

# M J Pueschel

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

1,728  
citations

218677

26  
h-index

289244

40  
g-index

61  
all docs

61  
docs citations

61  
times ranked

890  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Gyrokinetic turbulence simulations at high plasma beta. <i>Physics of Plasmas</i> , 2008, 15, 102310.  | 1.9 | 127       |
| 2  | Characterizing electron temperature gradient turbulence via numerical simulation. <i>Physics of Plasmas</i> , 2006, 13, 122306.                                  | 1.9 | 99        |
| 3  | Gyrokinetic Microtearing Turbulence. <i>Physical Review Letters</i> , 2011, 106, 155003.   | 7.8 | 98        |
| 4  | Transport properties of finite- $\hat{\rho}^2$ microturbulence. <i>Physics of Plasmas</i> , 2010, 17, .  | 1.9 | 89        |
| 5  | Electromagnetic stabilization of tokamak microturbulence in a high- $\hat{\rho}^2$ regime. <i>Plasma Physics and Controlled Fusion</i> , 2015, 57, 014032.       | 2.1 | 70        |
| 6  | Origin of Magnetic Stochasticity and Transport in Plasma Microturbulence. <i>Physical Review Letters</i> , 2012, 108, 235002.                                    | 7.8 | 64        |
| 7  | On the role of numerical dissipation in gyrokinetic Vlasov simulations of plasma microturbulence. <i>Computer Physics Communications</i> , 2010, 181, 1428-1437. | 7.5 | 62        |
| 8  | Gyrokinetic prediction of microtearing turbulence in standard tokamaks. <i>Physics of Plasmas</i> , 2012, 19, .  | 1.9 | 59        |
| 9  | Role of subdominant stable modes in plasma microturbulence. <i>Physics of Plasmas</i> , 2011, 18, .  | 1.9 | 51        |
| 10 | Gyrokinetic study of ASDEX Upgrade inter-ELM pedestal profile evolution. <i>Nuclear Fusion</i> , 2015, 55, 063028.   | 3.5 | 51        |
| 11 | Nonlinear Electromagnetic Stabilization of Plasma Microturbulence. <i>Physical Review Letters</i> , 2018, 120, 175002.   | 7.8 | 48        |
| 12 | Quasilinear transport modelling at low magnetic shear. <i>Physics of Plasmas</i> , 2012, 19, .   | 1.9 | 42        |
| 13 | Magnetic stochasticity and transport due to nonlinearly excited subdominant microtearing modes. <i>Physics of Plasmas</i> , 2013, 20, .                          | 1.9 | 41        |
| 14 | Gyrokinetic simulations of magnetic reconnection. <i>Physics of Plasmas</i> , 2011, 18, .  | 1.9 | 39        |
| 15 | Extreme Heat Fluxes in Gyrokinetic Simulations: A New Critical $\hat{\rho}^2$ . <i>Physical Review Letters</i> , 2013, 110, 155005.                              | 7.8 | 39        |
| 16 | Stellarator Turbulence: Subdominant Eigenmodes and Quasilinear Modeling. <i>Physical Review Letters</i> , 2016, 116, 085001.                                     | 7.8 | 34        |
| 17 | Subdominant Modes in Zonal-Flow-Regulated Turbulence. <i>Physical Review Letters</i> , 2014, 112, 095002.  | 7.8 | 33        |
| 18 | Overview of gyrokinetic studies of finite- $\hat{\rho}^2$ microturbulence. <i>Nuclear Fusion</i> , 2015, 55, 104011.   | 3.5 | 33        |

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|----|--|-----|-----------|
| 19 | Properties of high- $\hat{\nu}^2$ microturbulence and the non-zonal transition. <i>Physics of Plasmas</i> , 2013, 20, .  | 1.9 | 32        |
| 20 | Microtearing modes as the source of magnetic fluctuations in the JET pedestal. <i>Nuclear Fusion</i> , 2021, 61, 036015.   | 3.5 | 32        |
| 21 | Gyrokinetic studies of microinstabilities in the reversed field pinch. <i>Physics of Plasmas</i> , 2013, 20, .   | 1.9 | 30        |
| 22 | On secondary and tertiary instability in electromagnetic plasma microturbulence. <i>Physics of Plasmas</i> , 2013, 20, .   | 1.9 | 30        |
| 23 | The effect of magnetic flutter on residual flow. <i>Physics of Plasmas</i> , 2013, 20, .   | 1.9 | 27        |
| 24 | Gyrokinetic studies of trapped electron mode turbulence in the Helically Symmetric eXperiment stellarator. <i>Physics of Plasmas</i> , 2015, 22, .                             | 1.9 | 26        |
| 25 | Saturation scalings of toroidal ion temperature gradient turbulence. <i>Physics of Plasmas</i> , 2018, 25, .   | 1.9 | 26        |
| 26 | Stellarator microinstabilities and turbulence at low magnetic shear. <i>Journal of Plasma Physics</i> , 2018, 84, .  | 2.1 | 26        |
| 27 | Turbulence-level dependence of cosmic ray parallel diffusion. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 498, 5051-5064.                                 | 4.4 | 26        |
| 28 | MAGNETIC RECONNECTION TURBULENCE IN STRONG GUIDE FIELDS: BASIC PROPERTIES AND APPLICATION TO CORONAL HEATING. <i>Astrophysical Journal, Supplement Series</i> , 2014, 213, 30. | 7.7 | 22        |
| 29 | Gyrokinetic simulations of ETG and ITG turbulence. <i>Nuclear Fusion</i> , 2007, 47, 817-824.  | 3.5 | 21        |
| 30 | Linear signatures in nonlinear gyrokinetics: interpreting turbulence with pseudospectra. <i>New Journal of Physics</i> , 2016, 18, 075018.                                     | 2.9 | 20        |
| 31 | Microturbulence studies of pulsed poloidal current drive discharges in the reversed field pinch. <i>Physics of Plasmas</i> , 2015, 22, .                                       | 1.9 | 18        |
| 32 | Regimes of cosmic-ray diffusion in Galactic turbulence. <i>SN Applied Sciences</i> , 2022, 4, 15.  | 2.9 | 18        |
| 33 | Aspects of the non-zonal transition. <i>Physics of Plasmas</i> , 2014, 21, 055901.   | 1.9 | 17        |
| 34 | Saturation and nonlinear electromagnetic stabilization of ITG turbulence. <i>Physics of Plasmas</i> , 2019, 26, 082302.  | 1.9 | 17        |
| 35 | Turbulence, transport, and zonal flows in the Madison symmetric torus reversed-field pinch. <i>Physics of Plasmas</i> , 2017, 24, .  | 1.9 | 16        |
| 36 | Direct Measurement of a Toroidally Directed Zonal Flow in a Toroidal Plasma. <i>Physical Review Letters</i> , 2019, 122, 105001.   | 7.8 | 15        |

