

CONTACT INFORMATION	Dept. of Physics & Astronomy College of Charleston 66 George St. Charleston, SC 29424 USA	<i>Phone:</i> (843) 953-3643 <i>Fax:</i> (843) 953-4824 <i>Email:</i> carsonjc@cofc.edu <i>WWW:</i> carsonjc.people.cofc.edu
RESEARCH INTERESTS	Medical and astronomical imaging instrumentation, extrasolar planets, stellar activity, global health.	
EDUCATION	Ph.D. in Astronomy	Cornell University January 2005
	M.S. in Astronomy	Cornell University December 2003
	B.A. in Physics	Pomona College May 1999
HONORS AND AWARDS	SCRA Applied Researcher of the Year	2024
	InnoVision Award for Technology Development	2023
	Henri Chretien International Research Grant Award	2019
	Fulbright Scholarship	2016
	InnoVision Award for Technology Application	2014
	Distinguished Research Award, College of Charleston	2014
	Gordon E. Jones Distinguished Achievement Award, College of Charleston	2014
	Research Corporation Cottrell College Science Award	2012
	Co-discovery of GJ 758 B - TIME Magazine Top 10 Science Discoveries of 2009	2009
	MPIA Fellowship	2008-2010
	NASA NPP Fellowship	2007-2008
	NASA Space Grant Graduate Fellowship	2002-2003
	Frank P. Brackett Prize in Astronomy, Pomona College	1999
PROFESSIONAL POSITIONS	College of Charleston	
	<i>Professor</i>	2022 - present
	<i>Associate Professor</i>	2015 - 2022
	<i>Assistant Professor</i>	2010 - 2015
	Pensievision Inc	
	<i>Co-Founder and Chief Technology Officer</i>	2015 - present
	Universidad Nacional de Colombia	
	<i>Fulbright Scholar</i>	2017

Visiting Professor Ad Honorem 2017

Max-Planck-Institut für Astronomie
MPIA Fellow 2007 - 2010

Jet Propulsion Laboratory
NASA NPP Fellow 2006 - 2007
Caltech Postdoctoral Scholar 2004 - 2006

PROFESSIONAL
SERVICE

President
Charleston Chapter of Sigma Xi – The Scientific Research Society 2017 - 2020
(accolade: 2018 Chapter of Excellence Award)

Councilor
Oak Ridge Associated Universities 2013 - 2020
Council on Undergraduate Research 2016 - 2018

Referee
Astronomical Journal 2020, 2022
American Journal of Physics 2011, 2013, 2015, 2018, 2019, 2020, 2021
Monthly Notices of the Royal Astronomical Society 2015
Advances in Space Research 2014
Astrophysical Journal 2013
Astronomy & Astrophysics 2010
Optics Express 2006

Grant Reviewer
National Science Foundation 2006, 2014, 2023
Research Corporation for Science Advancement 2013, 2014, 2015, 2016, 2018, 2019, 2020
Fulbright Program 2019, 2020
NASA 2011, 2013, 2015, 2017
Oak Ridge Associated Universities 2012, 2013
COST (Swiss Research Organization) 2013
FONDECYT (Chile National Science Foundation) 2011, 2012
FCT (Portuguese Foundation for Science & Technology) 2012
NWO (Dutch Scientific Research Organization) 2010

Advisory Board Member
Biomedical Sciences Advisory Board, South Carolina Research Authority 2020 - 2021
Biomedical Engineering and Mechanics Industry Partners, Virginia Tech 2020 - 2021

GRANTS AWARDED
AS LEAD
INVESTIGATOR

National Institutes of Health / National Cancer Institute, “A Novel Low Cost Handheld 3D Imaging System for Improved Screening of Cervical Neoplasia in Resource Limited Settings”, (2023-2025), \$2,160,469.

NASA SC Space Grant, “Two Scientific Payloads for South Carolina’s First CubeSat Mission”, (2024), \$20,000.

National Science Foundation, “An Endoscopic 3D Imaging System for the Evaluation of Cancer and Other Disorders of the Esophagus and Pharynx”, (2023-2024), \$255,717.

SC INBRE / National Institutes of Health, “Development of a 3D Widefield Imaging and Navigation System With Microscopic Assessment of Large-Size Cartilage Samples”, (2022-2023),

\$225,000.

South Carolina Research Authority, “A Novel Low Cost Handheld 3D Imaging System for Improved Screening of Cervical Neoplasia in Resource Limited Settings”, (2023-2024), \$25,000.

National Institutes of Health / National Cancer Institute, “A Novel Low Cost Handheld 3D Imaging System for Improved Screening of Cervical Neoplasia in Resource Limited Settings”, (2021-2022), \$400,000.

South Carolina Research Authority, “A Novel Low Cost Handheld 3D Imaging System for Improved Screening of Cervical Neoplasia in Resource Limited Settings”, (2021-2022), \$50,000.

SC INBRE / National Institutes of Health, “Advancing Low Cost, All-Focus, 3D Imaging Technologies, Using Shape-From-Focus Techniques”, (2020-2022), \$150,000.

NASA SC Space Grant, “An Observational & Computational Investigation into the Impact of Stellar Activity on Planet Evolution”, (2020), \$20,000.

South Carolina Research Authority, “Developing a Single-Visit System to Screen, Diagnose, and Treat Cervical Neoplasia”, (2020-2021), \$25,000.

CofC Faculty Research and Development Grant, “Telescope Monitoring of Young Stars, to Investigate the Impact of Stellar Activity on Planet Evolution & Habitability”, (2020), \$5,000.

American Astronomical Society, “Spectroscopic Monitoring of Young Stars, to Investigate the Impact of Stellar Activity on Planet Evolution”, (2019), \$16,200.

South Carolina Research Authority, “Developing a Single-Visit System to Screen, Diagnose, and Treat Cervical Neoplasia”, (2019), \$50,000.

National Science Foundation, “Developing a Single-Visit System to Screen, Diagnose, and Treat Cervical Neoplasia”, (2018-2019), \$224,289.

NASA SC Space Grant, “Palmetto Research Academy: Investigating the Impact of Episodic Stellar Activity on Planet Formation and Evolution”, (2018), \$18,000.

Fulbright Scholarship, “Engaging Students in Colombia in Extrasolar Planet Studies”, (2016-2017), \$26,000.

NASA SC Space Grant, “Using HST Archival Data to Evaluate New Exoplanet Candidates Discovered by VLT/SPHERE”, (2016-2017), \$20,000.

NASA SC Space Grant, “Palmetto Research Academy: Numerical Simulations and Observational Signatures of the Escaping Upper Atmosphere of Hot Jupiter Extrasolar Planets” (Co-PI), (2016), \$18,000.

NASA SC Space Grant, “Debris Disk and Extrasolar Planet Imaging with the Hubble and Spitzer Telescopes”, (2015-2016), \$19,500.

CofC Faculty Research and Development Grant, “Exploring Stellar Disks with the Hubble Space Telescope”, (2015), \$4,000.

Spitzer Space Telescope General Observing Time, “Imaging Search for Dynamically Inferred Planets in Nearby Debris Disk Systems” (Administrative PI), (2012-2015), \$5,000.

Hubble Space Telescope EPO Grant, “Transporting HST Exoplanet Studies to the Middle/High-School Classroom”, (2011-2015), \$20,000.

National Science Foundation, “RUI: Ground-Based and Space-Based Direct Imaging Surveys for Extrasolar Planets”, (2010-2015), \$286,568.

Research Corporation Cottrell College Science Award, “Extrasolar Planet Imaging Studies with the Hubble and Spitzer Telescopes”, (2012-2014), \$35,000.

NASA SC Space Grant, “Search for Extrasolar Planets of Young Nearby Stars”, (2012-2013), \$30,000.

NASA Keck General Observing Time, “Coldest Imaged Companion of a Sun-like Star”, (2010-2012), \$12,700.

