., Vilmer, N., & Bommier, V., “*Energetic electrons and photospheric electric currents during solar flares*”, 2015AGUFMSH52A..06M [ADS](#)
- Bommier, V., “*Solar Surface Anisotropy effect on the Magnetic Field*”, 2015IAUS..305...28B [ADS](#)
- Lilensten, J., Bommier, V., Barthélémy, M., et al., “*The auroral red line polarization: modelling and measurements*”, 2015JWS...5A..26L [ADS](#)
- Musset, S., Vilmer, N., & Bommier, V., “*Hard X-ray emitting energetic electrons and photospheric electric currents*”, 2015A&A...580A.106M [ADS](#)
- Sahal-Bréchot, S. & Bommier, V., “*Collisional line broadening versus collisional depolarization: Similarities and differences*”, 2014AdSpR..54.1164S [ADS](#)
- Bommier, V., “*XTAT: A New Multilevel-Multiline Polarized Radiative Transfer Code with PRD*”, 2014ASPC..489..195B [ADS](#)
- Dominguez-Tagle, C., Appourchaux, T., Ruiz de Galarreta, C., et al., “*Optical characterization of the breadboard narrowband prefilters for Solar Orbiter PHI*”, 2014SPIE.9143E..5GD [ADS](#)
- Janvier, M., Aulanier, G., Bommier, V., et al., “*Electric Currents in Flare Ribbons: Observations and Three-dimensional Standard Model*”, 2014ApJ...788...60J [ADS](#)
- Serge, K., Zhukov, A., Dolla, L., et al., “*Possible measurements of the magnetic field in eruptive prominences using the PROBA-3 coronagraph*”, 2014cosp...40E2971S [ADS](#)
- Musset, S., Vilmer, N., & Bommier, V., “*Relation between electric current densities and X-ray emissions from particles accelerated during solar flares*”, 2014cosp...40E2209M [ADS](#)
- Bommier, V., “*24 synoptic maps 1974-1982 (ascending phase of cycle XXI) of 323 prominence average magnetic fields measured by the Hanle effect*”, 2014IAUS..300..397B [ADS](#)
- Bommier, V., “*Reconciliating the Vertical and Horizontal Gradients of the Sunspot Magnetic Field*”, 2013PRI..2013E...1B [ADS](#)
- Lamy, H., Barthelemy, M., Lilensten, J., Bommier, V., & Simon Wedlund, C., “*Polarisation of the auroral red line in the Earth’s upper atmosphere: a review (Invited)*”, 2013AGUFM.P42B..03L [ADS](#)
- Molodij, G., Bommier, V., & Rayrole, J., “*Longitudinal magnetic field and velocity gradients in the photosphere inferred from THEMIS multiline observations*”, 2013A&A...552A..50M [ADS](#)
- Bommier, V. & Aulanier, G., “*Behavior of the vertical current during the X2 flare of 2011 February 15 observed by SDO/HMI, compared to a line-tied zero-beta resistive MHD simulation*”, 2013enss.confE..79B [ADS](#)
- Lilensten, J., Barthélémy, M., Amblard, P.-O., et al., “*The thermospheric auroral red line polarization: confirmation of detection and first quantitative analysis*”, 2013JWS...3A..01L [ADS](#)
- Schmieder, B., Guo, Y., Aulanier, G., et al., “*Reconstruction of 3D Coronal Magnetic Structures from THEMIS/MTR and Hinode/SOT Vector Maps*”, 2012ASPC..454..363S [ADS](#)
- Joulin, V., Schmieder, B., Aulanier, G., & Bommier, V., “*Electric current density and related sigmoid in an active region*”, 2012EAS....55..143J [ADS](#)
- Mein, P., Uitenbroek, H., Mein, N., Bommier, V., & Faurobert, M., “*Inversion of Zeeman Line Profiles Using Central Moments*”, 2012EAS....55...83M [ADS](#)
- Bommier, V., “*Magnetic field distribution in the quiet and active photosphere*”, 2012EAS....55...49B [ADS](#)
- Guo, Y., Schmieder, B., Bommier, V., & Mein, P., “*Magnetic Field Structures in a Facular Region Derived from THEMIS and Hinode Vector Magnetic Field*”, 2012ASPC..456...55G [ADS](#)
- Peter, H., Abbo, L., Andretta, V., et al., “*Solar magnetism eXplorer (SolmeX). Exploring the magnetic field in the upper atmosphere of our closest star*”, 2012EXA...33..271P [ADS](#)
