

Gary Ferland

List of Publications by Year in descending order

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112
papers

8,337
citations

50276

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43889

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114
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docs citations

114
times ranked

4756
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Dense Molecular Clouds in the Crab Supernova Remnant. <i>Astrophysical Journal</i> , 2022, 925, 59. | 4.5 | 3 |
| 2 | The Paschen Jump as a Diagnostic of the Diffuse Nebular Continuum Emission in Active Galactic Nuclei*. <i>Astrophysical Journal</i> , 2022, 927, 60. | 4.5 | 5 |
| 3 | A Practical Guide to the Partition Function of Atoms and Ions. <i>Publications of the Astronomical Society of the Pacific</i> , 2022, 134, 073001. | 3.1 | 2 |
| 4 | Improved Fe ii Emission-line Models for AGNs Using New Atomic Data Sets. <i>Astrophysical Journal</i> , 2021, 907, 12. | 4.5 | 21 |
| 5 | Role of Polycyclic Aromatic Hydrocarbons on the Cosmic-Ray Ionization Rate in the Galaxy. <i>Astrophysical Journal</i> , 2021, 908, 138. | 4.5 | 5 |
| 6 | Deciphering the 3D Orion Nebula. III. Structure on the NE Boundary of the Orion-S Embedded Molecular Cloud. <i>Astrophysical Journal</i> , 2021, 908, 162. | 4.5 | 1 |
| 7 | Deciphering the 3D Orion Nebula. II. A Low Ionization Region of Multiple Velocity Components Southwest of $\hat{1}$. Confounds Interpretation of Low Velocity Resolution Studies of Temperature, Density, and Abundance. <i>Astrophysical Journal</i> , 2021, 907, 119. | 4.5 | 4 |
| 8 | Deciphering the 3D Orion Nebula-IV: The HH 269 Flow Emerges from the Orion-S Embedded Molecular Cloud. <i>Astrophysical Journal</i> , 2021, 909, 97. | 4.5 | 0 |
| 9 | X-Ray Spectroscopy in the Microcalorimeter Era. III. Line Formation under Case A, Case B, Case C, and Case D in H- and He-like Iron for a Photoionized Cloud. <i>Astrophysical Journal</i> , 2021, 912, 26. | 4.5 | 10 |
| 10 | Cloudy in the Microcalorimeter Era: Improved Energies for Si and S $K\alpha$ Fluorescence Lines. <i>Research Notes of the AAS</i> , 2021, 5, 149. | 0.7 | 1 |
| 11 | Space Telescope and Optical Reverberation Mapping Project. XIII. An Atlas of UV and X-Ray Spectroscopic Signatures of the Disk Wind in NGC 5548. <i>Astrophysical Journal</i> , 2021, 906, 14. | 4.5 | 5 |
| 12 | Evidence of a Tidal-disruption Event in GSN 069 from the Abnormal Carbon and Nitrogen Abundance Ratio. <i>Astrophysical Journal Letters</i> , 2021, 920, L25. | 8.3 | 21 |
| 13 | Hypermassive black holes have faint broad and narrow emission lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 2992-3010. | 4.4 | 1 |
| 14 | Newly Improved Ionization Corrections for the Neutral Interstellar Medium: Enabling Accurate Abundance Determinations in Star-forming Galaxies throughout the Universe*. <i>Astrophysical Journal</i> , 2020, 892, 19. | 4.5 | 7 |
| 15 | Space Telescope and Optical Reverberation Mapping Project. XI. Disk-wind Characteristics and Contributions to the Very Broad Emission Lines of NGC 5548. <i>Astrophysical Journal</i> , 2020, 898, 141. | 4.5 | 13 |
| 16 | X-Ray Spectroscopy in the Microcalorimeter Era. I. Effects of Fe xxiv Resonant Auger Destruction on Fe xxv $K\alpha$ Spectra. <i>Astrophysical Journal</i> , 2020, 901, 68. | 4.5 | 11 |
| 17 | X-Ray Spectroscopy in the Microcalorimeter Era. II. A New Diagnostic on Column Density from the Case A to B Transition in H- and He-like Iron. <i>Astrophysical Journal</i> , 2020, 901, 69. | 4.5 | 9 |
| 18 | Cosmic Ray Dissociation of Molecular Hydrogen and Dense Cloud Chemistry. <i>Research Notes of the AAS</i> , 2020, 4, 78. | 0.7 | 10 |

