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RESEARCH INTERESTS

Star and Planet Formation: Testing theoretical models for the structure and evolution of collapsing protostellar clouds. Modeling the size, structure, and composition of protoplanetary accretion disks. Observational signatures of star and planet formation.

Interstellar Medium: Modeling the three-dimensional ionization and temperature structure of the ISM. Effect of 3D structures on the propagation of ionizing radiation and interpretation of nebular emission line diagnostics. Radiation hydrodynamics and feedback in the ISM.

Medical Physics: Optical scattering properties of healthy and diseased tissue. Exploring theoretical aspects of photodynamic therapy for treatment of skin and brain cancers. Quantifying damage to skin from exposure to ultraviolet radiation. The safety and efficacy of UVC light to prevent the airborne spread of viruses.

Theoretical Radiation Transfer: Development of three-dimensional Monte Carlo radiation transfer and hydrodynamics codes.

EDUCATION

1993 PhD, Astronomy, University of Glasgow
Spectropolarimetric Analysis of Stellar Winds, Advisor: J.C. Brown
1990 B.Sc., Physics & Astronomy, University of Glasgow

EMPLOYMENT

2001- Faculty member, School of Physics & Astronomy, University of St Andrews
2001-2006 PPARC Advanced Fellowship, University of St Andrews
1997-2001 Astrophysicist, Harvard-Smithsonian Center for Astrophysics
1996-1997 Assistant Scientist, University of Wisconsin-Madison
1994-1996 UK SERC/NATO Post Doctoral Research Fellow, University of Wisconsin

POST DOCTORAL RESEARCHERS

Camilo Penalzoza (2021-2023), computational models of Far-UVC inactivation
Camilo Penalzoza (2019-2021), stellar feedback in the diffuse ionised gas of galaxies
Bert Vandenbroucke (2016-19), photoionization feedback in the interstellar medium
Diego Concalves (2016-2018), radiation-hydrodynamic simulations of star formation

PHD STUDENTS

Current:

Louise Finlayson, *Ultraviolet through optical light for phototherapies*

Lewis McCallum, *Feedback processes and the formation of the Diffuse Ionised Gas in galaxies*

Eve Taggart, *The role of melanin and skin-type in accurate analysis of pulse oximetry*

Completed:

Isla Barnard, *Radiation penetration into human skin*, 2021

Kristin Lund, *High mass star star formation and magnetic helicity*, 2020

Lewis McMillan, *Advanced MCRT algorithms for biophotonic and medical applications*, 2019

Louise Campbell, *Theoretical modelling of photodynamic therapy*, 2016

Joanna Barnes, *The Warm Ionized Medium in the Milky Way Galaxy*, 2016

John MacLachlan, *Modeling infrared emission of galaxies across the Hubble sequence*, 2013
Ronan Valentine, *Biophysical Aspects of Photodynamic Therapy*, 2011
Katharine Johnston, *Observational Signatures of Massive Star Formation*, 2010
Thomas Robitaille, *Star Formation Across the Galaxy*, 2008
Ben Hood, *Theoretical Studies of Scattered Light Signatures of Extrasolar Planets*, 2007
Mark O'Sullivan, *Warping, Dust Settling, and Dynamics of Protoplanetary Disks*, 2007
Christina Walker, *Modelling the Structure and Appearance of Protoplanetary Disks*, 2006

SCIENTIFIC COMMUNITY SERVICE

PhD Examiner: St Andrews, Cardiff, Cambridge, Exeter, Edinburgh, UCL, Hertfordshire
Reviewer for German DFG, 2023, 2014, 2011
Reviewer of UK-STFC & other European research grants and observing proposals
Reviewer for NASA Origins of Solar Systems program, 2010, 1998, 1997
Reviewer, NASA Theory Panel, 1996
Reviewer for astronomical and medical physics journals

