

Arturo Manchado Torres

List of Publications by Year in descending order

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98
papers

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citations

186265
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docs citations

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6387
citing authors

#	ARTICLE	IF	CITATIONS
1	Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies, and the Distant Universe. <i>Astronomical Journal</i> , 2017, 154, 28.	4.7	1,100
2	The 16th Data Release of the Sloan Digital Sky Surveys: First Release from the APOGEE-2 Southern Survey and Full Release of eBOSS Spectra. <i>Astrophysical Journal, Supplement Series</i> , 2020, 249, 3.	7.7	826
3	The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the Extended Baryon Oscillation Spectroscopic Survey and from the Second Phase of the Apache Point Observatory Galactic Evolution Experiment. <i>Astrophysical Journal, Supplement Series</i> , 2018, 235, 42.	7.7	796
4	The 13th Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory. <i>Astrophysical Journal, Supplement Series</i> , 2017, 233, 25.	7.7	406
5	The Seventeenth Data Release of the Sloan Digital Sky Surveys: Complete Release of MaNGA, MaStar, and APOGEE-2 Data. <i>Astrophysical Journal, Supplement Series</i> , 2022, 259, 35.	7.7	405
6	The Fifteenth Data Release of the Sloan Digital Sky Surveys: First Release of MaNGA-derived Quantities, Data Visualization Tools, and Stellar Library. <i>Astrophysical Journal, Supplement Series</i> , 2019, 240, 23.	7.7	299
7	Chemical tagging with APOGEE: discovery of a large population of N-rich stars in the inner Galaxy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 501-524.	4.4	150
8	NEW H-BAND STELLAR SPECTRAL LIBRARIES FOR THE SDSS-III/APOGEE SURVEY. <i>Astronomical Journal</i> , 2015, 149, 181.	4.7	114
9	The Dynamical Evolution of the Circumstellar Gas around Low- and Intermediate-mass Stars. II. The Planetary Nebula Formation. <i>Astrophysical Journal</i> , 2002, 581, 1204-1224.	4.5	101
10	Infrared spectroscopy and integrated molar absorptivity of C60 and C70 fullerenes at extreme temperatures. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 413, 213-222.	4.4	80
11	Quadrupolar Planetary Nebulae: A New Morphological Class. <i>Astrophysical Journal</i> , 1996, 466, L95-L98.	4.5	78
12	The Lazy Giants: APOGEE Abundances Reveal Low Star Formation Efficiencies in the Magellanic Clouds. <i>Astrophysical Journal</i> , 2020, 895, 88.	4.5	77
13	<i>Spitzer</i> Infrared Spectrograph Observations of Magellanic Cloud Planetary Nebulae: The Nature of Dust in Low-Metallicity Circumstellar Ejecta. <i>Astrophysical Journal</i> , 2007, 671, 1669-1684.	4.5	76
14	Planetary Nebula Abundances and Morphology: Probing the Chemical Evolution of the Milky Way. <i>Astrophysical Journal</i> , 2006, 651, 898-905.	4.5	74
15	The Dynamical Evolution of the Circumstellar Gas around Low- and Intermediate-mass Stars. I. The Asymptotic Giant Branch. <i>Astrophysical Journal</i> , 2002, 571, 880-900.	4.5	70
16	The Correlations between Planetary Nebula Morphology and Central Star Evolution: Analysis of the Northern Galactic Sample. <i>Astrophysical Journal</i> , 2002, 576, 285-293.	4.5	51
17	Ram Pressure Stripping in Planetary Nebulae. <i>Astrophysical Journal</i> , 2003, 585, L49-L53.	4.5	50
18	Final Targeting Strategy for the Sloan Digital Sky Survey IV Apache Point Observatory Galactic Evolution Experiment 2 North Survey. <i>Astronomical Journal</i> , 2021, 162, 302.	4.7	44