MPIA Postdoctoral Fellowship, “Science Observations with SPHERE: Direct Imaging of Exoplanets”, (2007-2010), €87,000 [\$98,000 USD]

NASA NPP Fellowship, “Observational Studies of Substellar Companions Around Nearby Stars and Instrumentation Research to Improve High Contrast Companion Searches”, (2006-2007), \$100,000

JPL Innovative Spontaneous Concepts Grant, “A Band Limited Mask for High-Contrast Adaptive Optics Imaging”, (2006), \$30,000.

NASA NY Space Grant Graduate Fellowship, (2002-2003), \$40,000.

GRANTS AWARDED
AS
CO-INVESTIGATOR*

National Institutes of Health, “Precision Imaging to Evaluate Kaposi Sarcoma (Prime-KS)”, (2024-2029), \$2,375,000.

National Science Foundation, “ADAPT in SC: AI-enabled Devices for the Advancement of Personalized and Transformative Healthcare in South Carolina”, (2023-2028), \$20,000,000.

South Carolina Research Authority, “Advancing Innovation to Commercialization at CofC Using Global Logistics as a Pilot”, (2024-2027), \$640,000.

Jet Propulsion Laboratory, “Advanced Computational Tools for the Starshade Exoplanet Data Challenge”, (2021-2022), \$50,000.

Hubble Space Telescope General Observing Time, “Decoding Debris System Substructures: Imprints of Planets/Planetesimals and Signatures of Extrinsic Influences on Material in Ring-Like Disks”, (2014-2016), \$315,188.

Spitzer Space Telescope General Observing Time, “Confirmation of T Dwarf Candidate Companions of Radial Velocity Planet Systems”, (2012-2014), \$5,000.

Spitzer Space Telescope General Observing Time, “Search for Planetary Mass Companions of Nearby Young Stars”, (2011-2014), \$44,000.

National Institutes of Health, “Developing a 3D Imaging System for Monitoring Kaposi’s Sarcoma”, (2012-2014), \$129,000.

Hubble Space Telescope General Observing Time, “Probing for Exoplanets Hiding in Dusty Debris Disks: Inner Disk Imaging, Characterization, and Exploration”, (2010-2013), \$520,000.

Spitzer Space Telescope General Observing Time, “IRAC Search for Planetary Mass Companions of Extrasolar Planetary Systems: Probing the inner 400 AU”, (2007), \$50,000.

National Science Foundation, “Development of a Visible-Light Adaptive Optics Upgrade at Palomar Mountain”, (2006-2008), \$1,100,000.

Spitzer Space Telescope General Observing Time, “Search for Planetary Companions of Epsilon Eridani and Fomalhaut”, (2006), \$50,000.

. * funding values reflect overall grant award, covering all team members.

PROFESSIONAL MEMBERSHIPS

Sigma Xi
Phi Kappa Phi
Council on Undergraduate Research
South Carolina Science Council
American Astronomical Society

RESEARCHERS SUPERVISED

Eva Godwin (NASA MIST Fellow, SURF Fellow): “Advancing CubeSat Mission Readiness”, 2025-present

Gael Gonzalez (NASA MIST Fellow, SURF Fellow): “Development of Two CubeSat Payloads”, 2024-present

Bryn Gerding: “An Innovative 3D Imaging System for Screening and Diagnosing Pre-Cancerous Growths”, 2024-present

Nisa Soltani: “An Investigation of Piezoelectronics and Telecentric Lenses for Advanced 3D Biomedical Imaging”, 2023-present

Bailey Williamson: “An Innovative 3D Imaging System for Screening and Diagnosing Pre-Cancerous Growths”, 2020-present

Stanley McAfee: “An Innovative 3D Imaging System for Screening and Diagnosing Pre-Cancerous Growths”, 2018-present

Kevin Gainey: “An Innovative 3D Imaging System for Screening and Diagnosing Pre-Cancerous Growths”, 2012-2013 and 2018-present

Isabelle Mehochko: “An Innovative 3D Imaging System for Screening and Diagnosing Pre-Cancerous Growths”, 2023-present

Julia Wakefield: “An Innovative 3D Imaging System for Screening and Diagnosing Pre-Cancerous Growths”, 2021, 2024-present

Brian Nguyen: “Computational Techniques for Biomedical 3D Optical Imaging”, 2024

Allie Barnes: “A Human Factors Investigation of a New Medical Device for Cervical Cancer Screening”, 2023-2024

James Dockery (NASA MIST Fellow, SURF Fellow): “Investigating the Impact of Episodic Stellar Activity on Planet Evolution”, 2021-2024

Jake Frederick: “Investigating the Impact of Episodic Stellar Activity on Planet Evolution”, 2022-2024

Chris Lesoine: “Design, Assembly, and In-lab Testing of a CubeSat Payload for Ultraviolet Stellar Observation”, 2023-2024

Jenna Snead (SURF Fellow): “Testing the Functionality of an Autofocus, Variable Zoom Camera System for 3D Medical Imaging Applications”, 2020-2023

Brianna Joyner: “A Novel, Miniaturized, 3D Imaging Scope for Medical Applications”, 2021-2023

Aly Nida (NASA USRF Fellow): “Advanced Computational Tools for the Starshade Exoplanet Data Challenge”, 2018, 2020-2023

Yared Reinartz: “Algorithm Development for Combining Multiple, 3D, Shape-From-Focus Images, for Medical Applications”, 2021-2022

DJ Guarino: “Investigating the Impact of Episodic Stellar Activity on Planet Evolution”, 2021

Logan Oxener: “Investigating the Impact of Episodic Stellar Activity on Planet Evolution”, 2019-2021

Katrina Bynum (SURF Fellow): “A CubeSat Feasibility Study for Monitoring Episodic Stellar Activity”, 2020-2021

Blake Mino (NASA USRF Fellow, NASA Palmetto Fellow): “Exoplanet Imaging with the Hubble Space Telescope”, 2017-2020

Will Ceva (NASA Palmetto Fellow): “Investigating the Impact of Episodic Stellar Activity on Planet Formation and Evolution”, 2017-2020

Lucy Williamson (SURF Fellow): “Investigating the Impact of Episodic Stellar Activity on Planet Formation and Evolution”, 2018-2019

Quinn Williams: “A 3D Imaging System for Screening and Diagnosing Cervical Cancer”, 2019

Austin Purtell: “Exoplanet Imaging with the Hubble Space Telescope”, 2019

Dereck Morgado: “Investigating the Impact of Episodic Stellar Activity on Planet Formation and Evolution”, 2018-2019

David Melnick (NASA USRF Fellow, SURF Fellow, MAYS Fellow): “Exoplanet Imaging with the Spitzer and Hubble Space Telescope”, 2015-2018

Elyana Crowder (SURF Fellow, MAYS Fellow): “Spectroscopic Monitoring of Young Stars with Circumstellar Disks, to Investigate the Impact of Stellar Activity on Planet Formation and Evolution”, 2016-2018

Maxwell Rabe (SURF Fellow): “A Novel 3D Imaging Technique for Cancer Diagnoses”, 2018

Rafael Hurtado: “Exoplanet Studies with the Subaru SEEDS Survey”, 2017-2018

Vianny Estrada: “Spectroscopic Monitoring of Young Stars with Circumstellar Disks, to Investigate the Impact of Stellar Activity on Planet Formation and Evolution”, 2017

Lennart Langouche: “A Fiber-Based Liquid Lens Endoscope”, 2017

Jerson Huerfano: “Exoplanet Imaging with the Hubble Space Telescope”, 2017

Wendell Roberson: “Exoplanet Studies with the Subaru SEEDS Survey”, 2016

Adam Fletcher: “Using HST Archival Data to Evaluate New Exoplanet Candidates Discovered by VLT/SPHERE”, 2016

Ariane McKiernan (HHMI Fellow): “A Novel 3D Imaging Technique for Cancer Diagnoses”, 2015-2016

Hannah Wilson (SURF Fellow, AYRA Recipient): “A Novel 3D Imaging Technique for Cancer Diagnoses”, 2014-2016

Laura Stevens (NASA USRF Fellow): “Exoplanet Studies with the Subaru SEEDS Survey”, 2011-2016

