Cesare Cecchi-Pestellini

List of Publications by Year
in descending order

101 papers	1,628 citations	304701 22 h-index	377849 34 g-index
101 all docs	101 docs citations	101 times ranked	1418 citing authors

#	Article	IF	Citations
1	Extreme-ultraviolet- and X-Ray-driven Photochemistry of Gaseous Exoplanets. Planetary Science Journal, 2022, 3, 1.	3.6	8
2	The GAPS Programme at TNG. Astronomy and Astrophysics, 2022, 658, A136.	5.1	20
3	X-Ray-induced Diffusion and Mixing in Layered Astrophysical Ices. Astrophysical Journal, 2022, 926, 176.	4.5	5
4	Planet interactions at a young age. Astronomische Nachrichten, 2022, 343, .	1.2	1
5	Organics on the Rocks: A Cosmic Origin for the Seeds of Life. Springer Proceedings in Physics, 2021, , 27-34.	0.2	0
6	Optical tweezers in a dusty universe. European Physical Journal Plus, 2021, 136, 1.	2.6	5
7	Atomistic simulations of the free-energy landscapes of interstellar chemical reactions: the case of methyl isocyanate. Monthly Notices of the Royal Astronomical Society, 2021, 504, 1565-1570.	4.4	6
8	A systematic study of CO2 planetary atmospheres and their link to the stellar environment. Monthly Notices of the Royal Astronomical Society, 2020, 496, 5350-5359.	4.4	2
9	Effects of 150â€“1000 eV Electron Impacts on Pure Carbon Monoxide Ices Using the Interstellar Energetic-Process System (IEPS). Astrophysical Journal, 2020, 889, 57.	4.5	11
10	X-ray processing of a realistic ice mantle can explain the gas abundances in protoplanetary disks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16149-16153.	7.1	16
11	X-ray versus Ultraviolet Irradiation of Astrophysical Ice Analogs Leading to Formation of Complex Organic Molecules. ACS Earth and Space Chemistry, 2019, 3, 2138-2157.	2.7	19
12	Synthesis of Complex Organic Molecules in Soft X-Ray Irradiated Ices. Astrophysical Journal, 2019, 879, 21.	4.5	24
13	Photo-evaporation of close-in gas giants orbiting around G and M stars. Astronomy and Astrophysics, 2019, 624, A101.	5.1	16
14	RÃ¶ntgen spheres around active stars. Monthly Notices of the Royal Astronomical Society, 2018, 473, 447-456.	4.4	9
15	X-Ray Photo-desorption of H₂O:CO:NH₃ Circumstellar Ice Analogs: Gas-phase Enrichment. Astrophysical Journal, 2018, 868, 73.	4.5	15
16	Dust Motions in Magnetized Turbulence: Source of Chemical Complexity. Astrophysical Journal Letters, 2018, 866, L23.	8.3	17
17	Chemical Evolution of Interstellar Methanol Ice Analogs upon Ultraviolet Irradiation: The Role of the Substrate. Astrophysical Journal, 2018, 858, 35.	4.5	14
18	X-RAY IRRADIATION OF H₂O + CO ICE MIXTURES WITH SYNCHROTRON LIGHT. Astrophysical Journal, 2016, 820, 25.	4.5	24