- Bommier, V., “*Hanle effect from a dipolar magnetic structure: the case of the solar corona and the case of a star*”, 2012A&A...539A.122B [ADS](#)
- Molodij, G., Schmieder, B., & Bommier, V., “*Multi-wavelength observations to understand the solar magnetic activity and its feedback on the interplanetary medium*”, 2012mfu3.conf..93M [ADS](#)
- Lamy, H., Barthelemy, M., Simon Wedlund, C., Lilensten, J., & Bommier, V., “*Polarisation of auroral emission lines in the Earth’s upper atmosphere : first results and perspectives*”, 2011AGUFM.P14C..03L [ADS](#)
- Mein, P., Uitenbroek, H., Mein, N., Bommier, V., & Faurobert, M., “*Fast inversion of Zeeman line profiles using central moments*”, 2011A&A...535A..45M [ADS](#)
- Bommier, V., “*Observed difference between the vertical and horizontal magnetic field gradients in sunspots*”, 2011sdmi.confE...6B [ADS](#)
- Bommier, V., Landi Degl’Innocenti, E., Schmieder, B., & Gelly, B., “*Vector magnetic field and vector current density in and around the δ-spot NOAA 10808textdagger*”, 2011IAUS..273..338B [ADS](#)
- Guo, Y., Schmieder, B., Démoulin, P., et al., “*A filament supported by different magnetic field configurations*”, 2011IAUS..273..328G [ADS](#)

- Molodij, G., Bommier, V., & Rayrole, J., "Network velocity gradients in the photosphere. I. Modeling", 2011A&A...531A..139M [ADS](#)
- Molodij, G. & Bommier, V., "Inclusion of velocity gradients in the Unno solution for magnetic field diagnostic from spectropolarimetric data", 2011IAUS..274..291M [ADS](#)
- Bommier, V., "The quiet Sun magnetic field: statistical description from THEMIS observations", 2011A&A...530A..51B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Schmieder, B., & Gelly, B., "Magnetic Field, Density Current, and Lorentz Force Full Vector Maps of the NOAA 10808 Double Sunspot: Evidence of Strong Horizontal Current Flows in the Penumbra", 2011ASPC..437..491B [ADS](#)
- Bommier, V., "The Quiet Sun Magnetic Field Structure Derived from a Full Vector Determination", 2011ASPC..437..471B [ADS](#)
- Bommier, V., Sahal-Bréchot, S., Dubau, J., & Cormille, M., "The Theoretical Impact Polarization of the O I 6300 Å Red Line of Earth Aurora", 2011ASPC..437..73B [ADS](#)
- Landi Degl'Innocenti, E., Belluzzi, L., & Bommier, V., "Polarized Radiative Transfer: from Solar Applications to Laboratory Experiments", 2011ASPC..437..45L [ADS](#)
- Guo, Y., Schmieder, B., Démoulin, P., et al., "Coexisting Flux Rope and Dipped Arcade Sections Along One Solar Filament", 2010ApJ...714..343G [ADS](#)
- Guo, Y., Schmieder, B., Bommier, V., & Gosain, S., "Magnetic Field Structures in a Facular Region Observed by THEMIS and Hinode", 2010SoPh..262..35G [ADS](#)
- Mein, P., Mein, N., & Bommier, V., "Fast imaging spectroscopy with MSDP spectrometers. Vector magnetic maps with THEMIS/MSDP", 2009A&A...507..531M [ADS](#)
- Bommier, V., Martínez González, M., Bianda, M., et al., "The quiet Sun magnetic field observed with ZIMPOL on THEMIS. I. The probability density function", 2009A&A...506.1415B [ADS](#)
- Bommier, V., "Atomic and Molecular Depolarizing Collision Rates", 2009ASPC..405..335B [ADS](#)
- Balthasar, H. & Bommier, V., "The Height Dependence of the Magnetic Vector Field in Sunspots", 2009ASPC..405..229B [ADS](#)
- Faurobert, M., Bommier, V., & Derouich, M., "Non-LTE Modeling of the Ba II D2 Line Resonance Polarization", 2009ASPC..405..35F [ADS](#)
- Canou, A., Amari, T., Bommier, V., et al., "Evidence for a Pre-Eruptive Twisted Flux Rope Using the Themis Vector Magnetograph", 2009ApJ...693L..27C [ADS](#)
- Bommier, V., "The Solar Magnetic Field: Surface and Upper Layers, Network and Internetwork Field", in The Rotation of Sun and Stars, Vol. 765, 231–259 2009LNP...765..231B [ADS](#)