Jameson Sanders: “Imaging Extrasolar Planets and Circumstellar Disks with the Hubble Space Telescope”, 2015

Clay Gardner: “Imaging Extrasolar Planets and Circumstellar Disks with the Hubble Space Telescope”, 2014-2015

Kellen Lawson (MAYS Fellow, SURF Fellow): “Exoplanet Studies with the Subaru SEEDS Survey”, 2013-2014

Zachary Griggs: “Imaging Extrasolar Planets and Circumstellar Disks with the Hubble Space Telescope”, 2013-2014

Benjamin Wilson (MAYS Fellow, Boeing Scholar): “Imaging Extrasolar Planets and Circumstellar Disks with the Hubble Space Telescope”, 2013-2014

David McDaniel: “A Novel 3D Imaging Technique for Cancer Diagnoses”, 2014

Nathan Gunzenhauser: “Subaru SEEDS Exoplanet Survey”, 2014-2015

Brittany Yeager: “Imaging Extrasolar Planets and Circumstellar Disks with the Hubble Space Telescope”, 2013-2014

Kara Perrino: “The Hubble Exoplanet Classroom”, 2013

Thea Kozakis (SURF Fellow, MAYS Fellow): “Exoplanet Studies with the Subaru SEEDS Survey”, 2011-2013

David Ruwadi: “The Hubble Exoplanet Classroom”, 2012

Palmer Wong: “Exoplanet Studies with the Subaru SEEDS Survey”, 2011-2012

Jesica Trucks: “A Monte Carlo Population Study of Exoplanet Companions of High Mass Stars”,

2011-2012

J. Alex Greene: “Brown Dwarfs Around Radial Velocity Planet Systems”, 2012

Andrei Zorilescu: “Lucky Imaging with the College of Charleston Observatory”, 2011-2012

John Bent: “Brown Dwarfs Around Radial Velocity Planet Systems”, 2011

Carolyn Schnupp: “Brown Dwarfs Around Radial Velocity Planet Systems”, 2009-2010

Gregorio Villar: “An Adaptive Optics Survey of Sub-Stellar Companions to TPF Candidate Targets”, 2007-2009

Michael Blaschak: “An Adaptive Optics Survey of Sub-stellar Companions to TPF Candidate Targets”, 2007-2008

Kyle Hiner: “A Distance-Limited Imaging Survey of Sub-Stellar Companions to Solar Neighborhood Stars”, 2006-2007

Lilit Abramyan: “Palomar Hale Telescope Adaptive Optics Instrumentation”, 2006-2007

Jeffrey Smith (JPlus Scholar): “A Monte Carlo Population Study of Wide Separation Brown Dwarf Companions to Main Sequence Stars”, 2005

PATENTS

1. **J. C. Carson**, B. Carson, S. Esener, K. Liu, D. Melnick, & E. Crowder, “[Method, System, Software and Device for Remote, Miniaturized, and Three-Dimensional Imaging and Analysis of Human Lesions; Research and Clinical Applications](#)”, U.S. Patent 20190090753, March 2019.

PEER REVIEWED PUBLICATIONS

1. M. Damiano, S. Shaklan, R. Hu, B. Dunne, A. Tanner, A. Nida, **J. C Carson**, S. Hildebrandt, & D. Lisman, 2024, *Journal of Astronomical Telescopes, Instruments, and Systems*, 10, 048001 “[Starshade exoplanet data challenge: what we learned](#)”
2. M. Jones, Y. Reinartz, R. Brahm, M. Tala Pinto, J. Eberhardt, F. Rojas, A. Triaud, A. Gupta, C. Ziegler, M. Hobson, A. Jordán, T. Henning, T. Trifonov, M. Schlecker, N. Espinoza, P. Torres-Miranda, P. Sarkis, S. Ulmer-Moll, M. Lendl, M. Uzundag, M. Moyano, K. Hesse, D. Caldwell, A. Shporer, M. Lund, J. Jenkins, S. Seager, J. Winn, G. Ricker, C. Burke, P. Figueira, A. Psaridi, K. Al Moulla, D. Mounzer, M. Standing, D. Martin, G. Dransfield, T. Baycroft, D. Dragomir, G. Boyle, V. Suc, A. Mann, M. Timmermans, E. Ducrot, M. Hooton, S. Zuñiga-Fernández, D. Sebastian, M. Gillon, D. Queloz, **J. C Carson**, & J. Lissauer, 2024, *Astronomy & Astrophysics*, 683, 192 “[A long-period transiting substellar companion in the super-Jupiters to brown dwarfs mass regime and a prototypical warm-Jupiter detected by TESS](#)”
3. M. Janson, R. Gratton, L. Rodet, A. Vigan, M. Bonnefoy, P. Delorme, E. Mamajek, S. Reffert, L. Stock, G.-D. Marleau, M. Langlois, G. Chauvin, S. Desidera, S. Ringqvist, L. Mayer, G. Viswanath, V. Squicciarini, M. Meyer, M. Samland, S. Petrus, R. Helled, M. Kenworthy, S. Quanz, B. Biller, T. Henning, D. Mesa, N. Engler, **J. C Carson**, 2022, *Nature*, 600, 231 “[A wide-orbit giant planet in the high-mass b Centauri binary system](#)”
4. M. Janson, V. Squicciarini, P. Delorme, R. Gratton, M. Bonnefoy, S. Reffert, E. Mamajek, S. Eriksson, A. Vigan, M. Langlois, N. Engler, G. Chauvin, S. Desidera, L. Mayer, G.-D. Marleau, A. Bohn, M. Samland, M. Bonavita, M. Meyer, V. d’Orazi, T. Henning, S. Quanz, M. Kenworthy, & **J. C. Carson**, 2021, *Astronomy & Astrophysics*, 646, 164 “[BEAST Begins: Sample Characteristics and Survey Performance of the B-Star Exoplanet Abundance Study](#)”
5. S. Desidera, G. Chauvin, M. Bonavita, S. Messina, H. LeCoroller, T. Schmidt, R. Gratton, C. Lazzoni, M. Meyer, J. Schlieder, A. Cheetham, J. Hagelberg, M. Bonnefoy, M. Feldt, A.-M. Lagrange, M. Langlois, A. Vigan, T. Tan, F.-J. Hamsch, M. Millward, J. Alcalá, S. Benatti, W. Brandner, **J. C. Carson**, et al., 2021, *Astronomy & Astrophysics*, 651, 70 “[The SPHERE Infrared Survey for Exoplanets \(SHINE\). I. Sample Definition and Target Characterization](#)”

