

Franz Kerschbaum

List of Publications by Year in descending order

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126
papers

4,852
citations

159585

30
h-index

91884

69
g-index

130
all docs

130
docs citations

130
times ranked

4186
citing authors

#	ARTICLE	IF	CITATIONS
1	The Photodetector Array Camera and Spectrometer (PACS) on the Herschel Space Observatory. <i>Astronomy and Astrophysics</i> , 2010, 518, L2.	5.1	1,880
2	A chemical survey of exoplanets with ARIEL. <i>Experimental Astronomy</i> , 2018, 46, 135-209.	3.7	249
3	A far-infrared survey of bow shocks and detached shells around AGB stars and red supergiants. <i>Astronomy and Astrophysics</i> , 2012, 537, A35.	5.1	149
4	Unexpectedly large mass loss during the thermal pulse cycle of the red giant star R Sculptoris. <i>Nature</i> , 2012, 490, 232-234.	27.8	127
5	Mass loss rates of a sample of irregular and semiregular M-type AGB-variables. <i>Astronomy and Astrophysics</i> , 2002, 391, 1053-1067.	5.1	127
6	^{28}SiO radio line emission towards M-type AGB stars: A probe of circumstellar dust formation and dynamics. <i>Astronomy and Astrophysics</i> , 2003, 411, 123-147.	5.1	123
7	Dust shells around carbon Mira variables. <i>Monthly Notices of the Royal Astronomical Society</i> , 1998, 293, 18-42.	4.4	114
8	MESS (Mass-loss of Evolved StarS), a Herschel key program. <i>Astronomy and Astrophysics</i> , 2011, 526, A162.	5.1	93
9	SPICA – A Large Cryogenic Infrared Space Telescope: Unveiling the Obscured Universe. <i>Publications of the Astronomical Society of Australia</i> , 2018, 35, .	3.4	90
10	Warm water vapour in the sooty outflow from a luminous carbon star. <i>Nature</i> , 2010, 467, 64-67.	27.8	87
11	Infrared optical properties of spinels. <i>Astronomy and Astrophysics</i> , 2001, 373, 1125-1138.	5.1	85
12	The enigmatic nature of the circumstellar envelope and bow shock surrounding Betelgeuse as revealed by Herschel. <i>Astronomy and Astrophysics</i> , 2012, 548, A113.	5.1	76
13	The wonderful complexity of the Mira AB system. <i>Astronomy and Astrophysics</i> , 2014, 570, L14.	5.1	62
14	Oxygen-rich semiregular and irregular variables. <i>Astronomy and Astrophysics</i> , 1999, 138, 299-322.	2.1	60
15	On the origin of the $19.5\ \mu\text{m}$ feature. <i>Astronomy and Astrophysics</i> , 2002, 393, L7-L10.	5.1	59
16	Infrared Properties of Solid Titanium Oxides: Exploring Potential Primary Dust Condensates. <i>Astrophysical Journal, Supplement Series</i> , 2003, 149, 437-445.	7.7	50
17	Long period variables detected by ISO in the Small Magellanic Cloud. <i>Astronomy and Astrophysics</i> , 2003, 406, 51-63.	5.1	49
18	An independent distance estimate to CW Leonis. <i>Astronomy and Astrophysics</i> , 2012, 543, L8.	5.1	44