- Faurobert, M., Derouich, M., Bommier, V., & Arnaud, J., "Hanle effect in the solar Ba II D2 line: a diagnostic tool for chromospheric weak magnetic fields", 2009A&A...493..201F [ADS](#)
- Roudier, T., Malherbe, J. M., Švanda, M., et al., "Photospheric flows around a quiescent filament at Large and small scale and their effects on filament destabilization", 2008sf2a.conf..569R [ADS](#)
- Dudík, J., Aulanier, G., Schmieder, B., Bommier, V., & Roudier, T., "Topological Departures from Translational Invariance along a Filament Observed by THEMIS", 2008SoPh..248..29D [ADS](#)
- Roudier, T., Švanda, M., Meunier, N., et al., "Large-scale horizontal flows in the solar photosphere. III. Effects on filament destabilization", 2008A&A...480..255R [ADS](#)
- Schmieder, B., Bommier, V., Kitai, R., et al., "Magnetic Causes of the Eruption of a Quiescent Filament", 2008SoPh..247..321S [ADS](#)
- Bommier, V., González, M. J. M., Schmieder, B., & Landi Degl'Innocenti, E., "Magnetic Field Vector Measurements with THEMIS", 2008ASPC..383..123B [ADS](#)
- Li, H., Schmieder, B., Song, M. T., & Bommier, V., "Interaction of magnetic field systems leading to an X1.7 flare due to large-scale flux tube emergence", 2007A&A...475.1081L [ADS](#)
- Mein, P., Bommier, V., & Mein, N., "Fast vector magnetographs: THEMIS/MSDP and EST project", 2007sf2a.conf..601M [ADS](#)
- Stepán, J. & Bommier, V., "A generalized $\sqrt{?}$ -law. The role of unphysical source terms in resonance line polarization transfer and its importance as an additional test of NLTE radiative transfer codes", 2007A&A...468..797S [ADS](#)
- Rondi, S., Roudier, T., Molodij, G., et al., "Photospheric flows around a quiescent filament", 2007A&A...467.1289R [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Landolfi, M., & Molodij, G., "Is the Solar Intranetwork Field a Resolved Turbulent Field?", 2007ASPC..370..81B [ADS](#)
- Sahal-Bréchot, S., Derouich, M., Bommier, V., & Barklem, P. S., "Multipole rates for atomic polarization studies: the case of complex atoms in non-spherically symmetric states colliding with atomic hydrogen", 2007A&A...465..667S [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Landolfi, M., & Molodij, G., "UNNOFIT inversion of spectro-polarimetric maps observed with THEMIS", 2007A&A...464..323B [ADS](#)
- Balthasar, H. & Bommier, V., "Simultaneous polarimetric observations with VTT and THEMIS", 2007msfa.conf..229B [ADS](#)
- Sahal-Bréchot, S., Derouich, M., Bommier, V., & Barklem, P. S., "Multipole rates for atomic polarization studies: the case of complex atoms in non-spherically symmetric states colliding with atomic hydrogen.", 2007MmSAI..78..197S [ADS](#)
- Mein, P., Mein, N., & Bommier, V., "Fast vector magnetic maps with imaging spectroscopy", 2007MmSAI..78..160M [ADS](#)
- Rondi, S., Roudier, T., Molodij, G., et al., "Photospheric flows around a quiescent filament and CALAS first results.", 2007MmSAI..78..114R [ADS](#)
- Bommier, V., Molodij, G., & Meunier, N., "The granular magnetic field as observed with THEMIS", 2007MmSAI..78..65B [ADS](#)
- Bommier, V., "Some THEMIS tip-tilt images .", 2007MmSAI..78..23B [ADS](#)
- Bommier, V. & Sahal-Bréchot, S., "Solar magnetism and dynamics and THEMIS users meeting", 2007MmSAI..78..5B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., & Molodij, G., "Multi-Line Determination of the Turbulent Magnetic Field from the Second Solar Spectrum of MgH", 2006ASPC..358..317B [ADS](#)
- Bommier, V., "Semi-Classical Collision Formalism with Energy and Momentum Transfer", 2006ASPC..358..245B [ADS](#)
- Bommier, V. & Molodij, G., "Second Spectrum of Na I D_1 Observed with THEMIS", 2006ASPC..358..231B [ADS](#)