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19	SOFT X-RAY IRRADIATION OF SILICATES: IMPLICATIONS FORÂDUST EVOLUTION IN PROTOPLANETARY DISKS. Astrophysical Journal, 2016, 828, 29.	4.5	9
20	MODELING EXTRAGALACTIC EXTINCTION THROUGH GAMMA-RAY BURST AFTERGLOWS. Astrophysical Journal, 2016, 829, 22.	4.5	0
21	CHEMICAL EVOLUTION OF A CO ICE INDUCED BY SOFT X-RAYS. Astrophysical Journal, 2016, 819, 38.	4.5	17
22	MODELING DUST IN THE MAGELLANIC CLOUDS. Astrophysical Journal, 2015, 810, 70.	4.5	2
23	Redshifted diffuse interstellar bands in the Orion OB1 association. Monthly Notices of the Royal Astronomical Society, 2015, 451, 3210-3218.	4.4	7
24	EXTRAGALACTIC INTERSTELLAR EXTINCTION CURVES: INDICATORS OF LOCAL PHYSICAL CONDITIONS. Astrophysical Journal, 2014, 788, 100.	4.5	4
25	Preparing EChO space mission: laboratory simulation of planetary atmospheres. , 2014, , .		0
26	OBSERVATIONAL EVIDENCE OF DUST EVOLUTION IN GALACTIC EXTINCTION CURVES. Astrophysical Journal, 2014, 785, 41.	4.5	9
27	The formation of glycine and other complex organic molecules in exploding ice mantles. Faraday Discussions, 2014, 168, 369-388.	3.2	10
28	MODELING GALACTIC EXTINCTION WITH DUST AND â€œREALâ€•POLYCYCLIC AROMATIC HYDROCARBONS. Astrophysical Journal, Supplement Series, 2013, 207, 7.	7.7	28
29	Episodic explosions in interstellar ices. Monthly Notices of the Royal Astronomical Society, 2013, 430, 264-273.	4.4	35
30	SOFT X-RAY IRRADIATION OF METHANOL ICE: FORMATION OF PRODUCTS AS A FUNCTION OF PHOTON ENERGY. Astrophysical Journal, 2013, 778, 162.	4.5	51
31	A radical route to interstellar propylene formation. Monthly Notices of the Royal Astronomical Society: Letters, 2013, 436, L59-L63.	3.3	19
32	Modeling Galactic Extinction with dust and "real" PAHs. Journal of Physics: Conference Series, 2013, 470, 012009.	0.4	0
33	SOFT X-RAY IRRADIATION OF H₂S ICE AND THE PRESENCE OF S₂IN COMETS. Astrophysical Journal Letters, 2012, 751, L40.	8.3	33
34	HOT HYDROGEN IN DIFFUSE CLOUDS. Astrophysical Journal, 2012, 755, 119.	4.5	8
35	The nature of interstellar dust as revealed by light scattering. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 2310-2320.	2.3	7
36	EXCITATION OF C₂IN DIFFUSE INTERSTELLAR CLOUDS. Astrophysical Journal, 2012, 749, 48.	4.5	11

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37	SOFT X-RAY IRRADIATION OF PURE CARBON MONOXIDE INTERSTELLAR ICE ANALOGUES. Astrophysical Journal Letters, 2012, 746, L1.	8.3	23
38	Stratified dust grains in the interstellar medium. III. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1898-1906.	2.3	4
39	THE CHEMICAL AGE OF THE BOK GLOBULE CB238. Astronomical Journal, 2011, 142, 70.	4.7	0
40	Polycyclic Aromatic Hydrocarbons and the Extinction Curve. EAS Publications Series, 2011, 46, 327-340.	0.3	2
41	The young hard active Sun: soft X-ray irradiation of tryptophan in water solutions. International Journal of Astrobiology, 2011, 10, 67-75.	1.6	1
42	FORMATION PUMPING OF MOLECULAR HYDROGEN IN DARK CLOUDS. Astrophysical Journal, 2010, 725, 1111-1123.	4.5	18
43	SOFT X-RAY IRRADIATION OF METHANOL ICE: IMPLICATION FOR H ₂ CO FORMATION IN INTERSTELLAR REGIONS. Astrophysical Journal Letters, 2010, 722, L45-L48.	8.3	18
44	Radiative transfer modelling in protoplanetary disks with the Pâ€N Approximation and Monte Carlo techniques. Mathematical Methods in the Applied Sciences, 2010, 33, 1263-1273.	2.3	0
45	Modelling peculiar extinction curves. Monthly Notices of the Royal Astronomical Society, 2010, , no-no.	4.4	5
46	Large prebiotic molecules in space: photophysics of acetic acid and its isomers. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1667-1674.	4.4	14
47	A new Bok globule towards Cygnus OB2 No. 12. Monthly Notices of the Royal Astronomical Society, 2010, 407, 1255-1258.	4.4	3
48	CHEMISTRY IN EVAPORATING ICESâ€"UNEXPLORED TERRITORY. Astrophysical Journal, 2010, 725, 1581-1586.	4.5	10
49	ULTRAVIOLET RADIATION INSIDE INTERSTELLAR GRAIN AGGREGATES. III. FLUFFY GRAINS. Astrophysical Journal, 2009, 701, 1426-1435.	4.5	5
50	CHEMISTRY IN DIFFUSE CLOUDS WITH TRANSIENT MICROSTRUCTURE. Astrophysical Journal, 2009, 706, 1429-1432.	4.5	9
51	The relative role of EUV radiation and X-rays in the heating ofÂhydrogen-rich exoplanet atmospheres. Astronomy and Astrophysics, 2009, 496, 863-868.	5.1	46
52	Mass loss from â€œHot Jupitersâ€â€"Implications for CoRoT discoveries, Part II: Long time thermal atmospheric evaporation modeling. Planetary and Space Science, 2008, 56, 1260-1272.	1.7	80
53	The role of the charge state of PAHs in ultraviolet extinction. Astronomy and Astrophysics, 2008, 486, L25-L29.	5.1	54
54	Dehydrogenated polycyclic aromatic hydrocarbons and UV bump. Astronomy and Astrophysics, 2008, 489, 1183-1187.	5.1	44

