Frantz Martinache

List of Publications by Year
in descending order

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71	2,047	304743	265206
papers	citations	22 h-index	42 g-index

71	71	71	1440
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Images of embedded Jovian planet formation at a wide separation around AB Aurigae. Nature Astronomy, 2022, 6, 751-759.	10.1	63
2	Mid-infrared photometry of the T Tauri triple system with kernel phase interferometry. Astronomy and Astrophysics, 2021, 646, A36.	5.1	2
3	SCExAO/MEC and CHARIS Discovery of a Low-mass, 6 au Separation Companion to HIP 109427 Using Stochastic Speckle Discrimination and High-contrast Spectroscopy*. Astronomical Journal, 2021, 162, 44.	4.7	17
4	First on-sky demonstration of spatial Linear Dark Field Control with the vector-Apodizing Phase Plate at Subaru/SCExAO. Astronomy and Astrophysics, 2021, 653, A42.	5.1	6
5	Wavefront sensing using non-redundant aperture masking interferometry: tests and validation on Subaru/SCExAO. , 2021, , .		0
6	SCExAO: a testbed for developing high-contrast imaging technologies for ELTs. , 2021, , .		3
7	Multiband Imaging of the HD 36546 Debris Disk: A Refined View from SCExAO/CHARIS*. Astronomical Journal, 2021, 162, 293.	4.7	5
8	Subaru Near-infrared Imaging Polarimetry of Misaligned Disks around the SR 24 Hierarchical Triple System*. Astronomical Journal, 2020, 159, 12.	4.7	5
9	High-resolution survey for planetary companions to young stars in the Taurus molecular cloud. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1382-1396.	4.4	7
10	Kernel-phase analysis: Aperture modeling prescriptions that minimize calibration errors. Astronomy and Astrophysics, 2020, 636, A72.	5.1	8
11	Angular differential kernel phases. Astronomy and Astrophysics, 2020, 636, A21.	5.1	5
12	On-sky verification of Fast and Furious focal-plane wavefront sensing: Moving forward toward controlling the island effect at Subaru/SCExAO. Astronomy and Astrophysics, 2020, 639, A52.	5.1	17
13	Kernel nullers for an arbitrary number of apertures. Astronomy and Astrophysics, 2020, 642, A202.	5.1	7
14	The MKID Exoplanet Camera for Subaru SCExAO. Publications of the Astronomical Society of the Pacific, 2020, 132, 125005.	3.1	32
15	On-sky performance and recent results from the Subaru coronagraphic extreme adaptive optics system. , 2020, , .		11
16	Atmospheric Characterization and Further Orbital Modeling of Î² Andromeda b. Astronomical Journal, 2020, 159, 40.	4.7	4
17	Precision Photometric and Astrometric Calibration Using Alternating Satellite Speckles. Astronomical Journal, 2020, 159, 250.	4.7	9
18	SCExAO/CHARIS Near-infrared Integral Field Spectroscopy of the HD 15115 Debris Disk. Astronomical Journal, 2020, 160, 163.	4.7	12

