

# Soare Sorin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4216892/publications.pdf>

Version: 2024-02-01

374  
papers

7,340  
citations

71102

41  
h-index

144013

57  
g-index

376  
all docs

376  
docs citations

376  
times ranked

3236  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Overview of the JET results in support to ITER. Nuclear Fusion, 2017, 57, 102001.   | 3.5  | 150       |
| 2  | ELM divertor peak energy fluence scaling to ITER with data from JET, MAST and ASDEX upgrade. Nuclear Materials and Energy, 2017, 12, 84-90.         | 1.3  | 116       |
| 3  | Isotope effects on L-H threshold and confinement in tokamak plasmas. Plasma Physics and Controlled Fusion, 2018, 60, 014045.                        | 2.1  | 98        |
| 4  | Power exhaust by SOL and pedestal radiation at ASDEX Upgrade and JET. Nuclear Materials and Energy, 2017, 12, 111-118.                              | 1.3  | 92        |
| 5  | Experimental Validation of a Filament Transport Model in Turbulent Magnetized Plasmas. Physical Review Letters, 2015, 115, 215002.                  | 7.8  | 89        |
| 6  | Overview of the JET preparation for deuterium-tritium operation with the ITER like-wall. Nuclear Fusion, 2019, 59, 112021.                          | 3.5  | 87        |
| 7  | Beryllium migration in JET ITER-like wall plasmas. Nuclear Fusion, 2015, 55, 063021.  | 3.5  | 83        |
| 8  | WEST Physics Basis. Nuclear Fusion, 2015, 55, 063017.   | 3.5  | 82        |
| 9  | Pedestal confinement and stability in JET-ILW ELMy H-modes. Nuclear Fusion, 2015, 55, 113031.   | 3.5  | 82        |
| 10 | Core turbulent transport in tokamak plasmas: bridging theory and experiment with QuaLiKiz. Plasma Physics and Controlled Fusion, 2016, 58, 014036.  | 2.1  | 81        |
| 11 | Improved confinement in JET high- $\beta$ plasmas with an ITER-like wall. Nuclear Fusion, 2015, 55, 053031.   | 3.5  | 79        |
| 12 | Gyrokinetic analysis and simulation of pedestals to identify the culprits for energy losses using "fingerprints". Nuclear Fusion, 2019, 59, 096001. | 3.5  | 76        |
| 13 | Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating. Nature Physics, 2017, 13, 973-978.                          | 16.7 | 73        |
| 14 | Overview of the JET results with the ITER-like wall. Nuclear Fusion, 2013, 53, 104002.  | 3.5  | 70        |
| 15 | WALLDYN simulations of global impurity migration in JET and extrapolations to ITER. Nuclear Fusion, 2015, 55, 053015.                               | 3.5  | 67        |
| 16 | Stationary Zonal Flows during the Formation of the Edge Transport Barrier in the JET Tokamak. Physical Review Letters, 2016, 116, 065002.           | 7.8  | 64        |
| 17 | Dual sightline measurements of MeV range deuterons with neutron and gamma-ray spectroscopy at JET. Nuclear Fusion, 2015, 55, 123026.                | 3.5  | 60        |
| 18 | Erosion, screening, and migration of tungsten in the JET divertor. Nuclear Fusion, 2019, 59, 096035.  | 3.5  | 60        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Runaway electron beam generation and mitigation during disruptions at JET-ILW. Nuclear Fusion, 2015, 55, 093013.  | 3.5 | 58        |
| 20 | Melt damage to the JET ITER-like Wall and divertor. Physica Scripta, 2016, T167, 014070.  | 2.5 | 58        |
| 21 | Erosion and deposition in the JET divertor during the first ILW campaign. Physica Scripta, 2016, T167, 014051.  | 2.5 | 58        |
| 22 | Tractable flux-driven temperature, density, and rotation profile evolution with the quasilinear gyrokinetic transport model QuaLiKiz. Plasma Physics and Controlled Fusion, 2017, 59, 124005. | 2.1 | 57        |
| 23 | Correlation of the tokamak H-mode density limit with ballooning stability at the separatrix. Nuclear Fusion, 2018, 58, 034001.  | 3.5 | 57        |
| 24 | Key impact of finite-beta and fast ions in core and edge tokamak regions for the transition to advanced scenarios. Nuclear Fusion, 2015, 55, 053007.  | 3.5 | 56        |
| 25 | Influence of the E $\times$ B drift in high recycling divertors on target asymmetries. Plasma Physics and Controlled Fusion, 2015, 57, 095002.  | 2.1 | 56        |
| 26 | Recent progress towards a quantitative description of filamentary SOL transport. Nuclear Fusion, 2017, 57, 056044.  | 3.5 | 56        |
| 27 | Long-term fuel retention in JET ITER-like wall. Physica Scripta, 2016, T167, 014075.  | 2.5 | 52        |
| 28 | MeV-range velocity-space tomography from gamma-ray and neutron emission spectrometry measurements at JET. Nuclear Fusion, 2017, 57, 056001.   | 3.5 | 52        |
| 29 | Dust generation in tokamaks: Overview of beryllium and tungsten dust characterisation in JET with the ITER-like wall. Fusion Engineering and Design, 2018, 136, 579-586.                      | 1.9 | 52        |
| 30 | First dust study in JET with the ITER-like wall: sampling, analysis and classification. Nuclear Fusion, 2015, 55, 113033.   | 3.5 | 51        |
| 31 | Scaling of the MHD perturbation amplitude required to trigger a disruption and predictions for ITER. Nuclear Fusion, 2016, 56, 026007.  | 3.5 | 51        |
| 32 | Overview of the JET results. Nuclear Fusion, 2015, 55, 104001.  | 3.5 | 50        |
| 33 | Progress in understanding disruptions triggered by massive gas injection via 3D non-linear MHD modelling with JOREK. Plasma Physics and Controlled Fusion, 2017, 59, 014006.                  | 2.1 | 47        |
| 34 | Overview of fuel inventory in JET with the ITER-like wall. Nuclear Fusion, 2017, 57, 086045.  | 3.5 | 47        |
| 35 | Overview of JET results. Nuclear Fusion, 2009, 49, 104006.  | 3.5 | 46        |
| 36 | Overview of the JET ITER-like wall divertor. Nuclear Materials and Energy, 2017, 12, 499-505.   | 1.3 | 46        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Three-dimensional non-linear magnetohydrodynamic modeling of massive gas injection triggered disruptions in JET. <i>Physics of Plasmas</i> , 2015, 22, .                                      | 1.9 | 45        |
| 38 | Beryllium melting and erosion on the upper dump plates in JET during three ITER-like wall campaigns. <i>Nuclear Fusion</i> , 2019, 59, 086009.  | 3.5 | 45        |
| 39 | Ion target impact energy during Type I edge localized modes in JET ITER-like Wall. <i>Plasma Physics and Controlled Fusion</i> , 2015, 57, 085006.  | 2.1 | 44        |
| 40 | Adaptive predictors based on probabilistic SVM for real time disruption mitigation on JET. <i>Nuclear Fusion</i> , 2018, 58, 056002.  | 3.5 | 44        |
| 41 | Real-time control of divertor detachment in H-mode with impurity seeding using Langmuir probe feedback in JET-ITER-like wall. <i>Plasma Physics and Controlled Fusion</i> , 2017, 59, 045001. | 2.1 | 43        |
| 42 | Studies of dust from JET with the ITER-Like Wall: Composition and internal structure. <i>Nuclear Materials and Energy</i> , 2017, 12, 582-587.  | 1.3 | 41        |
| 43 | Real-time-capable prediction of temperature and density profiles in a tokamak using RAPTOR and a first-principle-based transport model. <i>Nuclear Fusion</i> , 2018, 58, 096006.             | 3.5 | 41        |
| 44 | Inferring divertor plasma properties from hydrogen Balmer and Paschen series spectroscopy in JET-ILW. <i>Nuclear Fusion</i> , 2015, 55, 123028.   | 3.5 | 40        |
| 45 | JET and COMPASS asymmetrical disruptions. <i>Nuclear Fusion</i> , 2015, 55, 113006.   | 3.5 | 40        |
| 46 | Integrated modelling of H-mode pedestal and confinement in JET-ILW. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 014042.   | 2.1 | 40        |
| 47 | Application of Gaussian process regression to plasma turbulent transport model validation via integrated modelling. <i>Nuclear Fusion</i> , 2019, 59, 056007.                                 | 3.5 | 39        |
| 48 | Overview of JET results. <i>Nuclear Fusion</i> , 2003, 43, 1540-1554.   | 3.5 | 38        |
| 49 | Investigation into the formation of the scrape-off layer density shoulder in JET ITER-like wall L-mode and H-mode plasmas. <i>Nuclear Fusion</i> , 2018, 58, 056001.                          | 3.5 | 38        |
