

BIBLIOGRAPHY

Papers

1. J. B. Oke (+ 15 graduate students), A Model for a Helium Star of 1 Solar Mass. *Astrophys. J.*, **133**, 166 - 169, 1961
2. D. Mihalas, Light Curves of Humason's Supernova in Virgo. *Pub. Astron. Soc. Pacific*, **74**, 116 - 124, 1962
3. D. Mihalas, Decay Times of Type I Supernovae Light Curves. *Pub. Astron. Soc. Pacific*, **75**, 256 -268, 1963
4. D. Mihalas, Photoelectric Equivalent Widths in ρ Leo and π^4 Ori. *Astrophys. J.*, **139**, 764 - 765, 1964
5. R. C. Henry and D. Mihalas, The Abundance of Magnesium in the Atmospheres of O- and B-Stars. *Astrophys. J.*, **140**, 873 - 884, 1964
6. D. Mihalas, A Spectroscopic Estimate of the Atmospheric Properties of O- and B-Stars. *Astrophys. J.*, **140**, 885 - 901, 1964
7. D. Mihalas, Model Atmospheres and Line Profiles for Early-Type Stars. *Astrophys. J. Supp.* No. 92, **9**, 321 - 438, 1965
8. O. Gingerich, D. Mihalas, S. Matsushima, and S.E. Strom. An Archetype Non-Grey Stellar Atmosphere. *Astrophys. J.*, **141**, 316 - 319, 1965
9. D. Mihalas, Constant-Flux Convective Model Atmospheres. *Astrophys. J.*, **141**, 564 - 581, 1965
10. D. Mihalas and D. C. Morton, A Model for a B1V Star with Line Blanketing. *Astrophys. J.*, **142**, 253 - 264, 1965
11. D. Mihalas, Balmer-Line Blanketed Model Atmospheres for A-Type Stars. *Astrophys. J. Supp.* No. 114, **13**, 1 - 30, 1966
12. D. Mihalas and J. L. Henshaw, Studies of the Peculiar A Stars. III. Model-Atmosphere Line-Strength Calculations with Application to the Ap-Stars. *Astrophys. J.*, **144**, 25 - 58, 1966
13. L. H. Auer, D. Mihalas, L. H. Aller, and J. E. Ross, The Manganese Star 53 Tauri. II. Fine Analysis. *Astrophys. J.*, **145**, 153 - 173, 1966
14. D. Mihalas, The Calculation of Model Stellar Atmospheres. In *Methods in Computational Physics*, ed. B. Alder, S. Fernbach, and M. Rotenberg, (New York: Academic Press), **7**, 1 - 52, 1967
15. D. Mihalas, LTE Model Atmospheres with Line Blanketing: Review and Future Prospects. *J. Quantit. Spectrosc. Radiat. Transf.*, **6**, 581 - 590, 1966

16. G.O. Abell and D. Mihalas, Procedure of Photometry for Elliptical Galaxies. *Astron. J.*, **71**, 635 - 641, 1966
17. D. Mihalas, Statistical–Equilibrium Model Atmospheres for Early–Type Stars. I. Hydrogen Continua. *Astrophys. J.*, **149**, 169 - 190, 1967
18. D. Mihalas, Statistical–Equilibrium Model Atmospheres for Early–Type Stars. II. Formation of the Lyman Continuum. *Astrophys. J.*, **150**, 909 - 925, 1967
19. D. Mihalas and M. E. Stone, Statistical–Equilibrium Model Atmospheres for Early–Type Stars. III. Hydrogen and Helium Continua. *Astrophys. J.*, **151**, 293 - 310, 1968
20. D. G. Hummer and D. Mihalas, Line Formation with Noncoherent Electron Scattering in O– and B–Stars. *Astrophys. J. Letters*, **150**, L57 - L59, 1967
21. L. H. Auer and D. Mihalas, Solution of Transfer Equations Subject to the Constraint of Radiative Equilibrium. *Astrophys. J.*, **151**, 311 - 316, 1968
22. L. H. Auer and D. Mihalas, Line Formation with Non–Coherent Scattering by Electrons. I. Parameterized Models. *Astrophys. J.*, **153**, 245 - 256, 1968
23. D. Mihalas, Statistical Equilibrium Model Atmospheres for Early–Type Stars. IV. Remarks on Observational Tests. *Astrophys. J.*, **153**, 317 - 320, 1968
24. L. H. Auer and D. Mihalas, Line Formation with Non–Coherent Scattering by Electrons. II. Calculations with Model Atmospheres. *Astrophys. J.*, **153**, 923 - 928, 1968
25. L. H. Auer and D. Mihalas, Non–LTE Model Atmospheres. I. Radiative Equilibrium Models with Lyman Alpha. *Astrophys. J.*, **156**, 157 - 175, 1969
26. L. H. Auer and D. Mihalas, Brackett– α Emission in Non–LTE Model Stellar Atmospheres. *Astrophys. J. Letters*, **156**, L151 - L153, 1969
27. D. Mihalas, A Possible Mechanism for Energization of Stellar Winds in Early–Type Stars. *Astrophys. J. Letters*, **156**, L155 - L158, 1969
28. L. H. Auer and D. Mihalas, Non–LTE Model Atmospheres. II. Effects of Balmer– α . *Astrophys. J.*, **157**, 681 - 686, 1969
29. D. Mihalas, The Effects of Line Shifts on the Temperature Distribution in Stellar Atmospheres. *Astrophys. J.*, **157**, 1363 - 1367, 1969
30. L. H. Auer and D. Mihalas, Non–LTE Model Atmospheres. III. A Complete–Linearization Method. *Astrophys. J.*, **158**, 641- 655, 1969
31. L.H. Auer and D. Mihalas, Non–LTE Atmospheres. IV. Results For Multi–Line Computations. *Astrophys. J.*, **160**, 233 - 243, 1970
32. D. G. Hummer and D. Mihalas, Model Atmospheres for the Central Stars of Planetary Nebulae. *Monthly Notices Royal Astron. Soc.*, **147**, 339 - 354, 1970
33. D. Mihalas and L. H. Auer, Non–LTE Model Atmospheres. V. Multi–Line Hydrogen–Helium Models for O– and Early B–Stars. *Astrophys. J.*, **160**, 1161 - 1176, 1970