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19	High-resolution Near-infrared Polarimetry and Submillimeter Imaging of FS Tau A: Possible Streamers in Misaligned Circumbinary Disk System. Astrophysical Journal, 2020, 889, 140.	4.5	3
20	SCExAO/CHARIS Direct Imaging Discovery of a 20 au Separation, Low-mass Ratio Brown Dwarf Companion to an Accelerating Sun-like Star [*]. Astrophysical Journal Letters, 2020, 904, L25.	8.3	33
21	SCExAO/CHARIS High-contrast Imaging of Spirals and Darkening Features in the HD 34700 A Protoplanetary Disk. Astrophysical Journal, 2020, 900, 135.	4.5	15
22	A Chromaticity Analysis and PSF Subtraction Techniques for SCExAO/CHARIS Data. Astronomical Journal, 2019, 158, 36.	4.7	6
23	No Clear, Direct Evidence for Multiple Protoplanets Orbiting LkCa 15: LkCa 15 bcd are Likely Inner Disk Signals. Astrophysical Journal Letters, 2019, 877, L3.	8.3	67
24	Kernel phase imaging with VLT/NACO: high-contrast detection of new candidate low-mass stellar companions at the diffraction limit. Monthly Notices of the Royal Astronomical Society, 2019, 486, 639-654.	4.4	18
25	Multi-epoch Direct Imaging and Time-variable Scattered Light Morphology of the HD 163296 Protoplanetary Disk. Astrophysical Journal, 2019, 875, 38.	4.5	23
26	Visible and Near-infrared Laboratory Demonstration of a Simplified Pyramid Wavefront Sensor. Publications of the Astronomical Society of the Pacific, 2019, 131, 044503.	3.1	14
27	Isochronal age-mass discrepancy of young stars: SCExAO/CHARIS integral field spectroscopy of the HIP 79124 triple system. Astronomy and Astrophysics, 2019, 622, A42.	5.1	20
28	Kernel-phase detection limits. Astronomy and Astrophysics, 2019, 630, A120.	5.1	9
29	Focal-plane wavefront sensing with the vector-Apodizing Phase Plate. Astronomy and Astrophysics, 2019, 632, A48.	5.1	16
30	Recovering saturated images for high dynamic kernel-phase analysis. Astronomy and Astrophysics, 2019, 623, A164.	5.1	7
31	Performance and early science with the Subaru Coronagraphic Extreme Adaptive Optics project. , 2019, , .		5
32	Calibration of the island effect: Experimental validation of closed-loop focal plane wavefront control on Subaru/SCExAO. Astronomy and Astrophysics, 2018, 610, A18.	5.1	23
33	Kernel-nulling for a robust direct interferometric detection of extrasolar planets. Astronomy and Astrophysics, 2018, 619, A87.	5.1	20
34	SCExAO/CHARIS Near-IR High-contrast Imaging and Integral Field Spectroscopy of the HIP 79977 Debris Disk. Astronomical Journal, 2018, 156, 279.	4.7	17
35	SCExAO/CHARIS Near-infrared Direct Imaging, Spectroscopy, and Forward-Modeling of Î² And b: A Likely Young, Low-gravity Superjovian Companion. Astronomical Journal, 2018, 156, 291.	4.7	39
36	Measurements of Speckle Lifetimes in Near-infrared Extreme Adaptive Optics Images for Optimizing Focal Plane Wavefront Control. Publications of the Astronomical Society of the Pacific, 2018, 130, 104502.	3.1	6

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37	On-sky Closed-loop Correction of Atmospheric Dispersion for High-contrast Coronagraphy and Astrometry. Publications of the Astronomical Society of the Pacific, 2018, 130, 025004.	3.1	2
38	An H-band Vector Vortex Coronagraph for the Subaru Coronagraphic Extreme Adaptive Optics System. Publications of the Astronomical Society of the Pacific, 2018, 130, 035001.	3.1	10
39	Laboratory and On-sky Validation of the Shaped Pupil Coronagraphâ€™s Sensitivity to Low-order Aberrations With Active Wavefront Control. Publications of the Astronomical Society of the Pacific, 2018, 130, 044505.	3.1	16
40	SCExAO, an instrument with a dual purpose: perform cutting-edge science and develop new technologies. , 2018, , .		23
41	The compute and control for adaptive optics (CACAO) real-time control software package. , 2018, , .		10
42	Subaru Coronagraphic Extreme-AO (SCExAO) wavefront control: current status and ongoing developments. , 2018, , .		2
43	Image-plane fringe tracker for adaptive-optics assisted long baseline interferometry. , 2018, , .		2
44	Efficient injection from large telescopes into single-mode fibres: Enabling the era of ultra-precision astronomy. Astronomy and Astrophysics, 2017, 604, A122.	5.1	61
45	A High-precision Technique to Correct for Residual Atmospheric Dispersion in High-contrast Imaging Systems. Publications of the Astronomical Society of the Pacific, 2016, 128, 124404.	3.1	10
46	Spectrally dispersed Fourier-phase analysis for redundant apertures. Proceedings of SPIE, 2016, , .	0.8	5
47	First on-sky closed loop measurement and correction of atmospheric dispersion. Proceedings of SPIE, 2016, , .	0.8	1
48	The SCExAO high contrast imager: transitioning from commissioning to science. Proceedings of SPIE, 2016, , .	0.8	9
49	Closed-loop focal plane wavefront control with the SCExAO instrument. Astronomy and Astrophysics, 2016, 593, A33.	5.1	18
50	The Palomar kernel-phase experiment: testing kernel phase interferometry for ground-based astronomical observations. Monthly Notices of the Royal Astronomical Society, 2016, 455, 1647-1653.	4.4	13
51	On-Sky Demonstration of Low-Order Wavefront Sensing and Control with Focal Plane Phase Mask Coronagraphs. Publications of the Astronomical Society of the Pacific, 2015, 127, 857-869.	3.1	27
52	ARTIFICIAL INCOHERENT SPECKLES ENABLE PRECISION ASTROMETRY AND PHOTOMETRY IN HIGH-CONTRAST IMAGING. Astrophysical Journal Letters, 2015, 813, L24.	8.3	38
53	The Subaru Coronagraphic Extreme Adaptive Optics System: Enabling High-Contrast Imaging on Solar-System Scales. Publications of the Astronomical Society of the Pacific, 2015, 127, 890-910.	3.1	279
54	The VAMPIRES instrument: imaging the innermost regions of protoplanetary discs with polarimetric interferometry. Monthly Notices of the Royal Astronomical Society, 2015, 447, 2894-2906.	4.4	44

