

Robert Budny

List of Publications by Year in descending order

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112
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112
times ranked

1711
citing authors

#	ARTICLE	IF	CITATIONS
1	Study of ion-gyroscale fluctuations in low-density L-mode plasmas heated by NBI on KSTAR. Nuclear Fusion, 2018, 58, 046009.	1.6	1
2	Orchestrating TRANSP Simulations for Interpretative and Predictive Tokamak Modeling with OMFIT. Fusion Science and Technology, 2018, 74, 101-115.	0.6	44
3	Alpha heating, isotopic mass, and fast ion effects in deuterium-tritium experiments. Nuclear Fusion, 2018, 58, 096011.	1.6	3
4	Ion gyroscale fluctuation measurement with microwave imaging reflectometer on KSTAR. Review of Scientific Instruments, 2016, 87, 11E134.	0.6	5
5	Modelling neutral beams in fusion devices: Beamlet-based model for fast particle simulations. Computer Physics Communications, 2015, 188, 33-46.	3.0	63
6	Internal transport barrier triggered by non-linear lower hybrid wave deposition under condition of beam-driven toroidal rotation. Physics of Plasmas, 2015, 22, 032507.	0.7	1
7	Anomalous fast ion losses at high \hat{I}^2 on the tokamak fusion test reactor. Physics of Plasmas, 2015, 22, 032501.	0.7	5
8	Integrated modeling of temperature profiles in L-mode tokamak discharges. Physics of Plasmas, 2014, 21, 122505.	0.7	14
9	Energetic ion transport by microturbulence is insignificant in tokamaks. Physics of Plasmas, 2013, 20, 056108.	0.7	35
10	Ion heat transport studies in JET. Plasma Physics and Controlled Fusion, 2011, 53, 124033.	0.9	22
11	Comment on Li pellet conditioning in tokamak fusion test reactor. Physics of Plasmas, 2011, 18, .	0.7	2
12	Off-axis fishbone-like instability and excitation of resistive wall modes in JT-60U and DIII-D. Physics of Plasmas, 2011, 18, .	0.7	34
13	Effect of pedestal height and internal transport barriers on International Thermonuclear Experimental Reactor target steady state simulations. Physics of Plasmas, 2011, 18, 112508.	0.7	7
14	Refractive and relativistic effects on ITER low field side reflectometer design. Review of Scientific Instruments, 2010, 81, 10D908.	0.6	3
15	Validation of on- and off-axis neutral beam current drive against experiment in DIII-D. Physics of Plasmas, 2009, 16, 092508.	0.7	23
16	PREDICTIONS OF ELECTRON CYCLOTRON CURRENT DRIVE AND HEATING IN ITER. , 2009, , .		0
17	Excitation of Alfvén eigenmodes by low energy beam ions in the DIII-D and JET tokamaks. Physics of Plasmas, 2008, 15, 056107.	0.7	33
18	Intense Geodesic Acousticlike Modes Driven by Suprathermal Ions in a Tokamak Plasma. Physical Review Letters, 2008, 101, 185001.	2.9	132

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19	The physics of sawtooth stabilization. Plasma Physics and Controlled Fusion, 2007, 49, B385-B394.	0.9	50
20	Simulation of Fusion Plasmas: Current Status and Future Direction. Plasma Science and Technology, 2007, 9, 312-387.	0.7	29
21	Multitude of Core-Localized Shear Alfvén Waves in a High-Temperature Fusion Plasma. Physical Review Letters, 2006, 96, 105006.	2.9	48
22	Multispecies density and temperature gradient dependence of quasilinear particle and energy fluxes. Physics of Plasmas, 2005, 12, 042506.	0.7	2
23	Simulation and Analysis of the Hybrid Operating Mode in ITER. , 2005, , .		0
24	Sawtooth control in fusion plasmas. Plasma Physics and Controlled Fusion, 2005, 47, B121-B133.	0.9	44
25	Similarity in H-mode energy confinement: β^* rather than n limit should be kept fixed. Plasma Physics and Controlled Fusion, 2004, 46, A207-A213.	0.9	12
26	Status of and prospects for advanced tokamak regimes from multi-machine comparisons using the International Tokamak Physics Activity database. Plasma Physics and Controlled Fusion, 2004, 46, A19-A34.	0.9	31
27	Preliminary calculations of expected signal levels of a thin Faraday foil lost alpha particle diagnostic for International Thermonuclear Experimental Reactor. Review of Scientific Instruments, 2004, 75, 3569-3571.	0.6	1
28	Numerical techniques used in Neutral Beam Injection modules. Computer Physics Communications, 2004, 164, 421-427.	3.0	27
29	Advanced tokamak profile evolution in DIII-D. Physics of Plasmas, 2003, 10, 1691-1697.	0.7	24
30	Improved ELM scaling with impurity seeding in JET. Plasma Physics and Controlled Fusion, 2003, 45, 1657-1669.	0.9	14
31	Neutral beam stabilization of sawtooth oscillations in JET. Plasma Physics and Controlled Fusion, 2002, 44, 205-222.	0.9	45
32	The role of axisymmetric reconnection events in JET discharges with extreme shear reversal. Plasma Physics and Controlled Fusion, 2002, 44, 1127-1141.	0.9	23
33	Confinement properties of high density impurity seeded ELMy H-mode discharges at low and high triangularity on JET. Plasma Physics and Controlled Fusion, 2002, 44, 1845-1861.	0.9	47
34	Microturbulence and flow shear in high-performance JET ITB plasma. Plasma Physics and Controlled Fusion, 2002, 44, 1215-1228.	0.9	18
35	Experimental Determination of Critical Threshold in Electron Transport on Tore Supra. Physical Review Letters, 2001, 87, 125001.	2.9	115
36	Observation of modes at frequencies near the second Alfvén gap in the Tokamak Fusion Test Reactor. Physics of Plasmas, 2000, 7, 4121.	0.7	3