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19	A census of AGB stars in Local Group galaxies. <i>Astronomy and Astrophysics</i> , 2003, 403, 93-103.	5.1	43
20	Large granulation cells on the surface of the giant star ϵ Cruis. <i>Nature</i> , 2018, 553, 310-312.	27.8	42
21	The wind of ω Hydrae as seen by <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2014, 561, A5.	5.1	41
22	Detection of anhydrous hydrochloric acid, HCl, in IRC+10216 with <i>Herschel</i> SPIRE and PACS spectrometers. <i>Astronomy and Astrophysics</i> , 2010, 518, L136.	5.1	39
23	Probing the inner wind of AGB stars: Interferometric observations of SiO millimetre line emission from the oxygen-rich stars R Dor and L2 Pup. <i>Astronomy and Astrophysics</i> , 2004, 422, 651-663.	5.1	37
24	The Photodetector Array Camera and Spectrometer (PACS) for the Herschel Space Observatory. <i>Proceedings of SPIE</i> , 2008, , .	0.8	35
25	<i>Herschel</i> 's view into Mira's head. <i>Astronomy and Astrophysics</i> , 2011, 531, L4.	5.1	35
26	ALMA sub-mm maser and dust distribution of VY Canis Majoris. <i>Astronomy and Astrophysics</i> , 2014, 572, L9.	5.1	35
27	Discovery of multiple dust shells beyond 1 arcmin in the circumstellar envelope of IRC+10216 using <i>Herschel</i> PACS. <i>Astronomy and Astrophysics</i> , 2011, 534, A1.	5.1	34
28	Multi-colour light variation of AGB stars observed with ISO. <i>Astronomy and Astrophysics</i> , 2001, 375, 527-538.	5.1	33
29	The detached dust shells of AQ Andromedae, U Antliae, and TT Cygni. <i>Astronomy and Astrophysics</i> , 2010, 518, L140.	5.1	32
30	<i>Herschel</i> PACS and SPIRE imaging of CW Leonis. <i>Astronomy and Astrophysics</i> , 2010, 518, L141.	5.1	32
31	The EChO science case. <i>Experimental Astronomy</i> , 2015, 40, 329-391.	3.7	31
32	The circumstellar envelope around the S-type AGB star W Aql. <i>Astronomy and Astrophysics</i> , 2017, 605, A126.	5.1	31
33	Large-scale environments of binary AGB stars probed by <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2013, 549, A69.	5.1	30
34	Silicon in the dust formation zone of IRC+10216. <i>Astronomy and Astrophysics</i> , 2010, 518, L143.	5.1	29
35	The evolutionary state of Miras with changing pulsation periods. <i>Astronomy and Astrophysics</i> , 2011, 531, A88.	5.1	29
36	The SAFARI imaging spectrometer for the SPICA space observatory. <i>Proceedings of SPIE</i> , 2012, , .	0.8	29

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37	The wind of W Hydrae as seen by <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2014, 570, A67.	5.1	29
38	A detailed view of the gas shell around R Sculptoris with ALMA. <i>Astronomy and Astrophysics</i> , 2016, 586, A5.	5.1	28
39	DEATHSTAR: Nearby AGB stars with the Atacama Compact Array. <i>Astronomy and Astrophysics</i> , 2020, 640, A133.	5.1	27
40	Lunar phases and survival of breast cancer patients – a statistical analysis of 3,757 cases. <i>Breast Cancer Research and Treatment</i> , 2001, 70, 131-135.	2.5	26
41	PACS and SPIRE spectroscopy of the red supergiant VY CMa. <i>Astronomy and Astrophysics</i> , 2010, 518, L145.	5.1	25
42	Reduction of the maximum mass-loss rate of OH/IR stars due to unnoticed binary interaction. <i>Nature Astronomy</i> , 2019, 3, 408-415.	10.1	24
43	XÂHerculis and TXÂPiscium: two cases of ISM interaction with stellar winds observed by <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2011, 532, A135.	5.1	23
44	The extended molecular envelope of the asymptotic giant branch star ϵ Gruis as seen by ALMA. <i>Astronomy and Astrophysics</i> , 2017, 605, A28.	5.1	23
45	Bolometric corrections for cool giants based on near-infrared photometry. <i>Astronomy and Astrophysics</i> , 2010, 524, A87.	5.1	23
46	The ALMA detection of CO rotational line emission in AGB stars in the Large Magellanic Cloud. <i>Astronomy and Astrophysics</i> , 2016, 596, A50.	5.1	22
47	H ₂ O in stellar atmospheres. <i>Astronomy and Astrophysics</i> , 2002, 395, 915-927.	5.1	21
48	Large-scale environments of binary AGB stars probed by <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2014, 570, A113.	5.1	21
49	A census of AGB stars in Local Group galaxies. <i>Astronomy and Astrophysics</i> , 2001, 367, 557-565.	5.1	21
50	MATISSE: perspective of imaging in the mid-infrared at the VLTI. <i>Proceedings of SPIE</i> , 2008, , .	0.8	20
51	<i>Herschel</i> /PACS observations of the 69 μ m band of crystalline olivine around evolved stars. <i>Astronomy and Astrophysics</i> , 2014, 565, A109.	5.1	20
52	Irregular variables of type Lb. New JHKLM-photometry for 160 stars. <i>Astronomy and Astrophysics</i> , 1996, 118, 397-405.	2.1	20
53	An extensive Δ α -photometric survey of southern B and A type bright stars. <i>Astronomy and Astrophysics</i> , 1998, 130, 455-464.	2.1	20
54	Far-infrared spectra of hydrous silicates at low temperatures. <i>Astronomy and Astrophysics</i> , 2008, 492, 117-125.	5.1	18

