

Denis Defrère

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8855973/publications.pdf>

Version: 2024-02-01

127
papers

3,237
citations

159358

30
h-index

189595

50
g-index

127
all docs

127
docs citations

127
times ranked

2332
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Atmospheric characterization of terrestrial exoplanets in the mid-infrared: biosignatures, habitability, and diversity. <i>Experimental Astronomy</i> , 2022, 54, 1197-1221. | 1.6 | 21 |
| 2 | Large Binocular Telescope Search for Companions and Substructures in the (Pre)transitional Disk of AB Aurigae. <i>Astrophysical Journal</i> , 2022, 926, 71. | 1.6 | 2 |
| 3 | Detection of Near-infrared Water Ice at the Surface of the (Pre)Transitional Disk of AB Aur: Informing Icy Grain Abundance, Composition, and Size. <i>Astronomical Journal</i> , 2022, 163, 145. | 1.9 | 9 |
| 4 | Unveiling exozodiacal light. <i>Physics Today</i> , 2022, 75, 46-52. | 0.3 | 2 |
| 5 | The HOSTS Survey: Evidence for an Extended Dust Disk and Constraints on the Presence of Giant Planets in the Habitable Zone of ι^2 Leo. <i>Astronomical Journal</i> , 2021, 161, 186. | 1.9 | 5 |
| 6 | A near-infrared interferometric survey of debris-disk stars. <i>Astronomy and Astrophysics</i> , 2021, 651, A45. | 2.1 | 9 |
| 7 | Resolving Io's Volcanoes from a Mutual Event Observation at the Large Binocular Telescope. <i>Planetary Science Journal</i> , 2021, 2, 227. | 1.5 | 5 |
| 8 | Keck/NIRC2 L [*] -band Imaging of Jovian-mass Accreting Protoplanets around PDS 70. <i>Astronomical Journal</i> , 2020, 159, 263. | 1.9 | 51 |
| 9 | The HOSTS Survey for Exozodiacal Dust: Observational Results from the Complete Survey. <i>Astronomical Journal</i> , 2020, 159, 177. | 1.9 | 57 |
| 10 | Implementing multiwavelength fringe tracking for the Large Binocular Telescope Interferometer's phase sensor, PHASECam. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2020, 6, 1. | 1.0 | 2 |
| 11 | Exoplanet detection yield of a space-based Bracewell interferometer from small to medium satellites. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2020, 6, . | 1.0 | 5 |
| 12 | Overview and prospects of the LBTI beyond the completed HOSTS survey. , 2020, , . | | 2 |
| 13 | Towards the development of mid-infrared integrated optics in the renewed context of high-contrast interferometry. , 2020, , . | | 0 |
| 14 | Performance study of interferometric small-sats to detect exoplanets: updated exoplanet yield and application to nearby exoplanets. , 2020, , . | | 0 |
| 15 | Review and scientific prospects of high-contrast optical stellar interferometry. , 2020, , . | | 0 |
| 16 | MARVEL, a four-telescope array for high-precision radial-velocity monitoring. , 2020, , . | | 0 |
| 17 | Preparatory studies for a mid-infrared nulling interferometry experiment at cryogenic conditions. , 2020, , . | | 0 |
| 18 | Optimizing MARVEL for the radial velocity follow up of TESS and PLATO transiting exoplanets. , 2020, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Deep Exploration of μ Eridani with Keck Ms-band Vortex Coronagraphy and Radial Velocities: Mass and Orbital Parameters of the Giant Exoplanet*. <i>Astronomical Journal</i> , 2019, 157, 33. | 1.9 | 53 |
| 20 | Searching for Atmospheric Bioindicators in Planets around the Two Nearby Stars, Proxima Centauri and Epsilon Eridaniâ€”Test Cases for Retrieval of Atmospheric Gases with Infrared Spectroscopy. <i>Astrobiology</i> , 2019, 19, 797-810. | 1.5 | 6 |
| 21 | Constraints on HD 113337 fundamental parameters and planetary system. <i>Astronomy and Astrophysics</i> , 2019, 627, A44. | 2.1 | 7 |
| 22 | Development of a space-based nulling interferometer to detect and characterize exoplanets. , 2019, , . | | 0 |
| 23 | A recent history of science cases for optical interferometry. <i>Experimental Astronomy</i> , 2018, 46, 389-399. | 1.6 | 2 |
| 24 | Prospects for the characterisation of exo-zodiacal dust with the VLTI. <i>Experimental Astronomy</i> , 2018, 46, 401-411. | 1.6 | 4 |