34. L. H. Auer and D. Mihalas, On the Use of Variable Eddington Factors in Non-LTE Stellar Atmospheres Computations. *Monthly Notices Royal Astron. Soc.*, **149**, 65 - 74, 1970
35. D. Mihalas, A Comment on "Far Ultraviolet Photometry of Orion Stars" by G. R. Carruthers. *Astrophys. Space Sci.*, **8**, 50 - 52, 1970
36. D. Mihalas and L. H. Auer, Non-LTE Model Atmospheres. VI. Limb Darkening and Rotation Broadening of H α . *Astrophys. J.*, **161**, 1129 - 1133, 1970
37. D. Mihalas and W. R. Luebke, A Non-LTE Picket-Fence Model in Radiative Equilibrium. *Monthly Notices Royal Astron. Soc.*, **153**, 229 - 239, 1971
38. R. J. Brucato and D. Mihalas, On the Excitation Mechanism of N III Emission in the Of-Stars. *Monthly Notices Royal Astron. Soc.*, **154**, 491 - 503, 1971
39. D. Mihalas and L. H. Auer, Non-LTE Model Atmospheres. VII. The Hydrogen and Helium Spectra of the O-Stars. *Astrophys. J. Suppl.* No. 205, **24**, 193 - 246, 1972
40. D. Mihalas, A Comment on the Interpretation of the Broad Component of N III $\lambda\lambda 4634 - 4640$ Emission in Of-Stars, *Astrophys. J.*, **170**, 541 - 545, 1971
41. D. Mihalas and G. W. Lockwood, Observations of the He II $\lambda 10124$ Line in O- and Of-Stars. *Astrophys. J.*, **175**, 757 - 764, 1972
42. D. Mihalas, Non-LTE Effects on Continuum and Hydrogen-Line Parameters in B- and O-Stars. *Astrophys. J.*, **176**, 139 - 152, 1972
43. D. Mihalas, D. G. Hummer and P. S. Conti, On the N III $\lambda\lambda 4640, 4097$ Lines in Of-Stars. *Astrophys. J. Letters*, **175**, L99 - L104, 1972
44. D. Mihalas, Analyses of Light-Ion Spectra in Stellar Atmospheres. I. Magnesium II in B- and O-Stars. *Astrophys. J.*, **177**, 115 - 128, 1972
45. D. Mihalas, Analyses of Light-Ion Spectra in Stellar Atmospheres. II. The Calcium II K-Line in B-Stars. *Astrophys. J.*, **179**, 209 - 220, 1973
46. D. Mihalas and D. G. Hummer, Analyses of Light-Ion Spectra in Stellar Atmospheres. III. Nitrogen III in the O-Stars. *Astrophys. J.*, **179**, 827 - 845, 1973
47. D. Mihalas, The Nitrogen III Emission Lines in the Of-Stars. *Pub. Astron. Soc. Pacific*, **85**, 593 - 598, 1973
48. L. H. Auer and D. Mihalas, Analyses of Light-Ion Spectra in Stellar Atmospheres. IV. He I in the B-Stars. *Astrophys. J. Suppl.* No. 223, **25**, 433 - 462, 1973
49. D. Mihalas and R. G. Athay, The Effects of Departures from LTE in Stellar Spectra. *Ann. Rev. Astron. Astrophys.*, **11**, 187 - 218, 1973
50. L. H. Auer and D. Mihalas, Analyses of Light-Ion Spectra in Stellar Atmospheres. V. Neon I in B-Stars. *Astrophys. J.*, **184**, 151 - 166, 1973
51. D. Mihalas, On the Helium-Spectrum Variations of ϵ Arietis and α Centauri. *Astrophys. J.*, **184**, 851 - 871, 1973