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19	Infrared Space Observatory Observations of IRAS 16594 α 4656: A New Proto-Planetary Nebula with a Strong 21 Micron Dust Feature. <i>Astrophysical Journal</i> , 1999, 513, 941-946.	4.5	43
20	THE INTERACTION OF ASYMPTOTIC GIANT BRANCH STARS WITH THE INTERSTELLAR MEDIUM. <i>Astrophysical Journal</i> , 2012, 748, 94.	4.5	40
21	THE NATURE OF DUST IN COMPACT GALACTIC PLANETARY NEBULAE FROM <i>SPITZER</i> SPECTRA. <i>Astrophysical Journal</i> , 2012, 753, 172.	4.5	40
22	Infrared spectroscopy of hydrogenated fullerenes (fulleranes) at extreme temperatures. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 2868-2878.	4.4	37
23	The role of massive AGB stars in the early solar system composition. <i>Meteoritics and Planetary Science</i> , 2009, 44, 627-639.	1.6	35
24	Far- and mid-infrared spectroscopy of complex organic matter of astrochemical interest: coal, heavy petroleum fractions and asphaltenes. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 429, 3025-3039.	4.4	34
25	Sonochemical Synthesis of Fullerene C ₆₀ /Anthracene Diels-Alder Mono and Bis-adducts. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2014, 22, 565-574.	2.1	33
26	A DETAILED LOOK AT CHEMICAL ABUNDANCES IN MAGELLANIC CLOUD PLANETARY NEBULAE. I. THE SMALL MAGELLANIC CLOUD. <i>Astrophysical Journal</i> , 2010, 717, 562-576.	4.5	32
27	The multiple-shell structure of the planetary nebula NGC 6751. <i>Astrophysical Journal</i> , 1991, 376, 150.	4.5	32
28	Multiple collimated outflows in a planetary nebula?. <i>New Astronomy</i> , 1997, 2, 461-470.	1.8	30
29	HIGH-RESOLUTION IMAGING OF NGC 2346 WITH GSAOI/GeMS: DISENTANGLING THE PLANETARY NEBULA MOLECULAR STRUCTURE TO UNDERSTAND ITS ORIGIN AND EVOLUTION. <i>Astrophysical Journal</i> , 2015, 808, 115.	4.5	28
30	The triple-shell structure and collimated outflows of the planetary nebula NGC 6891. <i>Monthly Notices of the Royal Astronomical Society</i> , 2000, 313, 1-7.	4.4	27
31	Far infrared (terahertz) spectroscopy of a series of polycyclic aromatic hydrocarbons and application to structure interpretation of asphaltenes and related compounds. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 111, 68-79.	3.9	27
32	Optical and Infrared Observations of the Bipolar Proto-Planetary Nebula Henize 401. <i>Astrophysical Journal</i> , 1999, 526, 854-861.	4.5	25
33	A detailed analysis of the properties of radiolyzed proteinaceous amino acids. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2011, 287, 903-911.	1.5	24
34	Physical Structure of Planetary Nebulæ. I. The Owl Nebula. <i>Astronomical Journal</i> , 2003, 125, 3213-3221.	4.7	23
35	Solid state radiolysis of amino acids in an astrochemical perspective. <i>Radiation Physics and Chemistry</i> , 2011, 80, 57-65.	2.8	23
36	Phosphorus-rich stars with unusual abundances are challenging theoretical predictions. <i>Nature Communications</i> , 2020, 11, 3759.	12.8	23

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37	Electronic absorption spectroscopy of polycyclic aromatic hydrocarbons (PAHs) radical cations generated in oleum: A superacid medium. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2010, 77, 998-1004.	3.9	22
38	[ITAL] HUBBLE SPACE TELESCOPE[/ITAL] [ITAL]Hubble Space Telescope[/ITAL] and Ground-based Spectroscopy of K648 in M15. <i>Astronomical Journal</i> , 2001, 122, 1538-1544.	4.7	20
39	Radiolysis and radioracemization of 20 amino acids from the beginning of the Solar System. <i>Rendiconti Lincei</i> , 2011, 22, 81-94.	2.2	20
40	ROTATING STARS AND THE FORMATION OF BIPOLAR PLANETARY NEBULAE. II. TIDAL SPIN-UP. <i>Astrophysical Journal</i> , 2016, 823, 142.	4.5	19
41	Synthesis and FTâ€IR Spectroscopy of Perdeuterofullerane: C ₆₀ D ₃₆ Evidences of Isotope Effect in the Stability of C ₆₀ D ₃₆ . <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2009, 17, 378-389.	2.1	18
42	On the C ₆₀ Fullerene Adduct with Pentacene: Synthesis and Stability. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2015, 23, 818-823.	2.1	18
43	Constraint on the time variation of the fine-structure constant with the SDSS-III/BOSS DR12 quasar sample. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 452, 4153-4168.	4.4	18
44	Low and High Temperature Infrared Spectroscopy of C ₆₀ and C ₇₀ Fullerenes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2010, 18, 224-235.	2.1	17
45	KINEMATICAL ANALYSIS OF A SAMPLE OF BIPOLAR PLANETARY NEBULAE. <i>Astronomical Journal</i> , 2008, 135, 2199-2211.	4.7	16
46	Merging of Elliptical Galaxies as a Possible Origin of the Intergalactic Stellar Population. <i>Astrophysical Journal</i> , 2006, 644, 843-849.	4.5	15
47	Perdeuterofulleranes: Synthesis and Properties of C ₇₀ D ₃₈ and C ₇₀ H ₃₈ . <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2009, 17, 401-413.	2.1	15
48	Solid state radiolysis of sulphur-containing amino acids: cysteine, cystine and methionine. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2011, 287, 573-580.	1.5	14
49	Chemical Thermodynamics Applied to the Dielsâ€Alder Reaction of C ₆₀ Fullerene with Polyacenes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2015, 23, 760-768.	2.1	14
50	About the iron carbonyl complex with C ₆₀ and C ₇₀ fullerene: [Fe(CO) ₄ (C ₆₀) ₂] and [Fe(CO) ₄ (C ₇₀) ₂]. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2016, 24, 225-233.	2.1	14
51	A new route to graphene starting from heavily ozonized fullerenes: Part 1â€”thermal reduction under inert atmosphere. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2016, 24, 52-61.	2.1	14
52	A young, dusty, compact radio source within a Lyâ± halo. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 389, 792-798.	4.4	13
53	Extreme nitrogen enrichment in the asymmetrical planetary nebulae M1-75. <i>Astrophysical Journal</i> , 1995, 444, L49.	4.5	13
54	Determination of the Integrated Molar Absorptivity and Molar Extinction Coefficient of Hydrogenated Fullerenes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013, 21, 417-428.	2.1	12