- Derouich, M., Bommier, V., Malherbe, J. M., et al., "Interpretation of the Second Solar Spectrum of the Sr I 4607 Å Line Observed at THEMIS and Pic-du-Midi", 2006ASPC..358..120D [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Landolfi, M., & Molodij, G., "UNNOFIT Inversion of Spectro-Polarimetric Maps Observed with THEMIS", 2006ASPC..358..119B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Feautrier, N., & Molodij, G., "Collisional influence on the differential Hanle effect method applied to the second solar spectrum of the A²Π-X²Σ (0, 0) band of MgH", 2006A&A...458..625B [ADS](#)
- Derouich, M., Bommier, V., Malherbe, J. M., & Landi Degl'Innocenti, E., "Second solar spectrum of the Sr I 4607 Å line: depth probing of the turbulent magnetic field strength in a quiet region", 2006A&A...457.1047D [ADS](#)
- Ben-Jaffel, L., Harris, W., Bommier, V., et al., "Predictions on the application of the Hanle effect to map the surface magnetic field of Jupiter", 2005Icar..178..297B [ADS](#)
- Bommier, V., Rayrole, J., & Eff-Darwich, A., "Vector magnetic field map at the photospheric level below and around a solar filament (neutral line)", 2005A&A...435.1115B [ADS](#)
- Bommier, V., Derouich, M., Landi Degl'Innocenti, E., Molodij, G., & Sahal-Bréchot, S., "Interpretation of second solar spectrum observations of the Sr I 4607 Å line in a quiet region: Turbulent magnetic field strength determination", 2005A&A...432..295B [ADS](#)
- Derouich, M., Malherbe, J. M., Bommier, V., Landi Degl'Innocenti, E., & Sahal-Bréchot, S., "Second solar spectrum observed at the Pic-du-Midi: depth probing of the turbulent magnetic field intensity in a quiet region.", 2004sf2a.conf..113D [ADS](#)
- Derouich, M., Bommier, V., Landi Degl'Innocenti, E., Molodij, G., & Sahal-Bréchot, S., "Diagnostic of turbulent magnetic fields in solar quiet regions by their Hanle effect in the Sr I 4607Å line", 2003sf2a.conf..113D [ADS](#)
- Bommier, V., "The Hanle effect observed in solar prominences: interpretation of the 1974 1982 Pic-du-Midi observations, and new perspectives", 2003EAS.....9..197B [ADS](#)
- Bommier, V. & Kerkeni, B., "Theoretical Study of the Collisional Depolarization and of the Hanle Effect in the Na I D_2 Line Observed on the Solar Limb", 2003ASPC..307..284B [ADS](#)
- Bommier, V., "The Partial Redistribution in the Atomic Density Matrix Formalism", 2003ASPC..307..213B [ADS](#)
- Kerkeni, B. & Bommier, V., "Theoretical study of the collisional depolarization and of the Hanle effect in the Na I D_2 line observed on the solar limb", 2002A&A...394..707K [ADS](#)
- Raouafi, N. E., Sahal-Bréchot, S., Lemaire, P., & Bommier, V., "Linear polarization of the O VI lambda 1031.92 coronal line. I. Constraints on the solar wind velocity field vector in the polar holes", 2002A&A...390..691R [ADS](#)
- Bommier, V. & Kerkeni, B., "Theoretical study of the collisional depolarization and of the Hanle effect in the line Na I D2 observed on the solar limb", 2002sf2a.conf..125B [ADS](#)
- Bommier, V. & Molodij, G., "Some THEMIS-MTR observations of the second solar spectrum (2000 campaign)", 2002A&A...381..241B [ADS](#)
- Bommier, V. & Rayrole, J., "Search for polarimetric sensitivity in the first observations with THEMIS spectropolarimetric mode MTR (August 1998 campaign)", 2002A&A...381..227B [ADS](#)

- Paletou, F., López Ariste, A., Bommier, V., & Semel, M., “*Full-Stokes spectropolarimetry of solar prominences*”, 2001A&A...375L..39P [ADS](#)
- Vogt, E., Sahal-Bréchot, S., & Bommier, V., “*Polarization of the hydrogen H α line in solar flares. Contribution of the local polarized radiation field and effect of the spectral index of the proton energy distribution*”, 2001A&A...374..1127W [ADS](#)