52. R. W. Milkey and D. Mihalas, Resonance Line Transfer with Partial Redistribution: A Preliminary Study of Lyman- α in the Solar Chromosphere. *Astrophys. J.*, **185**, 709 - 726, 1973
53. R. W. Milkey and D. Mihalas, Calculation of the Solar Chromospheric Lyman- α Profile Allowing for Partial Redistribution Effects. *Solar Phys.*, **32**, 361 - 363, 1973
54. D. Mihalas, A. J. Barnard, J. Cooper, and E. W. Smith, He I $\lambda 4471$ Profiles in B-Stars: Calculations with an Improved Line-Broadening Theory. *Astrophys. J.*, **190**, 315 - 318, 1974
55. J. N. Heasley, D. Mihalas, and A. I. Poland, Theoretical Helium I Emission Line Intensities for Quiescent Prominences. *Astrophys. J.*, **192**, 181 - 192, 1974
56. D. Mihalas and D. G. Hummer, Some Observational Implications of Extended Static O-Star Model Atmospheres. *Astrophys. J. Letters*, **189**, L39 - L43, 1974
57. R. W. Milkey and D. Mihalas, Resonance-Line Transfer with Partial Redistribution: II. The Solar Mg II Lines. *Astrophys. J.*, **192**, 769 - 776, 1974
58. D. Mihalas, Progress Towards an Interpretation of Stellar Spectra. *Astron. J.*, **79**, 1111 - 1121, 1974
59. D. Mihalas and D. G. Hummer, Theory of Extended Stellar Atmospheres, I. Computational Method and First Results for Static Spherical Models. *Astrophys. J. Suppl.* No. 265, **28**, 343 - 372, 1974
60. D. Mihalas, A. J. Barnard, J. Cooper, and E. W. Smith, He I $\lambda 4922$ Profiles in B-Stars: Calculations with an Improved Line-Broadening Theory. *Astrophys. J.*, **197**, 139 - 142, 1975
61. D. Mihalas, S. A. Frost, and G. W. Lockwood, Observations of the C III $\lambda 8500$ ($3s^1S - 3p^1P$) Line in O- and Of-Stars. *Pub. Astron. Soc. Pacific*, **87**, 153 - 161, 1975
62. R. W. Milkey, R. A. Shine, and D. Mihalas, Resonance-Line Transfer with Partial Redistribution. IV. A Generalized Formulation for Lines with Common Upper States. *Astrophys. J.*, **199**, 718 - 723, 1975
63. R. W. Milkey, R. A. Shine, and D. Mihalas, Resonance-Line Transfer with Partial Redistribution. V. The Solar Ca II Lines. *Astrophys. J.*, **199**, 724 - 733, 1975
64. R. A. Shine, R. W. Milkey, and D. Mihalas, Resonance-Line Transfer with Partial Redistribution. VI. The Ca II K-Line in Solar-Type Stars. *Astrophys. J.*, **201**, 222 - 224, 1975
65. D. G. Hummer, P. B. Kunasz, and D. Mihalas, Theory of Extended Stellar Atmospheres. II. A Grid of Static Spherical Models for O-Stars and Planetary Nebula Nuclei. *Astrophys. J.*, **202**, 92 - 113, 1975
66. R. W. Milkey, R. A. Shine, D. Mihalas, Resonance-Line Transfer with Partial Redistribution. VII. Angle-Dependent Redistribution. *Astrophys. J.*, **202**, 250 - 258, 1975
67. D. Mihalas, P. B. Kunasz, and D. G. Hummer, Solution of the Comoving Frame Equation of Transfer in Spherically Symmetric Flows. I. Computational Method for Equivalent Two Level Atom Source Functions, *Astrophys. J.*, **202**, 465 - 489, 1975