6. S. Mayama, S. Pérez, N. Kusakabe, T. Muto, T. Tsukagoshi, M. Sitko, M. Takami, J. Hashimoto, R. Dong, J. Kwon, S. Hayashi, T. Kudo, M. Kuzuhara, K. Follette, M. Fukagawa, M. Momose, D. Oh, J. de Leon, E. Akiyama, J. Wisniewski, Y. Yang, L. Abe, W. Brandner, T. Brandt, M. Bonnefoy, **J. C. Carson**, et al., 2020, *Astronomical Journal*, 159, 12 “[Subaru Near-infrared Imaging Polarimetry of Misaligned Disks around the SR 24 Hierarchical Triple System](#)”
7. Y. Yang, E. Akiyama, T. Currie, R. Dong, J. Hashimoto, S. Hayashi, C. Grady, M. Janson, N. Jovanovic, T. Uyama, T. Nakagawa, T. Kudo, N. Kusakabe, M. Kuzuhara, L. Abe, W. Brandner, T. Brandt, M. Bonnefoy, **J. C. Carson**, et al., 2020, *Astrophysical Journal*, 889, 140 “[High-resolution Near-infrared Polarimetry and Submillimeter Imaging of FS Tau A: Possible Streamers in Misaligned Circumbinary Disk System](#)”
8. M. Janson, R. Asensio-Torres, D. André, M. Bonnefoy, P. Delorme, S. Reffert, S. Desidera, M. Langlois, G. Chauvin, R. Gratton, A. Bohn, S. Eriksson, G.-D. Marleau, E. Mamajek, A. Vigan, **J. C. Carson**, et al., 2019, *Astronomy & Astrophysics*, 626, 99 “[The B-Star Exoplanet Abundance Study: a co-moving 16-25 \$M_{Jup}\$ companion to the young binary system HIP 79098](#)”
9. A.-L. Maire, L. Rodet, F. Cantalloube, R. Galicher, W. Brandner, S. Messina, C. Lazzoni, D. Mesa, D. Melnick, **J. C. Carson**, et al., 2019, *Astronomy & Astrophysics*, 624, A118 “[Hint of curvature in the orbital motion of the exoplanet 51 Eridani b using 3 yr of VLT/SPHERE monitoring](#)”
10. T. Currie, T. Brandt, T. Uyama, E. Nielsen, S. Blunt, O. Guyon, M. Tamura, C. Marois, K. Mede, M. Kuzuhara, T. Groff, N. Jovanovic, N. J. Kaskin, J. Lozi, K. Hodapp, J. Chilcote, **J. C. Carson**, et al., 2019, *Astronomical Journal*, 156, 291 “[SCEXAO/CHARIS Near-infrared Direct Imaging, Spectroscopy, and Forward-Modeling of \$\kappa\$ And b: A Likely Young, Low-gravity Superjovian Companion](#)”
11. E. Rich, J. Wisniewski, T. Currie, M. Fukagawa, C. Grady, M. Sitko, M. Pikhartova, J. Hashimoto, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2019, *Astrophysical Journal*, 875, 38 “[Multi-epoch Direct Imaging and Time-variable Scattered Light Morphology of the HD 163296 Protoplanetary Disk](#)”
12. T. Mizuki, M. Kuzuhara, K. Mede, J. Schlieder, M. Janson, T. Brandt, T. Hirano, N. Narita, J. Wisniewski, T. Yamada, B. Biller, M. Bonnefoy, **J. C. Carson**, et al., 2018, *Astrophysical Journal*, 865, 152 “[Orbital Characterization of GJ1108A System, and Comparison of Dynamical Mass with Model-derived Mass for Resolved Binaries](#)”
13. A. Boccaletti, E. Sezestre, A.-M. Lagrange, P. Thebault, R. Gratton, M. Langlois, C. Thalmann, M. Janson, P. Delorme, J.-C. Augereau, G. Schneider, J. Milli, C. Grady, J. Debes, Q. Kral, J. Olofsson, **J. C. Carson**, et al., 2018, *Astronomy & Astrophysics*, 614, 52 “[Observations of fast-moving features in the debris disk of AU Mic on a three-year timescale: Confirmation and new discoveries](#)”
14. T. Uyama, J. Hashimoto, T. Muto, E. Akiyama, R. Dong, J. de Leon, I. Sakon, T. Kudo, N. Kusakabe, M. Kuzuhara, M. Bonnefoy, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2018, *Astronomical Journal*, 156, 63 “[Subaru/HiCIAO \$HK_s\$ Imaging of LKHa 330: Multi-band Detection of the Gap and Spiral-like Structures](#)”
15. Y. Yang, S. Mayama, S. Hayashi, J. Hashimoto, R. Rafikov, E. Akiyama, T. Currie, M. Janson, M. Momose, T. Nakagawa, D. Oh, T. Kudo, N. Kusakabe, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2018, *Astrophysical Journal*, 861, 133 “[High-contrast Polarimetry Observation of the T Tau Circumstellar Environment](#)”
16. P. Delorme, T. Schmidt, M. Bonnefoy, S. Desidera, C. Ginski, B. Charnay, C. Lazzoni, V. Chris-

- tiaens, S. Messina, V. D’Orazi, J. Milli, J. Schlieder, R. Gratton, L. Rodet, A.-M. Lagrange, O. Absil, A. Vigan, R. Galicher, J. Hagelberg, M. Bonavita, B. Lavie, A. Zurlo, J. Olofsson, A. Boccaletti, F. Cantalloube, D. Mouillet, G. Chauvin, F.-J. Hamsch, M. Langlois, S. Udry, T. Henning, J.-L. Beuzit, C. Mordasini, P. Lucas, F. Marocco, B. Biller, **J. C. Carson**, et al., 2017, *Astronomy & Astrophysics*, 608, 79 “[In-depth study of moderately young but extremely red, very dusty substellar companion HD 206893B](#)”
17. E. Rich, J. Wisniewski, M. McElwain, J. Hashimoto, T. Kudo, N. Kusakabe, Y. Okamoto, L. Abe, E. Akiyama, W. Brandner, T. Brandt, P. Cargile, **J. C. Carson**, et al., 2017, *MNRAS*, 472, 1736, “[The Fundamental Stellar Parameters of FGK Stars in the SEEDS Survey](#)”
 18. A. Vigan, M. Bonavita, B. Biller, D. Forgan, K. Rice, G. Chauvin, S. Desidera, J.-C. Meunier, P. Delorme, J. Schlieder, M. Bonnefoy, **J. C. Carson**, et al., 2017, *Astronomy & Astrophysics*, 603, 3, “[The VLT/NaCo Large Program to Probe the Occurrence of Exoplanets and Brown Dwarfs at Wide Orbits. IV. Gravitational Instability Rarely Forms Wide, Giant Planets](#)”
 19. M. Samland, P. Molliere, M. Bonnefoy, A.-L. Maire, F. Cantalloube, A. Cheetham, D. Mesa, R. Gratton, B. Biller, Z. Wahhaj, J. Bouwman, W. Brandner, D. Melnick, **J. C. Carson**, et al., 2017, *Astronomy & Astrophysics*, 603, 57, “[Spectral and Atmospheric Characterization of 51 Eridani b using VLT/SPHERE](#)”
 20. T. Currie, O. Guyon, M. Tamura, T. Kudo, N. Jovanovic, J. Lozi, J. Schlieder, T. Brandt, J. Kuhn, E. Serabyn, M. Janson, **J. C. Carson**, et al., 2017, *Astrophysical Journal*, 836, 15, “[Subaru/SCEXAO First-light Direct Imaging of a Young Debris Disk around HD 36546](#)”
 21. T. Uyama, J. Hashimoto, M. Kuzuhara, S. Mayama, E. Akiyama, T. Currie, J. Livingston, T. Kudo, N. Kusakabe, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2017, *Astronomical Journal*, 153, 106, “[The SEEDS High-Contrast Imaging Survey of Exoplanets Around Young Stellar Objects](#)”
 22. E. Garcia, T. Currie, O. Guyon, K. Stassun, N. Jovanovic, J. Lozi, T. Kudo, D. Doughty, J. Schlieder, J. Kwon, T. Uyama, M. Kuzuhara, **J. C. Carson**, et al., 2017, *Astrophysical Journal*, 834, 162, “[SCEXAO and GPI Y JHband Photometry and Integral Field Spectroscopy of the Young Brown Dwarf Companion to HD 1160](#)”
 23. Y. Yang, J. Hashimoto, S. Hayashi, M. Tamura, S. Mayama, R. Rafikov, E. Akiyama, **J. C. Carson**, et al., 2017, *Astronomical Journal*, 153, 7, “[Near-infrared Imaging Polarimetry of Inner Region of GG Tau A Disk](#)”
 24. R. Kooistra, I. Kamp, M. Fukagawa, F. Menard, M. Momose, T. Tsukagoshi, T. Kudo, N. Kusakabe, J. Hashimoto, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2017, *Astronomy & Astrophysics*, 597, 132, “[Radial decoupling of small and large dust grains in the transitional disk RX J1615.3-3255](#)”
 25. L. Roberts, B. Mason, J. Aguilar, **J. C. Carson**, et al., 2016, *Astronomical Journal*, 151, 169, “[Characterization of the Companion \$\mu\$ Her](#)”
 26. S. Durkan, M. Janson, & **J. C. Carson**, 2016, *Astrophysical Journal*, 824, 58, “[High Contrast Imaging with Spitzer: Constraining the Frequency of Giant Planets out to 1000 au Separations](#)”
 27. T. Ryu, B. Sato, M. Kuzuhara, N. Narita, Y. Takahashi, T. Uyama, T. Kudo, N. Kusakabe, J. Hashimoto, M. Omiya, H. Harakawa, L. Abe, H. Ando, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2016, *Astrophysical Journal*, 825, 127, “[High-contrast Imaging of Intermediate-mass Giants with Long-term Radial Velocity Trends](#)”