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55	<i>Herschel</i> observations of extreme OH/IR stars. <i>Astronomy and Astrophysics</i> , 2015, 578, A115.	5.1	18
56	Long-period variables in NGC 147 and NGC 185. <i>Astronomy and Astrophysics</i> , 2011, 532, A78.	5.1	17
57	The VLTI/MIDI view on the inner mass loss of evolved stars from the <i>Herschel</i> MESS sample. <i>Astronomy and Astrophysics</i> , 2017, 600, A136.	5.1	16
58	A far-infrared survey of bow shocks and detached shells around AGB stars and red supergiants (<i>Corrigendum</i>). <i>Astronomy and Astrophysics</i> , 2012, 543, C1.	5.1	16
59	Constraints on the H ₂ O formation mechanism in the wind of carbon-rich AGB stars. <i>Astronomy and Astrophysics</i> , 2016, 588, A124.	5.1	15
60	Rings and filaments: The remarkable detached CO shell of U Antliae. <i>Astronomy and Astrophysics</i> , 2017, 605, A116.	5.1	15
61	<i>Herschel</i> spectral mapping of the Helix nebula (NGC 7293). <i>Astronomy and Astrophysics</i> , 2014, 566, A78.	5.1	14
62	The extended molecular envelope of the asymptotic giant branch star ϵ Gruis as seen by ALMA. <i>Astronomy and Astrophysics</i> , 2020, 633, A13.	5.1	13
63	ALMA observations of the variable $^{12}\text{CO}/^{13}\text{CO}$ ratio around the asymptotic giant branch star R Sculptoris. <i>Astronomy and Astrophysics</i> , 2013, 556, L1.	5.1	13
64	The photodetector array camera and spectrometer (PACS) for the Herschel Space Observatory. , 2006, 6265, 69.		12
65	SAFARI new and improved: extending the capabilities of SPICA's imaging spectrometer. <i>Proceedings of SPIE</i> , 2014, , .	0.8	12
66	ALMA observations of the "fresh" carbon-rich AGB star TX Piscium. <i>Astronomy and Astrophysics</i> , 2019, 621, A50.	5.1	12
67	Near-infrared variability of a sample of galactic carbon Miras. <i>Astronomy and Astrophysics</i> , 2006, 460, 539-545.	5.1	10
68	The geometry of the close environment of SV Piscium as probed by VLTI/MIDI. <i>Astronomy and Astrophysics</i> , 2012, 541, A164.	5.1	10
69	Dusty shells surrounding the carbon variables S Scuti and RT Capricorni. <i>Astronomy and Astrophysics</i> , 2014, 566, A69.	5.1	10
70	A census of AGB stars in Local Group galaxies. <i>Astronomy and Astrophysics</i> , 2004, 427, 613-619.	5.1	10
71	Molecular line study of the S-type AGB star W Aquilae. <i>Astronomy and Astrophysics</i> , 2018, 617, A23.	5.1	9
72	Modelling the carbon AGB star R Sculptoris. <i>Astronomy and Astrophysics</i> , 2018, 614, A17.	5.1	9