| 25 | Interferometric Space Missions for Exoplanet Science: Legacy of Darwin/TPF. , 2018, , 1229-1255. | | 2 |
| 26 | The HOSTS Surveyâ€”Exozodiacal Dust Measurements for 30 Stars. <i>Astronomical Journal</i> , 2018, 155, 194. | 1.9 | 78 |
| 27 | Space-based infrared interferometry to study exoplanetary atmospheres. <i>Experimental Astronomy</i> , 2018, 46, 543-560. | 1.6 | 25 |
| 28 | The LEECH Exoplanet Imaging Survey: Limits on Planet Occurrence Rates under Conservative Assumptions. <i>Astronomical Journal</i> , 2018, 156, 286. | 1.9 | 44 |
| 29 | The path towards high-contrast imaging with the VLTI: the Hi-5 project. <i>Experimental Astronomy</i> , 2018, 46, 475-495. | 1.6 | 28 |
| 30 | Discovery of a point-like source and a third spiral arm in the transition disk around the Herbig Ae star MWC 758. <i>Astronomy and Astrophysics</i> , 2018, 611, A74. | 2.1 | 70 |
| 31 | An H-band Vector Vortex Coronagraph for the Subaru Coronagraphic Extreme Adaptive Optics System. <i>Publications of the Astronomical Society of the Pacific</i> , 2018, 130, 035001. | 1.0 | 10 |
| 32 | Exoplanet science with a space-based mid-infrared nulling interferometer. , 2018, , . | | 21 |
| 33 | Characterizing the atmosphere of Proxima b with a space-based mid-infrared nulling interferometer. , 2018, , . | | 2 |
| 34 | The HOSTS survey for exo-zodiacal dust: preliminary results and future prospects. , 2018, , . | | 6 |
| 35 | Image-plane fringe tracker for adaptive-optics assisted long baseline interferometry. , 2018, , . | | 2 |
| 36 | Planet formation imager: project update. , 2018, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Simultaneous water vapor and dry air optical path length measurements and compensation with the large binocular telescope interferometer. Proceedings of SPIE, 2016, , . | 0.8 | 6 |
| 56 | Three years of harvest with the vector vortex coronagraph in the thermal infrared. Proceedings of SPIE, 2016, , . | 0.8 | 37 |
| 57 | Enabling the direct detection of earth-sized exoplanets with the LBTI HOSTS project: a progress report. Proceedings of SPIE, 2016, , . | 0.8 | 3 |
| 58 | THE INNER DEBRIS STRUCTURE IN THE FOMALHAUT PLANETARY SYSTEM*. Astrophysical Journal, 2016, 818, 45. | 1.6 | 40 |
| 59 | Commissioning and first light results of an L'-band vortex coronagraph with the Keck II adaptive optics NIRC2 science instrument. Proceedings of SPIE, 2016, , . | 0.8 | 6 |
| 60 | THE LEECH EXOPLANET IMAGING SURVEY: CHARACTERIZATION OF THE COLDEST DIRECTLY IMAGED EXOPLANET, GJ 504 b, AND EVIDENCE FOR SUPERSTELLAR METALLICITY*. Astrophysical Journal, 2016, 817, 166. | 1.6 | 68 |
| 61 | OVMS-plus at the LBT: disturbance compensation simplified. Proceedings of SPIE, 2016, , . | 0.8 | 8 |
| 62 | NULLING DATA REDUCTION AND ON-SKY PERFORMANCE OF THE LARGE BINOCULAR TELESCOPE INTERFEROMETER. Astrophysical Journal, 2016, 824, 66. | 1.6 | 70 |
| 63 | MODELS OF THE Î-CORVI DEBRIS DISK FROM THE KECK INTERFEROMETER, SPITZER, AND HERSCHEL. Astrophysical Journal, 2016, 817, 165. | 1.6 | 16 |
| 64 | THE LEECH EXOPLANET IMAGING SURVEY: ORBIT AND COMPONENT MASSES OF THE INTERMEDIATE-AGE, LATE-TYPE BINARY NO UMa* â€. Astrophysical Journal, 2016, 818, 1. | 1.6 | 41 |
| 65 | A near-infrared interferometric survey of debris-disc stars. Astronomy and Astrophysics, 2016, 595, A44. | 2.1 | 31 |
| 66 | HUNTING FOR PLANETS IN THE HL TAU DISK. Astrophysical Journal Letters, 2015, 812, L38. | 3.0 | 52 |
| 67 | The LEECH Exoplanet Imaging Survey. Further constraints on the planet architecture of the HR 8799 system. Astronomy and Astrophysics, 2015, 576, A133. | 2.1 | 50 |
| 68 | Exoplanet science with the LBTI: instrument status and plans. Proceedings of SPIE, 2015, , . | 0.8 | 2 |
| 69 | EXO-ZODI MODELING FOR THE LARGE BINOCULAR TELESCOPE INTERFEROMETER. Astrophysical Journal, Supplement Series, 2015, 216, 23. | 3.0 | 27 |
| 70 | FIRST-LIGHT LBT NULLING INTERFEROMETRIC OBSERVATIONS: WARM EXOZODIACAL DUST RESOLVED WITHIN A FEW AU OF Î-Crv. Astrophysical Journal, 2015, 799, 42. | 1.6 | 42 |