68. D. Mihalas, P. B. Kunasz, and D. G. Hummer, Solution of the Comoving Frame Equation of Transfer in Spherically Symmetric Flows. II. Picket-Fence Models. *Astrophys. J.*, **203**, 647 - 659, 1976
69. J. N. Heasley and D. Mihalas, Structure and Spectrum of Quiescent Prominences: Energy Balance and Hydrogen Spectrum. *Astrophys. J.*, **205**, 273 - 285, 1976
70. D. Mihalas, P. B. Kunasz, and D. G. Hummer, Solution of the Comoving Frame Equation of Transfer in Spherically Symmetric Flows. III. Effect of Aberration and Advection Terms. *Astrophys. J.*, **206**, 515 - 524, 1976
71. R. G. Athay, D. Mihalas, and R. A. Shine, An Archetype Hydrogen Atmosphere Problem. *Solar Phys.*, **45**, 15 - 23, 1975
72. D. Mihalas, R. A. Shine, P. B. Kunasz, and D. G. Hummer, Resonance-Line Transfer with Partial Redistribution. VIII. Solution in the Comoving Frame for Moving Atmospheres. *Astrophys. J.*, **205**, 492 - 498, 1976
73. D. Mihalas, P. B. Kunasz, and D. G. Hummer, Solution of the Comoving-Frame Equation of Transfer in Spherically Symmetric Flows. IV. Frequency-Dependent Source Functions for Scattering by Atoms and Electrons. *Astrophys. J.*, **210**, 419 - 433, 1976
74. D. Mihalas and P. B. Kunasz, Solution of the Comoving-Frame Equation of Transfer in Spherically Symmetric Flows. V. Multilevel Atoms. *Astrophys. J.*, **219**, 635 - 653, 1978
75. D. Mihalas, L. H. Auer, and B. R. Mihalas, Two-Dimensional Radiative Transfer. I. Planar Geometry. *Astrophys. J.*, **220**, 1001 - 1023, 1978
76. D. Mihalas, Curves of Growth and Line Profiles in Expanding and Rotating Atmospheres. *Monthly Notices Royal Astron. Soc.*, **189**, 671 - 699, 1979
77. D. Mihalas and P. S. Conti, Some Speculations Concerning the Significance of Beals Type III P-Cygni Profiles. *Astrophys. J.*, **235**, 515 - 518, 1980
78. D. Mihalas, Solution of the Comoving-Frame Equation of Transfer in Spherically Symmetric Flows. VI. Relativistic Flows. *Astrophys. J.*, **237**, 574 - 589, 1980
79. D. Mihalas, Solution of the Comoving-Frame Equation of Transfer in Spherically Symmetric Flows. VII. Angle-Dependent Partial Redistribution. *Astrophys. J.*, **238**, 1034 - 1041, 1980
80. D. Mihalas, Radiative Transfer in Spherical Flows with Nonmonotonic Velocity Fields: The Observer's Frame Reconsidered, *Astrophys. J.*, **238**, 1042 - 1046, 1980
81. D. Mihalas, Difference-Equation Methods for the Solution of Radiative Transfer Problems in Media with Discontinuities. *J. Quantit. Spectrosc. Radiat. Transf.*, **25**, 145 - 149, 1981
82. B. Baschek, D. Mihalas, and J. Oxenius, On the Stimulated Emission Terms in Partial Redistribution Calculations. *Astron. and Astrophys.*, **97**, 43 - 45, 1981
83. A. H. Vaughan, S. L. Baliunas, F. Middlekoop, L. W. Hartmann, D. Mihalas, R. W. Noyes, and G. W. Preston, Stellar Rotation in Lower Main Sequence Stars Measured from Time Variations in H and K Emission-Line Fluxes. I. Initial Results. *Astrophys. J.*, **250**, 276 - 283, 1981

84. D. Mihalas, A Comment on "Radiative Transfer in Spherically Symmetric Flows" by J. I. Castor. *Astrophys. J.*, **250**, 373 - 375, 1981
85. B. R. Durney, D. Mihalas, and R.D. Robinson, A Preliminary Interpretation of Stellar Chromospheric Ca II Emission Variations Within the Framework of Stellar Dynamo Theory. *Pub. Astron. Soc. Pacific*, **93**, 537 - 543, 1981
86. D. Mihalas, R. P. Weaver, and J. G. Sanderson, On Iterative Solutions of the LTE Model Atmosphere Problem. *J. Quantit. Spectrosc. Radiat. Transf.*, **28**, 53 - 59, 1982
87. D. Mihalas and R. I. Klein, On the Solution of the Time-Dependent Inertial-Frame Equation of Radiative Transfer in Moving Media to $O(v/c)$. *J. Comp. Phys.*, **46**, 97 - 136, 1982
88. D. Mihalas and R. P. Weaver, Time-Dependent Radiative Transfer with Automatic Flux Limiting. *J. Quantit. Spectrosc. Radiat. Transf.*, **28**, 213 - 222, 1982
89. D. Mihalas, Comments on the Dynamical Effects of Radiative Viscosity, *Astrophys. J.*, **266**, 242 - 247, 1983
90. R. R. Radick, L. Hartmann, D. Mihalas, S. P. Worden, J. L. Africano, A. Klimke, and E. T. Tyson, The Photometric Variability of Solar-Type Stars. I. Preliminary Results for the Pleiades, Hyades, and the Malmquist Field. *Pub. Astron. Soc. Pacific*, **94**, 934 - 944, 1982
91. D. Mihalas and B. W. Mihalas, On the Propagation of Acoustic Waves in a Radiating Fluid, *Astrophys. J.*, **273**, 355 - 362, 1983
92. S.L. Baliunas, A.H. Vaughan, L. Hartmann, F. Middlekoop, D. Mihalas, R.W. Noyes, G.W. Preston, J. Frazer, and H. Lanning, Stellar Rotation in Lower Main Sequence Stars Measured From Time Variations in H and K Emission Line Fluxes. II. Detailed Analysis of the 1980 Observing Season Data. *Astrophys. J.*, **275**, 752 - 772, 1983
93. R. R. Radick, G. W. Lockwood, D. T. Thompson, A. Warnock, L. W. Hartmann, D. Mihalas, S. P. Worden, G. W. Henry, and J. M. Sherlin, The Photometric Variability of Solar-Type Stars. III. Results from 1981-82, Including Parallel Observations of 36 Hyades Stars. *Pub. Astron. Soc. Pacific*, **95**, 621 - 634, 1983
94. K.-H. A. Winkler, M. L. Norman, and D. Mihalas, Adaptive-Mesh Radiation Hydrodynamics. I. The Radiation Transport Equation in a Completely Adaptive Coordinate System. *J. Quantit. Spectrosc. Radiat. Transf.*, **31**, 473 - 478, 1984
95. D. Mihalas, K.-H. A. Winkler, and M. L. Norman, Adaptive-Mesh Radiation Hydrodynamics. II. The Radiation and Fluid Equations in Relativistic Flows. *J. Quantit. Spectrosc. Radiat. Transf.*, **31**, 479 - 489, 1984
96. B. W. Lites and D. Mihalas, The H^- Equilibrium Using Coupled Rate Equations for H^- , H , H^+ , H_2 , and H_2^+ . *Solar Phys.*, **93**, 23 - 35, 1984
97. D. Mihalas, The Computation of Radiation Transport Using Feautrier Variables. I. Static Media. *J. Comp. Phys.*, **57**, 1 - 25, 1985