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55	A new route to graphene starting from heavily ozonized fullerenes: Part 3 – an electron spin resonance study. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2016, 24, 195-201.	2.1	12
56	A new route to graphene starting from heavily ozonized fullerenes: Part 2 – oxidation in air. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2016, 24, 62-66.	2.1	11
57	Kinetic Isotope Effects on the Photolysis of C ₆₀ H ₁₈ and C ₆₀ D ₁₈ . <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2009, 17, 414-427.	2.1	10
58	On the Radical Cation Spectra of Fullerenes and Fulleranes. Part 1: C ₆₀ , C ₇₀ , C ₇₆ , C ₇₈ and C ₈₄ . <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2012, 20, 656-671.	2.1	10
59	On the Radical Anion Spectra of Fullerenes C ₆₀ and C ₇₀ . <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2013, 21, 537-548.	2.1	10
60	Toluene pyrolysis in an electric ARC: Products analysis. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2019, 27, 469-477.	2.1	10
61	Petroleum, coal and other organics in space. <i>Astrophysics and Space Science</i> , 2020, 365, 1.	1.4	10
62	Heavy-element Abundances in P-rich Stars: A New Site for the s-process?. <i>Astrophysical Journal Letters</i> , 2020, 904, L1.	8.3	10
63	A Review on Carbon-rich Molecules in Space. <i>Proceedings of the International Astronomical Union</i> , 2012, 10, 720-722.	0.0	9
64	The chemical composition of the post-asymptotic giant branch F supergiant CRL 2688. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 425, 997-1006.	4.4	9
65	On the Molar Extinction Coefficient and Integrated Molar Absorptivity of the Infrared Absorption Spectra of C ₆₀ and C ₇₀ Fullerenes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2012, 20, 191-199.	2.1	9
66	Acenes adducts with C ₇₀ fullerene: Anthracene, tetracene and pentacene. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2016, 24, 679-687.	2.1	9
67	Charge-transfer interaction between C ₆₀ fullerene and alkynaphthalenes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2017, 25, 223-229.	2.1	9
68	FT-IR spectroscopy of carbonized acenes: a possible key for the UIBs/AIBs origins. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2018, 26, 820-826.	2.1	9
69	Photolytic Decomposition of Hydrogenated C ₇₀ : C ₇₀ H ₃₈ and C ₇₀ D ₃₈ . <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2009, 17, 428-439.	2.1	8
70	Amino acids in comets and meteorites: stability under gamma radiation and preservation of the enantiomeric excess. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, , no-no.	4.4	7
71	GTC/CanariCam Mid-IR Imaging of the Fullerene-rich Planetary Nebula IC 418: Searching for the Spatial Distribution of Fullerene-like Molecules. <i>Astronomical Journal</i> , 2018, 155, 105.	4.7	7
72	Wide binaries in planetary nebulae with <i>Gaia</i> DR2. <i>Astronomy and Astrophysics</i> , 2020, 644, A173.	5.1	7