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37	Transitionless enhanced confinement and the role of radial electric field shear. Physics of Plasmas, 2000, 7, 615-625.	0.7	18
38	Nonlinear evolution of double tearing modes in tokamaks. Physics of Plasmas, 2000, 7, 4112.	0.7	44
39	Internal Transport Barrier with Ion-Cyclotron-Resonance Minority Heating on Tore Supra. Physical Review Letters, 2000, 84, 4593-4596.	2.9	46
40	Nature of Monster Sawteeth and Their Relationship to Alfvén Instabilities in Tokamaks. Physical Review Letters, 2000, 84, 1212-1215.	2.9	31
41	Local transport in Joint European Tokamak edge-localized, high-confinement mode plasmas with H, D, DT, and T isotopes. Physics of Plasmas, 2000, 7, 5038-5050.	0.7	35
42	Observation of modes at frequencies near the second Alfvén gap in TFTR. , 1999, , .		0
43	Overview of experiments with radiation cooling at high confinement and high density in limited and diverted discharges. Plasma Physics and Controlled Fusion, 1999, 41, A379-A399.	0.9	51
44	Neoclassical simulations of fusion alpha particles in pellet charge exchange experiments on the Tokamak Fusion Test Reactor. Physics of Plasmas, 1999, 6, 2826-2833.	0.7	6
45	Anomalous Beam-Ion Loss in TFTR Reversed Magnetic Shear Plasmas. Physical Review Letters, 1999, 82, 924-927.	2.9	13
46	Tokamak Fusion Test Reactor charge exchange atom spectrometry using a natural diamond detector. Review of Scientific Instruments, 1999, 70, 1107-1110.	0.6	24
47	Fusion performance analysis of plasmas with reversed magnetic shear in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1999, 6, 3247-3262.	0.7	1
48	Effective temperatures, sawtooth mixing, and stochastic diffusion ripple loss of fast H+ minority ions driven by ion cyclotron heating in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1999, 6, 2430-2436.	0.7	21
49	Modeling of the shear effects on the thermal ion transport in advanced tokamak scenarios. Physics of Plasmas, 1999, 6, 4229-4238.	0.7	13
50	Neoclassical tearing modes in Tokamak Fusion Test Reactor experiments. I. Measurements of magnetic islands and $\tilde{\rho}^2$. Physics of Plasmas, 1998, 5, 1076-1084.	0.7	35
51	Transport of recycled deuterium to the plasma core in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1998, 5, 1062-1067.	0.7	4
52	Toroidal Alfvén eigenmodes in TFTR deuterium-tritium plasmas. Physics of Plasmas, 1998, 5, 1703-1711.	0.7	33
53	Alpha-particle physics in the tokamak fusion test reactor DT experiment. Plasma Physics and Controlled Fusion, 1997, 39, A275-A283.	0.9	23
54	Local transport barrier formation and relaxation in reverse-shear plasmas on the Tokamak Fusion Test Reactor. Physics of Plasmas, 1997, 4, 1736-1744.	0.7	109