98. K.-H. A. Winkler, M. L. Norman, and D. Mihalas, Implicit Adaptive-Grid Radiation Hydrodynamics. In *Multiple Time Scales*, "Computational Techniques", ed. J.U. Brackbill and B.I. Cohen, (New York: Academic Press), **2**, 145 - 184, 1985
99. K.-H. A. Winkler, D. Mihalas, and M.L. Norman, Adaptive-Grid Methods with Asymmetric Time-Filtering. *Comp. Phys. Commun.*, **36**, 121 - 140, 1985
100. D. Mihalas and P. B. Kunasz, The Computation of Radiation Transport Using Feautrier Variables. II. Spectrum Line Formation in Moving Media. *J. Comp. Phys.*, **64**, 1 - 26, 1986
101. W. Däppen, L. Anderson, and D. Mihalas, Statistical Mechanics of Partially Ionized Stellar Plasmas: The Planck - Larkin Partition Function, Polarization Shifts, and Simulation of Optical Spectra. *Astrophys. J.*, **319**, 195 - 206, 1987
102. D. G. Hummer and D. Mihalas, The Equation of State for Stellar Envelopes. I. An Occupation Probability Formalism for the Truncation of Internal Partition Functions. *Astrophys. J.*, **331**, 794 - 814, 1988
103. D. Mihalas, W. Däppen, and D. G. Hummer, The Equation of State for Stellar Envelopes. II. Algorithm and Selected Results. *Astrophys. J.*, **331**, 815 - 825, 1988
104. W. Däppen, D. Mihalas, D. G. Hummer, and B. W. Mihalas, The Equation of State for Stellar Envelopes. III. Thermodynamic Quantities. *Astrophys. J.*, **332**, 261 - 270, 1988
105. D. Mihalas, D. G. Hummer, B. W. Mihalas, and W. Däppen, The Equation of State for Stellar Envelopes. IV. Thermodynamic Quantities and Selected Ionization Fractions for Six Elemental Mixes. *Astrophys. J.*, **350**, 300 - 308, 1990
106. D. K. Duncan (+ 17 other authors), Ca II H and K Measurements Made at Mt. Wilson Observatory, 1966 - 83. *Astrophys. J. Suppl.*, **76**, 383 - 430, 1991
107. J. M. Stone and D. Mihalas, Upwind Monotonic Interpolation Methods for the Solution of the Time Dependent Radiative Transfer Equation. *J. Comp. Physics*, **100**, 402 - 408, 1992
108. J.M. Stone, D. Mihalas, and M.L. Norman, Zeus-2D: A Radiation Magnetohydrodynamics Code of Astrophysical Flows in Two Space Dimensions. III. The Radiation Hydrodynamic Algorithms and Tests. *Astrophys. J. Suppl.*, **80**, 819 - 845, 1992
109. D. Mihalas, The Opacity Project - Equation of State. *Revista Mexicana de Astronomia y Astrofisica*, **23**, 127 - 132, 1992
110. N. R. Simon, S. M. Kanbur, and D. Mihalas, On Cepheids at Maximum and Minimum Light. *Astrophys. J.*, **414**, 310 - 315, 1993
111. M. J. Seaton, Y. Yu, D. Mihalas, and A.K. Pradhan, Opacities for Stellar Envelopes. *Monthly Notices Royal Astron. Soc.*, **266**, 805 - 828, 1994
112. M. Gehmeyr and D. Mihalas, Adaptive Grid Radiation Hydrodynamics with TITAN. *Physica D*, **77**, 320 - 341, 1994
113. M. Gehmeyr, B. Cheng, and D. Mihalas, Noh's Constant-Velocity Shock Problem Revisited. *Shock Waves*, **7**, 255 - 274, 1997