RESEARCH AWARDS AND FUNDING

2022 STFC-IAA, Computational models of Far-UVC inactivation in large spaces, £30K
2022 STFC-IAA, Far-UVC eye discomfort study, £25K
2022 NHS-Scotland, Far-UVC for reducing airborne transmission of viruses, £120K
2021-2022 UK-HSA, Safety and efficacy testing of Far-UVC, £296K
2020-2021 SALT (St Andrews Light Technology) for coronavirus inactivation, £50K
2018-2021 STFC funded postdoctoral position: radiation hydrodynamics, £200K
2015-2018 STFC funded postdoctoral position: radiation hydrodynamics, £200K
2019 STFC-IAA, The Wee Discovery Book of PDT, £10K
2019 STFC funded Summer School on Radiation Hydrodynamics, St Andrews, £20K
2017 STFC funded Monte Carlo Radiation Transfer Summer School, St Andrews, £20K
2015 STFC funded Monte Carlo Radiation Transfer Summer School, St Andrews, £20K
2013 STFC funded Monte Carlo Radiation Transfer Summer School, St Andrews, £20K
2002-2016 Co-I of several PPARC/STFC Rolling Grants: *Astrophysics at St Andrews*
2004-2005 UK Medical Research Council Discipline Hopper, £55K
Light Scattering Spectroscopy for Non-Invasive Diagnosis of Cervical Neoplasia
2001-2006 UK-PPARC Advanced Fellow, University of St Andrews
Probing Asymmetries in Astrophysical Environments: Winds, Disks, and Things that Go Clump in the Light
2002-2005 UK-PPARC Short-Term Visiting Fellowships at St Andrews, £15K
1996-2001 NASA Long Term Space Astrophysics Research Program, \$400K
Three-Dimensional Radiation Transfer Modeling of Circumstellar Environments
1999-2002 Co-I, NSF Stellar Astronomy Program, \$60K
The Geometry and Evolution of Low Mass Star Formation
1999 Co-I, Hubble Space Telescope Archival Program, \$30K
Testing Protostellar Collapse and Outflow Models
1997 PI, Hubble Space Telescope Archival Program, \$24K
Morphology of Protostellar Environments
1994-1996 UK-SERC/NATO Post-Doctoral Research Fellowship
Probing Circumstellar Environments with Spectropolarimetry

TALKS AT INTERNATIONAL MEETINGS

Webinar on Disinfection using Ultraviolet Radiation
 World Health Organisation, December 2021
Safety and efficacy of filtered Far-UVC devices
 Photonics West, March 2021
 Hosted RAS discussion meeting on radiation hydrodynamics, London, January 2020
Photoionisation modelling of the diffuse ionised gas (Review)
 Warm ionised medium in galaxies workshop, Green Bank, USA, October 2019
Diffuse Ionised Gas in Galaxies
 Resolving the ionised interstellar medium, EWASS2019, Lyon, France, June 2019
Photoionization simulations of a SILCCy interstellar medium
 Physics of the Interstellar Medium, Cologne Germany, February 2017
A model for (quasi) periodic multi-wavelength photometric variability in young stellar objects
 Star Formation 2016, Exeter, England, August 2016
Large scale ionization modelling of diffuse ionized gas in the interstellar medium
 The passage of light through spiral galaxies, Lorentz Centre, Leiden, May 2014
3D Radiation Transfer Modeling of Dust and Ionized Gas in The Galaxy
 The Spectral Energy Distribution of Galaxies, Preston, England, September 2011
Modeling Spectral Energy Distributions of Circumstellar Disks
 Circumstellar disks and planets at very high resolution, Portugal, May 2007
Clues to Disk Clearing from Spectral Energy Distributions
 The Disk-Planet Connection, Cambridge, July 2006
Photoionization and Radiation in a Fractal Interstellar Medium
 Small Ionized and Neutral Structures in the ISM, Socorro, May 2006
Monte Carlo Radiation Transfer in Protoplanetary Disks
 From Disks to Planets, Pasadena, March 2005
A Review of Photoionization Models of the Diffuse Ionized Gas
 Diffuse Matter in the Galaxy, Puerto Rico, September 2004
Monte Carlo Radiation Transfer in Protoplanetary Disks
 Cores, Disks, & Outflows, Banff, July 2004
Monte Carlo Photoionization Simulations of Diffuse Ionized Gas
 Extraplanar Gas, Dwingeloo, Netherlands, June 2004
Monte Carlo Radiation Transfer in Protoplanetary Disks: Disk-Planet Interactions, Structure and Warping
 Structure, Chemistry and Appearance of Protoplanetary Disks, Munich, April 2004
Leaky HII Regions and the He⁺/H⁺ Problem
 How the Galaxy Works, Granada, Spain, July 2003