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73	The photodetector array camera and spectrometer (PACS) for the Herschel Space Observatory. , 2004, , .		8
74	Infrared spectra of C-type variables with ISO. Symposium - International Astronomical Union, 1999, 191, 181-186.	0.1	5
75	On-board Data Processing to Lower Bandwidth Requirements on an Infrared Astronomy Satellite: Case of Herschel-PACS Camera. Eurasip Journal on Advances in Signal Processing, 2005, 2005, 1.	1.7	5
76	Fitting of dust spectra with genetic algorithms. Astronomy and Astrophysics, 2010, 516, A45.	5.1	4
77	Spectro-Imaging of the Asymmetric Inner Molecular and Dust Shell Region of the Mira Variable W Hya with MIDI/VLTI¹. Publications of the Astronomical Society of the Pacific, 2015, 127, 732-741.	3.1	4
78	DEATHSTAR: nearby AGB stars with the Atacama Compact Array. Astronomy and Astrophysics, 2021, 653, A53.	5.1	4
79	Dust Features of Visually Bright AGB Variables as Seen by ISO and IRAS. Astrophysics and Space Science, 1997, 251, 211-214.	1.4	3
80	The Pulsation of M-type Miras: Multi-Epoch ISO-SWS Observations and Dynamical Models. International Astronomical Union Colloquium, 2002, 185, 538-541.	0.1	3
81	Otto von Littrow and his spectrograph. Astronomische Nachrichten, 2009, 330, 574-577.	1.2	3
82	Improving Herschel imaging datasets. Proceedings of SPIE, 2014, , .	0.8	3
83	WFI electronics and on-board data processing. Proceedings of SPIE, 2016, , .	0.8	3
84	The design of the instrument control unit and its role within the data processing system of the ESA PLATO Mission. , 2018, , .		3
85	HERSCHEL/PACS on-board reduction flight software. Proceedings of SPIE, 2008, , .	0.8	2
86	O-rich SR and Mira variables in DENIS. Astrophysics and Space Science, 1994, 217, 137-138.	1.4	1
87	Synthetic Spectra of Long-Period Variables: A First Comparison with ISO Observations. Astrophysics and Space Science, 1997, 251, 243-246.	1.4	1
88	Dust Shells Around Carbon Mira Variables. Astrophysics and Space Science, 1997, 251, 89-96.	1.4	1
89	Atmospheric Structure and Mass Loss of O-rich Long Period Variables. A Confrontation of Models with ISO-SWS Observations. Symposium - International Astronomical Union, 1999, 191, 169-174.	0.1	1
90	Visual and Near-Infrared Photometry of Nearby Dwarf Spheroidals. Symposium - International Astronomical Union, 1999, 192, 455-458.	0.1	1

