

# Richard J Hawryluk

## List of Publications by Year in descending order

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113  
papers

5,022  
citations

87888

38  
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95266

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115  
all docs

115  
docs citations

115  
times ranked

1878  
citing authors

#	ARTICLE	IF	CITATIONS
1	Qualification of NSTX-U Inner TF Bundle Using Hi-Fidelity Models. Fusion Science and Technology, 2021, 77, 658-675.	1.1	0
2	The challenge and promise of studying burning plasmas. Physics Today, 2019, 72, 34-40.	0.3	13
3	Control of plasma stored energy for burn control using DIII-D in-vessel coils. Nuclear Fusion, 2015, 55, 053001.	3.5	16
4	Overview of the JET results with the ITER-like wall. Nuclear Fusion, 2013, 53, 104002.	3.5	70
5	Prospects for pilot plants based on the tokamak, spherical tokamak and stellarator. Nuclear Fusion, 2011, 51, 103014.	3.5	77
6	23rd IAEA Fusion Energy Conference: summary of sessions EX/C and ICC. Nuclear Fusion, 2011, 51, 094005.	3.5	2
7	First observation of ELM pacing with vertical jogs in a spherical torus. Nuclear Fusion, 2010, 50, 064015.	3.5	22
8	Importance of plasma response to nonaxisymmetric perturbations in tokamaks. Physics of Plasmas, 2009, 16, 056115.	1.9	74
9	Development of ITER 15â€‰MA ELMy H-mode inductive scenario. Nuclear Fusion, 2009, 49, 085034.	3.5	62
10	Principal physics developments evaluated in the ITER design review. Nuclear Fusion, 2009, 49, 065012.	3.5	200
11	An overview of the iter in-vessel coil systems. , 2009, , .		11
12	Overview of recent physics results from the National Spherical Torus Experiment (NSTX). Nuclear Fusion, 2007, 47, S645-S657.	3.5	40
13	Scientific Challenges, Opportunities and Priorities for the U.S. Fusion Energy Sciences Program. Journal of Fusion Energy, 2005, 24, 13-114.	1.2	3
14	Progress towards high performance plasmas in the National Spherical Torus Experiment (NSTX). Nuclear Fusion, 2005, 45, S168-S180.	3.5	60
15	Progress towards high-performance, steady-state spherical torus. Plasma Physics and Controlled Fusion, 2003, 45, A335-A350.	2.1	25
16	Results of NSTX heating experiments. IEEE Transactions on Plasma Science, 2003, 31, 60-67.	1.3	2
17	Overview of JET results. Nuclear Fusion, 2003, 43, 1540-1554.	3.5	38
18	The national spherical torus experiment (NSTX) research programme and progress towards high beta, long pulse operating scenarios. Nuclear Fusion, 2003, 43, 1653-1664.	3.5	49