- Bommier, V. & Stenflo, J. O., “*Partial frequency redistribution with Hanle and Zeeman effects. Non-perturbative classical theory*”, 1999A&A...350..327B [ADS](#)
- Raouafi, N. E., Sahal-Bréchot, S., Lemaire, P., & Bommier, V., “*Doppler redistribution of resonance polarization of the O VI 103.2 nm line observed above a polar hole*”, 1999ASSL..243..349R [ADS](#)
- Paletou, F., Bommier, V., & Faurobert-Scholl, M., “*Polarized radiation transfer in 2D geometry*”, 1999ASSL..243..189P [ADS](#)
- Faurobert-Scholl, M., Paletou, F., & Bommier, V., “*Polarized redistribution matrix for Hanle effect: Numerical tests*”, 1999ASSL..243..115F [ADS](#)
- Bommier, V., “*The density matrix theory for polarized radiation redistribution: Extensions for multilevel atom model and quantum Doppler effect*”, 1999ASSL..243..43B [ADS](#)
- Sahal-Bréchot, S., Bommier, V., & Feautrier, N., “*Doppler redistribution of anisotropic radiation and resonance polarization in moving scattering media. I. Theory revisited in the density matrix formalism*”, 1998A&A...340..579S [ADS](#)
- Bommier, V. & Leroy, J. L., “*Global Pattern of the Magnetic Field Vectors Above Neutral Lines from 1974 to 1982: Pic-du-Midi Observations of Prominences*”, 1998ASPC..150..434B [ADS](#)
- Bommier, V., “*Master equation theory applied to the redistribution of polarized radiation, in the weak radiation field limit. II. Arbitrary magnetic field case*”, 1997A&A...328..726B [ADS](#)
- Bommier, V., “*Master equation theory applied to the redistribution of polarized radiation, in the weak radiation field limit. I. Zero magnetic field case*”, 1997A&A...328..706B [ADS](#)
- Heinzel, P., Bommier, V., & Vial, J. C., “*A Complex Diagnostic of Solar Prominences*”, 1996SoPh..164..211H [ADS](#)
- Bommier, V. & Landi Degl'Innocenti, E., “*Non-LTE Polarized Radiative Transfer in Intermediate Magnetic Fields: Numerical Problems and Results*”, 1996SoPh..164..117B [ADS](#)
- Bommier, V., “*Atomic Coherences and Level-Crossings Physics*”, 1996SoPh..164..29B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Leroy, J.-L., & Sahal-Brechot, S., “*Complete determination of the magnetic field vector and of the electron density in 14 prominences from linear polarization measurements in the HeI D₃ and H α lines*”, 1994SoPh..154..231B [ADS](#)
- Landi Degl'Innocenti, E. & Bommier, V., “*Resonance line polarization for arbitrary magnetic fields in optically thick media. III. A generalization of the ??/2-law*”, 1994A&A...284..865L [ADS](#)
- Landi Degl'Innocenti, E. & Bommier, V., “*A Spectroscopic Method for the Solution of the 180 degrees Azimuth Ambiguity in Magnetograms*”, 1993ApJ...411L..49L [ADS](#)
- Sahal-Brechot, S., Feautrier, N., Bommier, V., & Dekertanguy, A., “*Stokes parameters of the O VI 103.2 nm line as a probe of the matter velocity field vector in the solar wind acceleration region.*”, 1992ESASP.344..81S [ADS](#)
- Bommier, V., “*Derivation of the radiative transfer equation for line polarization studies in the presence of magnetic field in astrophysics.*”, 1991AnPh...16..599B [ADS](#)
- Bommier, V. & Sahal-Bréchot, S., “*Derivation of the master equation for the atomic density matrix for line polarization studies in the presence of magnetic field and depolarizing collisions in astrophysics.*”, 1991AnPh...16..555B [ADS](#)
- Dimitrijević, M. S., Sahal-Bréchot, S., & Bommier, V., “*Stark broadening parameter tables for spectral lines of multicharged ions of astrophysical interest. II. Si IV lines*”, 1991B0Beo.144..81D [ADS](#)
- Dimitrijević, M. S., Sahal-Bréchot, S., & Bommier, V., “*Stark broadening parameter tables for spectral lines of multicharged ions of astrophysical interest. I: C IV lines*”, 1991B0Beo.144..65D [ADS](#)