TEACHING AND DEPARTMENTAL DUTIES

Since 1994 I have supervised many undergraduate research projects at Wisconsin, Harvard, and St Andrews. Since 2002 I have supervised fifteen PhD students at St Andrews, taught undergraduate astronomy courses at all levels, and served as class head for first year astronomy (typically 70 students per year). I am currently the Admissions Officer for the School of Physics & Astronomy, receiving fifteen hundred undergraduate applications per year from which we admit 100 students.

UNIVERSITY DUTIES

For three years I served on the Athletic Union Board overseeing the governance of student sports at St Andrews. I have given two laureation addresses for honorary degree recipients (Peter Alliss and Charlie Sifford) and have proposed two candidates (Charlie Sifford and Renee Powell) for

honorary degrees from St Andrews – these nominations of African American golfers generated worldwide media interest. I conceived and established the New Links Scholarship to enable children from under-represented backgrounds to study at the University of St Andrews.

WITHIN THE LOCAL AND INTERNATIONAL COMMUNITY

Alongside the New Links Scholarship, in 2006 I founded the New Links St Andrews and USA foundations that have charitable status in the UK and 501(c)(3) tax-exempt status in the USA. This project involved extensive promotion, fundraising (in Scotland and throughout USA) and working with local businesses in St Andrews to make the dream of overseas travel a reality to children from disadvantaged backgrounds worldwide. Since 2006 we have brought over one hundred children from disadvantaged communities in the USA, Africa, and Scotland to St Andrews for week-long visits. The first New Links Scholar (from Mansfield Texas) graduated from the University of St Andrews in June 2011. Further information at: www.newlinks.org.

REFEREED PUBLICATIONS

2022

Potential harm to the skin from unfiltered krypton chloride “far-ultraviolet-C” lamps, even below an occupational exposure limit

O’Mahoney, P., **Wood, K.**, Ibbotson, S.H., & Eadie, E.
2022, Journal of Radiological Protection, 42, 043501

Depth penetration of light into skin as a function of wavelength from 200nm to 1000nm

Finlayson, L., Barnard, I.R.M., McMillan, L., Ibbotson, S.H., Brown, C.T.A.B., Eadie, E., & **Wood, K.**
2022, Photochemistry & Photobiology, 98, 974

Far-UVC (222nm) efficiently inactivated an airborne pathogen in a room-sized chamber

Eadie, E., Hiwar, W., Fletcher, L., Tidswell, E., O’Mahoney, P., Buonanno, M., Welch, D., Adamson, C.S., Brenner, D.J., Noakes, C., & **Wood, K.**
2022, Scientific Reports, 12, 4373

Turn up the lights, leave them on, and shone them all around – numerical simulations point the way to more efficient use of Far-UVC lights for the inactivation of airborne coronavirus

Wood, K., Wood, A., Penaloza, C., & Eadie, E.
2022, Photochemistry & Photobiology, 98, 471

2021

Imaging in thick samples, a phased Monte Carlo radiation transfer algorithm

McMillan, L., Reidt, S., McNicol, C., Barnard, I., MacDonald, M., Brown, C.T.A., & **Wood, K.**
2021, Journal of Biomedical Optics, 26, 9