| 71 | TARGET SELECTION FOR THE LBTI EXOZODI KEY SCIENCE PROGRAM. Astrophysical Journal, Supplement Series, 2015, 216, 24. | 3.0 | 23 |
| 72 | IMPACT OF Î-Crv ON THE CAPABILITIES OF AFFORDABLE SPACE MISSIONS TO DETECT BIOSIGNATURES ON EXTRASOLAR PLANETS. Astrophysical Journal, 2015, 808, 194. | 1.6 | 18 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | SPATIALLY RESOLVED M-BAND EMISSION FROM IO'S LOKI PATERA'S FIZEAU IMAGING AT THE 22.8 m LBT. <i>Astronomical Journal</i> , 2015, 149, 175. | 1.9 | 20 |
| 74 | First light with ALES: A 2-5 micron adaptive optics Integral Field Spectrograph for the LBT. <i>Proceedings of SPIE</i> , 2015, , . | 0.8 | 17 |
| 75 | Accreting protoplanets in the LkCa 15 transition disk. <i>Nature</i> , 2015, 527, 342-344. | 13.7 | 249 |
| 76 | The LEECH Exoplanet Imaging Survey. Further constraints on the planet architecture of the HR 8799 system (Corrigendum). <i>Astronomy and Astrophysics</i> , 2015, 579, C2. | 2.1 | 10 |
| 77 | A near-infrared interferometric survey of debris-disk stars. <i>Astronomy and Astrophysics</i> , 2014, 570, A128. | 2.1 | 73 |
| 78 | CHARACTERIZATION OF THE BENCHMARK BINARY NLTT 33370 ^{<sup></sup>} . <i>Astrophysical Journal</i> , 2014, 783, 27. | 1.6 | 20 |
| 79 | Unveiling new stellar companions from the PIONIER exozodi survey. , 2014, , . | | 0 |
| 80 | Large binocular telescope interferometer adaptive optics: on-sky performance and lessons learned. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 20 |
| 81 | L'-band AGPM vector vortex coronagraph's first light on LBTI/LMIRCam. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 12 |
| 82 | The LBTI hunt for observable signatures of terrestrial systems (HOSTS) survey: a key NASA science program on the road to exoplanet imaging missions. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 4 |
| 83 | Co-phasing the Large Binocular Telescope: status and performance of LBTI/PHASECam. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 10 |
| 84 | High contrast imaging at the LBT: the LEECH exoplanet imaging survey. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 11 |
| 85 | Fizeau interferometric imaging of Io volcanism with LBTI/LMIRcam. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 9 |
| 86 | Commissioning the LBTI for use as a nulling interferometer and coherent imager. , 2014, , . | | 11 |
| 87 | The VORTEX project: first results and perspectives. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 2 |
| 88 | MID-INFRARED HIGH-CONTRAST IMAGING OF HD 114174 B: AN APPARENT AGE DISCREPANCY IN A SIRIUS-LIKE BINARY SYSTEM. <i>Astrophysical Journal Letters</i> , 2014, 783, L25. | 3.0 | 15 |
| 89 | DOES THE DEBRIS DISK AROUND HD 32297 CONTAIN COMETARY GRAINS?., <i>Astrophysical Journal</i> , 2014, 783, 21. | 1.6 | 57 |
| 90 | DIRECTLY IMAGED L-T TRANSITION EXOPLANETS IN THE MID-INFRARED ^{<sup></sup>} . <i>Astrophysical Journal</i> , 2014, 792, 17. | 1.6 | 112 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | CONSTRAINING THE EXOZODIACAL LUMINOSITY FUNCTION OF MAIN-SEQUENCE STARS: COMPLETE RESULTS FROM THE KECK NULLER MID-INFRARED SURVEYS. <i>Astrophysical Journal</i> , 2014, 797, 119. | 1.6 | 69 |
| 92 | Characterization of the gaseous companion β Andromedae b. <i>Astronomy and Astrophysics</i> , 2014, 562, A111. | 2.1 | 44 |
| 93 | Searching for faint companions with VLT/PIONIER. <i>Astronomy and Astrophysics</i> , 2014, 570, A127. | 2.1 | 22 |
| 94 | Operation and performance of the mid-infrared camera, NOMIC, on the Large Binocular Telescope. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 11 |
| 95 | Parasitic interference in nulling interferometry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 431, 1286-1295. | 1.6 | 0 |
| 96 | The Large Binocular Telescope Interferometer & Adaptive Optics System: On-sky Performance and Results. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 26-27. | 0.0 | 1 |
| 97 | Unraveling the Mystery of Exozodiacal Dust. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 338-339. | 0.0 | 1 |