28. E. Akiyama, J. Hashimoto, H. baobabu Liu, J. i-hsiu Li, M. Bonnefoy, R. Dong, Y. Hasegawa, T. Henning, M. Sitko, M. Janson, M. Feldt, J. Wisniewski, T. Kudo, N. Kusakabe, T. Tsukagoshi, M. Momose, T. Muto, T. Taki, M. Kuzuhara, M. Satoshi, M. Takami, N. Ohashi, C. Grady, J. Kwon, C. Thalmann, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2016, *Astronomical Journal*, 152, 222, “[Spiral Structure and Differential Dust Size Distribution in the LKH \$\alpha\$ 330 Disk](#)”
29. R. Asensio-Torres, M. Janson, J. Hashimoto, C. Thalmann, T. Currie, E. Buenzli, T. Kudo, M. Kuzuhara, N. Kusakabe, L. Abe, E. Akiyama, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2016, *Astronomy & Astrophysics*, 593, 73, “[Polarimetry and flux distribution in the debris disk around HD 32297](#)”
30. T. Mizuki, T. Yamada, **J. C. Carson**, et al., 2016, *Astronomy & Astrophysics*, 595, 79, “[High-contrast imaging of \$\epsilon\$ Eridani with ground-based instruments](#)”
31. D. Oh, J. Hashimoto, **J. C. Carson**, et al., 2016, *Astrophysical Journal*, 831, 7, “[Resolved Near-infrared Image of the Inner Cavity in the GM Aur Transitional Disk](#)”
32. E. Rich, T. Currie, J. Wisniewski, J. Hashimoto, T. Brandt, **J. C. Carson**, et al., 2016, *Astrophysical Journal*, 830, 114, “[Thermal Infrared Imaging and Atmospheric Modeling of VHS J125601.92-125723.9 b: Evidence for Moderately Thick Clouds and Equilibrium Carbon Chemistry in a Hierarchical Triple System](#)”
33. M. Janson, C. Thalmann, A. Boccaletti, A.-L. Maire, A. Zurlo, F. Marzari, M. Meyer, **J. C. Carson**, et al., 2016, *Astrophysical Journal*, 816, 1, “[Detection of Sharp Symmetric Features in the Circumbinary Disk around AK Sco](#)”
34. M. Konishi, C. Grady, G. Schneider, H. Shibai, M. McElwain, E. Nesvold, M. Kuchner, **J. C. Carson**, et al., 2016, *Astrophysical Journal*, 818, 23, “[Discovery of an Inner Disk Component around HD 141569 A](#)”
35. K. Helminiak, M. Kuzuhara, K. Mede, T. Brandt, R. Kandori, T. Suenaga, N. Kusakabe, N. Narita, **J. C. Carson**, et al., 2016, *Astrophysical Journal*, 832, 33, “[SEEDS Direct Imaging of the RV-detected Companion to V450 Andromedae, and Characterization of the System](#)”
36. Y. Ohta, M. Fukagawa, M. Sitko, T. Muto, S. Kraus, C. Grady, J. Wisniewski, J. Swearingen, H. Shibai, T. Sumi, J. Hashimoto, T. Kudo, N. Kusakabe, M. Momose, Y. Okamoto, T. Kotani, M. Takami, T. Currie, C. Thalmann, M. Janson, E. Akiyama, K. Follette, S. Mayama, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2016, *Publications of the Astronomical Society of Japan*, 68, 53 “[Extreme Asymmetry in the Polarized Disk of V1247 Orionis](#)”
37. M. Reggiani, M. Meyer, G. Chauvin, A. Vigan, S. Quanz, B. Biller, M. Bonavita, S. Desidera, P. Delorme, J. Hagelberg, A.-L. Maire, A. Boccaletti, J.-L. Beuzit, E. Buenzli, **J. C. Carson**, et al., 2016, *Astronomy & Astrophysics*, 586, 147, “[The VLT/NaCo large program to probe the occurrence of exoplanets and brown dwarfs at wide orbits . III. The frequency of brown dwarfs and giant planets as companions to solar-type stars](#)”
38. D. Oh, J. Hashimoto, M. Tamura, J. Wisniewski, E. Akiyama, T. Currie, S. Mayama, M. Takami, C. Thalmann, T. Kudo, N. Kusakabe, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2016, *Publications of the Astronomical Society of Japan*, 68, 3, “[Near-infrared imaging polarimetry of LkCa 15: A possible warped inner disk](#)”
39. G. Schneider, C. Grady, C. Stark, A. Gaspar, **J. C. Carson**, et al., 2016, *Astronomical Journal*, 152, 64 “[Deep HST/STIS Visible-light Imaging of Debris Systems around Solar Analog Hosts](#)”

40. J. Lomax, J. Wisniewski, C. Grady, M. McElwain, J. Hashimoto, T. Kudo, N. Kusakabe, Y. Okamoto, M. Fukagawa, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2016, *Astrophysical Journal*, 828, 2, “[Constraining the Movement of the Spiral Features and the Locations of Planetary Bodies within the AB Aur System](#)”
41. M. Konishi, T. Matsuo, K. Yamamoto, M. Samland, J. Sudo, H. Shibai, Y. Itoh, M. Fukagawa, T. Sumi, T. Kudo, J. Hashimoto, M. Kuzuhara, N. Kusakabe, L. Abe, E. Akiyama, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2016, *Publications of the Astronomical Society of Japan*, 68, 92, “[A substellar companion to Pleiades HII 3441](#)”
42. A. Boccaletti, C. Thalmann, A.-M. Lagrange, M. Janson, J.-C. Augereau, G. Schneider, J. Milli, C. Grady, J. Debes, M. Langlois, D. Mouillet, T. Henning, C. Dominik, A.-L. Maire, J.-L. Beuzit, **J. C. Carson**, et al., 2015, *Nature*, 526, 230, “[Fast-Moving Features in the Debris Disk Around AU Microscopii](#)”
43. T. Currie, C. Lisse, M. Kuchner, N. Madhusudhan, S. Kenyon, C. Thalmann, **J. C. Carson**, & J. Debes, 2015, *Astrophysical Journal Letters*, 807, 7, “[Direct Imaging and Spectroscopy of a Young Extrasolar Kuiper Belt in the Nearest OB Association](#)”
44. E. Rich, J. Wisniewski, S. Mayama, T. Brandt, J. Hashimoto, T. Kudo, N. Kusakabe, C. Espaillat, L. Abe, E. Akiyama, W. Brandner, **J. C. Carson**, et al., 2015, *Astronomical Journal*, 150, 86, “[Near-IR Polarized Scattered Light Imagery of the DoAr 28 Transitional Disk](#)”
45. C. Thalmann, G. Mulders, M. Janson, J. Olofsson, M. Benisty, H. Avenhaus, X. Quanz, H. Schmid, T. Henning, E. Buenzli, F. Menard, **J. C. Carson**, et al., 2015, *Astrophysical Journal*, 808, 41, “[Optical Imaging Polarimetry of the LkCa 15 Protoplanetary Disk with SPHERE ZIMPOL](#)”
46. M. Momose, A. Morita, M. Fukagawa, T. Muto, T. Takeuchi, J. Hashimoto, M. Honda, T. Kudo, Y. Okamoto, K. Kanagawa, H. Tanaka, C. Grady, M. Sitko, E. Akiyama, T. Currie, K. Follette, S. Mayama, N. Kusakabe, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2015, *Publications of the Astronomical Society of Japan*, 67, 83, “[Detailed structure of the outer disk around HD 169142 with polarized light in H-band](#)”
47. M. Janson, S. Quanz, **J. C. Carson**, et al., 2015, *Astronomy & Astrophysics*, 574, 120, “[High-contrast Imaging with Spitzer: Deep Observations of Vega, Fomalhaut, and epsilon Eridani](#)”
48. S. Desidera, E. Covino, S. Messina, **J. C. Carson**, et al., 2015, *Astronomy & Astrophysics*, 573, 126 “[The VLT/NaCo Large Program to Probe the Occurrence of Exoplanets and Brown Dwarfs in Wide Orbits: I- Sample Definition and Characterization](#)”
49. E. Akiyama, T. Muto, N. Kusakabe, A. Kataoka, J. Hashimoto, T. Tsukagoshi, J. Kwon, T. Kudo, R. Kandori, C. Grady, M. Takami, M. Janson, M. Kuzuhara, T. Henning, M. Sitko, **J. C. Carson**, et al., 2015, *Astrophysical Journal Letters*, 802, 17, “[Discovery of a Disk Gap Candidate at 20 AU in TW Hydrae](#)”
50. C. Grady, M. Fukagawa, Y. Maruta, Y. Ohta, J. Wisniewski, J. Hashimoto, Y. Okamoto, M. Momose, T. Currie, M. McElwain, T. Muto, T. Kotani, N. Kusakabe, M. Feldt, M. Sitko, K. Follette, M. Bonnefoy, T. Henning, M. Takami, J. Karr, J. Kwon, T. Kudo, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2015, *Astrophysics and Space Science*, 355, 253, “[The outer disks of Herbig stars from the UV to NIR](#)”
51. J. de Leon, M. Takami, J. Karr, J. Hashimoto, T. Kudo, M. Sitko, S. Mayama, N. Kusakabe, E. Akiyama, H. Liu, T. Usuda, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2015,