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55	Roles of Electric Field Shear and Shafranov Shift in Sustaining High Confinement in Enhanced Reversed Shear Plasmas on the TFTR Tokamak. <i>Physical Review Letters</i> , 1997, 78, 2972-2975.	2.9	119
56	Measurements of nonthermal confined alpha particles in Tokamak Fusion Test Reactor D-T plasmas (invited). <i>Review of Scientific Instruments</i> , 1997, 68, 269-274.	0.6	7
57	Alpha diagnostics using pellet charge exchange: Results on the Tokamak Fusion Test Reactor and prospects for ITER. <i>Review of Scientific Instruments</i> , 1997, 68, 336-339.	0.6	7
58	The role of the neutral beam fueling profile in the performance of the Tokamak Fusion Test Reactor and other tokamak plasmas. <i>Physics of Plasmas</i> , 1997, 4, 1699-1706.	0.7	12
59	Alpha-driven magnetohydrodynamics (MHD) and MHD-induced alpha loss in the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1997, 4, 1610-1616.	0.7	16
60	Alpha-Particle-Driven Toroidal Alfvén Eigenmodes in the Tokamak Fusion Test Reactor. <i>Physical Review Letters</i> , 1997, 78, 2976-2979.	2.9	118
61	Alpha particle losses from Tokamak Fusion Test Reactor deuterium-tritium plasmas. <i>Physics of Plasmas</i> , 1996, 3, 1875-1880.	0.7	25
62	Confinement and the safety factor profile. <i>Physics of Plasmas</i> , 1996, 3, 1348-1355.	0.7	3
63	Measurements of confined alphas and tritons in the MHD quiescent core of TFTR plasmas using the pellet charge exchange diagnostic. <i>Plasma Physics and Controlled Fusion</i> , 1996, 38, 1779-1789.	0.9	21
64	Ripple-induced energetic particle loss in tokamaks. <i>Physics of Plasmas</i> , 1996, 3, 3043-3054.	0.7	43
65	Simulations of alpha particle ripple loss from the International Thermonuclear Experimental Reactor. <i>Physics of Plasmas</i> , 1996, 3, 3037-3042.	0.7	21
66	Confinement analysis in low-confinement mode of hydrogen isotope experiments on the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1996, 3, 4521-4535.	0.7	12
67	Performance of ICRF-heated D-T plasmas fueled by neutral beam injection in TFTR. , 1996, , .		1
68	Computational model for fast wave current drive. , 1996, , .		1
69	Turbulent Fluctuations in TFTR Configurations with Reversed Magnetic Shear. <i>Physical Review Letters</i> , 1996, 77, 3145-3148.	2.9	178
70	TRANSP simulations of International Thermonuclear Experimental Reactor plasmas. <i>Physics of Plasmas</i> , 1996, 3, 4583-4593.	0.7	17
71	A threshold for excitation of neoclassical tearing modes. <i>Physics of Plasmas</i> , 1996, 3, 3379-3385.	0.7	63
72	Fusion Heating in a Deuterium-Tritium Tokamak Plasma. <i>Physical Review Letters</i> , 1996, 76, 2722-2725.	2.9	48

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73	Tomography of (2, 1) and (3, 2) magnetic island structures on Tokamak Fusion Test Reactor. Physics of Plasmas, 1996, 3, 2631-2640.	0.7	19
74	Modeling of neutral hydrogen velocities in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1996, 3, 4084-4094.	0.7	52
75	Off-Axis Sawteeth and Double-Tearing Reconnection in Reversed Magnetic Shear Plasmas in TFTR. Physical Review Letters, 1996, 77, 3553-3556.	2.9	147
76	First Observation of Alpha Particle Loss Induced by Kinetic Ballooning Modes in TFTR Deuterium-Tritium Experiments. Physical Review Letters, 1996, 76, 1071-1074.	2.9	26
77	ICRF heating of TFTR plasmas fuelled by deuterium - tritium neutral beam injection. Plasma Physics and Controlled Fusion, 1996, 38, 723-750.	0.9	10
78	Combined H-modes in DD and DT plasmas in TFTR. Plasma Physics and Controlled Fusion, 1996, 38, 1353-1357.	0.9	1
79	Tritium Particle Transport Experiments on TFTR during D-T Operation. Physical Review Letters, 1995, 75, 85-88.	2.9	31
80	Measurements of the Production and Transport of Helium Ash in the TFTR Tokamak. Physical Review Letters, 1995, 75, 3689-3692.	2.9	42
81	Improved Confinement with Reversed Magnetic Shear in TFTR. Physical Review Letters, 1995, 75, 4417-4420.	2.9	662
82	Isotopic scaling of transport in deuterium-tritium plasmas. Physica Scripta, 1995, 51, 394-401.	1.2	25
83	Observation of Nonlinear Neoclassical Pressure-Gradient-Driven Tearing Modes in TFTR. Physical Review Letters, 1995, 74, 4663-4666.	2.9	361
84	\hat{I}^2 limit disruptions in the Tokamak Fusion Test Reactor. Physics of Plasmas, 1995, 2, 4216-4229.	0.7	37
85	Ion cyclotron range of frequencies heating and current drive in deuterium-tritium plasmas. Physics of Plasmas, 1995, 2, 2427-2434.	0.7	35
86	Measurements of Fast Confined Alphas on TFTR. Physical Review Letters, 1995, 75, 846-849.	2.9	66
87	ICRF heating of TFTR deuterium supershot plasmas in the ^3He minority regime. Plasma Physics and Controlled Fusion, 1994, 36, 523-542.	0.9	23
88	Anomalous losses of deuterium-deuterium fusion products in the Tokamak Fusion Test Reactor*. Physics of Plasmas, 1994, 1, 1469-1478.	0.7	29
89	Investigation of ballooning modes in high poloidal beta plasmas in the Tokamak Fusion Test Reactor*. Physics of Fluids B, 1993, 5, 2571-2577.	1.7	21
90	Observation of ballooning modes in high-temperature tokamak plasmas. Physical Review Letters, 1992, 69, 2376-2379.	2.9	25

