

Gary Staebler

List of Publications by Year in descending order

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Version: 2024-02-01

47
papers

2,289
citations

236925

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docs citations

47
times ranked

1224
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | A gyro-Landau-fluid transport model. <i>Physics of Plasmas</i> , 1997, 4, 2482-2496. | 1.9 | 493 |
| 2 | A theory-based transport model with comprehensive physics. <i>Physics of Plasmas</i> , 2007, 14, 055909. | 1.9 | 303 |
| 3 | Gyro-Landau fluid equations for trapped and passing particles. <i>Physics of Plasmas</i> , 2005, 12, 102508. | 1.9 | 203 |
| 4 | The first transport code simulations using the trapped gyro-Landau-fluid model. <i>Physics of Plasmas</i> , 2008, 15, . | 1.9 | 129 |
| 5 | The role of zonal flows in the saturation of multi-scale gyrokinetic turbulence. <i>Physics of Plasmas</i> , 2016, 23, . | 1.9 | 91 |
| 6 | New Paradigm for Suppression of Gyrokinetic Turbulence by Velocity Shear. <i>Physical Review Letters</i> , 2013, 110, 055003. | 7.8 | 76 |
| 7 | Impurity-Induced Suppression of Core Turbulence and Transport in the DIII-D Tokamak. <i>Physical Review Letters</i> , 2000, 84, 1922-1925. | 7.8 | 59 |
| 8 | Integrated fusion simulation with self-consistent core-pedestal coupling. <i>Physics of Plasmas</i> , 2016, 23, . | 1.9 | 56 |
| 9 | Gyrokinetic simulation of momentum transport with residual stress from diamagnetic level velocity shears. <i>Physics of Plasmas</i> , 2011, 18, 042504. | 1.9 | 52 |
| 10 | Impurity confinement and transport in high confinement regimes without edge localized modes on | 1.9 | 47 |
| 11 | A correlation electron cyclotron emission diagnostic and the importance of multifield fluctuation measurements for testing nonlinear gyrokinetic turbulence simulations. <i>Review of Scientific Instruments</i> , 2008, 79, 103505. | 1.3 | 44 |
| 12 | Neural-network accelerated coupled core-pedestal simulations with self-consistent transport of impurities and compatible with ITER IMAS. <i>Nuclear Fusion</i> , 2021, 61, 026006. | 3.5 | 42 |
| 13 | Confinement improvement in the high poloidal beta regime on DIII-D and application to steady-state H-mode on EAST. <i>Physics of Plasmas</i> , 2017, 24, . | 1.9 | 41 |
| 14 | H-mode grade confinement in L-mode edge plasmas at negative triangularity on DIII-D. <i>Physics of Plasmas</i> , 2019, 26, . | 1.9 | 38 |
| 15 | Geometry dependence of the fluctuation intensity in gyrokinetic turbulence. <i>Plasma Physics and Controlled Fusion</i> , 2021, 63, 015013. | 2.1 | 37 |
| 16 | Changes in particle transport as a result of resonant magnetic perturbations in DIII-D. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 35 |
| 17 | DIII-D Research to Prepare for Steady State Advanced Tokamak Power Plants. <i>Journal of Fusion Energy</i> , 2019, 38, 72-111. | 1.2 | 35 |
| 18 | Predicting rotation for ITER via studies of intrinsic torque and momentum transport in DIII-D. <i>Physics of Plasmas</i> , 2017, 24, . | 1.9 | 34 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Explaining Cold-Pulse Dynamics in Tokamak Plasmas Using Local Turbulent Transport Models. Physical Review Letters, 2018, 120, 075001. | 7.8 | 34 |
| 20 | Progress toward steady-state tokamak operation exploiting the high bootstrap current fraction regime. Physics of Plasmas, 2016, 23, . | 1.9 | 33 |
| 21 | Joint DIII-D/EAST research on the development of a high poloidal beta scenario for the steady state missions of ITER and CFETR. Plasma Physics and Controlled Fusion, 2018, 60, 014043. | 2.1 | 32 |
| 22 | The effects of dilution on turbulence and transport in C-Mod ohmic plasmas and comparisons with gyrokinetic simulations. Physics of Plasmas, 2015, 22, 072507. | 1.9 | 31 |