Astrophysical Journal Letters, 806, 10, “Near-IR High-resolution Imaging Polarimetry of the SU Aur Disk: Clues for Tidal Tails?”

52. M. Konishi, H. Shibai, T. Sumi, M. Fukagawa, T. Matsuo, M. Samland, K. Yamamoto, J. Sudo, Y. Itoh, N. Arimoto, M. Kajisawa, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2015, Publications of the Astronomical Society of Japan, 67, 1, “Indications of M-dwarf deficits in the halo and thick disk of the Galaxy”
53. J. Hashimoto, T. Tsukagoshi, J. Brown, R. Dong, T. Muto, Z. Zhu, J. Wisniewski, N. Ohashi, T. Kudo, N. Kusakabe, L. Abe, E. Akiyama, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2015, Astrophysical Journal, 799, 43, “The Structure of Pre-transitional Protoplanetary Disks. II. Azimuthal Asymmetries, Different Radial Distributions of Large and Small Dust Grains in PDS~70”
54. K. Follette, C. Grady, J. Swearingen, M. Sitko, E. Champney, N. van der Marel, M. Takami, M. Kuchner, L. Close, T. Muto, S. Mayama, M. McElwain, M. Fukagawa, K. Maaskant, M. Min, R. Russell, T. Kudo, N. Kusakabe, J. Hashimoto, L. Abe, E. Akiyama, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2015, Astrophysical Journal, 798, 132, “SEEDS Adaptive Optics Imaging of the Asymmetric Transition Disk Oph IRS 48 in Scattered Light”
55. G. Chauvin, A. Vigan, M. Bonnefoy, S. Desidera, M. Bonavita, D. Mesa, A. Boccaletti, E. Buenzli, **J. C. Carson**, et al., 2015, Astronomy & Astrophysics, 573, 127 “The VLT/NaCo Large Program to Probe the Occurrence of Exoplanets and Brown Dwarfs in Wide Orbits: II-Survey Description, Results and Performances”
56. C. Thalmann, S. Desidera, M. Bonavita, M. Janson, T. Usuda, T. Henning, C. Bergfors, A. Boccaletti, W. Brandner, **J. C. Carson**, et al., 2014, Astronomy & Astrophysics, 572, 91, “SPOTS: The Search for Planets Orbiting Two Stars I. Survey Description and First Observations”
57. Y. Itoh, Y. Oasa, T. Kudo, N. Kusakabe, J. Hashimoto, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2014, Research in Astronomy & Astrophysics, 14, 1438, “Near-infrared polarimetry of the GG Tauri A binary system”
58. T. Brandt, M. McElwain, E. Turner, K. Mede, D. Spiegel, M. Kuzuhara, J. Schlieder, J. Wisniewski, L. Abe, B. Biller, W. Brandner, **J. C. Carson**, et al., 2014, Astrophysical Journal, 794, 159, “A Statistical Analysis of SEEDS and Other High-contrast Exoplanet Surveys: Massive Planets or Low-mass Brown Dwarfs?”
59. M. Takami, Y. Hasegawa, T. Muto, P.-G. Gu, R. Dong, J. Karr, J. Hashimoto, N. Kusakabe, E. Chapillon, Y.-W. Tang, Y. Itoh, **J. C. Carson**, et al., 2014, Astrophysical Journal, 795, 71, “Surface Geometry of Protoplanetary Disks Inferred From Near-Infrared Imaging Polarimetry”
60. S. Baghdadchi, K. Liu, J. Knapp, G. Prager, S. Graves, K. Akrami, R. Manuel, R. Bastos, E. Reid, D. Carson, S. Esener, **J. C. Carson**, & Y.-T. Liu, 2014, Journal of Translational Medicine, 12, 169, “An innovative System for 3D Clinical Photography in the Resource-Limited Settings” [Project leaders are last two authors.] [Discovery resulted in 2014 InnoVision Award.]
61. G. Schneider, C. Grady, D. Hines, C. Stark, J. Debes, **J. C. Carson**, et al. 2014, Astronomical Journal, 148, 59, “Probing for Exoplanets Hiding in Dusty Debris Disks: Disk Imaging, Characterization, and Exploration with HST/STIS Multi-Roll Coronagraphy” [Journal cover article]
62. A. Hulsebus, M. Marengo, **J. C. Carson**, & K. Stapelfeldt, 2014, Astrophysical Journal, 784, 41, “A Mid-Infrared Search for Substellar Companions of Nearby Planet-Host Stars”
63. T. Brandt, M. Kuzuhara, M. McElwain, J. Schlieder, J. Wisniewski, E. Turner, **J. C. Carson**, et