114. M. W. Sincell, M. Gehmeyr, and D. Mihalas, The Quasi-Stationary Structure of Radiating Shock Waves, I. The One-Temperature Fluid. *Shock Waves*, **9**, 391 - 402, 1999
115. M. W. Sincell, M. Gehmeyr, and D. Mihalas, The Quasi-Stationary Structure of Radiating Shock Waves, II. The Two-Temperature Fluid. *Shock Waves*, **9**, 403 - 411, 1999
116. A. Nayfonov, W. Däppen, D. G. Hummer, and D. Mihalas, The MHD Equation of State with Post-Holtsmark Microfield Distributions. *Astrophys. J.*, **526**, 451 - 464, 1999
117. D. Mihalas, Schuster's Radiative Transfer Model of a Stellar Atmosphere. *Astrophys. J.*, **525**, 25 - 30, 1999 (Centennial Edition)
118. D. Mihalas, Baade's Resolution of M32, NCC 205, and M31. *Astrophys. J.*, **525**, 359 - 361, 1999 (Centennial Edition)
119. K. H. Simmons and D. Mihalas, A Linearized Analysis of the Modified P_1 Equations. *J. Quantit. Spectrosc. Radiat. Transf.*, **66**, 263 - 269, 2000
120. R. B. Lowrie, D. Mihalas, and J.E. Morel, Comoving-Frame Radiation Transport for Nonrelativistic Fluid Velocities. *J. Quantit. Spectrosc. Radiat. Transf.*, **69**, 291 - 304, 2001
121. D. Mihalas and L. H. Auer, On Laboratory-Frame Radiation Hydrodynamics. *J. Quantit. Spectrosc. Radiat. Transf.*, **71**, 61 - 97, 2001
122. D. Mihalas, Fifty Years of Research on Stellar Atmospheres. *Pub. Astron. Soc. Aust.*, **18**, 311 - 316, 2001

Books

1. D. Mihalas (in collaboration with P.M. Routly), *Galactic Astronomy*, (San Francisco: W. H. Freeman and Company), 1968
2. D. Mihalas, *Stellar Atmospheres*. (San Francisco: W. H. Freeman and Company), 1970
3. D. Mihalas, B. Pagel, and P. Souffrin, *Theorie des Atmospheres Stellaires*. First Advanced Course of the Swiss Society for Astronomy and Astrophysics. (Geneva: Observatoire de Geneve), 1971
4. D. Mihalas, *Stellar Atmospheres*, 2nd Edition. (San Francisco: W. H. Freeman and Company), 1978
5. D. Mihalas and J. Binney, *Galactic Astronomy: Structure and Kinematics of Galaxies*. (San Francisco: W.H. Freeman and Company), 1981
6. D. Mihalas and B. W. Mihalas, *Foundations of Radiation Hydrodynamics*. (New York: Oxford University Press), 1984. Paperback Edition, (New York: Dover Publications, Inc.), 1999
7. R. J. LeVeque, D. Mihalas, E. A. Dorfi, and E. Müller, *Computational Methods for Astrophysical Fluid Flow*. Saas-Fee Advanced Course 27. Swiss Society for Astronomy and Astrophysics. (Berlin: Springer Verlag), 1998
8. D. Mihalas and I. Hubeny, *Theory of Stellar Atmospheres: An Introduction to Astrophysical Non-equilibrium Quantitative Spectroscopic Analysis*. (Final manuscript was submitted to Princeton University Press), 2013

Books Edited

1. P. A. Sturrock, T. E. Holzer, D. Mihalas, and R. K. Ulrich, *Physics of the Sun*. In three volumes. (Dordrecht: D. Reidel Publishing Company), 1986
2. D. Mihalas and K.-H. Winkler, *Radiation Hydrodynamics in Stars and Compact Objects*. Proceedings of Colloquium No. 89 of the International Astronomical Union, Copenhagen. (Heidelberg: Springer Verlag), 1986
3. I. Hubeny, D. Mihalas, and K. Werner, *Stellar Atmosphere Modeling*. Proceedings of an International Workshop held in Tübingen, Germany. (San Francisco: Astronomical Society of the Pacific), 2003