| 50 | The role of MHD in causing impurity peaking in JET hybrid plasmas. <i>Nuclear Fusion</i> , 2016, 56, 066002.  | 3.5 | 37        |
| 51 | Multi-machine scaling of the main SOL parallel heat flux width in tokamak limiter plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 074005.                                    | 2.1 | 36        |
| 52 | Understanding the physics of ELM pacing via vertical kicks in JET in view of ITER. <i>Nuclear Fusion</i> , 2016, 56, 026001.  | 3.5 | 36        |
| 53 | First principles and integrated modelling achievements towards trustful fusion power predictions for JET and ITER. <i>Nuclear Fusion</i> , 2019, 59, 086047.                                  | 3.5 | 36        |
| 54 | A machine learning approach based on generative topographic mapping for disruption prevention and avoidance at JET. <i>Nuclear Fusion</i> , 2019, 59, 106017.                                 | 3.5 | 36        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Beryllium global erosion and deposition at JET-ILW simulated with ERO2.0. Nuclear Materials and Energy, 2019, 18, 331-338.  | 1.3 | 36        |
| 56 | Neutron spectroscopy measurements of 14 MeV neutrons at unprecedented energy resolution and implications for deuterium-tritium fusion plasma diagnostics. Measurement Science and Technology, 2018, 29, 045502.               | 2.6 | 35        |
| 57 | Dynamics and stability of divertor detachment in H-mode plasmas on JET. Plasma Physics and Controlled Fusion, 2017, 59, 095003.   | 2.1 | 34        |
| 58 | Scenario development for the observation of alpha-driven instabilities in JET DT plasmas. Nuclear Fusion, 2018, 58, 082005.   | 3.5 | 34        |
| 59 | Impact of ICRF on the scrape-off layer and on plasma wall interactions: From present experiments to fusion reactor. Nuclear Materials and Energy, 2019, 18, 131-140.  | 1.3 | 34        |
| 60 | Overview of JET results. Nuclear Fusion, 2011, 51, 094008.  | 3.5 | 33        |
| 61 | Discriminating the trapped electron modes contribution in density fluctuation spectra. Nuclear Fusion, 2015, 55, 093021.  | 3.5 | 33        |
| 62 | Transport analysis and modelling of the evolution of hollow density profiles plasmas in JET and implication for ITER. Nuclear Fusion, 2015, 55, 123001.   | 3.5 | 33        |
| 63 | Challenges in the extrapolation from DD to DT plasmas: experimental analysis and theory based predictions for JET-DT. Plasma Physics and Controlled Fusion, 2017, 59, 014023.   | 2.1 | 33        |
| 64 | Fast H isotope and impurity mixing in ion-temperature-gradient turbulence. Nuclear Fusion, 2018, 58, 076028.  | 3.5 | 33        |
| 65 | Direct measurement of residual stress in sub-micron interconnects. Semiconductor Science and Technology, 2003, 18, 992-996.   | 2.0 | 32        |
| 66 | Ion cyclotron resonance heating for tungsten control in various JET H-mode scenarios. Plasma Physics and Controlled Fusion, 2017, 59, 055001.   | 2.1 | 32        |
| 67 | Experimental estimation of tungsten impurity sputtering due to Type I ELMs in JET-ITER-like wall using pedestal electron cyclotron emission and target Langmuir probe measurements. Physica Scripta, 2016, T167, 014005.      | 2.5 | 31        |
| 68 | Fast-ion energy resolution by one-step reaction gamma-ray spectrometry. Nuclear Fusion, 2016, 56, 046009.   | 3.5 | 31        |
| 69 | Studies of the pedestal structure and inter-ELM pedestal evolution in JET with the ITER-like wall. Nuclear Fusion, 2017, 57, 116012.  | 3.5 | 30        |
| 70 | The maximum likelihood reconstruction method for JET neutron tomography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 595, 623-630. | 1.6 | 29        |
| 71 | Benchmark experiments on neutron streaming through JET Torus Hall penetrations. Nuclear Fusion, 2015, 55, 053028.   | 3.5 | 29        |
| 72 | Axisymmetric oscillations at H transitions in JET: M-mode. Nuclear Fusion, 2017, 57, 022021.  | 3.5 | 29        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Non-Maxwellian fast particle effects in gyrokinetic GENE simulations. Physics of Plasmas, 2018, 25, .  | 1.9 | 29        |
| 74 | 3D non-linear MHD simulation of the MHD response and density increase as a result of shattered pellet injection. Nuclear Fusion, 2018, 58, 126025.   | 3.5 | 29        |
| 75 | Modelling of JET hybrid plasmas with emphasis on performance of combined ICRF and NBI heating. Nuclear Fusion, 2018, 58, 106037.   | 3.5 | 29        |
| 76 | Plasma confinement at JET. Plasma Physics and Controlled Fusion, 2016, 58, 014034.   | 2.1 | 28        |
| 77 | Assessment of erosion, deposition and fuel retention in the JET-ILW divertor from ion beam analysis data. Nuclear Materials and Energy, 2017, 12, 559-563.                                 | 1.3 | 28        |
| 78 | Characterisation of the deuterium recycling at the W divertor target plates in JET during steady-state plasma conditions and ELMs. Physica Scripta, 2016, T167, 014076.                    | 2.5 | 27        |
| 79 | Gyrokinetic study of turbulent convection of heavy impurities in tokamak plasmas at comparable ion and electron heat fluxes. Nuclear Fusion, 2017, 57, 022009.                             | 3.5 | 27        |
| 80 | Assessment of SOLPS5.0 divertor solutions with drifts and currents against L-mode experiments in ASDEX Upgrade and JET. Plasma Physics and Controlled Fusion, 2017, 59, 035003.            | 2.1 | 27        |
| 81 | First ERO2.0 modeling of Be erosion and non-local transport in JET ITER-like wall. Physica Scripta, 2017, T170, 014018.  | 2.5 | 27        |
| 82 | Erosion and deposition in the JET divertor during the second ITER-like wall campaign. Physica Scripta, 2017, T170, 014058.   | 2.5 | 27        |
| 83 | Adaptive learning for disruption prediction in non-stationary conditions. Nuclear Fusion, 2019, 59, 086037.  | 3.5 | 27        |
| 84 | Nanoindentation assessment of aluminium metallisation; the effect of creep and pile-up. Surface and Coatings Technology, 2004, 177-178, 497-503.   | 4.8 | 26        |
| 85 | An Analytical Expression for the Electric Field and Particle Tracing in Modelling of Be Erosion Experiments at the JET ITER-like Wall. Contributions To Plasma Physics, 2016, 56, 640-645. | 1.1 | 26        |
| 86 | Technological exploitation of Deuterium-Tritium operations at JET in support of ITER design, operation and safety. Fusion Engineering and Design, 2016, 109-111, 278-285.                  | 1.9 | 26        |
| 87 | Experience on divertor fuel retention after two ITER-Like Wall campaigns. Physica Scripta, 2017, T170, 014063.   | 2.5 | 26        |
| 88 | Dimensionless scalings of confinement, heat transport and pedestal stability in JET-ILW and comparison with JET-C. Plasma Physics and Controlled Fusion, 2017, 59, 014014.                 | 2.1 | 26        |
| 89 | Test particles dynamics in the JOEUK 3D non-linear MHD code and application to electron transport in a disruption simulation. Nuclear Fusion, 2018, 58, 016043.                            | 3.5 | 26        |
| 90 | Assessment of the baseline scenario at $q \sim 3$ for ITER. Nuclear Fusion, 2018, 58, 126010.  | 3.5 | 26        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | W transport and accumulation control in the termination phase of JET H-mode discharges and implications for ITER. Plasma Physics and Controlled Fusion, 2018, 60, 074008.         | 2.1 | 26        |
| 92  | Self-consistent pedestal prediction for JET-ILW in preparation of the DT campaign. Physics of Plasmas, 2019, 26, .  | 1.9 | 26        |
| 93  | Runaway electron beam control. Plasma Physics and Controlled Fusion, 2019, 61, 014036.  | 2.1 | 26        |
| 94  | Impact of divertor geometry on radiative divertor performance in JET H-mode plasmas. Plasma Physics and Controlled Fusion, 2016, 58, 045011.                                      | 2.1 | 25        |
| 95  | Plasma impact on diagnostic mirrors in JET. Nuclear Materials and Energy, 2017, 12, 506-512.  | 1.3 | 25        |
| 96  | Recent progress in the quantitative validation of JOEUK simulations of ELMs in JET. Nuclear Fusion, 2017, 57, 076006.   | 3.5 | 25        |
