

Sean P Matt

List of Publications by Year in descending order

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Version: 2024-02-01

62
papers

2,828
citations

159585

30
h-index

175258

52
g-index

63
all docs

63
docs citations

63
times ranked

1711
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Accretion-powered Stellar Winds as a Solution to the Stellar Angular Momentum Problem. <i>Astrophysical Journal</i> , 2005, 632, L135-L138. | 4.5 | 266 |
| 2 | THE MASS-DEPENDENCE OF ANGULAR MOMENTUM EVOLUTION IN SUN-LIKE STARS. <i>Astrophysical Journal Letters</i> , 2015, 799, L23. | 8.3 | 230 |
| 3 | MAGNETIC BRAKING FORMULATION FOR SUN-LIKE STARS: DEPENDENCE ON DIPOLE FIELD STRENGTH AND ROTATION RATE. <i>Astrophysical Journal Letters</i> , 2012, 754, L26. | 8.3 | 175 |
| 4 | THE EFFECT OF MAGNETIC TOPOLOGY ON THERMALLY DRIVEN WIND: TOWARD A GENERAL FORMULATION OF THE BRAKING LAW. <i>Astrophysical Journal</i> , 2015, 798, 116. | 4.5 | 166 |
| 5 | Accretion-powered Stellar Winds. II. Numerical Solutions for Stellar Wind Torques. <i>Astrophysical Journal</i> , 2008, 678, 1109-1118. | 4.5 | 148 |
| 6 | The spin of accreting stars: dependence on magnetic coupling to the disc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 356, 167-182. | 4.4 | 115 |
| 7 | On Differential Rotation and Overshooting in Solar-like Stars. <i>Astrophysical Journal</i> , 2017, 836, 192. | 4.5 | 101 |
| 8 | When Do Stalled Stars Resume Spinning Down? Advancing Gyrochronology with Ruprecht 147. <i>Astrophysical Journal</i> , 2020, 904, 140. | 4.5 | 89 |
| 9 | MASS LOSS IN PRE-MAIN-SEQUENCE STARS VIA CORONAL MASS EJECTIONS AND IMPLICATIONS FOR ANGULAR MOMENTUM LOSS. <i>Astrophysical Journal</i> , 2012, 760, 9. | 4.5 | 88 |
| 10 | ON THE DIVERSITY OF MAGNETIC INTERACTIONS IN CLOSE-IN STAR-PLANET SYSTEMS. <i>Astrophysical Journal</i> , 2014, 795, 86. | 4.5 | 87 |
| 11 | MAGNETIC GAMES BETWEEN A PLANET AND ITS HOST STAR: THE KEY ROLE OF TOPOLOGY. <i>Astrophysical Journal</i> , 2015, 815, 111. | 4.5 | 78 |
| 12 | Accretion-powered Stellar Winds. III. Spin-Equilibrium Solutions. <i>Astrophysical Journal</i> , 2008, 681, 391-399. | 4.5 | 69 |
| 13 | Disk Formation by Asymptotic Giant Branch Winds in Dipole Magnetic Fields. <i>Astrophysical Journal</i> , 2000, 545, 965-973. | 4.5 | 67 |
| 14 | SPIN EVOLUTION OF ACCRETING YOUNG STARS. II. EFFECT OF ACCRETION-POWERED STELLAR WINDS. <i>Astrophysical Journal</i> , 2012, 745, 101. | 4.5 | 65 |
| 15 | A path towards understanding the rotation-activity relation of M dwarfs with K2 mission, X-ray and UV data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 463, 1844-1864. | 4.4 | 65 |
| 16 | Simulation-based Investigation of a Model for the Interaction between Stellar Magnetospheres and Circumstellar Accretion Disks. <i>Astrophysical Journal</i> , 2002, 574, 232-245. | 4.5 | 62 |
| 17 | SPIN EVOLUTION OF ACCRETING YOUNG STARS. I. EFFECT OF MAGNETIC STAR-DISK COUPLING. <i>Astrophysical Journal</i> , 2010, 714, 989-1000. | 4.5 | 61 |
| 18 | Estimating Magnetic Filling Factors from Zeeman-Doppler Magnetograms. <i>Astrophysical Journal</i> , 2019, 876, 118. | 4.5 | 59 |