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| 19 | Cloudy in the Microcalorimeter Era: Improved Energies for $K\pm$ Transitions. Research Notes of the AAS, 2020, 4, 184. | 0.7 | 4 |
| 20 | Space Telescope and Optical Reverberation Mapping Project. X. Understanding the Absorption-line Holiday in NGC 5548. Astrophysical Journal, 2019, 877, 119. | 4.5 | 35 |
| 21 | Space Telescope and Optical Reverberation Mapping Project. VIII. Time Variability of Emission and Absorption in NGC 5548 Based on Modeling the Ultraviolet Spectrum. Astrophysical Journal, 2019, 881, 153. | 4.5 | 34 |
| 22 | The Structure of the Orion Nebula in the Direction of $\hat{l}_{¹}$ Ori C. Astrophysical Journal, 2019, 881, 130. | 4.5 | 18 |
| 23 | A Wind-based Unification Model for NGC 5548: Spectral Holidays, Nondisk Emission, and Implications for Changing-look Quasars. Astrophysical Journal Letters, 2019, 882, L30. | 8.3 | 33 |
| 24 | Intermediate-line Emission in AGNs: The Effect of Prescription of the Gas Density. Astrophysical Journal, 2018, 856, 78. | 4.5 | 17 |
| 25 | Ro-vibrational analysis of SiO in UV-irradiated environments. Molecular Astrophysics, 2018, 13, 6-21. | 1.6 | 2 |
| 26 | Suppression of Dielectronic Recombination Due to Finite Density Effects. II. Analytical Refinement and Application to Density-dependent Ionization Balances and AGN Broad-line Emission. Astrophysical Journal, Supplement Series, 2018, 237, 41. | 7.7 | 15 |
| 27 | Emission Line Ratios of Fe III as Astrophysical Plasma Diagnostics. Astrophysical Journal, 2017, 841, 3. | 4.5 | 13 |
| 28 | Space Telescope and Optical Reverberation Mapping Project. V. Optical Spectroscopic Campaign and Emission-line Analysis for NGC 5548. Astrophysical Journal, 2017, 837, 131. | 4.5 | 93 |
| 29 | Swift Monitoring of NGC 4151: Evidence for a Second X-Ray/UV Reprocessing. Astrophysical Journal, 2017, 840, 41. | 4.5 | 98 |
| 30 | Atomic Data Revisions for Transitions Relevant to Observations of Interstellar, Circumgalactic, and Intergalactic Matter. Astrophysical Journal, Supplement Series, 2017, 230, 8. | 7.7 | 29 |
| 31 | Which Stars Are Ionizing the Orion Nebula?. Astrophysical Journal, 2017, 837, 151. | 4.5 | 32 |
| 32 | The Carbon and Nitrogen Abundance Ratio in the Broad Line Region of Tidal Disruption Events. Astrophysical Journal, 2017, 846, 150. | 4.5 | 23 |
| 33 | The Validity of 21 cm Spin Temperature as a Kinetic Temperature Indicator in Atomic and Molecular Gas. Astrophysical Journal, 2017, 843, 149. | 4.5 | 8 |
| 34 | THE INTERMEDIATE-LINE REGION IN ACTIVE GALACTIC NUCLEI. Astrophysical Journal, 2016, 831, 68. | 4.5 | 31 |
| 35 | EVIDENCE FOR FLUORESCENT Fe II EMISSION FROM EXTENDED LOW IONIZATION OUTFLOWS IN OBSCURED QUASARS. Astrophysical Journal, 2016, 824, 106. | 4.5 | 8 |
| 36 | SPACE TELESCOPE AND OPTICAL REVERBERATION MAPPING PROJECT. IV. ANOMALOUS BEHAVIOR OF THE BROAD ULTRAVIOLET EMISSION LINES IN NGC 5548. Astrophysical Journal, 2016, 824, 11. | 4.5 | 63 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | ULTRAVIOLET EMISSION LINES OF Si II IN QUASARS—INVESTIGATING THE “Si II DISASTER”. <i>Astrophysical Journal</i> , 2016, 825, 28. | 4.5 | 7 |
| 38 | EVIDENCE FOR PHOTOIONIZATION-DRIVEN BROAD ABSORPTION LINE VARIABILITY. <i>Astrophysical Journal</i> , 2015, 814, 150. | 4.5 | 53 |
| 39 | STOUT: CLOUDY’S ATOMIC AND MOLECULAR DATABASE. <i>Astrophysical Journal</i> , 2015, 807, 118. | 4.5 | 28 |
| 40 | ATOMIC DATA AND SPECTRAL MODEL FOR Fe II. <i>Astrophysical Journal</i> , 2015, 808, 174. | 4.5 | 36 |
| 41 | HERSCHEL DUST EMISSION AS A PROBE OF STARLESS CORES MASS: MCLD 123.5+24.9 OF THE POLARIS FLARE. <i>Astrophysical Journal</i> , 2015, 809, 17. | 4.5 | 7 |
| 42 | Accurate determination of the free-free Gaunt factor I. Non-relativistic Gaunt factors. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 420-428. | 4.4 | 65 |
| 43 | A transition mass for black holes to show broad emission lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 437, 740-747. | 4.4 | 10 |
| 44 | LONG-TERM SPECTRAL EVOLUTION OF TIDAL DISRUPTION CANDIDATES SELECTED BY STRONG CORONAL LINES. <i>Astrophysical Journal</i> , 2013, 774, 46. | 4.5 | 45 |
| 45 | Dielectric recombination and stability of warm gas in AGN. , 2012, , . | | 0 |
| 46 | ION-BY-ION COOLING EFFICIENCIES. <i>Astrophysical Journal</i> , Supplement Series, 2012, 199, 20. | 7.7 | 81 |
| 47 | The influence of soft spectral components on the structure and stability of warm absorbers in active galactic nuclei. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 422, 637-651. | 4.4 | 24 |
| 48 | The energy source of the filaments around the giant galaxy NGC 1275. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 417, 172-177. | 4.4 | 96 |
| 49 | STRUCTURE AND FEEDBACK IN 30 DORADUS. II. STRUCTURE AND CHEMICAL ABUNDANCES. <i>Astrophysical Journal</i> , 2011, 738, 34. | 4.5 | 99 |
| 50 | DIVISION VI: INTERSTELLAR MATTER. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 213-214. | 0.0 | 0 |
| 51 | HIGH-EXCITATION EMISSION LINES NEAR ETA CARINAE, AND ITS LIKELY COMPANION STAR. <i>Astrophysical Journal</i> , 2010, 710, 729-742. | 4.5 | 81 |
| 52 | IMPLICATIONS OF INFALLING Fe II-EMITTING CLOUDS IN ACTIVE GALACTIC NUCLEI: ANISOTROPIC PROPERTIES. <i>Astrophysical Journal</i> , 2009, 707, L82-L86. | 4.5 | 71 |
| 53 | ORION’S BAR: PHYSICAL CONDITIONS ACROSS THE DEFINITIVE H ⁺ /H ⁰ /H ₂ INTERFACE. <i>Astrophysical Journal</i> , 2009, 693, 285-302. | 4.5 | 71 |
| 54 | Collisional heating as the origin of filament emission in galaxy clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 392, 1475-1502. | 4.4 | 138 |