| 97  | Fuel inventory and deposition in castellated structures in JET-ILW. Nuclear Fusion, 2017, 57, 066027.   | 3.5 | 25        |
| 98  | Long-term fuel retention and release in JET ITER-Like Wall at ITER-relevant baking temperatures. Nuclear Fusion, 2017, 57, 086024.  | 3.5 | 25        |
| 99  | Maximum likelihood bolometric tomography for the determination of the uncertainties in the radiation emission on JET TOKAMAK. Review of Scientific Instruments, 2018, 89, 053504. | 1.3 | 25        |
| 100 | The $\tilde{n}$ neutron deficit™ in the JET tokamak. Nuclear Fusion, 2017, 57, 076029.  | 3.5 | 25        |
| 101 | Performance of the prototype LaBr3 spectrometer developed for the JET gamma-ray camera upgrade. Review of Scientific Instruments, 2016, 87, 11E717.                               | 1.3 | 24        |
| 102 | Experimental investigation of geodesic acoustic modes on JET using Doppler backscattering. Nuclear Fusion, 2016, 56, 106026.  | 3.5 | 24        |
| 103 | Impact of divertor geometry on H-mode confinement in the JET metallic wall. Nuclear Fusion, 2017, 57, 086025.   | 3.5 | 24        |
| 104 | Modelling of tungsten erosion and deposition in the divertor of JET-ILW in comparison to experimental findings. Nuclear Materials and Energy, 2019, 18, 239-244.                  | 1.3 | 24        |
| 105 | First mirror test in JET for ITER: Complete overview after three ILW campaigns. Nuclear Materials and Energy, 2019, 19, 59-66.  | 1.3 | 24        |
| 106 | Asymmetric toroidal eddy currents (ATEC) to explain sideways forces at JET. Nuclear Fusion, 2016, 56, 106010.   | 3.5 | 23        |
| 107 | Sawtooth pacing with on-axis ICRH modulation in JET-ILW. Nuclear Fusion, 2017, 57, 036027.  | 3.5 | 23        |
| 108 | High fusion performance at high $T_e$ and high $T_i$ in JET-ILW baseline plasmas with high NBI heating power and low gas puffing. Nuclear Fusion, 2018, 58, 036020.               | 3.5 | 23        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | Impact of electron-scale turbulence and multi-scale interactions in the JET tokamak. Nuclear Fusion, 2018, 58, 124003.  | 3.5 | 23        |
| 110 | Measuring fast ions in fusion plasmas with neutron diagnostics at JET. Plasma Physics and Controlled Fusion, 2019, 61, 014027.  | 2.1 | 23        |
| 111 | Determination of isotope ratio in the divertor of JET-ILW by high-resolution H $\alpha$ spectroscopy: H $\alpha$ -D experiment and implications for D-T experiment. Nuclear Fusion, 2019, 59, 046011.             | 3.5 | 23        |
| 112 | Deposition of impurity metals during campaigns with the JET ITER-like Wall. Nuclear Materials and Energy, 2019, 19, 218-224.  | 1.3 | 23        |
| 113 | Determination of tungsten and molybdenum concentrations from an x-ray range spectrum in JET with the ITER-like wall configuration. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 144023. | 1.5 | 22        |
| 114 | Gyrokinetic study of turbulence suppression in a JET-ILW power scan. Plasma Physics and Controlled Fusion, 2016, 58, 115005.  | 2.1 | 22        |
| 115 | Neutron emission spectroscopy of DT plasmas at enhanced energy resolution with diamond detectors. Review of Scientific Instruments, 2016, 87, 11D822.   | 1.3 | 22        |
| 116 | Global and pedestal confinement and pedestal structure in dimensionless collisionality scans of low-triangularity H-mode plasmas in JET-ILW. Nuclear Fusion, 2017, 57, 016012.                                    | 3.5 | 22        |
| 117 | Modelling of transitions between L- and H-mode in JET high plasma current plasmas and application to ITER scenarios including tungsten behaviour. Nuclear Fusion, 2017, 57, 086023.                               | 3.5 | 22        |
| 118 | Fine metal dust particles on the wall probes from JET-ILW. Physica Scripta, 2017, T170, 014038.   | 2.5 | 22        |
| 119 | 14 MeV calibration of JET neutron detectors – phase 1: calibration and characterization of the neutron source. Nuclear Fusion, 2018, 58, 026012.  | 3.5 | 22        |
| 120 | First principles of modelling the stabilization of microturbulence by fast ions. Nuclear Fusion, 2018, 58, 082024.  | 3.5 | 22        |
| 121 | First principle integrated modeling of multi-channel transport including Tungsten in JET. Nuclear Fusion, 2018, 58, 096003.   | 3.5 | 22        |
| 122 | Role of fast ion pressure in the isotope effect in JET L-mode plasmas. Nuclear Fusion, 2019, 59, 096030.  | 3.5 | 22        |
| 123 | Radiation asymmetries during the thermal quench of massive gas injection disruptions in JET. Nuclear Fusion, 2015, 55, 123027.  | 3.5 | 21        |
| 124 | Experimental evaluation of stable long term operation of semiconductor magnetic sensors at ITER relevant environment. Nuclear Fusion, 2015, 55, 083006.   | 3.5 | 21        |
| 125 | Electron acceleration in a JET disruption simulation. Nuclear Fusion, 2018, 58, 106022.   | 3.5 | 21        |
| 126 | Dependence of Process Parameters on Stress Generation in Aluminum Thin Films. IEEE Transactions on Device and Materials Reliability, 2004, 4, 482-487.  | 2.0 | 20        |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 127 | Non-linear MHD simulations of ELMs in JET and quantitative comparisons to experiments. Plasma Physics and Controlled Fusion, 2016, 58, 014026.                                       | 2.1 | 20        |
| 128 | Deuterium trapping and release in JET ITER-like wall divertor tiles. Physica Scripta, 2016, T167, 014074.  | 2.5 | 20        |
| 129 | ITER oriented neutronics benchmark experiments on neutron streaming and shutdown dose rate at JET. Fusion Engineering and Design, 2017, 123, 171-176.                                | 1.9 | 20        |
| 130 | Transient induced tungsten melting at the Joint European Torus (JET). Physica Scripta, 2017, T170, 014013.   | 2.5 | 20        |
| 131 | Physics and operation oriented activities in preparation of the JT-60SA tokamak exploitation. Nuclear Fusion, 2017, 57, 085001.  | 3.5 | 20        |
| 132 | Multi-machine analysis of termination scenarios with comparison to simulations of controlled shutdown of ITER discharges. Nuclear Fusion, 2018, 58, 026019.                          | 3.5 | 20        |
| 133 | Experimental validation of an analytical kinetic model for edge-localized modes in JET-ITER-like wall. Nuclear Fusion, 2018, 58, 066006.   | 3.5 | 20        |
| 134 | Identification of BeO and BeOxDy in melted zones of the JET Be limiter tiles: Raman study using comparison with laboratory samples. Nuclear Materials and Energy, 2018, 17, 295-301. | 1.3 | 20        |
| 135 | Tritium retention characteristics in dust particles in JET with ITER-like wall. Nuclear Materials and Energy, 2018, 17, 279-283.   | 1.3 | 20        |
| 136 | Equilibrium reconstruction at JET using Stokes model for polarimetry. Nuclear Fusion, 2018, 58, 106032.  | 3.5 | 20        |
| 137 | Observation of enhanced ion particle transport in mixed H/D isotope plasmas on JET. Nuclear Fusion, 2018, 58, 076022.  | 3.5 | 20        |
| 138 | 14 MeV calibration of JET neutron detectorsâ€”phase 2: in-vessel calibration. Nuclear Fusion, 2018, 58, 106016.  | 3.5 | 20        |
| 139 | Neutronics experiments and analyses in preparation of DT operations at JET. Fusion Engineering and Design, 2016, 109-111, 895-905.   | 1.9 | 19        |
| 140 | JET experiments with tritium and deuteriumâ€”tritium mixtures. Fusion Engineering and Design, 2016, 109-111, 925-936.  | 1.9 | 19        |
| 141 | Mitigation of divertor heat loads by strike point sweeping in high power JET discharges. Physica Scripta, 2017, T170, 014040.  | 2.5 | 19        |
| 142 | Neutral pathways and heat flux widths in vertical- and horizontal-target EDGE2D-EIRENE simulations of JET. Nuclear Fusion, 2018, 58, 096029.   | 3.5 | 19        |
| 143 | L to H mode transition: parametric dependencies of the temperature threshold. Nuclear Fusion, 2015, 55, 073015.  | 3.5 | 18        |
| 144 | High performance detectors for upgraded gamma ray diagnostics for JET DT campaigns. Physica Scripta, 2016, 91, 064003.   | 2.5 | 18        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Response function of single crystal synthetic diamond detectors to 1-4 MeV neutrons for spectroscopy of D plasmas. <i>Review of Scientific Instruments</i> , 2016, 87, 11D823.  | 1.3 | 18        |