Computer modelling indicates dramatically less DNA damage from Far-UVC krypton chloride lamps (222nm) than from sunlight exposure

Eadie, E., O’Mahoney, P., Finlayson, L., Barnard, I.R.M., Ibbotson, S.H., & **Wood, K.**
2021, Photochemistry & Photobiology, 97, 1150

Development of a predictive Monte Carlo radiative transfer model for ablative fractional lasers

McMillan, L., O’Mahoney, P., Feng, K., Zheng, K., Barnard, I.R.M., Li, C., Ibbotson, S., Eadie, E., Brown, C.T.A., & **Wood, K.**
2020, Lasers in Surgery and Medicine, 53, 731

Air disinfection with germicidal ultraviolet light: for this pandemic and the next

Bergman, R. et al, including **Wood, K.**
2021, Photochemistry & Photobiology, 97, 464

Minimal, superficial DNA damage in human skin from filtered far-ultraviolet-C

Hickerson, R., Conneely, Tsutsumi, H., **Wood, K.**, Jackson, D., Ibbotson, S., & Eadie, E.
2021, British Journal of Dermatology, 184, 1197

Extreme exposure to filtered far-UVC: A case study
Eadie, E., Barnard, I.R.M., Ibbotson, S., & **Wood, K.**
2021, *Photochemistry & Photobiology*, 97, 527

Photoionization feedback in turbulent molecular clouds
Sartorio, N.S., Vandenbroucke, B., Falceta-Goncales, D., & **Wood, K.**
2021, *MNRAS*, 500, 1833

2020

Further evidence that far-UVC for disinfection is unlikely to cause erythema or pre-mutagenic DNA lesions in skin
Barnard, I.R.M., Eadie, E., & **Wood, K.**
2020, *Photodermatology, Photoimmunology, & Photomedicine*, 36, 476

Could psoralen plus ultraviolet A1 work? Depth penetration achieved by photodynamic therapy
Barnard, I., Eadie, E., McMillan, L., Moseley, H., Brown, C.T.A., **Wood, K.**, & Dawe, R.
2020, *British Journal of Dermatology*, 182, 813

2019

Radiation hydrodynamic simulations of the diffuse ionised gas in disc galaxies
Vandenbroucke, B., & **Wood, K.**
2019, *MNRAS*, 488, 1977

Testing the stability of R-type ionised accretion flows around forming stars with 1D radiation hydrodynamics
Vandenbroucke, B., Sartorio, N., **Wood, K.**, Falceta-Goncalves, & Keto, E.
2018, *MNRAS*, 485, 3771

Radiation hydrodynamic simulations of massive star formation via gravitationally trapped HII regions – Spherically symmetric ionised accretion flows
Lund, K., **Wood, K.**, Falceta-Goncalves, D., Vandenbroucke, B., Sartorio, N.S., Bonnell, I.A., Johnston, K.G., & Keto, E.
2019, *MNRAS*, 485, 3761

Exoplanetary Monte Carlo Radiative Transfer with Correlated-k I. Benchmarking Transit and Emission Observables
Lee, G.K.H., Taylor, J., Grimm, S.L., Baudino, J., Garland, R., Irwin, P.G.J., & **Wood, K.**
2019, *MNRAS*, 487, 2082

Massive star formation via disc accretion: the effect of photoionisation feedback
Sartorio, N., Vandenbroucke, B., Falceta-Goncalves, D., **Wood, K.**, & Keto, E.
2019, *MNRAS*, 486, 5171

2018

Quantifying direct DNA damage in the basal layer of skin exposed to UV radiation from sun beds
Barnard, I.R.M., Tierney, P., Campbell, C.L., McMillan, L., Moseley, H., Eadie, E., Brown, C.T.A., & **Wood, K.**

2018, Photochemistry & Photobiology, 94, 1017

A novel light source with tuneable uniformity of light distribution for artificial daylight photodynamic therapy

O'Mahoney, P., Haigh, N., **Wood, K.**, Brown, C.T.A.B., Ibbotson, S., & Eadie, E.