Papers in Conference Proceedings

1. L. H. Auer, D. Mihalas, L. H. Aller and J. E. Ross, Fine Analysis of the Manganese Star 53 Tauri. In *The Magnetic and Related Stars*, ed. R.C. Cameron, (Baltimore: Mono Book Corp.), pp. 433 - 444, 1967
2. D. Mihalas, Effects of Departures from LTE and Atmospheric Extension on Colors and Theoretical Continuum Parameters. In *Multicolor Photometry and the Theoretical HR Diagram*, ed. A. G. D. Philip and D. S. Hayes, Dudley Observatory Report No. 9, (Albany: State University of New York), pp. 241 - 269, 1975
3. R. Cayrel and D. Mihalas, Report of Commission 36 of the International Astronomical Union (Theory of Stellar Atmospheres). In *Transactions of the International Astronomical Union*, ed. G. Contopoulos, (Dordrecht: Reidel), **16A**, part 2, pp. 189 - 205, 1976
4. D. Mihalas, Radiative Transfer in Expanding Atmospheres. In *Physique des Mouvements dans les Atmospheres Stellaires*, ed. R. Cayrel and M. Steinberg. (Paris: Centre National de la Recherche Scientifique), pp. 347 - 361, 1976
5. D. Mihalas and G. Traving, Report of Commission 36 of the International Astronomical Union (Theory of Stellar Atmospheres). In *Transactions of the International Astronomical Union*, ed. E. A. Muller, (Dordrecht: Reidel), **17A**, part 2, pp. 193 - 210, 1979
6. D. Mihalas, The Solar Stellar Connection: What Observations are Needed? In *Solar Instrumentation: What's Next?*, ed. R. B. Dunn, (Sunspot: Sacramento Peak Observatory), pp. 193 - 200, 1981
7. D. Mihalas, On the Relevance of the MK System and Process to the Theory of Stellar Atmospheres. In *The MK Process and Spectral Classification*, ed. R. F. Garrison, (Toronto: David Dunlap Observatory), pp. 4 - 16, 1984
8. D. Mihalas, The Equations of Radiation Hydrodynamics. In *Astrophysical Radiation Hydrodynamics*, ed. K.-H. A. Winkler and M. L. Norman, (Dordrecht: D. Reidel), pp. 45 - 70, 1986
9. D. Mihalas, Atomic Processes and Radiation Transport in Stars. In *Atomic Processes in Plasmas*, ed. A. Hauer and A. L. Merts, (New York: American Institute of Physics), pp. 42 - 50, 1988
10. Progress Toward an Improved Equation of State and Opacity for Stellar Envelopes. In *The Use of Pulsating Stars in Fundamental Problems of Astronomy*. ed. E. G. Schmidt, (Cambridge: Cambridge University Press), pp. 59 - 62, 1989
11. J. M. Stone, M. L. Norman, and D. Mihalas. Numerical Simulations of Mass Outflows from Star Forming Regions. In *Accretion Disks and Magnetic Fields in Astrophysics*, ed. G. Belvedere, (Dordrecht: Kluwer Academic Publishers), pp. 207 - 221, 1989
12. D. Mihalas, Recent Progress and Future Prospects in the Study of Stellar Atmospheres. In *Astrophysics: Recent Progress and Future Possibilities*. ed. B. Gustafsson and P. E. Nissen, Matematisk-Fysiske Medd. (Copenhagen), **42**: 4, pp. 51 - 74, 1990

13. D. Mihalas, Current Status of the Opacity Project. In *Confrontation Between Stellar Pulsation and Evolution*. ed. C. Cacciari and G. Clementi, (San Francisco: Astronomical Society of the Pacific), pp. 99 - 100, 1990
14. J. M. Stone, M. L. Norman, and D. Mihalas. MHD Simulations of Mass Outflows from Star Forming Regions. In *Galactic and Extragalactic Magnetic Fields*. ed. R. Beck, P. Kronberg, and R. Wielebinski, (Dordrecht: Reidel). pp. 351 - 358, 1990
15. D. Mihalas, The Quest for Physical Realism for Stellar Atmospheric Modeling. In *Stellar Atmospheres: Beyond Classical Models*. ed. L. Crivellari, I. Hubeny, and D.G. Hummer, (Dordrecht: Kluwer), pp. 127 - 141, 1991
16. D. Mihalas, Stellar Classification and the Theory of Stellar Atmospheres. In *The MK Process at 50 Years*. ed. C. J. Corbally, R. O. Gray, and R. F. Garrison, (San Francisco: Astronomical Society of the Pacific), pp. 41 - 56, 1994
17. D. Mihalas, Laboratory and Astrophysical Radiation Hydrodynamics. In *Stellar Atmospheric Modeling*. ed. I. Hubeny, D. Mihalas, and K. Werner, (San Francisco: Astronomical Society of the Pacific), pp. 459 - 470, 2003
18. D. Mihalas, Cepheid Atmospheres. In *Stellar Atmospheric Modeling*. ed. I. Hubeny, D. Mihalas, and K. Werner, (San Francisco: Astronomical Society of the Pacific), pp. 471 - 490, 2003
19. D. Mihalas, Summary/Prognosis of the Workshop. In *Stellar Atmosphere Modeling*. ed. I. Hubeny, D. Mihalas, and K. Werner, (San Francisco: Astronomical Society of the Pacific), pp. 677 - 694, 2003