| 146 | Nitrogen retention mechanisms in tokamaks with beryllium and tungsten plasma-facing surfaces. <i>Physica Scripta</i> , 2016, T167, 014077.  | 2.5 | 18        |
| 147 | Experience of handling beryllium, tritium and activated components from JET ITER like wall. <i>Physica Scripta</i> , 2016, T167, 014057.  | 2.5 | 18        |
| 148 | The role and application of ion beam analysis for studies of plasma-facing components in controlled fusion devices. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2016, 371, 4-11.                 | 1.4 | 18        |
| 149 | Application of transfer entropy to causality detection and synchronization experiments in tokamaks. <i>Nuclear Fusion</i> , 2016, 56, 026006.   | 3.5 | 18        |
| 150 | Energy balance in JET. <i>Nuclear Materials and Energy</i> , 2017, 12, 227-233.   | 1.3 | 18        |
| 151 | A multi-machine scaling of halo current rotation. <i>Nuclear Fusion</i> , 2018, 58, 016050.   | 3.5 | 18        |
| 152 | Investigation of deuterium trapping and release in the JET ITER-like wall divertor using TDS and TMAP. <i>Nuclear Materials and Energy</i> , 2019, 19, 166-178.   | 1.3 | 18        |
| 153 | Analysis of deposited layers with deuterium and impurity elements on samples from the divertor of JET with ITER-like wall. <i>Journal of Nuclear Materials</i> , 2019, 516, 202-213.                                  | 2.7 | 18        |
| 154 | Advances in the physics studies for the JT-60SA tokamak exploitation and research plan. <i>Plasma Physics and Controlled Fusion</i> , 2020, 62, 014009.   | 2.1 | 18        |
| 155 | Benchmarking the GENE and GYRO codes through the relative roles of electromagnetic and $E \times B$ stabilization in JET high-performance discharges. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 125018. | 1.7 | 17        |
| 156 | Improved ERO modelling for spectroscopy of physically and chemically assisted eroded beryllium from the JET-ILW. <i>Nuclear Materials and Energy</i> , 2016, 9, 604-609.  | 1.3 | 17        |
| 157 | Plasma edge and plasma-wall interaction modelling: Lessons learned from metallic devices. <i>Nuclear Materials and Energy</i> , 2017, 12, 3-17.   | 1.3 | 17        |
| 158 | Investigation and plasma cleaning of first mirrors coated with relevant ITER contaminants: beryllium and tungsten. <i>Nuclear Fusion</i> , 2017, 57, 086019.  | 3.5 | 17        |
| 159 | Calibration of neutron detectors on the Joint European Torus. <i>Review of Scientific Instruments</i> , 2017, 88, 103505.   | 1.3 | 17        |
| 160 | Versatile fusion source integrator AFSI for fast ion and neutron studies in fusion devices. <i>Nuclear Fusion</i> , 2018, 58, 016023.   | 3.5 | 17        |
| 161 | High-resolution tungsten spectroscopy relevant to the diagnostic of high-temperature tokamak plasmas. <i>Physical Review A</i> , 2018, 97, .  | 2.5 | 17        |
| 162 | Analysis of ELM stability with extended MHD models in JET, JT-60U and future JT-60SA tokamak plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2018, 60, 014032.   | 2.1 | 17        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | Effects of nitrogen seeding on core ion thermal transport in JET ILW L-mode plasmas. Nuclear Fusion, 2018, 58, 026028.  | 3.5 | 17        |
| 164 | Synthetic spectra of BeH, BeD and BeT for emission modeling in JET plasmas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 185701.                        | 1.5 | 17        |
| 165 | Activation of ITER materials in JET: nuclear characterisation experiments for the long-term irradiation station. Nuclear Fusion, 2018, 58, 096013.                                | 3.5 | 17        |
| 166 | Possible influence of near SOL plasma on the H-mode power threshold. Nuclear Materials and Energy, 2017, 12, 273-277.   | 1.3 | 16        |
| 167 | Axisymmetric global Alfvén eigenmodes within the ellipticity-induced frequency gap in the Joint European Torus. Physics of Plasmas, 2017, 24, .                                   | 1.9 | 16        |
| 168 | Bayesian electron density inference from JET lithium beam emission spectra using Gaussian processes. Nuclear Fusion, 2017, 57, 036017.  | 3.5 | 16        |
| 169 | Review of recent experimental and modeling advances in the understanding of lower hybrid current drive in ITER-relevant regimes. Nuclear Fusion, 2018, 58, 095003.                | 3.5 | 16        |
| 170 | Determination of tungsten sources in the JET-ILW divertor by spectroscopic imaging in the presence of a strong plasma continuum. Nuclear Materials and Energy, 2019, 18, 118-124. | 1.3 | 16        |
| 171 | Bayesian Integrated Data Analysis of Fast-Ion Measurements by Velocity-Space Tomography. Fusion Science and Technology, 2018, 74, 23-36.  | 1.1 | 15        |
| 172 | Correlation of surface chemical states with hydrogen isotope retention in divertor tiles of JET with ITER-Like Wall. Fusion Engineering and Design, 2018, 132, 24-28.             | 1.9 | 15        |
| 173 | A power-balance model of the density limit in fusion plasmas: application to the L-mode tokamak. Nuclear Fusion, 2019, 59, 126011.  | 3.5 | 15        |
| 174 | Improved ERO modelling of beryllium erosion at ITER upper first wall panel using JET-ILW and PISCES-B experience. Nuclear Materials and Energy, 2019, 19, 510-515.                | 1.3 | 15        |
| 175 | The effect of beryllium oxide on retention in JET ITER-like wall tiles. Nuclear Materials and Energy, 2019, 19, 346-351.  | 1.3 | 15        |
| 176 | Fast ion synergistic effects in JET high performance pulses. Nuclear Fusion, 2019, 59, 056005.  | 3.5 | 15        |
| 177 | Test Chip for the Development and Evaluation of Sensors for Measuring Stress in Metal Interconnects. IEEE Transactions on Semiconductor Manufacturing, 2005, 18, 255-261.         | 1.7 | 14        |
| 178 | Deep deuterium retention and Be/W mixing at tungsten coated surfaces in the JET divertor. Physica Scripta, 2016, T167, 014061.  | 2.5 | 14        |
| 179 | How to assess the efficiency of synchronization experiments in tokamaks. Nuclear Fusion, 2016, 56, 076008.  | 3.5 | 14        |
| 180 | Deposition in the inner and outer corners of the JET divertor with carbon wall and metallic ITER-like wall. Physica Scripta, 2016, T167, 014052.                                  | 2.5 | 14        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 181 | Raman microscopy investigation of beryllium materials. Physica Scripta, 2016, T167, 014027.  | 2.5 | 14        |
| 182 | Beryllium film deposition in cavity samples in remote areas of the JET divertor during the 2011â€“2012 ITER-like wall campaign. Nuclear Materials and Energy, 2017, 12, 548-552.                 | 1.3 | 14        |
| 183 | Micro-/nano-characterization of the surface structures on the divertor tiles from JET ITER-like wall. Fusion Engineering and Design, 2017, 116, 1-4.   | 1.9 | 14        |
| 184 | Structure, tritium depth profile and desorption from â€˜plasma-facingâ€™™ beryllium materials of ITER-Like-Wall at JET. Nuclear Materials and Energy, 2017, 12, 642-647.                         | 1.3 | 14        |
| 185 | 3D simulations of gas puff effects on edge plasma and ICRF coupling in JET. Nuclear Fusion, 2017, 57, 056042.  | 3.5 | 14        |
| 186 | Sub-millisecond electron density profile measurement at the JET tokamak with the fast lithium beam emission spectroscopy system. Review of Scientific Instruments, 2018, 89, 043509.             | 1.3 | 14        |
| 187 | Pedestal evolution physics in low triangularity JET tokamak discharges with ITER-like wall. Nuclear Fusion, 2018, 58, 016021.  | 3.5 | 14        |
| 188 | On the Use of Transfer Entropy to Investigate the Time Horizon of Causal Influences between Signals. Entropy, 2018, 20, 627.   | 2.2 | 14        |
| 189 | Real-time protection of the JET ITER-like wall based on near infrared imaging diagnostic systems. Nuclear Fusion, 2018, 58, 106021.  | 3.5 | 14        |