| 23 | Transport barriers in bootstrap-driven tokamaks. Physics of Plasmas, 2018, 25, . | 1.9 | 30 |
| 24 | Verification of a quasi-linear model for gyrokinetic turbulent transport. Nuclear Fusion, 2021, 61, 116007. | 3.5 | 29 |
| 25 | Transport and turbulence studies in the linear ohmic confinement regime in Alcator C-Mod. Plasma Physics and Controlled Fusion, 2012, 54, 124029. | 2.1 | 28 |
| 26 | Progress and challenges in understanding core transport in tokamaks in support to ITER operations. Plasma Physics and Controlled Fusion, 2020, 62, 014021. | 2.1 | 25 |
| 27 | Predictions of the near edge transport shortfall in DIII-D L-mode plasmas using the trapped gyro-Landau-fluid model. Physics of Plasmas, 2015, 22, 012507. | 1.9 | 24 |
| 28 | Alfvén eigenmode stability and critical gradient energetic particle transport using the Trapped-Gyro-Landau-Fluid model. Physics of Plasmas, 2017, 24, 072305. | 1.9 | 21 |
| 29 | Validation of nonlinear gyrokinetic simulations of L- and I-mode plasmas on Alcator C-Mod. Physics of Plasmas, 2017, 24, . | 1.9 | 21 |
| 30 | Observation of Reduced Electron-Temperature Fluctuations in the Core of H-Mode Plasmas. Physical Review Letters, 2008, 100, 035002. | 7.8 | 20 |
| 31 | Transport at high $\{\eta_p\}$ and development of candidate steady state scenarios for ITER. Nuclear Fusion, 2020, 60, 046025. | 3.5 | 19 |
| 32 | The quiescent double barrier regime in DIII-D. Plasma Physics and Controlled Fusion, 2002, 44, A123-A135. | 2.1 | 17 |
| 33 | Predict-first experiments and modeling of perturbative cold pulses in the DIII-D tokamak. Physics of Plasmas, 2019, 26, . | 1.9 | 14 |
| 34 | Advances in physics understanding of high poloidal beta regime toward steady-state operation of CFETR. Physics of Plasmas, 2021, 28, . | 1.9 | 14 |
| 35 | Quasilinear model for energetic particle diffusion in radial and velocity space. Physics of Plasmas, 2013, 20, . | 1.9 | 11 |
| 36 | Confinement properties of L-mode plasmas in ASDEX Upgrade and full-radius predictions of the TGLF transport model. Nuclear Fusion, 2022, 62, 066015. | 3.5 | 11 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Spectral treatment of gyrokinetic profile curvature. Plasma Physics and Controlled Fusion, 2020, 62, 042001. | 2.1 | 10 |
| 38 | Advances in prediction of tokamak experiments with theory-based models. Nuclear Fusion, 0, , . | 3.5 | 9 |
| 39 | Ion thermal transport in the H-mode edge transport barrier on DIII-D. Physics of Plasmas, 2022, 29, . | 1.9 | 9 |
| 40 | Role of microtearing mode in DIII-D and future high- β_p core plasmas. Physics of Plasmas, 2021, 28, . | 1.9 | 8 |
| 41 | Benchmark of quasi-linear models against gyrokinetic single scale simulations in deuterium and tritium plasmas for a JET high beta hybrid discharge. Nuclear Fusion, 2021, 61, 066032. | 3.5 | 8 |
| 42 | A new quasilinear saturation rule for tokamak turbulence with application to the isotope scaling of transport. Nuclear Fusion, 2022, 62, 096005. | 3.5 | 7 |
| 43 | The effects of main-ion dilution on turbulence in low q_{95} C-Mod ohmic plasmas, and comparisons with nonlinear GYRO. Physics of Plasmas, 2016, 23, 082509. | 1.9 | 4 |
| 44 | Experimental investigation and gyrokinetic simulations of multi-scale electron heat transport in JET, AUG, TCV. Nuclear Fusion, 2021, 61, 116071. | 3.5 | 4 |
| 45 | Explaining the lack of power degradation of energy confinement in wide pedestal quiescent H-modes via transport modeling. Nuclear Fusion, 2022, 62, 056024. | 3.5 | 1 |
| 46 | Physics of increased edge electron temperature and density turbulence during ELM-free QH-mode operation on DIII-D. Physics of Plasmas, 2018, 25, 055904. | 1.9 | 0 |
| 47 | Equilibrium reconstruction of DIII-D plasmas using predictive modeling of the pressure profile. Physics of Plasmas, 2022, 29, 062502. | 1.9 | 0 |