2018, Photodiagnosis and Photodynamic Therapy, 23, 144-150

Environmental effects on the ionisation of brown dwarf atmospheres

Rodriguez-Barrera, M.I., Helling, C., & **Wood, K.**

2018, A&A, 618, 10

Simulating radio emission lines from low mass stars

Llama, J., Jardine, M.M., **Wood, K.**, Halinan, G., & Morin, J.

2018, ApJ, 854, 7

The Monte Carlo photoionisation and moving-mesh radiation hydrodynamics code CMacionize

Vandenbroucke, B., & **Wood, K.**

2018, Astronomy & Computing, 23, 40

Radiative transfer calculations of the diffuse ionised gas in disc galaxies with cosmic ray feedback

Vandenbroucke, B., & **Wood, K.**, Girichidis, P., Hill, A.S., & Peters, T.

2018, MNRAS, 476, 4032

2017

A quantitative study of in vivo protoporphyrin IX fluorescence build up during occlusive treatment phases

Campbell, C.L., Brown, C.T.A.B., **Wood, K.**, Salvio, A.G., Inada, N.M., Bagnato, V.S., & Moseley, H.

2017, Photodiagnosis and Photodynamic Therapy, 18, 204

Dynamic mineral clouds on HD 189733b II. Monte Carlo radiative transfer for 3D cloudy exoplanet atmospheres combining scattering and emission spectra

Lee, G., **Wood, K.**, Dobbs-Dixon, I., Rice, A., & Helling, C.

2017, MNRAS, 601, 22

2016

A model for (quasi-)periodic multi-wavelength photometric variability in young stellar objects

Kesseli, A.Y., Petkova, M.A., **Wood, K.**, Whitney, B.A., Hillenbrand, L.A., Gregory, S.G.,

Stauffer, J.R., Morales-Calderon, M., Rebull, L., & Alencar, S.H.P.

2016, ApJ, 828, 1

Modeling topical photodynamic therapy treatment including the continuous production of Protoporphyrin IX

Campbell, C.L., Brown, C.T.A.B., **Wood, K.**, & Moseley, H.
2016, *Physics in Medicine & Biology*, 61, 21, 7507-7521

Monte Carlo modelling of photodynamic therapy treatments comparing clustered three-dimensional tumour structures with homogeneous tissue structures

Campbell, C.L., **Wood, K.**, Brown, C.T.A.B., & Moseley, H.
2016, *Physics in Medicine & Biology*, 61, 13, 4840-4854

Ionisation and discharge in cloud-forming atmospheres of brown dwarfs and extrasolar planets

Helling, C., Rimmer, P.B., Rodrigues-Barrera, M.I., **Wood, K.**, Robertson, G.B., & Stark, C.R.
2016, *Plasma Physics & Controlled Fusion*, 58, 7

Polarised light sheet tomography

Reidt, S., O'Brien, D., **Wood, K.**, & MacDonald, M.
2016, *Optics Express*, 24, 10, 11239-11249

2015

Monte Carlo modelling of daylight activated photodynamic therapy

Campbell, C.L., **Wood, K.**, Valentine, R.M., Brown, C.T.A.B., & Moseley, H.
2015, *Physics in Medicine & Biology*, 60, 4059

3D Monte Carlo radiation transfer modelling of photodynamic therapy

Campbell, C.L., Christison, C., Brown, C.T.A.B., **Wood, K.**, Valentine, R.M., & Moseley, H.
2015, *BiophotonicsSouth America*, SPIE, 9531

Models of diffuse Ha in the interstellar medium: the relative contributions from in situ ionization and dust scattering