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|----|--|-----|-----------|
| 37 | Multi-scale interactions of microtearing turbulence in the tokamak pedestal. Nuclear Fusion, 2020, 60, 124005.   | 3.5 | 15        |
| 38 | Mode-space energy distribution in instability-driven plasma turbulence. Physics of Plasmas, 2014, 21, 122303.  | 1.9 | 14        |
| 39 | On microinstabilities and turbulence in steep-gradient regions of fusion devices. Plasma Physics and Controlled Fusion, 2019, 61, 034002.                    | 2.1 | 14        |
| 40 | Threshold Heat-Flux Reduction by Near-Resonant Energy Transfer. Physical Review Letters, 2021, 126, 025004.  | 7.8 | 14        |
| 41 | Predicting the critical gradient of ITG turbulence in fusion plasmas. Nuclear Fusion, 2021, 61, 054003.  | 3.5 | 14        |
| 42 | Observation of trapped-electron-mode microturbulence in reversed field pinch plasmas. Physics of Plasmas, 2018, 25, .  | 1.9 | 13        |
| 43 | Enhanced magnetic reconnection in the presence of pressure gradients. Physics of Plasmas, 2015, 22, .  | 1.9 | 12        |
| 44 | Role of stable modes in driven shear-flow turbulence. Physics of Plasmas, 2018, 25, 122303.  | 1.9 | 12        |
| 45 | A comparison of turbulent transport in quasi-helical and a quasi-axisymmetric stellarator. Journal of Plasma Physics, 2019, 85, .                            | 2.1 | 12        |
| 46 | Coupling of damped and growing modes in unstable shear flow. Physics of Plasmas, 2017, 24, .   | 1.9 | 11        |
| 47 | Turbulence mitigation in maximum-J stellarators with electron-density gradient. Journal of Plasma Physics, 2022, 88, .                                       | 2.1 | 11        |
| 48 | Reduced models for ETG transport in the tokamak pedestal. Physics of Plasmas, 2022, 29, .  | 1.9 | 11        |
| 49 | A basic plasma test for gyrokinetics: GDC turbulence in LAPD. Plasma Physics and Controlled Fusion, 2017, 59, 024006.  | 2.1 | 9         |
| 50 | Effect of triangularity on ion-temperature-gradient-driven turbulence. Physics of Plasmas, 2022, 29, .   | 1.9 | 9         |
| 51 | Quasilinear modeling of heat flux from microtearing turbulence. Physics of Plasmas, 2020, 27, .  | 1.9 | 8         |
| 52 | Impact of resonant magnetic perturbations on zonal flows and microturbulence. Nuclear Fusion, 2020, 60, 096004.  | 3.5 | 8         |
| 53 | Saturation physics of threshold heat-flux reduction. Physics of Plasmas, 2021, 28, .   | 1.9 | 8         |
| 54 | Comparison of local and global gyrokinetic calculations of collisionless zonal flow damping in quasi-symmetric stellarators. Physics of Plasmas, 2021, 28, . | 1.9 | 7         |

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|----|---|-----|-----------|
| 55 | Kinetic-ballooning-mode turbulence in low-average-magnetic-shear equilibria. Journal of Plasma Physics, 2021, 87, .                                 | 2.1 | 6         |
| 56 | Anisotropic cosmic ray diffusion in isotropic Kolmogorov turbulence. Monthly Notices of the Royal Astronomical Society, 2022, 514, 2658-2666.       | 4.4 | 6         |
| 57 | Improving the stellarator through advances in plasma theory. Nuclear Fusion, 2022, 62, 042012.  | 3.5 | 5         |
| 58 | The impact of magnetic fields on momentum transport and saturation of shear-flow instability by stable modes. Physics of Plasmas, 2021, 28, 022309. | 1.9 | 4         |
| 59 | Mechanism for sequestering magnetic energy at large scales in shear-flow turbulence. Physics of Plasmas, 2022, 29, .                                | 1.9 | 4         |
| 60 | Pair plasma instability in homogeneous magnetic guide fields. Physics of Plasmas, 2020, 27, .   | 1.9 | 2         |
| 61 | Electromagnetic turbulence in increased $\hat{I}^2$ plasmas in the Large Plasma Device. Journal of Plasma Physics, 2021, 87, .                      | 2.1 | 1         |