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|----|---|-----|-----------|
| 19 | The Effect of Combined Magnetic Geometries on Thermally Driven Winds. II. Dipolar, Quadrupolar, and Octupolar Topologies. <i>Astrophysical Journal</i> , 2018, 854, 78. | 4.5 | 58 |
| 20 | FROM SOLAR TO STELLAR CORONA: THE ROLE OF WIND, ROTATION, AND MAGNETISM. <i>Astrophysical Journal</i> , 2015, 814, 99. | 4.5 | 57 |
| 21 | The non-dipolar magnetic fields of accreting T Tauri stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 389, 1839-1850. | 4.4 | 52 |
| 22 | Do Non-dipolar Magnetic Fields Contribute to Spin-down Torques?. <i>Astrophysical Journal</i> , 2019, 886, 120. | 4.5 | 45 |
| 23 | Simultaneous Production of Disk and Lobes: A Single-Wind MHD Model for the $\hat{\iota}$ Carinae Nebula. <i>Astrophysical Journal</i> , 2004, 615, 921-933. | 4.5 | 38 |
| 24 | Astrophysical Explosions Driven by a Rotating, Magnetized, Gravitating Sphere. <i>Astrophysical Journal</i> , 2006, 647, L45-L48. | 4.5 | 38 |
| 25 | The Impact of Metallicity on the Evolution of the Rotation and Magnetic Activity of Sun-like Stars. <i>Astrophysical Journal</i> , 2020, 889, 108. | 4.5 | 37 |
| 26 | Magnetic Braking of Sun-like and Low-mass Stars: Dependence on Coronal Temperature. <i>Astrophysical Journal</i> , 2017, 849, 83. | 4.5 | 35 |
| 27 | The Effect of Magnetic Variability on Stellar Angular Momentum Loss. I. The Solar Wind Torque during Sunspot Cycles 23 and 24. <i>Astrophysical Journal</i> , 2018, 864, 125. | 4.5 | 35 |
| 28 | Does Disk Locking Solve the Stellar Angular Momentum Problem?. <i>Astrophysical Journal</i> , 2004, 607, L43-L46. | 4.5 | 34 |
| 29 | The Effect of Combined Magnetic Geometries on Thermally Driven Winds. I. Interaction of Dipolar and Quadrupolar Fields. <i>Astrophysical Journal</i> , 2017, 845, 46. | 4.5 | 33 |
| 30 | Physical Conditions of Accreting Gas in T Tauri Star Systems. <i>Astrophysical Journal</i> , 2008, 687, 376-388. | 4.5 | 32 |
| 31 | Alfvén-wave-driven Magnetic Rotator Winds from Low-mass Stars. I. Rotation Dependences of Magnetic Braking and Mass-loss Rate. <i>Astrophysical Journal</i> , 2020, 896, 123. | 4.5 | 30 |
| 32 | Collimation of a central wind by a disc-associated magnetic field. <i>Monthly Notices of the Royal Astronomical Society</i> , 2003, 345, 660-670. | 4.4 | 29 |
| 33 | A SEARCH FOR STAR-DISK INTERACTION AMONG THE STRONGEST X-RAY FLARING STARS IN THE ORION NEBULA CLUSTER. <i>Astrophysical Journal</i> , 2010, 717, 93-106. | 4.5 | 23 |
| 34 | Evidence for metallicity-dependent spin evolution in the Kepler field. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 499, 3481-3493. | 4.4 | 23 |
| 35 | Photometric Variability as a Proxy for Magnetic Activity and Its Dependence on Metallicity. <i>Astrophysical Journal</i> , 2021, 912, 127. | 4.5 | 23 |
| 36 | The nature of stellar winds in the star-disk interaction. <i>Proceedings of the International Astronomical Union</i> , 2007, 3, 299-306. | 0.0 | 22 |