Technical Reports (Other than preprints)

1. D. Mihalas, Derivatives of Radar Range Rate with Respect to Burnout Conditions. Space Technology Laboratories Document No. 7340.2-14, 1959 (10 pages)
2. D. G. Hummer and D. Mihalas, Surface Fluxes for Model Atmospheres for the Central Stars of Planetary Nebulae. JILA Report No. 101, Joint Institute for Laboratory Astrophysics, University of Colorado, 1970 (27 pages)
3. D. Mihalas, Non-LTE Model Atmospheres for B- and O-Stars. NCAR Technical Note NCAR-TN/STR-76, 1972 (114 pages)
4. T. R. Stoeckley and D. Mihalas, Limb Darkening and Rotation Broadening of Neutral Helium and Ionized Magnesium Line Profiles in Early Type Stars. NCAR Technical Note, NCAR-TN/STR-84, 1973 (183 pages)
5. D. Mihalas, J. N. Heasley, and L. H. Auer, A Non-LTE Model Stellar Atmosphere Computer Program. NCAR Technical Note, NCAR-TN/STR-104, 1975 (233 pages)
6. D. Mihalas and R. Weaver, The Dynamics of a Radiating Fluid. Los Alamos National Laboratory Report No. LA-UR-82-606, 1982 (72 pages)
7. D. Mihalas and R. Weaver, The Dynamics of Radiating Fluids. Los Alamos National Laboratory Report No. LA-UR-82-743, 1982 (34 pages)
8. R. Weaver, D. Mihalas, and G. Olson, Methods for the Solution of the Two-Dimensional Radiation Transfer Equation. Los Alamos National Laboratory Report No. LA-UR-82-961, 1982 (40 pages)
9. D. Mihalas, The Momentum-Energy Equations for a Relativistic Flow with Thermonuclear Energy Release. Los Alamos National Laboratory Report No. LA-UR-84-3322, 1984 (10 pages)
10. P. Kunasz and D. Mihalas, Two-Dimensional Non-LTE Line Transfer in X-Y Coordinates, Program XY2D: Application of the ETLA Method to Multi-Level Atoms and Ions. Los Alamos National Laboratory Report No. LA-UR-84-3735, 1984 (25 pages)
11. D. Mihalas, D. Hummer, W. Däppen, and B. Mihalas, A Stellar Envelope Equation of State. Department of Astronomy, University of Illinois, 1988 (7 pages)
12. D. Mihalas and B. W. Mihalas, A User's Manual for the University of Illinois Stellar-Envelope Equation of State Code. Department of Astronomy and National Center for Supercomputing Applications, University of Illinois, 1989 (22 pages)
13. R. Gilliland, K. Fisher, D. Mihalas, R. Fisher, W. Lockwood, R. Radick, and L. Ramsey, HAO-Lowell-AFGL Solar Stellar Spectrophotometer Catalog. NCAR Technical Note, NCAR/TN-314+STR, 1989 (56 pages)
14. D. Mihalas and M. Gehmeyr, TITAN Code Reference Manual: A 1D Implicit-Adaptive-Grid Radiation Hydrodynamics Code. Department of Astronomy and National Center for Supercomputer Applications, University of Illinois, 1993 (viii + 133 pages)

15. M. Gehmeyr and D. Mihalas, TITAN Code User's Guide: A 1D Implicit-Adaptive-Grid Radiation Hydrodynamics Code. Department of Astronomy and National Center for Supercomputer Applications, University of Illinois, 1994 (v + 83 pages)
16. Calculation of the Radiation Field in Cylindrical (rz) Geometry with Short Characteristics. Los Alamos National Laboratory Report No. XTM-RN(U)-96-027, 1996 (8 pages)
17. D. Mihalas and L. H. Auer, An X-6 Radiation Hydrodynamics Primer. Los Alamos National Laboratory Report LA-UR-99-6018, 1999 (64 pages)
18. D. Mihalas, Radiation Hydrodynamics in Stellar Atmospheres. Los Alamos National Laboratory Report LA-UR-01-5586, 2001 (30 pages)
19. D. Mihalas, A Bibliography of Literature on Radiation Hydrodynamics. Los Alamos National Laboratory Report LA-13959, 2002 (70 pages)
20. D. Mihalas, A Guide to the Literature on Quantitative Spectroscopy in Astrophysics. Los Alamos National Laboratory Report LA-14062, 2003 (143 pages)
21. D. Mihalas, Photohydrodynamics. Los Alamos National Laboratory Report LA-UR-03-5836, 2003 (13 pages)