| 190 | Observations and modelling of ion cyclotron emission observed in JET plasmas using a sub-harmonic arc detection system during ion cyclotron resonance heating. Nuclear Fusion, 2018, 58, 096020. | 3.5 | 14        |
| 191 | Ion cyclotron resonance heating scenarios for DEMO. Nuclear Fusion, 2019, 59, 106051.  | 3.5 | 14        |
| 192 | Radiation damage and nuclear heating studies in selected functional materials during the JET DT campaign. Fusion Engineering and Design, 2016, 109-111, 1011-1015.                               | 1.9 | 13        |
| 193 | High power neon seeded JET discharges: Experiments and simulations. Nuclear Materials and Energy, 2017, 12, 882-886.   | 1.3 | 13        |
| 194 | Comparative H-mode density limit studies in JET and AUG. Nuclear Materials and Energy, 2017, 12, 100-110.  | 1.3 | 13        |
| 195 | Surface composition and structure of divertor tiles following the JET tokamak operation with the ITER-like wall. Nuclear Fusion, 2017, 57, 076027.   | 3.5 | 13        |
| 196 | Deuterium retention in the divertor tiles of JET ITER-Like wall. Nuclear Materials and Energy, 2017, 12, 655-661.  | 1.3 | 13        |
| 197 | Analyses of microstructure, composition and retention of hydrogen isotopes in divertor tiles of JET with the ITER-like wall. Physica Scripta, 2017, T170, 014031.                                | 2.5 | 13        |
| 198 | Trapped electron mode driven electron heat transport in JET: experimental investigation and gyro-kinetic theory validation. Nuclear Fusion, 2015, 55, 113016.                                    | 3.5 | 12        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 199 | Diagnostic application of magnetic islands rotation in JET. Nuclear Fusion, 2016, 56, 076004.  | 3.5 | 12        |
| 200 | Studies of Be migration in the JET tokamak using AMS with $^{10}\text{Be}$ marker. Nuclear Instruments & Methods in Physics Research B, 2016, 371, 370-375.  | 1.4 | 12        |
| 201 | Calculations to support JET neutron yield calibration: Modelling of neutron emission from a compact DT neutron generator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 847, 199-204. | 1.6 | 12        |
| 202 | A tool to support the construction of reliable disruption databases. Fusion Engineering and Design, 2017, 125, 139-153.  | 1.9 | 12        |
| 203 | Erosion at the inner wall of JET during the discharge campaign 2013–2014. Nuclear Materials and Energy, 2017, 11, 20-24.   | 1.3 | 12        |
| 204 | Assessment of divertor heat load with and without external magnetic perturbation. Nuclear Fusion, 2017, 57, 066045.  | 3.5 | 12        |
| 205 | Metallic mirrors for plasma diagnosis in current and future reactors: tests for ITER and DEMO. Physica Scripta, 2017, T170, 014061.  | 2.5 | 12        |
| 206 | Comparison of runaway electron generation parameters in small, medium-sized and large tokamaks—A survey of experiments in COMPASS, TCV, ASDEX-Upgrade and JET. Nuclear Fusion, 2018, 58, 016014.   | 3.5 | 12        |
| 207 | Assessment of the strength of kinetic effects of parallel electron transport in the SOL and divertor of JET high radiative H-mode plasmas using EDGE2D-EIRENE and KIPP codes. Plasma Physics and Controlled Fusion, 2018, 60, 115011.  | 2.1 | 12        |
| 208 | A new mechanism for increasing density peaking in tokamaks: improvement of the inward particle pinch with edge $E \times B$ shearing. Plasma Physics and Controlled Fusion, 2019, 61, 104002.  | 2.1 | 12        |
| 209 | Multiphysics approach to plasma neutron source modelling at the JET tokamak. Nuclear Fusion, 2019, 59, 096020.   | 3.5 | 12        |
| 210 | Dynamic modelling of local fuel inventory and desorption in the whole tokamak vacuum vessel for auto-consistent plasma-wall interaction simulations. Nuclear Materials and Energy, 2019, 19, 550-557.  | 1.3 | 12        |
| 211 | Diagnostic of fast-ion energy spectra and densities in magnetized plasmas. Journal of Instrumentation, 2019, 14, C05019-C05019.  | 1.2 | 12        |
| 212 | A novel sensor for the direct measurement of process induced residual stress in interconnects. , 0, , .  |     | 11        |
| 213 | Calibration of MEMS-based test structures for predicting thermomechanical stress in integrated circuit interconnect structures. IEEE Transactions on Device and Materials Reliability, 2005, 5, 713-719.   | 2.0 | 11        |
| 214 | On the interpretation of high-resolution x-ray spectra from JET with an ITER-like wall. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 144028.   | 1.5 | 11        |
| 215 | Neutron streaming along ducts and labyrinths at the JET biological shielding: Effect of concrete composition. Radiation Physics and Chemistry, 2015, 116, 359-364.   | 2.8 | 11        |
| 216 | Progress in reducing ICRF-specific impurity release in ASDEX upgrade and JET. Nuclear Materials and Energy, 2017, 12, 1194-1198.   | 1.3 | 11        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 217 | Upgrade of the tangential gamma-ray spectrometer beam-line for JET DT experiments. Fusion Engineering and Design, 2017, 123, 749-753.  | 1.9 | 11        |
| 218 | Numerical analysis of ELM stability with rotation and ion diamagnetic drift effects in JET. Nuclear Fusion, 2017, 57, 126001.  | 3.5 | 11        |
| 219 | Activation measurements in support of the 14 MeV neutron calibration of JET neutron monitors. Fusion Engineering and Design, 2017, 125, 50-56.   | 1.9 | 11        |
| 220 | Statistical validation of predictive TRANSP simulations of baseline discharges in preparation for extrapolation to JET D <sup>2</sup> T. Nuclear Fusion, 2017, 57, 066032.                                 | 3.5 | 11        |
| 221 | Comparison of JET AVDE disruption data with M3D simulations and implications for ITER. Physics of Plasmas, 2017, 24, .   | 1.9 | 11        |
| 222 | EDGE2D-EIRENE simulations of the influence of isotope effects and anomalous transport coefficients on near scrape-off layer radial electric field. Plasma Physics and Controlled Fusion, 2019, 61, 075010. | 2.1 | 11        |
| 223 | Investigation of deuterium trapping and release in the JET divertor during the third ILW campaign using TDS. Nuclear Materials and Energy, 2019, 19, 300-306.  | 1.3 | 11        |
| 224 | Long-lived coupled peeling ballooning modes preceding ELMs on JET. Nuclear Fusion, 2019, 59, 056004.   | 3.5 | 11        |
| 225 | A new tangential gamma-ray spectrometer for fast ion measurements in deuterium and deuterium-tritium plasmas of the Joint European Torus. Review of Scientific Instruments, 2021, 92, 043537.              | 1.3 | 11        |
| 226 | Fusion alpha-particle diagnostics for DT experiments on the joint European torus. AIP Conference Proceedings, 2014, , .  | 0.4 | 10        |
| 227 | Bayesian modelling of the emission spectrum of the Joint European Torus Lithium Beam Emission Spectroscopy system. Review of Scientific Instruments, 2016, 87, 023501.                                     | 1.3 | 10        |
| 228 | Advanced design of the Mechanical Tritium Pumping System for JET DTE2. Fusion Engineering and Design, 2016, 109-111, 359-364.  | 1.9 | 10        |
| 229 | Tritium distributions on tungsten and carbon tiles used in the JET divertor. Physica Scripta, 2016, T167, 014009.  | 2.5 | 10        |
| 230 | Technical preparations for the in-vessel 14 MeV neutron calibration at JET. Fusion Engineering and Design, 2017, 117, 107-114.   | 1.9 | 10        |
| 231 | Status of ITER material activation experiments at JET. Fusion Engineering and Design, 2017, 124, 1150-1155.  | 1.9 | 10        |
| 232 | On efficiency and interpretation of sawteeth pacing with on-axis ICRH modulation in JET. Nuclear Fusion, 2017, 57, 126057.   | 3.5 | 10        |
| 233 | Simulation of JET ITER-Like Wall pulses at high neon seeding rate. Nuclear Fusion, 2017, 57, 126021.   | 3.5 | 10        |
| 234 | The isotope effect on divertor conditions and neutral pumping in horizontal divertor configurations in JET-ILW Ohmic plasmas. Nuclear Materials and Energy, 2017, 12, 791-797.                             | 1.3 | 10        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | An analytical expression for ion velocities at the wall including the sheath electric field and surface biasing for erosion modeling at JET ILW. Nuclear Materials and Energy, 2017, 12, 341-345.                          | 1.3 | 10        |
