# Masahiro Hoshino

List of Publications by Year
in descending order



| 193 | 7,860 | 41344 | 56724 |
|---|---|---|---|
| papers | citations | 49 h-index | 83 g-index |

| 197 | 197 | 197 | 3782 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

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| 1 | Suprathermal electron acceleration in magnetic reconnection. Journal of Geophysical Research, 2001, 106, 25979-25997. | 3.3 | 310 |
| 2 | Geotail observations of the Hall current system: Evidence of magnetic reconnection in the magnetotail. Journal of Geophysical Research, 2001, 106, 25929-25949. | 3.3 | 298 |
| 3 | Relativistic magnetosonic shock waves in synchrotron sources - Shock structure and nonthermal acceleration of positrons. Astrophysical Journal, 1992, 390, 454. | 4.5 | 290 |
| 4 | The Generation of Nonthermal Particles in the Relativistic Magnetic Reconnection of Pair Plasmas. Astrophysical Journal, 2001, 562, L63-L66. | 4.5 | 262 |
| 5 | Decay instability of finiteâ€amplitude circularly polarized Alfven waves: A numerical simulation of stimulated Brillouin scattering. Journal of Geophysical Research, 1986, 91, 4171-4187. | 3.3 | 226 |
| 6 | Particle Acceleration and Magnetic Dissipation in Relativistic Current Sheet of Pair Plasmas. Astrophysical Journal, 2007, 670, 702-726. | 4.5 | 176 |
| 7 | Particle Acceleration in the Magnetotail and Aurora. Space Science Reviews, 2012, 173, 49-102. | 8.1 | 173 |
| 8 | Relativistic, perpendicular shocks in electron-positron plasmas. Astrophysical Journal, 1992, 391, 73. | 4.5 | 148 |
| 9 | Selected Problems in Collisionless-Shock Physics. Space Science Reviews, 2004, 110, 161-226. | 8.1 | 145 |
| 10 | Nonthermal Electrons at High Mach Number Shocks: Electron Shock Surfing Acceleration. Astrophysical Journal, 2002, 572, 880-887. | 4.5 | 143 |
| 11 | Strong Electron Acceleration at High Mach Number Shock Waves: Simulation Study of Electron Dynamics. Astrophysical Journal, 2000, 543, L67-L71. | 4.5 | 142 |
| 12 | Ion dynamics in magnetic reconnection: Comparison between numerical simulation and Geotail observations. Journal of Geophysical Research, 1998, 103, 4509-4530. | 3.3 | 136 |
| 13 | Stochastic electron acceleration during spontaneous turbulent reconnection in a strong shock wave. Science, 2015, 347, 974-978. | 12.6 | 135 |
| 14 | Turbulent magnetic field in the distant magnetotail: Bottom-up process of plasmoid formation?. Geophysical Research Letters, 1994, 21, 2935-2938. | 4.0 | 133 |
| 15 | Repeated injections of energy in the first 600â€‰ms of the giant flare of SGRâ€‰1806â€“20. Nature, 2005, 434, 1110-1111. | 27.8 | 131 |
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| 17 | The structure of the dissipation region for component reconnection: Particle simulations. Geophysical Research Letters, 2002, 29, 4-1. | 4.0 | 129 |
| 18 | Electron surfing acceleration in magnetic reconnection. Journal of Geophysical Research, 2005, 110, . | 3.3 | 128 |

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| 19 | In-flight Performance and Initial Results of Plasma Energy Angle and Composition Experiment (PACE) onÂSELENE (Kaguya). Space Science Reviews, 2010, 154, 265-303. | 8.1 | 123 |
| 20 | Structure of plasma sheet in magnetotail: Double-peaked electric current sheet. Journal of Geophysical Research, 1996, 101, 24775-24786. | 3.3 | 121 |
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| 22 | Stochastic Particle Acceleration in Multiple Magnetic Islands during Reconnection. Physical Review Letters, 2012, 108, 135003. | 7.8 | 116 |
| 23 | Transient and localized processes in the magnetotail: a review. Annales Geophysicae, 2008, 26, 955-1006. | 1.6 | 112 |
| 24 | The Role of the Guide Field in Relativistic Pair Plasma Reconnection. Astrophysical Journal, 2008, 677, 530-544. | 4.5 | 112 |
| 25 | Numerical study of the upstream wave excitation mechanism: 1. Nonlinear phase bunching of beam ions. Journal of Geophysical Research, 1985, 90, 57-64. | 3.3 | 102 |
| 26 | Evolution of the thin current sheet in a substorm observed by Geotail. Journal of Geophysical Research, 2003, 108, . | 3.3 | 98 |
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| 35 | Statistical study of thin current sheet evolution around substorm onset. Journal of Geophysical Research, 2004, 109, . | 3.3 | 71 |
| 36 | Electron Injection at High Mach Number Quasiâ€perpendicular Shocks: Surfing and Drift Acceleration. Astrophysical Journal, 2007, 661, 190-202. | 4.5 | 68 |

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| 60 | Numerical simulation of the dayside reconnection. Journal of Geophysical Research, 1983, 88, 6926-6936. | 3.3 | 41 |
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