Barnes, J.E., **Wood, K.**, Hill, A.S., & Haffner, L.M.
2015, *MNRAS*, 447, 559

Photoionising feedback and the star formation rates in galaxies

MacLachlan, J.M., Bonnell, I.A., **Wood, K.**, & Dale, J.E.
2015, *A&A*, 573, 112

2014

Photoionization and heating of a supernova-driven interstellar medium

Barnes, J.E., **Wood, K.**, Hill, A.S., & Haffner, L.M.
2014, *MNRAS*, 440, 3027

CS12264: Simultaneous optical and infrared light curves of young disk-bearing stars in NGC2264 with CoRoT and Spitzer – evidence for multiple origins of variability

Cody, A.M., et al. & **Wood, K.**
2014, *AJ*, 147, 82

2013

Exoplanet transit variability: bow-shocks and winds around HD189733b

Llama, J., Vidotto, A.A., Jardine, M., **Wood, K.**, Fares, R., & Gombosi, T.T.

2013, MNRAS, 436, 2179

Three-dimensional radiation transfer in young stellar objects

Whitney, B.A., Robitaille, T.P., Bjorkman, J.E., Dong, R., Wolff, M.R., **Wood, K.**, & Honor, J.

2013, ApJS, 207, 30

Three dimensional geometries and the analysis of HII regions

Wood, K., Barnes, J.E., Ercolano, B., Haffner, L.M., Reynolds, R.J., & Dale, J.

2013, ApJ, 770, 152

A systematic survey for eruptive young stellar objects using mid-infrared photometry

Scholz, A., Froebrich, D., & **Wood, K**

2013, MNRAS, 430, 2910

The standard model of low mass star formation applied to massive stars: a multi-wavelength picture of AFGL 2591

Johnson, K.G., Shepherd, D.S., Robitaille, T.P., & **Wood, K**

2013, A&A, 551, 43

New brown dwarf discs in Upper Scorpius observed with WISE

Dawson, P., Scholz, A., Ray, T.P., Marsh, K.A., **Wood, K.**, Padgett, D., & Ressler, M.E.

2013, MNRAS, 429, 903

2012

Monte Carlo simulations for optimal light delivery in photodynamic therapy of non-melanoma skin cancer

Valentine, R.M., **Wood, K.**, Brown, C.T.A.B., Ibbotson, S.H., & Moseley, H.

2012, Phys. Med. Biol. 57, 6327

Probing the structure and kinematics of the transition layer between the Magellanic Stream and the Halo in HI

Nigra, L., Stanimirovic, S., Gallagher, J.S., **Wood, K.**, Nidever, D., & Majewski, S.

2012, ApJ, 760, 48

A self-consistent model of Galactic stellar and dust infrared emission and the abundance of polycyclic aromatic hydrocarbons

Robitaille, T.P., Churchwell, E., Benjamin, R.A., Whitney, B.A., **Wood, K.**, Babler, B.L., & Meade, M.R.

2012, A&A, 545, 39

The three dimensional structure of NGC891

Schechtman-Rook, A., Bershady, M.A., & **Wood, K.**

2012, ApJ, 746, 70

2011

The stability of low surface brightness galaxy disks based on multi-wavelength modeling

MacLachlan, J.M., Matthews, L.D., **Wood, K.**, & Gallagher, J.S.

2011, ApJ, 741, 6

The shocking transit of WASP-12b: modeling the observed early ingress in the near ultraviolet

Llama, J., **Wood, K.**, Jardine, M., Vidotto, A.A., Helling, Ch., Fossati, L., & Haswell, C.A.