- Dimitrijevic, M. S., Sahal-Brechot, S., & Bommier, V., “*Stark Broadening of Spectral Lines of Multicharged Ions of Astrophysical Interest - Part Two - Si IV Lines*”, 1991A&AS..89..591D [ADS](#)
- Dimitrijevic, M. S., Sahal-Brechot, S., & Bommier, V., “*Stark broadening of spectral lines of multicharged ions of astrophysical interest. I - C IV lines. II - Si IV lines*”, 1991A&AS..89..581D [ADS](#)
- Landi Degl'Innocenti, E., Bommier, V., & Sahal-Brechot, S., “*Resonance Line Polarization for Arbitrary Magnetic Fields in Optically Thick Media - Part Two - Case of a Plane-Parallel Atmosphere and Absence of Zeeman Coherences*”, 1991A&A...244..401L [ADS](#)
- Landi Degl'Innocenti, E., Bommier, V., & Sahal-Brechot, S., “*Resonance line polarization for arbitrary magnetic fields in optically thick media. I - Basic formalism for a 3-dimensional medium.*”, 1991A&A...244..391L [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., & Sahal-Brechot, S., “*Resonance line polarization and the Hanle effect in optically thick media. II - Case of a plane-parallel atmosphere*”, 1991A&A...244..383B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., & Sahal-Brechot, S., “*Diagnostic of the magnetic field vector using the atomic density matrix formalism.*”, 1991so.po.work..434B [ADS](#)
- Landi Degl'Innocenti, E., Bommier, V., & Sahal-Brechot, S., “*Resonance line polarization and the Hanle effect in optically thick media.*”, 1990A&A...235..459L [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., & Sahal-Brechot, S., “*Linear polarization of the hydrogen H-alpha line in filaments. I - Theoretical investigation*”, 1989A&A...211..230B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., & Sahal-Brechot, S., “*Linear Polarization of Hydrogen H-alpha Line in Filaments: Method and Results of Computation*”, 1989HvaoOB..13..339B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., & Sahal-Brechot, S., “*Linear polarization of hydrogen Balmer lines in optically thick prominences: theoretical investigation.*”, 1988dssp.conf...41B [ADS](#)
- Landi Degl'Innocenti, E., Bommier, V., & Sahal-Brechot, S., “*Linear polarization of hydrogen Balmer lines in optically thick quiescent prominences*”, 1987A&A...186..335L [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., & Sahal-Brechot, S., “*Linear Polarization of Hydrogen Balmer Lines in Optically Thick Prominences - Theoretical Investigation*”, 1987dssp.work...41B [ADS](#)
- Bommier, V., “*Magnetic field vector and electron density diagnostics from linear polarization measurements in 14 solar prominences.*”, 1986NASC2442..209B [ADS](#)
- Sahal-Brechot, S., Malinovsky, M., & Bommier, V., “*The polarization of the O VI 1032 Å line as a probe for measuring the coronal vector magnetic field via the Hanle effect.*”, 1986A&A...168..284S [ADS](#)
- Bommier, V., Leroy, J. L., & Sahal-Brechot, S., “*The Linear Polarization of Hydrogen H-Beta Radiation and the Joint Diagnostic of Magnetic Field Vector and Electron Density in Quiescent Prominences - Part Two - the Electron Density*”, 1986A&A...156..90B [ADS](#)
- Bommier, V., Sahal-Brechot, S., & Leroy, J. L., “*The linear polarization of hydrogen H-beta radiation and the joint diagnostic of magnetic field vector and electron density in quiescent prominences. I - The magnetic field. II - The electron density*”, 1986A&A...156..79B [ADS](#)