- al., 2014, *Astrophysical Journal*, 786, 1, “[The Moving Group Targets of the SEEDS High-Contrast Imaging Survey of Exoplanets and Disks: Results and Observations from the First Three Years](#)”
64. C. Thalmann, G. Mulders, K. Hodapp, M. Janson, C. Grady, M. Min, M. de Juan Ovelar, **J. C. Carson**, et al., 2014, *Astronomy & Astrophysics*, 780, 102, “[The Architecture of the LkCa 15 Transitional Disk Revealed by High-Contrast Imaging](#)”
65. T. Tsukagoshi, M. Momose, J. Hashimoto, T. Kudo, S. Andrews, M. Saito, Y. Kitamura, N. Ohashi, D. Wilner, R. Kawabe, L. Abe, E. Akiyama, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2014, *Astrophysical Journal*, 783, 90, “[High-resolution Submillimeter and Near-infrared Studies of the Transition Disk around Sz 91](#)”
66. M. Bonnefoy, T. Currie, G.-D. Marleau, J. E. Schlieder, J. Wisniewski, **J. C. Carson**, et al., 2014, *Astronomy & Astrophysics*, 562, 111, “[Characterization of the gaseous companion Kappa Andromedae b: New Keck and LBTI high-contrast observations](#)”
67. **J. C. Carson**, et al., 2013, *Astrophysical Journal Letters*, 763, 32, “[Direct Imaging Discovery of a ‘Super-Jupiter’ Around the late B-Type Star Kappa And](#)” [\[Featured on front page of CNN.\]](#)
68. M. Kuzuhara, M. Tamura, T. Kudo, M. Janson, R. Kandori, T. Brandt, C. Thalmann, D. Spiegel, B. Biller, **J. C. Carson**, et al., 2013, *Astrophysical Journal Letters*, 775, 33, “[Direct Imaging of a Cold Jovian Exoplanet in Orbit Around the Sun-Like Star GJ 504](#)”
69. M. Janson, T. Brandt, A. Moro-Martin, T. Usuda, C. Thalmann, **J. C. Carson** et al., 2013, *Astrophysical Journal*, 773, 73, “[The SEEDS Direct Imaging Survey for Planets and Scattered Dust Emission in Debris Disk Systems](#)”
70. M. Janson, T. Brandt, M. Kuzuhara, D. S. Spiegel, C. Thalmann, T. Currie, M. Bonnefoy, N. Zimmerman, S. Sorahana, T. Kotani, J. Schlieder, J. Hashimoto, T. Kudo, N. Kusakabe, L. Abe, W. Brandner, **J. C. Carson**, et al., 2013, *Astrophysical Journal Letters*, 778, 4, “[Direct Imaging Detection of Methane in the Atmosphere of GJ 504 b](#)”
71. K. Yamamoto, T. Matsuo, H. Shibai, Y. Itoh, M. Konishi, J. Sudo, R. Tanii, M. Fukagawa, T. Sumi, T. Kudo, J. Hashimoto, N. Kusakabe, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2013, *Publications of the Astronomical Society of Japan*, 65, 90, “[Direct Imaging Search for Extrasolar Planets in the Pleiades](#)”
72. A. Zurlo, A. Vigan, J. Hagelberg, S. Desidera, G. Chauvin, J. M. Almenara, K. Biazzo, M. Bonnefoy, **J. C. Carson**, et al., 2013, *Astronomy & Astrophysics*, 554, 21, “[Astrophysical false positives in direct imaging for exoplanets: a white dwarf close to a rejuvenated star](#)”
73. M. Takami, J. Karr, J. Hashimoto, H. Kim, J. Wisniewski, T. Henning, C. Grady, R. Kandori, K. Hodapp, T. Kudo, N. Kusakabe, M.-Y. Chou, Y. Itoh, M. Momose, S. Mayama, T. Currie, K. Follette, J. Kwon, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2013, *Astrophysical Journal*, 772, 145, “[High-contrast Near-infrared Imaging Polarimetry of the Protoplanetary Disk around RY TAU](#)”
74. C. Thalmann, M. Janson, E. Buenzli, T. Brandt, J. Wisniewski, C. Dominik, **J. C. Carson**, et al., 2013, *Astrophysical Journal Letters*, 763, 29, “[Imaging Discovery of the Debris Disk around HIP 79977](#)”
75. T. Brandt, M. McElwain, E. Turner, L. Abe, W. Brandner, **J. Carson**, et al., 2013, *Astrophysical Journal*, 764, 183, “[New Techniques for High-Contrast Imaging with ADI: the ACORNS-ADI SEEDS Data Reduction Pipeline](#)”

76. K. Follette, M. Tamura, J. Hashimoto, B. Whitney, C. Grady, L. Close, S. Andrews, J. Kwon, J. Wisniewski, T. Brandt, S. Mayama, R. Kandori, R. Dong, L. Abe, W. Brandner, **J. C. Carson**, et al. 2013, *Astrophysical Journal*, 767, 10, “[Mapping H-band Scattered Light Emission in the Mysterious SR21 Transitional Disk](#)”
77. C. Grady, T. Muto, J. Hashimoto, M. Fukugawa, T. Currie, B. Biller, C. Thalmann, M. Sitko, R. Russell, J. Wisniewski, R. Dong, J. Kwon, S. Sai, J. Hornbeck, G. Schneider, D. Hines, A. Moro Martin, M. Feldt, Th. Henning, J.-U. Pott, M. Bonnefoy, J. Bouwman, S. Lacour, A. Mueller, A. Juhasz, A. Crida, G. Chauvin, S. Andrews, D. Wilner, A. Kraus, S. Dahm, T. Robitaille, H. Jang-Condell, L. Abe, E. Akiyama, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2013, *Astrophysical Journal*, 762, 48, “[Spiral Arms in the Asymmetrically Illuminated Disk of MWC 758 and Constraints on Giant Planets](#)”
78. J. Hashimoto, R. Dong, T. Kudo, M. Honda, M. K. McClure, Z. Zhu, T. Muto, J. Wisniewski, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2013, *Astrophysical Journal Letters*, 775, 33, “[Erratum: ‘Polarimetric Imaging of Large Cavity Structures in the Pre-transitional Protoplanetary Disk around PDS 70: Observations of the Disk’](#)”
79. R. Dong, J. Hashimoto, R. Rafikov, Z. Zhu, B. Whitney, T. Kudo, T. Muto, T. Brandt, M. McClure, J. Wisniewski, L. Abe, W. Brandner, **J. Carson**, et al., 2012, *Astrophysical Journal*, 760, 111, “[The Structure of Pre-transitional Protoplanetary Disks I: Radiative Transfer Modeling of the Disk+Cavity in the PDS 70 System](#)”
80. N. Narita, Y. Takahashi, M. Kuzuhara, T. Hirano, T. Suenaga, R. Kandori, T. Kudo, B. Sato, R. Suzuki, S. Ida, M. Nagasawa, L. Abe, W. Brandner, T. Brandt, **J. Carson**, et al., 2012, *Publications of the Astronomical Society of Japan Letters*, 64, 7, “[A Common Proper Motion Stellar Companion to HAT-P-7](#)”
81. S. Mayama, J. Hashimoto, T. Muto, T. Tsukagoshi, N. Kusakabe, M. Kuzuhara, Y. Takahashi, T. Kudo, R. Dong, M. Fukagawa, M. Takami, M. Momose, J. P. Wisniewski, K. Follette, L. Abe, E. Akiyama, W. Brandner, T. Brandt, **J. Carson**, et al., 2012, *Astrophysical Journal*, 760, 26, “[Subaru Imaging of Asymmetric Features in a Transitional Disk in Upper Scorpius](#)”
82. J. Hashimoto, R. Dong, T. Kudo, M. Honda, M. McClure, Z. Zhu, T. Muto, J. Wisniewski, L. Abe, W. Brandner, T. Brandt, **J. C. Carson**, et al., 2012, *Astrophysical Journal Letters*, 758, 19 “[Polarimetric Imaging of Large Cavity Structures in the Pre-transitional Protoplanetary Disk around PDS 70: Observations of the disk](#)”
83. N. Kusakabe, C. A. Grady, M. L. Sitko, J. Hashimoto, T. Kudo, M. Fukagawa, T. Muto, J. P. Wisniewski, M. Min, C. Werren, A. N. Day, L. C. Berman, D. K. Lynch, R. W. Russell, S. M. Brafford, L. Abe, W. Brandner, **J. C. Carson**, et al., 2012, *Astrophysical Journal*, 753, 153, “[High Contrast NIR Polarization Imaging of MWC480](#)”
84. Tanii, Itoh, Kudo, Hioki, Oasa, Gupta, Sen, Wisniewski, Muto, Grady, Hashimoto, Fukagawa, Mayama, Hornbeck, Sitko, Russell, Werren, Cure, Currie, Ohashi, Okamoto, Momose, Honda, Inutsuka, Takeuchi, Dong, Abe, Brandner, Brandt, **Carson**, et al., 2012, *Publications of the Astronomical Society of Japan*, 64, 124 “[High-Resolution Near-Infrared Polarimetry of a Circumstellar Disk around UX Tau A](#)”
85. M. Janson, **J. C. Carson**, et al., 2012, *Astrophysical Journal*, 747, 116, “[Infrared Non-detection of Fomalhaut b – Implications for the Planet Interpretation](#)”
86. R. Dong, R. Rafikov, Z. Zhu, L. Hartmann, B. Whitney, T. Brandt, T. Muto, J. Hashimoto, C. Grady, K. Follette, M. Kuzuhara, R. Tanii, Y. Itoh, C. Thalmann, J. Wisniewski, S. Mayama, M. Janson, L. Abe, W. Brandner, **J. C. Carson** et al. 2012, *Astrophysical Journal Letters*,