| 236 | Tritium distributions on W-coated divertor tiles used in the third JET ITER-like wall campaign. Nuclear Materials and Energy, 2019, 18, 258-261.   | 1.3 | 10        |
| 237 | JET diagnostic enhancements in preparation for DT operations. Review of Scientific Instruments, 2016, 87, 11D443.  | 1.3 | 9         |
| 238 | The effect of the isotope on the H-mode density limit. Nuclear Fusion, 2017, 57, 086007.   | 3.5 | 9         |
| 239 | ERO modeling and sensitivity analysis of locally enhanced beryllium erosion by magnetically connected antennas. Nuclear Fusion, 2018, 58, 016046.  | 3.5 | 9         |
| 240 | Modelling of the neutron production in a mixed beam DT neutron generator. Fusion Engineering and Design, 2018, 136, 1089-1093.   | 1.9 | 9         |
| 241 | Analysis of plasma termination in the JET hybrid scenario. Nuclear Fusion, 2018, 58, 076027.   | 3.5 | 9         |
| 242 | The software and hardware architecture of the real-time protection of in-vessel components in JET-ILW. Nuclear Fusion, 2019, 59, 076016.   | 3.5 | 9         |
| 243 | Full-orbit and drift calculations of fusion product losses due to explosive fishbones on JET. Nuclear Fusion, 2019, 59, 016004.  | 3.5 | 9         |
| 244 | Plasma isotopic changeover experiments in JET under carbon and ITER-like wall conditions. Nuclear Fusion, 2015, 55, 043021.  | 3.5 | 8         |
| 245 | Characterization of a diamond detector to be used as neutron yield monitor during the in-vessel calibration of JET neutron detectors in preparation of the DT experiment. Fusion Engineering and Design, 2016, 106, 93-98. | 1.9 | 8         |
| 246 | On the mechanisms governing gas penetration into a tokamak plasma during a massive gas injection. Nuclear Fusion, 2017, 57, 016027.  | 3.5 | 8         |
| 247 | The near infrared imaging system for the real-time protection of the JET ITER-like wall. Physica Scripta, 2017, T170, 014027.  | 2.5 | 8         |
| 248 | Characterization of a compact $\text{LaBr}_3(\text{Ce})$ detector with Silicon photomultipliers at high 14 MeV neutron fluxes. Journal of Instrumentation, 2017, 12, C10007-C10007.  | 1.2 | 8         |
| 249 | Analysis of possible improvement of the plasma performance in JET due to the inward spatial channelling of fast-ion energy. Nuclear Fusion, 2018, 58, 076012.  | 3.5 | 8         |
| 250 | On the universality of power laws for tokamak plasma predictions. Plasma Physics and Controlled Fusion, 2018, 60, 025028.  | 2.1 | 8         |
| 251 | On the role of finite grid extent in SOLPS-ITER edge plasma simulations for JET H-mode discharges with metallic wall. Nuclear Materials and Energy, 2018, 17, 174-181.   | 1.3 | 8         |
| 252 | A locked mode indicator for disruption prediction on JET and ASDEX upgrade. Fusion Engineering and Design, 2019, 138, 254-266.   | 1.9 | 8         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 253 | An assessment of nitrogen concentrations from spectroscopic measurements in the JET and ASDEX upgrade divertor. Nuclear Materials and Energy, 2019, 18, 147-152.  | 1.3 | 8         |
| 254 | Direct measurement of residual stress in integrated circuit interconnect features. Microelectronics Reliability, 2003, 43, 1797-1801.   | 1.7 | 7         |
| 255 | Turbulent transport analysis of JET H-mode and hybrid plasmas using QualiKiz and Trapped Gyro Landau Fluid. Plasma Physics and Controlled Fusion, 2015, 57, 035003.   | 2.1 | 7         |
| 256 | Edge profile analysis of Joint European Torus (JET) Thomson scattering data: Quantifying the systematic error due to edge localised mode synchronisation. Review of Scientific Instruments, 2016, 87, 013507.                 | 1.3 | 7         |
| 257 | Upgrades of Diagnostic Techniques and Technologies for JET Next D-T Campaigns. IEEE Transactions on Nuclear Science, 2016, 63, 1674-1681.   | 2.0 | 7         |
| 258 | Real-time control of ELM and sawtooth frequencies: similarities and differences. Nuclear Fusion, 2016, 56, 016008.  | 3.5 | 7         |
| 259 | JET experience on managing radioactive waste and implications for ITER. Fusion Engineering and Design, 2016, 109-111, 979-985.  | 1.9 | 7         |
| 260 | Advances in understanding and utilising ELM control in JET. Plasma Physics and Controlled Fusion, 2016, 58, 014017.   | 2.1 | 7         |
| 261 | The preparation of the Shutdown Dose Rate experiment for the next JET Deuterium-Tritium campaign. Fusion Engineering and Design, 2017, 123, 1039-1043.  | 1.9 | 7         |
| 262 | Expanding the role of impurity spectroscopy for investigating the physics of high-Z dissipative divertors. Nuclear Materials and Energy, 2017, 12, 91-99.   | 1.3 | 7         |
| 263 | Main chamber wall plasma loads in JET-ITER-like wall at high radiated fraction. Nuclear Materials and Energy, 2017, 12, 234-240.  | 1.3 | 7         |
| 264 | Real time control developments at JET in preparation for deuterium-tritium operation. Fusion Engineering and Design, 2017, 123, 535-540.  | 1.9 | 7         |
| 265 | Synthetic neutron camera and spectrometer in JET based on AFSI-ASCOT simulations. Journal of Instrumentation, 2017, 12, C09010-C09010.  | 1.2 | 7         |
| 266 | Testing of tritium breeder blanket activation foil spectrometer during JET operations. Fusion Engineering and Design, 2018, 136, 258-264.   | 1.9 | 7         |
| 267 | MHD spectroscopy of JET plasmas with pellets via Alfvén eigenmodes. Nuclear Fusion, 2018, 58, 082008.   | 3.5 | 7         |
| 268 | TLD calibration for neutron fluence measurements at JET fusion facility. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 904, 202-213. | 1.6 | 7         |
| 269 | Modelling of the effect of ELMs on fuel retention at the bulk W divertor of JET. Nuclear Materials and Energy, 2019, 19, 397-402.   | 1.3 | 7         |
| 270 | Comparison of the structure of the plasma-facing surface and tritium accumulation in beryllium tiles from JET ILW campaigns 2011-2012 and 2013-2014. Nuclear Materials and Energy, 2019, 19, 131-136.                         | 1.3 | 7         |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 271 | Gyrokinetic simulations of toroidal Alfvén eigenmodes excited by energetic ions and external antennas on the Joint European Torus. Nuclear Fusion, 2019, 59, 026008.   | 3.5 | 7         |
| 272 | Improved neutron activation dosimetry for fusion. Fusion Engineering and Design, 2019, 139, 109-114.   | 1.9 | 7         |
| 273 | Design of the JET upgraded gamma-ray cameras. Fusion Engineering and Design, 2009, 84, 2052-2057.  | 1.9 | 6         |
| 274 | Comparative analysis of core heat transport of JET high density H-mode plasmas in carbon wall and ITER-like wall. Plasma Physics and Controlled Fusion, 2015, 57, 065002.                                    | 2.1 | 6         |
| 275 | Integrated core "SOL" divertor modelling for ITER including impurity: effect of tungsten on fusion performance in H-mode and hybrid scenario. Nuclear Fusion, 2015, 55, 053032.                              | 3.5 | 6         |
| 276 | Simulating the nitrogen migration in Be/W tokamaks with WallDYN. Physica Scripta, 2016, T167, 014079.  | 2.5 | 6         |
| 277 | ITER-like antenna capacitors voltage probes: Circuit/electromagnetic calculations and calibrations. Review of Scientific Instruments, 2016, 87, 104705.  | 1.3 | 6         |
| 278 | Sparse representation of signals: from astrophysics to real-time data analysis for fusion plasmas and system optimization analysis for ITER and TCV. Plasma Physics and Controlled Fusion, 2016, 58, 123001. | 2.1 | 6         |
| 279 | Evaluation of reconstruction errors and identification of artefacts for JET gamma and neutron tomography. Review of Scientific Instruments, 2016, 87, 013502.  | 1.3 | 6         |
| 280 | Global optimization driven by genetic algorithms for disruption predictors based on APODIS architecture. Fusion Engineering and Design, 2016, 112, 1014-1018.  | 1.9 | 6         |