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| 55 | Properties of warm absorbers in active galaxies: a systematic stability curve analysis. Monthly Notices of the Royal Astronomical Society, 2009, 393, 83-98. | 4.4 | 42 |
| 56 | Electron-impact excitation of O ⁺ fine-structure levels. Monthly Notices of the Royal Astronomical Society, 2009, 397, 903-912. | 4.4 | 87 |
| 57 | New Results on Quasar Outflows. Proceedings of the International Astronomical Union, 2009, 5, 399-399. | 0.0 | 0 |
| 58 | Dielectronic recombination and stability of warm gas in active galactic nuclei. Monthly Notices of the Royal Astronomical Society: Letters, 2008, 384, L24-L28. | 3.3 | 20 |
| 59 | Magnetic fields and the location of the PDR. EAS Publications Series, 2008, 31, 53-56. | 0.3 | 2 |
| 60 | Expanding cloudy with third-party databases. EAS Publications Series, 2008, 31, 199-200. | 0.3 | 0 |
| 61 | He I Emission in the Orion Nebula and Implications for Primordial Helium Abundance. Astrophysical Journal, 2007, 657, 327-337. | 4.5 | 58 |
| 62 | A Magnetically Supported Photodissociation Region in M17. Astrophysical Journal, 2007, 658, 1119-1135. | 4.5 | 95 |
| 63 | Molecular Hydrogen in Star-forming Regions: Implementation of its Microphysics in CLOUDY. Astrophysical Journal, 2005, 624, 794-807. | 4.5 | 111 |
| 64 | Theoretical He I Emissivities in the Case B Approximation. Astrophysical Journal, 2005, 622, L73-L75. | 4.5 | 66 |
| 65 | Division VI: Interstellar Matter. Proceedings of the International Astronomical Union, 2005, 1, 267-271. | 0.0 | 0 |
| 66 | The VLT-LVES survey for molecular hydrogen in high-redshift damped Lyman λ systems: physical conditions in the neutral gas. Monthly Notices of the Royal Astronomical Society, 2005, 362, 549-568. | 4.4 | 153 |
| 67 | The H II Region/PDR Connection: Self-consistent Calculations of Physical Conditions in Star-forming Regions. Astrophysical Journal, Supplement Series, 2005, 161, 65-95. | 7.7 | 108 |
| 68 | Grain size distributions and photoelectric heating in ionized media. Monthly Notices of the Royal Astronomical Society, 2004, 350, 1330-1341. | 4.4 | 91 |
| 69 | Revisiting the torus: spectral predictions from the IR to the X-ray. Nuclear Physics, Section B, Proceedings Supplements, 2004, 132, 145-148. | 0.4 | 0 |
| 70 | The Origin of Fe II Emission in Active Galactic Nuclei. Astrophysical Journal, 2004, 615, 610-624. | 4.5 | 119 |
| 71 | The Effects of Low-temperature Dielectronic Recombination on the Relative Populations of the Fe M-shell States. Astrophysical Journal, 2004, 604, 556-561. | 4.5 | 43 |
| 72 | Physical Conditions in Orion's Veil. Astrophysical Journal, 2004, 609, 247-260. | 4.5 | 44 |