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|----|--|-----|-----------|
| 37 | Magnetic Braking of Accreting T Tauri Stars: Effects of Mass Accretion Rate, Rotation, and Dipolar Field Strength. <i>Astrophysical Journal</i> , 2021, 906, 4. | 4.5 | 21 |
| 38 | Direct Detection of Solar Angular Momentum Loss with the Wind Spacecraft. <i>Astrophysical Journal Letters</i> , 2019, 885, L30. | 8.3 | 20 |
| 39 | On the origin of the bimodal rotational velocity distribution in stellar clusters: rotation on the pre-main sequence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 495, 1978-1983. | 4.4 | 19 |
| 40 | An Approximate Determination of the Gas-Phase Metal Abundance in Herbig-Haro Outflows and Their Shocks. <i>Publications of the Astronomical Society of the Pacific</i> , 2001, 113, 158-164. | 3.1 | 17 |
| 41 | Solar Angular Momentum Loss over the Past Several Millennia. <i>Astrophysical Journal</i> , 2019, 883, 67. | 4.5 | 13 |
| 42 | The Effect of Magnetic Variability on Stellar Angular Momentum Loss. II. The Sun, 61 Cygni A, μ Eridani, β Bootis A, and γ Bootis A. <i>Astrophysical Journal</i> , 2019, 876, 44. | 4.5 | 13 |
| 43 | The contribution of alpha particles to the solar wind angular momentum flux in the inner heliosphere. <i>Astronomy and Astrophysics</i> , 2021, 650, A17. | 5.1 | 11 |
| 44 | The Solar Wind Angular Momentum Flux as Observed by Parker Solar Probe. <i>Astrophysical Journal Letters</i> , 2020, 902, L4. | 8.3 | 11 |
| 45 | A statistical evaluation of ballistic backmapping for the slow solar wind: The interplay of solar wind acceleration and corotation. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , . | 4.4 | 9 |
| 46 | Statistical Fitting of Evolutionary Models to Rotation Rates of Sun-like Stars. <i>Astrophysical Journal</i> , 2021, 913, 75. | 4.5 | 8 |
| 47 | How Much Do Underestimated Field Strengths from Zeeman-Doppler Imaging Affect Spin-down Torque Estimates?. <i>Astrophysical Journal</i> , 2020, 894, 69. | 4.5 | 7 |
| 48 | Magnetic Braking of Accreting T Tauri Stars II: Torque Formulation Spanning Spin-up and Spin-down Regimes. <i>Astrophysical Journal</i> , 2022, 929, 65. | 4.5 | 7 |
| 49 | Collimation of a Central Wind by a Disk-Associated Magnetic Field. <i>Astrophysics and Space Science</i> , 2003, 287, 65-68. | 1.4 | 5 |
| 50 | Effect of Differential Rotation on the Magnetic Braking of Low-mass and Solar-like Stars: A Proof-of-concept Study. <i>Astrophysical Journal</i> , 2022, 925, 100. | 4.5 | 5 |
| 51 | The Enigmatic HH 255. <i>Publications of the Astronomical Society of the Pacific</i> , 2003, 115, 334-341. | 3.1 | 4 |
| 52 | T Tauri Angular Momentum Loss via Large Scale Eruptive Flaring Events. , 2009, , . | | 3 |
| 53 | Coronal Mass Ejections and Angular Momentum Loss in Young Stars. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 318-321. | 0.0 | 2 |
| 54 | Modeling magnetized star-planet interactions: boundary conditions effects. <i>Proceedings of the International Astronomical Union</i> , 2013, 8, 330-334. | 0.0 | 2 |

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|----|---|-----|-----------|
| 55 | New Calculations of Stellar Wind Torques. , 2009, , . | | 1 |
| 56 | The rotation-magnetic field relation. , 2009, , . | | 1 |
| 57 | The Early History of Stellar Spin: the Theory of Accretion onto Young Stellar Objects. EPJ Web of Conferences, 2014, 64, 04001. | 0.3 | 1 |
| 58 | Measuring the physical conditions of accreting gas in T Tauri systems. Proceedings of the International Astronomical Union, 2007, 3, 95-102. | 0.0 | 0 |
| 59 | The role of complex magnetic topologies on stellar spin-down. Proceedings of the International Astronomical Union, 2015, 11, 297-302. | 0.0 | 0 |
| 60 | Erratum "The Effect of Combined Magnetic Geometries on Thermally Driven Winds. II. Dipolar, Quadrupolar, and Octupolar Topologies" (2018, ApJ, 854, 78). Astrophysical Journal, 2018, 857, 147. | 4.5 | 0 |
| 61 | Collimation of a Central Wind By a Disk-Associated Magnetic Field. , 2003, , 65-68. | | 0 |
| 62 | Soft X-rays from DG Tau: A physical Jet Model. Thirty Years of Astronomical Discovery With UKIRT, 2009, , 543-545. | 0.3 | 0 |