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55	MARC: A code for the retrieval of atmospheric parameters from millimeter-wave limb measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 105, 476-491.	2.3	33
56	Retrieval of minor constituents in a cloudy atmosphere with remote-sensing millimetre-wave measurements. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 163-170.	2.7	9
57	Detection of CS emission towards CygnusÂOB2ÂNo.Â12. Astronomy and Astrophysics, 2007, 466, 243-246.	5.1	6
58	Light within small particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 157-164.	2.3	2
59	Stellar X-ray heating of planet atmospheres. Astronomy and Astrophysics, 2006, 458, L13-L16.	5.1	35
60	Ultraviolet Radiation inside Interstellar Grain Aggregates. I. The Density of Radiation. Astrophysical Journal, 2005, 624, 223-231.	4.5	10
61	Aggregation of interstellar dust grains: effects on optical properties and dynamical behaviour. Journal of Physics: Conference Series, 2005, 6, 149-154.	0.4	2
62	Ultraviolet Radiation inside Interstellar Grain Aggregates. II. Field Depolarization. Astrophysical Journal, 2005, 633, 953-966.	4.5	6
63	Retrieving physical conditions from interstellar H2emission lines: a non linear fitting technique. Journal of Physics: Conference Series, 2005, 6, 191-196.	0.4	3
64	On the polarization and depolarization of the electromagnetic waves. Journal of Physics: Conference Series, 2005, 6, 59-72.	0.4	4
65	The diffuse clouds towards Cyg OB2 No. 5 and No. 12. Monthly Notices of the Royal Astronomical Society, 2005, 359, 73-78.	4.4	10
66	H2 excitation in turbulent interstellar clouds. Monthly Notices of the Royal Astronomical Society, 2005, 364, 1309-1314.	4.4	13
67	Role of clays in protecting adsorbed DNA against X-ray radiation. International Journal of Astrobiology, 2004, 3, 31-35.	1.6	22
68	On the formation and survival of complex prebiotic molecules in interstellar grain aggregates. International Journal of Astrobiology, 2004, 3, 287-293.	1.6	10
69	Optical properties of interstellar grain aggregates. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 89, 43-51.	2.3	6
70	Optical Properties of Composite Interstellar Grains: A Morphological Analysis. Astrophysical Journal, 2004, 615, 286-299.	4.5	32
71	The Structure of the Small Dark Cloud CB 107. Astrophysical Journal, 2004, 616, 319-330.	4.5	7
72	Hydrated sulphuric acid in dense molecular clouds. Monthly Notices of the Royal Astronomical Society, 2003, 341, 657-661.	4.4	23