- Bommier, V., Leroy, J. L., & Sahal-Brechot, S., “*Magnetic field-vector measurements in quiescent prominences via the Hanle effect: Analysis of prominences observed at Pic-du-Midi and at Sacramento Peak*”, 1985svmf.nasa..375B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Leroy, J. L., & Sahal-Brechot, S., “*Effect of polarized radiative transfer on the Hanle magnetic field determination in prominences: Analysis of hydrogen H alpha line observations at Pic-du-Midi*”, 1985svmf.nasa..335B [ADS](#)
- Querfeld, C. W., Smartt, R. N., Bommier, V., Landi Degl'Innocenti, E., & House, L. L., “*Vector Magnetic Fields in Prominences - Part Two Hei d3 Stokes Profiles Analysis for Two Quiescent Prominences*”, 1985SoPh...96..277Q [ADS](#)
- Bommier, V., Leroy, J. L., & Sahal-Brechot, S., “*Magnetic field-vector measurements in quiescent prominences via the Hanle effect: analysis of prominences observed at Pic-du-Midi and at Sacramento Peak.*”, 1985NASC2374..375B [ADS](#)
- Bommier, V., Landi Degl'Innocenti, E., Leroy, J. L., & Sahal-Brechot, S., “*Effect of polarized radiative transfer on the Hanle magnetic field determination in prominences: analysis of hydrogen H α line observations at Pic-du-Midi.*”, 1985NASC2374..335B [ADS](#)
- Leroy, J. L., Bommier, V., & Sahal-Brechot, S., “*New data on the magnetic structure of quiescent prominences*”, 1984A&A...131..33L [ADS](#)
- Bommier, V., Leroy, J. L., & Sahal-Brechot, S., “*Vector Magnetic Field Measurements in Quiescent Prominences via the Hanle Effect - Analysis of Prominences Observed at the Pic-Du and at Sacramento-Peak*”, 1984apoa.conf...58B [ADS](#)
- Athay, R. G., Querfeld, C. W., Smartt, R. N., Landi Degl'Innocenti, E., & Bommier, V., “*Vector Magnetic Fields in Prominences - Part Three - Hei d3 Stokes Profile Analysis for Quiescent and Eruptive Prominences*”, 1983SoPh...89...3A [ADS](#)
- Leroy, J. L., Bommier, V., & Sahal-Brechot, S., “*The Magnetic Field in the Prominences of the Polar Crown*”, 1983SoPh..83..135L [ADS](#)
- Bommier, V. & Sahal-Brechot, S., “*The Hanle Effect of the Coronal L-Alpha Line of Hydrogen - Theoretical Investigation*”, 1982SoPh...78..157B [ADS](#)
- Bommier, V., Sahal-Brechot, S., & Leroy, J. L., “*Determination of the complete vector magnetic field in solar prominences, using the Hanle effect*”, 1981A&A...100..231B [ADS](#)
- Querfeld, C. W., Smartt, R. N., Bommier, V., & Landi Degl'Innocenti, E., “*Vector Magnetic Fields Inferred from He I D₃ Polarization in the August 5, 1980 Eruptive Prominence*”, 1980BAAS...12..913Q [ADS](#)

- Querfeld, C. W., Smartt, R. N., Bommier, V., & Landi Degl'Innocenti, E., “*Quiescent Prominence Vector Magnetic Fields Inferred from He I D_3 Polarization*”, 1980BAAS...12..792Q [ADS](#)
- Bommier, V., “*Quantum theory of the Hanle effect. II - Effect of level-crossings and anti-level-crossings on the polarization of the D3 helium line of solar prominences*”, 1980A&A...87..109B [ADS](#)
- Bommier, V., “*Theory of the Hanle Effect; Application to the Linear Polarization of the Helium Lines in Solar Prominences.*”, 1979phsp.conf..93B [ADS](#)
- Bommier, V. & Sahal-Brechot, S., “*The Hanle Effect and the Determination of Magnetic Fields.*”, 1979phsp.conf..87B [ADS](#)
- Bommier, V. & Sahal-Brechot, S., “*Quantum theory of the Hanle effect: calculations of the Stokes parameters of the D_3 helium line for quiescent prominences*”, 1978A&A...69..57B [ADS](#)
- Sahal-Brechot, S., Bommier, V., & Leroy, J. L., “*The Hanle effect and the determination of magnetic fields in solar prominences.*”, 1977A&A...59..223S [ADS](#)
- Leroy, J. L., Ratier, G., & Bommier, V., “*The polarization of the D3 emission line in prominences.*”, 1977A&A...54..811L [ADS](#)
- Sahal-Brechot, S. & Bommier, V., “*Quantum theory of the Hanle effect. Application to the determination of magnetic fields in quiescent prominences.*”, 1977ROLun..12....5S [ADS](#)