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91	High poloidal beta equilibria in the Tokamak Fusion Test Reactor limited by a natural inboard poloidal field null. <i>Physics of Fluids B</i> , 1991, 3, 2277-2284.	1.7	63
92	High- Q plasmas in the TFTR tokamak. <i>Physics of Fluids B</i> , 1991, 3, 2308-2314.	1.7	17
93	Peaked density profiles in circular-limiter H-modes on the TFTR tokamak. <i>Physical Review Letters</i> , 1990, 65, 424-427.	2.9	58
94	Characterization of the Tokamak Fusion Test Reactor plasma edge by Langmuir calorimeter probes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1986, 4, 1817-1821.	0.9	8
95	Chromium getter studies in the Tokamak Fusion Test Reactor. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1986, 4, 1753-1757.	0.9	11
96	Probes for edge plasma studies of TFTR (invited). <i>Review of Scientific Instruments</i> , 1986, 57, 2107-2112.	0.6	17
97	Depolarization of D α -T plasmas by recycling in material walls. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1984, 2, 619-629.	0.9	14
98	TFTR prototype electrostatic calorimeter probe head. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1983, 1, 845-848.	0.9	16
99	$\tilde{a}, \tilde{c} \tilde{a} f - \tilde{a}, \tilde{1} \tilde{a} f \tilde{a} f \tilde{c} \tilde{a}, \tilde{a} f \tilde{a}$. <i>Shinku/Journal of the Vacuum Society of Japan</i> , 1983, 26, 526-549.	0.2	4
100	Thermal responses of first wall limiters in the Tokamak Fusion Test Reactor. <i>Journal of Vacuum Science and Technology</i> , 1980, 17, 298-300.	1.9	4
101	W 0 effects in electron-positron collisions on $1\hat{a}^{\sim}$ resonances. <i>Physical Review D</i> , 1979, 20, 2763-2774.	1.6	1
102	Deep-inelastic neutral-current cross sections. <i>Physical Review D</i> , 1978, 17, 1758-1762.	1.6	1
103	Reconciliation of deep-inelastic neutrino and antineutrino measurements with the four-flavor parton model. <i>Physical Review D</i> , 1977, 15, 3227-3231.	1.6	3
104	Measuring form factors and decay parameters of heavy spin-1/2 particles produced by e^+e^- annihilations. <i>Physical Review D</i> , 1977, 15, 81-88.	1.6	3
105	Manifest Left-Right Symmetry and its Experimental Consequences. <i>Physical Review Letters</i> , 1977, 38, 1252-1255.	2.9	308
106	Electric- and weak magnetic-dipole-moment effects in $e^+e^- \rightarrow \hat{a}^{\sim} l + \hat{a}^{\sim}$. <i>Physical Review D</i> , 1977, 15, 1222-1226.	1.6	5
107	Can couplings of charged heavy leptons to the W 0 be measured?. <i>Physical Review D</i> , 1977, 16, 3150-3156.	1.6	5
108	Weak effects in annihilations producing spin- $\hat{A}^{1/2}$ and spin-0 particle pairs. <i>Physical Review D</i> , 1976, 14, 2969-2989.	1.6	18

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109	SU(4) Light-Cone Analysis of Deep-Inelastic Lepton Scattering. Physical Review D, 1972, 6, 3651-3657.	1.6	13
110	Broken Scale Invariance and Kinematic Moments of Electroproduction Cross Sections. Physical Review D, 1971, 3, 744-746.	1.6	0