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73	Radiation pressure cross-sections of fluffy interstellar grains. Monthly Notices of the Royal Astronomical Society, 2003, 341, 1239-1245.	4.4	28
74	The far-ultraviolet signature of the â€˜missingâ€™ baryons in the Local Group of galaxies. Nature, 2003, 421, 719-721.	27.8	82
75	Rotational and Vibrational Excitation of CO Molecules by Collisions with4He Atoms. Astrophysical Journal, 2002, 571, 1015-1020.	4.5	47
76	C2absorption-line diagnostics of diffuse interstellar clouds. Monthly Notices of the Royal Astronomical Society, 2002, 331, L31-L34.	4.4	23
77	The discovery of clumpy structure in the diffuse gas towards Cyg OB2 No. 12. Monthly Notices of the Royal Astronomical Society, 2002, 337, 495-498.	4.4	13
78	Porous interstellar grains. Monthly Notices of the Royal Astronomical Society, 2001, 322, 749-756.	4.4	23
79	Dust-induced chemical differentiation in dense regions. Monthly Notices of the Royal Astronomical Society, 2001, 325, 826-834.	4.4	5
80	A kinetic model for dust coagulation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 70, 1-9.	2.3	2
81	Radiative transfer in a stochastic universe. New Astronomy, 2001, 6, 165-172.	1.8	2
82	Radiative transfer in a stochastic universe. New Astronomy, 2001, 6, 151-163.	1.8	9
83	Modelling the CO emission in southern Bok globules. Monthly Notices of the Royal Astronomical Society, 2001, 326, 1255-1260.	4.4	6
84	Beyond Mie Theory: The Transition Matrix Approach in Interstellar Dust Modeling. Astrophysical Journal, 2001, 559, 993-1004.	4.5	37
85	Dust Extinction in a Small Molecular Cloud. Astrophysical Journal, 2001, 558, 717-729.	4.5	16
86	H 2 Oâ€H 2 O Collision Rate Coefficients. Astrophysical Journal, Supplement Series, 2000, 128, 597-601.	7.7	23
87	H3+ in diffuse interstellar gas. Monthly Notices of the Royal Astronomical Society, 2000, 313, L6-L8.	4.4	30
88	Detection of HCO+ towards Cygnus OB2 No. 12. Monthly Notices of the Royal Astronomical Society, 2000, 317, L6-L10.	4.4	16
89	Mathematical methods for photon transport in random media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2000, 65, 835-851.	2.3	3
90	Radiative transfer in the stochastic interstellar medium. Transport Theory and Statistical Physics, 1999, 28, 199-228.	0.4	4

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91	Evolving interstellar extinction. Monthly Notices of the Royal Astronomical Society, 1998, 296, 414-418.	4.4	17
92	Millimeterâ€Wave Observations of Molecular Lines toward Bok Globules and Herbig Ae/Be Stars. Astrophysical Journal, 1998, 504, 866-873.	4.5	11
93	The regulatory role of Rv in the photochemistry of dark clouds. Planetary and Space Science, 1995, 43, 1319-1323.	1.7	2
94	Mapping UV radiation in dark clouds. Monthly Notices of the Royal Astronomical Society, 1995, 274, 134-146.	4.4	11
95	R V-dependent Interstellar Photodestruction Rates. Astrophysical Journal, Supplement Series, 1995, 100, 187.	7.7	11
96	Emission of HeH(+) in nebulae. Astrophysical Journal, 1993, 413, 611.	4.5	35
97	Cosmic ray induced photons in dense interstellar clouds. Monthly Notices of the Royal Astronomical Society, 1992, 258, 125-133.	4.4	85
98	A solution to the problem of radiation transfer in inhomogeneous media using the SHM. Journal of Quantitative Spectroscopy and Radiative Transfer, 1992, 47, 95-102.	2.3	3
99	Chemistry in Space. Il Nuovo Cimento Della SocietÃ Italiana Di Fisica C, 1992, 15, 1047-1069.	0.2	0
100	Stratified dust grains in the interstellar medium - I. An accurate computational method for calculating their optical properties. Monthly Notices of the Royal Astronomical Society, 0, 384, 591-598.	4.4	27
101	Stratified dust grains in the interstellar medium - II. Time-dependent interstellar extinction. Monthly Notices of the Royal Astronomical Society, 0, 408, 535-541.	4.4	26