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91	<title>Data reduction concept for FIRST/PACS</title>. , 2000, , .		1
92	Gas and Dust Mass Loss of O-rich AGB-stars. , 0, , 171-189.		1
93	Herschel/PACS on-board reduction/compression software implementation. , 2004, , .		1
94	The Exoplanet Characterization Observatory (EChO): performance model<i>EclipseSim</i>and applications. Proceedings of SPIE, 2012, , .	0.8	1
95	On-board target acquisition for CHEOPS. Proceedings of SPIE, 2016, , .	0.8	1
96	Outburst OH maser activity in the envelopes of Sâ€™Persei and VXâ€™Sagittarii. Astronomy and Astrophysics, 2010, 524, A99.	5.1	1
97	Dusty Giants going SAFARI. , 2009, , .		1
98	SAFARI: Imaging Spectrometer for the SPICA space observatory. , 2013, , .		1
99	Extended view on the dust shells around two carbon stars. Astronomy and Astrophysics, 2020, 644, A66.	5.1	1
100	CO observations of semiregular variables. Astrophysics and Space Science, 1995, 224, 499-500.	1.4	0
101	On the Nature of M stars with a 60 microns Excess. International Astronomical Union Colloquium, 1995, 155, 425-426.	0.1	0
102	Blackbody Fits of Semiregular Variables. International Astronomical Union Colloquium, 1995, 155, 407-408.	0.1	0
103	Molecular Features in ISO-SWS Spectra of O-Rich Long-Period Variables. Astrophysics and Space Science, 1997, 255, 255-256.	1.4	0
104	Dust Emission from AGB Stars ISO-SWS Observations of Long-Period Variables. Astrophysics and Space Science, 1997, 255, 445-446.	1.4	0
105	ISOCAM and DENIS Survey of 0.5 square degrees in the Bar of the LMC. Detection of the whole TP-AGB Star Population. Symposium - International Astronomical Union, 1999, 191, 561-566.	0.1	0
106	<title>Evaluation of FIRST/PACS data compression on ISO data</title>. , 2000, 4013, 253.		0
107	The Shape of Silicate Features in Semiregular and Mira Variables. Symposium - International Astronomical Union, 2000, 177, 539-539.	0.1	0
108	Comparison of C-Rich Mira, Semiregular, and Irregular Variables. Symposium - International Astronomical Union, 2000, 177, 547-547.	0.1	0

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109	A census of AGB stars in the Milky Way and M31 subgroups of dwarf-spheroidal galaxies. International Astronomical Union Colloquium, 2004, 193, 153-157.	0.1	0
110	A feasibility study of on-board data compression for infrared cameras of space observatories. , 2004, , .		0
111	Optics and the nature of light illustrated in the rare book collection of the Astronomy Library in Vienna. Astronomische Nachrichten, 2009, 330, 540-543.	1.2	0
112	Variable Red Giants. Proceedings of the International Astronomical Union, 2011, 7, 111-116.	0.0	0
113	LPVs in NGC 147 and NGC 185. EAS Publications Series, 2011, 48, 33-34.	0.3	0
114	To be or not to be asymmetric? VLTI and the mass loss geometry of red giants. Proceedings of SPIE, 2012, , .	0.8	0
115	EChO fine guidance sensor design and architecture. , 2014, , .		0
116	BASKET on-board software library. Proceedings of SPIE, 2014, , .	0.8	0
117	ALMA spectrum of the extreme OH/IR star OH 26.5+0.6. Proceedings of the International Astronomical Union, 2018, 14, 436-437.	0.0	0
118	The discovery of an asymmetric detached shell around the "fresh" carbon AGB star TX Psc. Proceedings of the International Astronomical Union, 2018, 14, 360-361.	0.0	0
119	Constraining convection across the AGB with high-angular-resolution observations. Proceedings of the International Astronomical Union, 2018, 14, 27-30.	0.0	0
120	Dust properties in the circumstellar environment of carbon stars. Proceedings of the International Astronomical Union, 2018, 14, 466-467.	0.0	0
121	LPVs as Possible Distance Indicators in NGC147 and NGC185. Thirty Years of Astronomical Discovery With UKIRT, 2012, , 169-172.	0.3	0
122	Near IR-Photometry of Semiregular Variables. , 1993, , 326-326.		0
123	Infrared Properties of Stars on the Asymptotic Giant Branch. Semiregular Variable Stars of Types SRa and SRb. Publications of the Astronomical Society of the Pacific, 1993, 105, 1496.	3.1	0
124	Dust Features of Visually Bright AGB Variables as Seen by ISO and IRAS. , 1997, , 211-214.		0
125	Molecular Features in ISO-SWS Spectra of O-Rich Long-Period Variables. , 1998, , 255-256.		0
126	Herschel and the invisible end of the rainbow. Proceedings of the International Astronomical Union, 2019, 15, 181-185.	0.0	0