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55	On-sky speckle nulling with the Subaru Coronagraphic Extreme AO (SCExAO) instrument. Proceedings of SPIE, 2014, , .	0.8	4
56	A demonstration of wavefront sensing and mirror phasing from the image domain. Monthly Notices of the Royal Astronomical Society, 2014, 440, 125-133.	4.4	24
57	Construction and status of the CHARIS high contrast imaging spectrograph. Proceedings of SPIE, 2014, , .	0.8	8
58	On-Sky Speckle Nulling Demonstration at Small Angular Separation with SCExAO. Publications of the Astronomical Society of the Pacific, 2014, 126, 565-572.	3.1	70
59	The Asymmetric Pupil Fourier Wavefront Sensor. Publications of the Astronomical Society of the Pacific, 2013, 125, 422-430.	3.1	57
60	DANCING IN THE DARK: NEW BROWN DWARF BINARIES FROM KERNEL PHASE INTERFEROMETRY. Astrophysical Journal, 2013, 767, 110.	4.5	25
61	Design of the CHARIS integral field spectrograph for exoplanet imaging. Proceedings of SPIE, 2013, , .	0.8	6
62	Speckle Control with a Remapped-Pupil PIAA Coronagraph. Publications of the Astronomical Society of the Pacific, 2012, 124, 1288-1294.	3.1	38
63	Conceptual design of the Coronagraphic High Angular Resolution Imaging Spectrograph (CHARIS) for the Subaru telescope. Proceedings of SPIE, 2012, , .	0.8	24
64	ESTABLISHING Î± Oph AS A PROTOTYPE ROTATOR: IMPROVED ASTROMETRIC ORBIT. Astrophysical Journal, 2011, 726, 104.	4.5	25
65	MAPPING THE SHORES OF THE BROWN DWARF DESERT. II. MULTIPLE STAR FORMATION IN TAURUS-AURIGA. Astrophysical Journal, 2011, 731, 8.	4.5	260
66	KERNEL PHASE IN FIZEAU INTERFEROMETRY. Astrophysical Journal, 2010, 724, 464-469.	4.5	90
67	VISUAL ORBIT OF THE LOW-MASS BINARY GJ 164 AB. Astrophysical Journal, 2009, 695, 1183-1190.	4.5	24
68	Phase-Induced Amplitude Apodization on Centrally Obscured Pupils: Design and First Laboratory Demonstration for the Subaru Telescope Pupil. Publications of the Astronomical Society of the Pacific, 2009, 121, 1232-1244.	3.1	19
69	Mapping the Shores of the Brown Dwarf Desert. I. Upper Scorpius. Astrophysical Journal, 2008, 679, 762-782.	4.5	176
70	Precision Masses of the Lowâ€Mass Binary System GJ 623. Astrophysical Journal, 2007, 661, 496-501.	4.5	33
71	Sparse-aperture adaptive optics. , 2006, , .		40