| 98 | LEECH: A 100 Night Exoplanet Imaging Survey at the LBT. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 70-71. | 0.0 | 2 |
| 99 | Searching for Faint Exozodiacal Disks: Keck Results and LBTI Status. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 332-333. | 0.0 | 0 |
| 100 | An interferometric study of the Fomalhaut inner debris disk. <i>Astronomy and Astrophysics</i> , 2013, 555, A146. | 2.1 | 54 |
| 101 | A near-infrared interferometric survey of debris-disc stars. <i>Astronomy and Astrophysics</i> , 2013, 555, A104. | 2.1 | 94 |
| 102 | Keck Interferometer Nuller science highlights. <i>Proceedings of SPIE</i> , 2012, , . | 0.8 | 0 |
| 103 | Parasitic interference in classical and nulling stellar interferometry. <i>Proceedings of SPIE</i> , 2012, , . | 0.8 | 0 |
| 104 | Studying hot exozodiacal dust with near-infrared interferometry. , 2012, , . | | 1 |
| 105 | Direct imaging of exoEarths embedded in clumpy debris disks. <i>Proceedings of SPIE</i> , 2012, , . | 0.8 | 12 |
| 106 | Hot circumstellar material resolved around β Pic with VLT/PIONIER. <i>Astronomy and Astrophysics</i> , 2012, 546, L9. | 2.1 | 31 |
| 107 | Hot exozodiacal dust resolved around Vega with IOTA/IONIC. <i>Astronomy and Astrophysics</i> , 2011, 534, A5. | 2.1 | 49 |
| 108 | Nulling interferometry: impact of exozodiacal clouds on the performance of future life-finding space missions. <i>Astronomy and Astrophysics</i> , 2010, 509, A9. | 2.1 | 49 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Exozodiacal discs with ALADDIN: how faint can we detect them?. EAS Publications Series, 2010, 40, 257-262. | 0.3 | 0 |
| 110 | Direct imaging of Earth-like planets: why we care about exozodis. Proceedings of SPIE, 2010, , . | 0.8 | 2 |
| 111 | Potential of balloon payloads for in flight validation of direct and nulling interferometry concepts. Proceedings of SPIE, 2010, , . | 0.8 | 1 |
| 112 | The planar optics phase sensor: a study for the VLTI 2nd generation fringe tracker. , 2010, , . | | 1 |
| 113 | The Search for Worlds Like Our Own. Astrobiology, 2010, 10, 5-17. | 1.5 | 16 |
| 114 | Darwinâ€™an experimental astronomy mission to search for extrasolar planets. Experimental Astronomy, 2009, 23, 435-461. | 1.6 | 74 |
| 115 | PEGASE, an infrared interferometer to study stellar environments and low mass companions around nearby stars. Experimental Astronomy, 2009, 23, 403-434. | 1.6 | 21 |
| 116 | <i>Darwin</i>â€™A Mission to Detect and Search for Life on Extrasolar Planets. Astrobiology, 2009, 9, 1-22. | 1.5 | 112 |
| 117 | Polar-interferometry: what can be learnt from the IOTA/IONIC experiment. Proceedings of SPIE, 2008, , . | 0.8 | 3 |
| 118 | Earth-like planets: science performance predictions for future nulling interferometry missions. , 2008, , . | | 1 |
| 119 | Science case for 1 mas spectro-imaging in the near-infrared. , 2008, , . | | 0 |
| 120 | High dynamic range interferometric observations of exozodiacal discs: performance comparison between ground, space, and Antarctica. Proceedings of SPIE, 2008, , . | 0.8 | 0 |
| 121 | Nulling interferometry: performance comparison between space and ground-based sites for exozodiacal disc detection. Astronomy and Astrophysics, 2008, 490, 435-445. | 2.1 | 13 |
| 122 | A near-infrared interferometric survey of debris disc stars. Astronomy and Astrophysics, 2008, 487, 1041-1054. | 2.1 | 53 |
| 123 | Pioneer Anomaly: What Can We Learn from LISA?. Astrophysics and Space Science Library, 2008, , 605-629. | 1.0 | 0 |
| 124 | Potential of space-based infrared Bracewell interferometers for planet detection. , 2007, , . | | 1 |
| 125 | Fresnel rhombs as achromatic phase shifters for infrared nulling interferometry. Optics Express, 2007, 15, 12850. | 1.7 | 29 |
| 126 | A near-infrared interferometric survey of debris disk stars. Astronomy and Astrophysics, 2007, 475, 243-250. | 2.1 | 95 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|----|-----------|
| 127 | The 4m international liquid mirror telescope (ILMT). , 2006, , . | | 4 |