| 281 | Investigation on the erosion/deposition processes in the ITER-like wall divertor at JET using glow discharge optical emission spectrometry technique. Physica Scripta, 2016, T167, 014049.                   | 2.5 | 6         |
| 282 | Impact of the JET ITER-like wall on H-mode plasma fueling. Nuclear Fusion, 2017, 57, 066024.   | 3.5 | 6         |
| 283 | The effect of lower hybrid waves on JET plasma rotation. Nuclear Fusion, 2017, 57, 034002.   | 3.5 | 6         |
| 284 | Evaluation of the plasma hydrogen isotope content by residual gas analysis at JET and AUG. Physica Scripta, 2017, T170, 014021.  | 2.5 | 6         |
| 285 | Quartz micro-balance results of pulse-resolved erosion/deposition in the JET-ILW divertor. Nuclear Materials and Energy, 2017, 12, 478-482.  | 1.3 | 6         |
| 286 | Analysis of activation and damage of ITER material samples expected from DD/DT campaign at JET. Fusion Engineering and Design, 2017, 125, 307-313.   | 1.9 | 6         |
| 287 | Impurity re-distribution in the corner regions of the JET divertor. Physica Scripta, 2017, T170, 014060.   | 2.5 | 6         |
| 288 | Self-consistent coupling of DSMC method and SOLPS code for modeling tokamak particle exhaust. Nuclear Fusion, 2017, 57, 066037.  | 3.5 | 6         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 289 | An improved model for the accurate calculation of parallel heat fluxes at the JET bulk tungsten outer divertor. Nuclear Fusion, 2018, 58, 106034.                          | 3.5 | 6         |
| 290 | Control of the hydrogen:deuterium isotope mixture using pellets in JET. Nuclear Fusion, 2019, 59, 106047.  | 3.5 | 6         |
| 291 | Geodesic acoustic mode evolution in L-mode approaching the H transition on JET. Plasma Physics and Controlled Fusion, 2019, 61, 075007.                                    | 2.1 | 6         |
| 292 | Tritium analysis of divertor tiles used in JET ITER-like wall campaigns by means of $\gamma$ -ray induced x-ray spectrometry. Physica Scripta, 2017, T170, 014014.         | 2.5 | 6         |
| 293 | Time-resolved deposition in the remote region of the JET-ILW divertor: measurements and modelling. Physica Scripta, 2017, T170, 014059.                                    | 2.5 | 6         |
| 294 | Obtaining mechanical parameters for metallisation stress sensor design using nanoindentation. International Journal of Materials Research, 2005, 96, 1262-1266.            | 0.8 | 6         |
| 295 | Plasma physics and control studies planned in JT-60SA for ITER and DEMO operations and risk mitigation. Plasma Physics and Controlled Fusion, 2022, 64, 054004.            | 2.1 | 6         |
| 296 | The merits of ion cyclotron resonance heating schemes for sawtooth control in tokamak plasmas. Journal of Plasma Physics, 2015, 81, .                                      | 2.1 | 5         |
| 297 | Core fusion power gain and alpha heating in JET, TFTR, and ITER. Nuclear Fusion, 2016, 56, 056002.   | 3.5 | 5         |
| 298 | Neutronic analysis of JET external neutron monitor response. Fusion Engineering and Design, 2016, 109-111, 99-103.   | 1.9 | 5         |
| 299 | The non-thermal origin of the tokamak low-density stability limit. Nuclear Fusion, 2016, 56, 056010.   | 3.5 | 5         |
| 300 | Plasma turbulence measured with fast frequency swept reflectometry in JET H-mode plasmas. Nuclear Fusion, 2016, 56, 126019.  | 3.5 | 5         |
| 301 | Characterisation of neutron generators and monitoring detectors for the in-vessel calibration of JET. Fusion Engineering and Design, 2018, 136, 233-238.                   | 1.9 | 5         |
| 302 | Plasma-wall interaction on the divertor tiles of JET ITER-like wall from the viewpoint of micro/nanosopic observations. Fusion Engineering and Design, 2018, 136, 199-204. | 1.9 | 5         |
| 303 | ICRH antenna S-matrix measurements and plasma coupling characterisation at JET. Nuclear Fusion, 2018, 58, 046012.  | 3.5 | 5         |
| 304 | Shutdown dose rate measurements after the 2016 Deuterium-Deuterium campaign at JET. Fusion Engineering and Design, 2018, 136, 1348-1353.                                   | 1.9 | 5         |
| 305 | Application of the Denovo Discrete Ordinates Radiation Transport Code to Large-Scale Fusion Neutronics. Fusion Science and Technology, 2018, 74, 303-314.                  | 1.1 | 5         |
| 306 | Shutdown dose rate neutronics experiment during high performances DD operations at JET. Fusion Engineering and Design, 2018, 136, 1545-1549.                               | 1.9 | 5         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 307 | Scaling of the geodesic acoustic mode amplitude on JET. Plasma Physics and Controlled Fusion, 2018, 60, 085006.   | 2.1 | 5         |
| 308 | RF sheath modeling of experimentally observed plasma surface interactions with the JET ITER-Like Antenna. Nuclear Materials and Energy, 2019, 19, 324-329.                                  | 1.3 | 5         |
| 309 | Approximate analytic expressions using Stokes model for tokamak polarimetry and their range of validity. Plasma Physics and Controlled Fusion, 2019, 61, 055008.                            | 2.1 | 5         |
| 310 | Conceptual Design of the Mechanical Tritium Pumping System for JET DTE2. Fusion Science and Technology, 2015, 68, 630-634.  | 1.1 | 4         |
| 311 | Scaling of the frequencies of the type one edge localized modes and their effect on the tungsten source in JET ITER-like wall. Plasma Physics and Controlled Fusion, 2016, 58, 125014.      | 2.1 | 4         |
| 312 | Stabilization of sawteeth with third harmonic deuterium ICRF-accelerated beam in JET plasmas. Physics of Plasmas, 2016, 23, 012505.   | 1.9 | 4         |
| 313 | Risk Mitigation for ITER by a Prolonged and Joint International Operation of JET. Journal of Fusion Energy, 2016, 35, 85-93.  | 1.2 | 4         |
| 314 | CeBr <sub>3</sub> -based detector for gamma-ray spectrometer upgrade at JET. Fusion Engineering and Design, 2017, 123, 986-989.   | 1.9 | 4         |
| 315 | Determining the prediction limits of models and classifiers with applications for disruption prediction in JET. Nuclear Fusion, 2017, 57, 016024.   | 3.5 | 4         |
| 316 | Be ITER-like wall at the JET tokamak under plasma. Physica Scripta, 2017, T170, 014049.   | 2.5 | 4         |
| 317 | Synthetic NPA diagnostic for energetic particles in JET plasmas. Journal of Instrumentation, 2017, 12, C11025-C11025.   | 1.2 | 4         |
| 318 | Application of the VUV and the soft x-ray systems on JET for the study of intrinsic impurity behavior in neon seeded hybrid discharges. Review of Scientific Instruments, 2018, 89, 10D131. | 1.3 | 4         |
| 319 | Inter-ELM evolution of the edge current density in JET-ILW type I ELMy H-mode plasmas. Plasma Physics and Controlled Fusion, 2018, 60, 085003.  | 2.1 | 4         |
| 320 | Interpretative and predictive modelling of Joint European Torus collisionality scans. Plasma Physics and Controlled Fusion, 2019, 61, 115004.   | 2.1 | 4         |
| 321 | On a fusion born triton effect in JET deuterium discharges with H-minority ion cyclotron range of frequencies heating. Nuclear Fusion, 2019, 59, 064001.                                    | 3.5 | 4         |
| 322 | COREDIV numerical simulation of high neutron rate JET-ILW DD pulses in view of extension to JET-ILW DT experiments. Nuclear Fusion, 2019, 59, 056026.                                       | 3.5 | 4         |
| 323 | Conceptual design of JT-60SA edge Thomson scattering diagnostic. Journal of Instrumentation, 2020, 15, C01011-C01011.   | 1.2 | 4         |
| 324 | Sensitivity of a Rotating Beam Sensor for Stress Evaluation in Aluminium Thin Films. Materials Science Forum, 2005, 490-491, 649-654.   | 0.3 | 3         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 325 | Definition of the radiation fields for the JET gamma-ray spectrometer diagnostics. Fusion Engineering and Design, 2013, 88, 1366-1370.  | 1.9 | 3         |
| 326 | Robust regression with CUDA and its application to plasma reflectometry. Review of Scientific Instruments, 2015, 86, 113507.  | 1.3 | 3         |
| 327 | Free boundary equilibrium in 3D tokamaks with toroidal rotation. Nuclear Fusion, 2015, 55, 063032.  | 3.5 | 3         |