2011, MNRAS, 416, L41

The standard model of low mass star formation applied to massive stars: modeling IRAS

20126+4104 in the infrared

Johnston, K.G., Keto, E., Robitaille, T.P., & **Wood, K.**

2011, MNRAS, 415, 2953

YSOVAR: The first sensitive, wide-area mid-infrared photometric monitoring of the Orion Nebula Cluster

Morales-Calderon, M., et al., & **Wood, K.**

2011, ApJ, 773, 50

Monte Carlo modeling of in vivo Protoporphyrin IX fluorescence and singlet oxygen production during photodynamic therapy for patients presenting with superficial basal cell carcinomas

Valentine, R.M., Brown, C.T.A., Moseley, H., & Ibbotson, S., & **Wood, K.**

2011, Journal of Biomedical Optics, 16, 048002

The infrared properties of embedded super star clusters: predictions from three dimensional radiative transfer models

Whelan, D.G., Johnson, K.E., Whitney, B.A., Indebetouw, R., & **Wood, K.**

2011, ApJ, 729, 111

Infrared spectroscopy of the diffuse ionized halos of edge-on galaxies

Rand, R.J., **Wood, K.**, Benjamin, R.A., & Meidt, S.E.

2011 ApJ, 728, 163

A quantitative comparison of 5-Aminolaevulinic Acid- and Methyl Aminolevulinate-induced fluorescence, photobleaching, and pain during photodynamic therapy

Valentine, R.M., Ibbotson, S.H., Brown, C.T.A., **Wood, K.**, & Moseley, H.

2011, Photochemistry & Photobiology, 87, 242

2010

A multiwavelength view of the protostellar binary IRAS04325+2402: a case for turbulent fragmentation

Scholz, A., **Wood, K.**, Wilner, D., Jayawardhana, R., Delorme, P., Garatti, A. Caratti O.,

Ivanov, V.D., Saviane, I., & Whitney, B.

2010, MNRAS, 409, 1557

Photoionization of High Altitude Gas in a Supernova-Driven Turbulent Interstellar Medium
Wood, K., Hill, A.S., Jounge, M.R., MacLow M.M., Benjamin, R.A., Haffner, L.M., Reynolds, R.J., & Madsen, G.J.
2010, ApJ, 721, 1397

2009

Ionized Gas toward Molecular Clumps: Physical Properties of Massive Star-Forming Regions
Johnston, K.G., Shepherd, D.S., Aguirre, J.E., Dunham, M.K., Rosolowsky, E., & **Wood, K.**
2009, ApJ, 707, 283

Hotspots and a clumpy disc: variability of brown dwarfs and stars in the young σ Ori cluster
Scholz, A., Xu, X., Jayawardhana, R., **Wood, K.**, Eislöffel, J., Quinn, C.
2009, MNRAS, 398, 873

The warm ionized medium in spiral galaxies
Haffner, L.M., Dettmar, R.-J., Beckman, J.E., **Wood, K.**, Slavin, J.D., Giammanco, C., Madsen, G.J., Zurita, A., & Reynolds, R. J.
2009, RvMP, 81, 969

Infrared Spectrograph Characterization of a Debris Disk Around an M-Type Star in NGC 2547
Teixeira, P.S., Lada, C.J., **Wood, K.**, Robitaille, T.P., & Luhman, K.L.
2009, ApJ, 700, 454

2008

Emission from Very Small Grains and PAH Molecules in Monte Carlo Radiation Transfer Codes: Application to the Edge-On Disk of Gomez's Hamburger
Wood, K., Whitney, B.A., Robitaille, T.P., & Draine, B.T.
2008, ApJ, 688, 1118

Reflected light from 3D exoplanetary atmospheres and simulation of HD 209458b
Hood, B., **Wood, K.**, Seager, S., & Collier Cameron, A.
2008, MNRAS, 389, 257

IRAS 04325+2402C: A Very Low Mass Object with an Edge-On Disk
Scholz, A., Jayawardhana, R., **Wood, K.**, Lafrenière, D., Schreyer, K., & Doyon, R.
2008, ApJ, 681, L29

Infrared signatures and models of circumstellar dust disks
Wood, K.
2008, NewAR, 52, 145

Infrared Spectroscopy of the Diffuse Ionized Halo of NGC 891
Rand, R.J., **Wood, K.**, & Benjamin, R.A.
2008, ApJ, 680, 263

2007

Why are accreting T Tauri stars observed to be less luminous in X-rays than non-accretors?