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| 73 | Observational Consequences of Fine-Structure Line Optical Depths on Infrared Spectral Diagnostics. Publications of the Astronomical Society of the Pacific, 2003, 115, 188-192. | 3.1 | 1 |
| 74 | Quantitative Spectroscopy of Photoionized Clouds. Annual Review of Astronomy and Astrophysics, 2003, 41, 517-554. | 24.3 | 150 |
| 75 | The Mass of Quasar Broad Emission Line Regions. Astrophysical Journal, 2003, 582, 590-595. | 4.5 | 46 |
| 76 | Chemical Abundances in Broad Emission Line Regions: The "Nitrogen" Cloud Quasi-Stellar Object Q0353+383. Astrophysical Journal, 2003, 583, 649-658. | 4.5 | 52 |
| 77 | Metallicities and Abundance Ratios from Quasar Broad Emission Lines. Astrophysical Journal, 2002, 564, 592-603. | 4.5 | 146 |
| 78 | Dissipative Heating and Quasar Emission Lines. Astrophysical Journal, 2002, 568, 581-591. | 4.5 | 11 |
| 79 | Physical Conditions in the Orion HII Region. Publications of the Astronomical Society of the Pacific, 2001, 113, 41-48. | 3.1 | 52 |
| 80 | Spectroscopic Challenges of Photoionized Plasmas. Publications of the Astronomical Society of the Pacific, 2001, 113, 1024-1024. | 3.1 | 20 |
| 81 | Fractal Quasar Clouds. Astrophysical Journal, 2001, 549, 118-132. | 4.5 | 20 |
| 82 | Observational Constraints on the Internal Velocity Field of Quasar Emission-Line Clouds. Astrophysical Journal, 2000, 542, 644-654. | 4.5 | 33 |
| 83 | Numerical Simulations of Fe II Emission Spectra. Astrophysical Journal, Supplement Series, 1999, 120, 101-112. | 7.7 | 124 |
| 84 | Elemental Abundances in Quasistellar Objects: Star Formation and Galactic Nuclear Evolution at High Redshifts. Annual Review of Astronomy and Astrophysics, 1999, 37, 487-531. | 24.3 | 331 |
| 85 | The PG X-Ray QSO Sample: Links between the Ultraviolet "X-Ray Continuum and Emission Lines. Astrophysical Journal, 1999, 515, L53-L56. | 4.5 | 86 |
| 86 | CLOUDY 90: Numerical Simulation of Plasmas and Their Spectra. Publications of the Astronomical Society of the Pacific, 1998, 110, 761-778. | 3.1 | 1,979 |
| 87 | Quasars as Cosmological Probes: The Ionizing Continuum, Gas Metallicity, and the W ₁ Relation. Astrophysical Journal, 1998, 507, 24-30. | 4.5 | 71 |
| 88 | The Ultraviolet-Optical Albedo of Broad Emission Line Clouds. Astrophysical Journal, 1998, 495, 672-679. | 4.5 | 16 |
| 89 | An Atlas of Computed Equivalent Widths of Quasar Broad Emission Lines. Astrophysical Journal, Supplement Series, 1997, 108, 401-415. | 7.7 | 187 |
| 90 | Do the Broad Emission Line Clouds See the Same Continuum That We See?. Astrophysical Journal, 1997, 487, 555-559. | 4.5 | 64 |