750, 161, “The Missing Cavities in the SEEDS Polarized Scattered Light Images of Transitional Protoplanetary Disks: a Generic Disk Model”

87. T. Muto, C. A. Grady, J. Hashimoto, M. Jukagawa, J. B. Hornbeck, M. Sitko, R. Russell, C. Werren, M. Cure, T. Currie, N. Ohashi, Y. Okamoto, M. Momose, M. Honda, S. Inutsuka, T. Takeuchi, R. Dong, L. Abe, W. Brandner, T. Brandt, **J. C. Carson** et al. 2012, *Astrophysical Journal Letters*, 748, 22, “Discovery of Small-Scale Spiral Structures in the Disk of SAO 206462 (HD 135344B): Implications for the Physical State of the Disk from Spiral Density Wave Theory”
88. **J. C. Carson**, et al., 2011, *Astrophysical Journal*, 743, 141, “A Spitzer IRAC Imaging Survey for T Dwarf Companions Around M, L, and T Dwarfs: Observations, Results, and Monte Carlo Population Analyses”
89. M. Janson, **J. C. Carson**, et al., 2011, *Astrophysical Journal Letters*, 728, 85, “Near-Infrared Multi-Band Photometry of the Substellar Companion GJ 758 B”
90. C. Thalmann, M. Janson, E. Buenzli, T. D. Brandt, J. P. Wisniewski, A. Moro-Martin, T. Usuda, G. Schneider, **J. C. Carson**, et al. 2011, *Astrophysical Journal Letters*, 743, 6 “Images of the Extended Outer Regions of the Debris Ring Around HR 4796 A”
91. J. Hashimoto, M. Tamura, T. Muto, T. Kudo, M. Fukagawa, T. Fukue, C. A. Grady, T. Henning, K. Hodapp, M. Honda, S. Inutsuka, E. Kokubo, G. Knapp, M. W. McElwain, M. Momose, N. Ohashi, Y. K. Okamoto, M. Takami, E. L. Turner, J. Wisniewski, M. Janson, L. Abe, W. Brandner, **J. C. Carson**, et al. 2011, *Astrophysical Journal Letters*, 729, 17, “Direct Imaging of Fine Structures in Giant Planet Forming Regions of the Protoplanetary Disk Around AB Aurigae”
92. D. M. Clark, S. S. Eikenberry, B. R. Brandl, J. C. Wilson, **J. C. Carson**, et al. 2011, *MNRAS*, 410, 890 “Multiwavelength study of Chandra X-ray sources in the Antennae”
93. S. Desidera, E. Covino, S. Messina, V. D. Orazi, J. M. Alcalá, E. Brugaletta, **J. C. Carson**, et al. 2011, *Astronomy & Astrophysics*, 529, 54, “The Debris Disk Host Star HD 61005: a member of the Argus Association?”
94. J. Crepp, E. Serabyn, **J. C. Carson**, J. Ge, & I. Kravchenko, et al. 2010, *Astrophysical Journal*, 715, 1533, “On-sky Demonstration of a Linear Band-limited Mask with Application to Visual Binary Stars”
95. E. Buenzli, C. Thalmann, A. Vigan, A. Boccaletti, G. Chauvin, J.C. Augereau, M. R. Meyer, F. Menard, S. Desidera, S. Messina, T. Henning, **J. C. Carson**, et al., 2010, *Astronomy & Astrophysics Letters*, 524L, 1, “Dissecting the Moth: Discovery of an Off-Centered Ring in the HD 61005 Debris Disk with High-Resolution Imaging”
96. N. Narita, T. Kudo, C. Bergfors, M. Nagasawa, C. Thalmann, B. Sato, R. Suzuki, R. Kandori, M. Janson, M. Goto, W. Brandner, S. Ida, L. Abe, **J. C. Carson**, et al. 2010, *Publications of the Astronomical Society of Japan*, 62, 779 “Search for Outer Massive Bodies around Transiting Planetary Systems: Candidates of Faint Stellar Companions around HAT-P-7”
97. C. Thalmann, C. A. Grady, M. Goto, J. P. Wisniewski, M. Janson, T. Henning, M. Fukagawa, M. Honda, G. D. Mulders, M. Min, A. Moro-Martin, M. W. McElwain, K. W. Hodapp, **J. C. Carson**, et al. 2010, *Astrophysical Journal*, 718, 87, “Imaging of a Transitional Disk Gap in Reflected Light: Indications of Planet Formation Around the Young Solar Analog LkCa 15”
98. **J. C. Carson**, K. D. Hiner, G. G. Villar, M. G. Blaschak, A. L. Rudolph, K. R. Stapelfeldt, 2009, *Astronomical Journal*, 137, 218, “A Distance-Limited Imaging Survey of Sub-Stellar Companions

to Solar Neighborhood Stars”

99. C. Thalmann, **J. C. Carson**, et al. 2009, *Astrophysical Journal*, 707, 123, “[Discovery of the Coldest Imaged Companion of a Sun-like Star](#)” [[TIME Magazine Top 10 Science Discoveries of 2009](#)]
100. M. Marengo, K. Stapelfeldt, M. W. Werner, J. L. Hora, G. G. Fazio, M. T. Schuster, **J. C. Carson**, S. T. Megeath, 2009, *Astrophysical Journal*, 700, 1647, “[Spitzer/Infrared Array Camera Limits to Planetary Companions of Fomalhaut and epsilon Eridani](#)”
101. D. M. Clark, S. S. Eikenberry, B. R. Brandl, J. C. Wilson, **J. C. Carson**, et al., 2008, *Astrophysical Journal*, 678, 798C, “[A First Estimate of the X-Ray Binary Frequency as a Function of Star Cluster Mass in a Single Galactic System](#)”
102. D.M. Clark, S. S. Eikenberry, B. R. Brandl, J. C. Wilson, **J. C. Carson** et al., 2007, *Astrophysical Journal*, 658, 319, “[Erratum:Infrared Counterparts to Chandra X-Ray Sources in the Antennae](#)”
103. D. M. Clark, S. S. Eikenberry, B. R. Brandl, J. C. Wilson, **J. C. Carson** et al., 2007, *Astrophysical Journal*, 658, 319, “[Infrared Counterparts to Chandra X-Ray Sources in the Antennae](#)”
104. **J. C. Carson**, S. S. Eikenberry, J. J. Smith, J. M. Cordes, 2006, *Astronomical Journal*, 132, 1146, “[The Cornell High-Order Adaptive Optics Survey for Brown Dwarfs in Stellar Systems-II: Results from Monte Carlo Population Analyses](#)”
105. **J. C. Carson**, S. S. Eikenberry, B. R. Brandl, J. C. Wilson, T. L. Hayward, 2005, *Astronomical Journal*, 130, 1212, “[The Cornell High-Order Adaptive Optics Survey for Brown Dwarfs in Stellar Systems-I: Observations, Data Reduction, and Detection Analyses](#)”
106. D. M. Clark, M. H. Christopher, S. S. Eikenberry, B. R. Brandl, J. C. Wilson, **J. C. Carson**, et al., 2005, *Astrophysical Journal*, 631, 109, “[The Ultraluminous X-Ray Source X-37 Is a Background Quasar in the Antennae Galaxies](#)”
107. B. R. Brandl, D. M. Clark, S. S. Eikenberry, J. C. Wilson, C. P. Henderson, D. J. Barry, J. R. Houck, **J. C. Carson**, et al., 2005, *Astrophysical Journal*, 631, 109, “[Deep Near-Infrared Imaging and Photometry of the Antennae Galaxies with WIRC](#)”

POPULAR
PUBLICATIONS

1. **J. C. Carson**, 2013, *Astronomy Magazine*, 41, 16, “[What Developments Have Scientists Made in Exoplanet Imaging?](#)” [[Invited article](#)]
2. **J. C. Carson**, 2007, *Saveur Magazine*, 99, 20, “[Hale and Hearty](#)”