Gregory, S.G., **Wood, K.**, & Jardine, M.
2007, MNRAS, 379, L35

The coronal structure of AB Dor determined from contemporaneous Doppler imaging and X-ray spectroscopy

Hussain, G.A.J., Jardine, M., Donati, J.-F., Brickhouse, N. S., Dunstone, N.J., **Wood, K.**, Dupree, A.K., Collier Cameron, A., & Favata, F.
2007, MNRAS, 377, 1488

Interpreting Spectral Energy Distributions from Young Stellar Objects. II. Fitting Observed SEDs Using a Large Grid of Precomputed Models

Robitaille, T.P. Whitney, B., Indebetouw, R., & **Wood, K.**
2007, ApJS, 169, 328

Evolution of brown dwarf disks: A Spitzer survey in Upper Scorpius

Scholz, A., Jayawardhana, R., **Wood, K.**, Meeus, G., Stelzer, B., Walker, C., & O'Sullivan, M.
2007, ApJ, 660 1517

Multiwavelength Imaging of Young Stellar Object Disks: Toward an Understanding of Disk Structure and Dust Evolution

Watson, A.M., Stapelfeldt, K.R., **Wood, K.**, & Menard, F.
Protostars & Planets V, B. Reipurth, D. Jewitt, and K. Keil (eds.), University of Arizona Press, Tucson, 2007, p.523-538

2006

Dust Filtration at Gap Edges: Implications for Spectral Energy Distributions of Discs with Embedded Planets

Rice, W.K.M.R., Armitage, P.J., **Wood, K.**, & Lodato, G.
2006, MNRAS, 373, 1619

Interpreting Spectral Energy Distributions from Young Stellar Objects. I. A grid of 200,000 YSO model SEDs

Robitaille, T., Whitney, B.A., Indebetouw, R., **Wood, K.**, & Denzmore, P.
2006, ApJ, ApJS, 167, 256

Near-Infrared Synthetic Images of Protostellar Disks and Envelopes

Stark, D.P., Whitney, B.A., Stassun, K., & **Wood, K.**
2006, ApJ, 649, 900

Exploring Brown Dwarf Disks: A 1.3 mm Survey in Taurus

Scholz, A., Jayawardhana, R., & **Wood, K.**
2006, ApJ, 645, 1498

X-Ray Emission from T Tauri Stars

Jardine, M., Collier Cameron, A., Donati, J.-F., Gregory, S.G., & **Wood, K.**
2006, MNRAS, 367, 917

Observations of IC348: The Disk Population at 2-3 Million Years

Lada, C.J., Muench, A.A., Luhman, K.L., Allen, L., Hartmann, L., Megeath, T., Myers, P., Fazio, G., **Wood, K.**, Muzerolle, J., Reike, G., Siegler, N., & Young, E.
2006, AJ, 131, 1574

Observational Properties of Protoplanetary Disk Gaps

Varnière, P., Bjorkman, J. E., Frank, A., Quillen, A., Carciofi, A.C. Whitney, B.A., & **Wood, K.**
2006, ApJ, 637, L125

Observations on the Formation of Massive Stars by Accretion

Keto, E., & **Wood, K.**
2006, ApJ, 637, 850

3-D Models of Embedded High-Mass Stars: Effects of a Clumpy Circumstellar Medium

Indebetouw, R., Whitney, B.A., Johnson, K.E., & **Wood, K.**
2006, ApJ, 636, 362

2005

Estimating the Porosity of the Interstellar Medium from Three Dimensional Photoionization Modeling of H II Regions

Wood, K., Haffner, L.M., Reynolds, R.J., Mathis, J.S., & Madsen, G.
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