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73	The changing nebula around the hot R Coronae Borealis star DY Centauri. Monthly Notices of the Royal Astronomical Society, 2013, 431, 159-166.	4.4	6
74	Submerged carbon arc in liquid benzene: GC-MS analysis of the products. Fullerenes Nanotubes and Carbon Nanostructures, 2017, 25, 576-584.	2.1	6
75	Far infrared spectroscopy and other spectral and thermal properties of $[Li@C_{60}]PF_6$. Fullerenes Nanotubes and Carbon Nanostructures, 2019, 27, 695-701.	2.1	6
76	On the Radical Cation Spectra of Fullerenes and Fulleranes. Part 2: C ₆₀ H ₃₆ , C ₇₀ H ₃₈ , C ₆₀ H ₁₈ and C ₆₀ H _x /C ₇₀ H _y Mixture. Fullerenes Nanotubes and Carbon Nanostructures, 2012, 20, 672-680.	2.1	5
77	C ₇₀ Fullerene charge-transfer interaction with alkynaphthalenes, pinenes, and a diene. Fullerenes Nanotubes and Carbon Nanostructures, 2017, 25, 505-511.	2.1	5
78	Phase-transfer catalysis in the oxidation of C _{sub>60} and C _{sub>70} fullerene with KMnO ₄ and crown ether. Fullerenes Nanotubes and Carbon Nanostructures, 2018, 26, 578-583.	2.1	4
79	Asphaltenes as model compounds of the UIBs/AIBs detected in various astrophysical objects. Part 1 – Petroleum asphaltenes carbonization. Fullerenes Nanotubes and Carbon Nanostructures, 0, , 1-13.	2.1	4
80	Raman, FT-IR spectroscopy and morphology of carbon dust from carbon arc in liquid benzene. Fullerenes Nanotubes and Carbon Nanostructures, 2018, 26, 654-660.	2.1	3
81	$[Li@C_{60}]PF_6$: Infrared spectra from 90K to 523K; Determination of the molar extinction coefficients and integrated molar absorptivity. Fullerenes Nanotubes and Carbon Nanostructures, 2020, 28, 474-479.	2.1	3
82	Vinylacetylene synthesis with a low power submerged carbon arc in n-hexane. Fullerenes Nanotubes and Carbon Nanostructures, 2021, 29, 956-965.	2.1	3
83	Molar extinction coefficient of fullerenes and related hydrogenated derivatives –fulleranes–. Proceedings of the International Astronomical Union, 2011, 7, 324-325.	0.0	2
84	Ultraviolet emission line imaging of planetary nebulae with GALEX. Proceedings of the International Astronomical Union, 2011, 7, 308-309.	0.0	2
85	The Central Star of NGC 2346 as a Clue to Binary Evolution through the Common Envelope Phase. Astrophysical Journal, 2019, 885, 84.	4.5	2
86	Isotope Effect in the UV Photolysis of Hydrogenated and Perdeuterated Fulleranes. Carbon Materials, 2010, , 149-170.	1.2	2
87	Hydrogenation of $[Li@C_{sub>60}]PF_6$: A comparison with fullerenes derived from C _{sub>60} . Fullerenes Nanotubes and Carbon Nanostructures, 2022, 30, 1245-1251.	2.1	2
88	THE INTERGALACTIC STELLAR POPULATION FROM MERGERS OF ELLIPTICAL GALAXIES WITH DARK MATTER HALOS. Astrophysical Journal, 2010, 710, 1589-1595.	4.5	1
89	A detailed look at chemical abundances in the Magellanic Clouds. Proceedings of the International Astronomical Union, 2011, 7, 502-503.	0.0	1
90	Low Temperature Infrared Spectroscopy of C ₆₀ and C ₇₀ Fullerenes and Fullerene C ₆₀ H ₁₈ . Carbon Materials, 2010, , 203-223.	1.2	1

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91	Asphaltenes as model compounds of the UIBs/AIBs detected in various astrophysical objects. Part 2 “ Natural bitumens asphaltenes carbonization. Fullerenes Nanotubes and Carbon Nanostructures, 0, , 1-19.		2.1	1
92	The Correlation of PN Morphology and Parameters. Symposium - International Astronomical Union, 2003, 209, 431-438.		0.1	0
93	Novel dispersive elements for LIRIS. Proceedings of SPIE, 2008, , .		0.8	0
94	Morphological classification of post-AGB stars. Proceedings of the International Astronomical Union, 2011, 7, 83-86.		0.0	0
95	Optical Survey of Post-AGB Candidates. Astrophysics and Space Science Library, 2001, , 21-27.		2.7	0
96	Molecular Hydrogen Around Post-AGB Stars. Astrophysics and Space Science Library, 2001, , 383-386.		2.7	0
97	Synthesis, Stability and Spectroscopy of Perdeuterofulleranes: C60D36 and C70D38 Evidences of Isotope Effects. Carbon Materials, 2010, , 127-148.		1.2	0
98	Asphaltenes as model compounds of the UIBs/AIBs detected in various astrophysical objects. Part 3: Petroleum asphaltenes high energy radiation processed. Fullerenes Nanotubes and Carbon Nanostructures, 0, , 1-13.		2.1	0