| 328 | Comparative gyrokinetic analysis of JET baseline H-mode core plasmas with carbon wall and ITER-like wall. Plasma Physics and Controlled Fusion, 2016, 58, 045021.                   | 2.1 | 3         |
| 329 | Numerical calculations of non-inductive current driven by microwaves in JET. Plasma Physics and Controlled Fusion, 2016, 58, 125001.  | 2.1 | 3         |
| 330 | JET Tokamak, preparation of a safety case for tritium operations. Fusion Engineering and Design, 2016, 109-111, 1308-1312.  | 1.9 | 3         |
| 331 | Correlation analysis for energy losses, waiting times and durations of type I edge-localized modes in the Joint European Torus. Nuclear Fusion, 2017, 57, 036026.                   | 3.5 | 3         |
| 332 | The global build-up to intrinsic ELM bursts and comparison with pellet triggered ELMs seen in JET. Nuclear Fusion, 2017, 57, 022017.  | 3.5 | 3         |
| 333 | EDGE2D-EIRENE simulations of the impact of poloidal flux expansion on the radiative divertor performance in JET. Nuclear Materials and Energy, 2017, 12, 786-790.                   | 1.3 | 3         |
| 334 | Intra-ELM tungsten sputtering in JET ITER-like wall: analytical studies of Be impurity and ELM type influence. Physica Scripta, 2017, T170, 014065.                                 | 2.5 | 3         |
| 335 | New Bond Coat Materials for Thermal Barrier Coating Systems Processed Via Different Routes. IOP Conference Series: Materials Science and Engineering, 2017, 209, 012045.            | 0.6 | 3         |
| 336 | Escaping alpha-particle monitor for burning plasmas. Nuclear Fusion, 2018, 58, 082009.  | 3.5 | 3         |
| 337 | Nonlinear dynamic analysis of $D^{\pm}$ signals for type I edge localized modes characterization on JET with a carbon wall. Plasma Physics and Controlled Fusion, 2018, 60, 025010. | 2.1 | 3         |
| 338 | Heat flux analysis of Type-I ELM impact on a sloped, protruding surface in the JET bulk tungsten divertor. Nuclear Materials and Energy, 2018, 17, 182-187.                         | 1.3 | 3         |
| 339 | OVERVIEW OF NEUTRON MEASUREMENTS IN JET FUSION DEVICE. Radiation Protection Dosimetry, 2018, 180, 102-108.  | 0.8 | 3         |
| 340 | Activation material selection for multiple foil activation detectors in JET TT campaign. Fusion Engineering and Design, 2018, 136, 988-992.   | 1.9 | 3         |
| 341 | Feasibility of a far infrared laser based polarimeter diagnostic system for the JT-60SA fusion experiment. Plasma Physics and Controlled Fusion, 2018, 60, 075016.                  | 2.1 | 3         |
| 342 | Alpha heating, isotopic mass, and fast ion effects in deuterium-tritium experiments. Nuclear Fusion, 2018, 58, 096011.  | 3.5 | 3         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 343 | Modification of the Alfvén wave spectrum by pellet injection. Nuclear Fusion, 2019, 59, 106031.   | 3.5 | 3         |
| 344 | Impact of fast ions on density peaking in JET: fluid and gyrokinetic modeling. Plasma Physics and Controlled Fusion, 2019, 61, 075008.  | 2.1 | 3         |
| 345 | Radial variation of heat transport in L-mode JET discharges. Nuclear Fusion, 2019, 59, 056006.  | 3.5 | 3         |
| 346 | Analysis of the outer divertor hot spot activity in the protection video camera recordings at JET. Fusion Engineering and Design, 2019, 139, 115-123.   | 1.9 | 3         |
| 347 | Obtaining mechanical parameters for metallisation stress sensor design using nanoindentation. International Journal of Materials Research, 2022, 96, 1262-1266.                               | 0.3 | 3         |
| 348 | Upgrade of the JET Gamma-Ray Cameras. AIP Conference Proceedings, 2008, , .   | 0.4 | 2         |
| 349 | Tandem collimators for the JET tangential gamma-ray spectrometer. Fusion Engineering and Design, 2011, 86, 1359-1364.   | 1.9 | 2         |
| 350 | Studies of the non-axisymmetric plasma boundary displacement in JET in presence of externally applied magnetic field. Plasma Physics and Controlled Fusion, 2015, 57, 104003.                 | 2.1 | 2         |
| 351 | A generalized Abel inversion method for gamma-ray imaging of thermonuclear plasmas. Journal of Instrumentation, 2016, 11, C03001-C03001.  | 1.2 | 2         |
| 352 | Modelling of plasma-edge and plasma-wall interaction physics at JET with the metallic first-wall. Physica Scripta, 2016, T167, 014078.  | 2.5 | 2         |
| 353 | Towards self-consistent plasma modelisation in presence of neoclassical tearing mode and sawteeth: effects on transport coefficients. Plasma Physics and Controlled Fusion, 2017, 59, 125012. | 2.1 | 2         |
| 354 | Gyrokinetic simulations of particle transport in pellet fuelled JET discharges. Plasma Physics and Controlled Fusion, 2017, 59, 105005.   | 2.1 | 2         |
| 355 | Novel method for determination of tritium depth profiles in metallic samples. Nuclear Fusion, 2019, 59, 106006.   | 3.5 | 2         |
| 356 | Assessment of aluminium metallisation by nanoindentation. Materials Research Society Symposia Proceedings, 2002, 750, 1.  | 0.1 | 1         |
| 357 | Determination of mechanical parameters for rotating MEMS structures as a function of deposition method. Materials Research Society Symposia Proceedings, 2003, 795, 535.                      | 0.1 | 1         |
| 358 | Implementation and testing of the JET gamma-ray cameras neutron filters pneumatic system. Fusion Engineering and Design, 2011, 86, 1196-1199.   | 1.9 | 1         |
| 359 | Thermal analysis of protruding surfaces in the JET divertor. Nuclear Fusion, 2017, 57, 066009.  | 3.5 | 1         |
| 360 | Divertor currents optimization procedure for JET-ILW high flux expansion experiments. Fusion Engineering and Design, 2018, 129, 115-119.  | 1.9 | 1         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 361 | Energetic ion losses $\hat{\sim}$ channeling $\hat{\sim}$ ™ mechanism and strategy for mitigation. Plasma Physics and Controlled Fusion, 2019, 61, 084008.   | 2.1 | 1         |
| 362 | Population modelling of the He II energy levels in tokamak plasmas: I. Collisional excitation model. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 045001.                        | 1.5 | 1         |
| 363 | Micro ion beam analysis for the erosion of beryllium marker tiles in a tokamak limiter. Nuclear Instruments & Methods in Physics Research B, 2019, 450, 200-204.   | 1.4 | 1         |
| 364 | On determining the prediction limits of mathematical models for time series. Journal of Instrumentation, 2016, 11, C07013-C07013.  | 1.2 | 1         |
| 365 | Hinge Sensitivity in a Micro-Rotating Structure for predicting Induced Thermo Mechanical Stress in Integrated Circuit Metal Interconnects. Materials Research Society Symposia Proceedings, 2003, 795, 52. | 0.1 | 0         |
| 366 | Calibration and optimization of interconnect based MEMS test structures for predicting thermo-mechanical stress in metallization. , 0, , .   |     | 0         |
| 367 | Test chip for the development and evaluation of test structures for measuring stress in metal interconnect. , 0, , .   |     | 0         |
| 368 | Upgrade of the JET tangential gamma-ray spectrometer. Conceptual design. , 2009, , .   |     | 0         |
| 369 | Classification of JET Neutron and Gamma Emissivity Profiles. Journal of Instrumentation, 2016, 11, C05021-C05021.  | 1.2 | 0         |
| 370 | MHD marking using the MSE polarimeter optics in ILW JET plasmas. Review of Scientific Instruments, 2016, 87, 11E556.   | 1.3 | 0         |
| 371 | Characteristics of pre-ELM structures during ELM control experiment on JET with $n=2$ magnetic perturbations. Nuclear Fusion, 2016, 56, 092011.  | 3.5 | 0         |
| 372 | First observation of the depolarization of Thomson scattering radiation by a fusion plasma. Nuclear Fusion, 2018, 58, 044003.  | 3.5 | 0         |
| 373 | Propagating transport-code input parameter uncertainties with deterministic sampling. Plasma Physics and Controlled Fusion, 2018, 60, 125010.  | 2.1 | 0         |
| 374 | Synthetic diagnostic for the JET scintillator probe lost alpha measurements. Journal of Instrumentation, 2019, 14, C09018-C09018.  | 1.2 | 0         |