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| 91 | Physical Conditions of the Coronal Line Region in Seyfert Galaxies. <i>Astrophysical Journal, Supplement Series</i> , 1997, 110, 287-297. | 7.7 | 68 |
| 92 | Atomic Data for Permitted Resonance Lines of Atoms and Ions from H to Si, and S, Ar, Ca, and Fe. <i>Atomic Data and Nuclear Data Tables</i> , 1996, 64, 1-180. | 2.4 | 291 |
| 93 | The Chemical Enrichment of Gas in Broad Absorption Line QSOs: Rapid Star Formation in the Early History of Galaxies. <i>Astrophysical Journal</i> , 1996, 461, 641. | 4.5 | 29 |
| 94 | Very High Density Clumps and Outflowing Winds in QSO Broad-Line Regions. <i>Astrophysical Journal</i> , 1996, 461, 664. | 4.5 | 72 |
| 95 | Rate Coefficients for Charge Transfer between Hydrogen and the First 30 Elements. <i>Astrophysical Journal, Supplement Series</i> , 1996, 106, 205. | 7.7 | 143 |
| 96 | Locally Optimally Emitting Clouds and the Origin of Quasar Emission Lines. <i>Astrophysical Journal</i> , 1995, 455, . | 4.5 | 261 |
| 97 | Optically thin broad-line clouds in active galactic nuclei. <i>Astrophysical Journal</i> , 1995, 441, 507. | 4.5 | 74 |
| 98 | Hubble Space Telescope Sample of Radio-loud Quasars: Ultraviolet Spectra of the First 31 Quasars. <i>Astrophysical Journal</i> , 1995, 447, 139. | 4.5 | 169 |
| 99 | The Hubble Space Telescope Sample of Radio-loud Quasars: The LY alpha /H beta Ratio. <i>Astrophysical Journal</i> , 1995, 448, 27. | 4.5 | 59 |
| 100 | Temperature Fluctuations in Photoionized Nebulae. <i>Astrophysical Journal</i> , 1995, 450, 691. | 4.5 | 42 |
| 101 | The Chemical Evolution of QSOs. , 1994, , 227-230. | | 0 |
| 102 | High Metallicities in QSOs. , 1994, , 220-226. | | 0 |
| 103 | The physical conditions within dense cold clouds in cooling flows. <i>Monthly Notices of the Royal Astronomical Society</i> , 1994, 266, 399-411. | 4.4 | 52 |
| 104 | The narrow-line region of high-luminosity active galactic nuclei. <i>Astrophysical Journal</i> , 1993, 410, 534. | 4.5 | 45 |
| 105 | The Chemical Evolution of QSOs and the Implications for Cosmology and Galaxy Formation. <i>Astrophysical Journal</i> , 1993, 418, 11. | 4.5 | 293 |
| 106 | Anisotropic line emission and the geometry of the broad-line region in active galactic nuclei. <i>Astrophysical Journal</i> , 1992, 387, 95. | 4.5 | 200 |
| 107 | A multiwavelength study of Nova QU Vulpeculae 1984. <i>Astrophysical Journal</i> , 1992, 398, 651. | 4.5 | 50 |
| 108 | The age and chemical evolution of high-redshift QSOs. <i>Astrophysical Journal</i> , 1992, 391, L53. | 4.5 | 109 |

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| 109 | Physical conditions in the Orion Nebula and an assessment of its helium abundance. <i>Astrophysical Journal</i> , 1991, 374, 580. | 4.5 | 282 |
| 110 | Spectra of Symbiotic Stars. <i>International Astronomical Union Colloquium</i> , 1983, 72, 35-40. | 0.1 | 0 |
| 111 | Discovery of atomic and molecular mid-infrared emission lines in off-nuclear regions of NGC 1275 and NGC 4696 with the Spitzer Space Telescope. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, 382, 1246-1260. | 4.4 | 68 |
| 112 | Self-consistent grain depletions and abundances I: The Orion Nebula as a test case. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , . | 4.4 | 2 |