#	ARTICLE	IF	CITATIONS
19	Development of a Silicon-Based Electron Beam Transmission Window for Use in a KrF Excimer Laser System. <i>Fusion Science and Technology</i> , 2003, 43, 414-419.	1.1	0
20	Report of the FESAC Panel on a Burning Plasma Program Strategy to Advance Fusion Energy. <i>Journal of Fusion Energy</i> , 2001, 20, 85-112.	1.2	0
21	Title is missing!. <i>Journal of Fusion Energy</i> , 2000, 19, 35-44.	1.2	0
22	Transitionless enhanced confinement and the role of radial electric field shear. <i>Physics of Plasmas</i> , 2000, 7, 615-625.	1.9	18
23	Results from D-T experiments on TFTR and implications for achieving an ignited plasma. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1999, 357, 443-469.	3.4	15
24	ICRF results in D-T plasmas in JET and TFTR and implications for ITER. <i>Plasma Physics and Controlled Fusion</i> , 1998, 40, A87-A103.	2.1	22
25	Results from deuterium-tritium tokamak confinement experiments. <i>Reviews of Modern Physics</i> , 1998, 70, 537-587.	45.6	113
26	Fusion plasma experiments on TFTR: A 20 year retrospective. <i>Physics of Plasmas</i> , 1998, 5, 1577-1589.	1.9	91
27	TFTR DT experiments. <i>Plasma Physics and Controlled Fusion</i> , 1997, 39, B103-B114.	2.1	35
28	Alpha-particle physics in the tokamak fusion test reactor DT experiment. <i>Plasma Physics and Controlled Fusion</i> , 1997, 39, A275-A283.	2.1	23
29	Deuterium-tritium plasmas in novel regimes in the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1997, 4, 1714-1724.	1.9	27
30	Plasma wall interaction and tritium retention in TFTR. <i>Journal of Nuclear Materials</i> , 1997, 241-243, 214-226.	2.7	39
31	Recent D-T results on TFTR. <i>Plasma Physics and Controlled Fusion</i> , 1995, 37, A69-A85.	2.1	22
32	Deuterium-tritium experiments on TFTR. <i>AIP Conference Proceedings</i> , 1995, , .	0.4	0
33	Plasma-surface interactions in TFTR DT experiments. <i>Journal of Nuclear Materials</i> , 1995, 220-222, 62-72.	2.7	18
34	Alfven frequency modes at the edge of TFTR plasmas. <i>Nuclear Fusion</i> , 1995, 35, 1469-1479.	3.5	40
35	Isotopic scaling of transport in deuterium-tritium plasmas. <i>Physica Scripta</i> , 1995, 51, 394-401.	2.5	25
36	Review of deuterium-tritium results from the Tokamak Fusion Test Reactor. <i>Physics of Plasmas</i> , 1995, 2, 2176-2188.	1.9	89

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37	Overview of DT results from TFTR. Nuclear Fusion, 1995, 35, 1429-1436.	3.5	41
38	Deuterium and tritium experiments on TFTR. Plasma Physics and Controlled Fusion, 1994, 36, B3-B15.	2.1	18
39	Preparations for deuterium-tritium experiments on the Tokamak Fusion Test Reactor*. Physics of Plasmas, 1994, 1, 1560-1567.	1.9	7
40	Fusion power production from TFTR plasmas fueled with deuterium and tritium. Physical Review Letters, 1994, 72, 3526-3529.	7.8	130
41	Confinement and heating of a deuterium-tritium plasma. Physical Review Letters, 1994, 72, 3530-3533.	7.8	90
42	Tritium Processing and Management During D-T Experiments on TFTR. Fusion Science and Technology, 1994, 26, 427-433.	0.6	13
43	Deuterium-Tritium Experiments on the Tokamak Fusion Test Reactor. Fusion Science and Technology, 1994, 26, 389-398.	0.6	10
44	Neutron emission from TFTR supershots. Nuclear Fusion, 1993, 33, 991-1007.	3.5	32
45	Operation at the tokamak equilibrium poloidal beta-limit in TFTR. Nuclear Fusion, 1992, 32, 1468-1473.	3.5	11
46	Status and Plans for TFTR. Fusion Science and Technology, 1992, 21, 1324-1331.	0.6	23
47	High poloidal beta equilibria in the Tokamak Fusion Test Reactor limited by a natural inboard poloidal field null. Physics of Fluids B, 1991, 3, 2277-2284.	1.7	63
48	High- $\beta$ plasmas in the TFTR tokamak. Physics of Fluids B, 1991, 3, 2308-2314.	1.7	17
49	Overview of TFTR transport studies. Plasma Physics and Controlled Fusion, 1991, 33, 1509-1536.	2.1	59
50	Discharge cleaning on Tokamak Fusion Test Reactor after boronization. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 2713-2715.	2.1	11
51	High- $\beta$ operation and magnetohydrodynamic activity on the TFTR tokamak. Physics of Fluids B, 1990, 2, 1287-1290.	1.7	35
52	Correlations of heat and momentum transport in the TFTR tokamak. Physics of Fluids B, 1990, 2, 1300-1305.	1.7	47
53	Effects of boronization of the first wall in TFTR. Journal of Nuclear Materials, 1990, 176-177, 337-342.	2.7	56
54	Enhanced confinement in tokamaks. Physics of Fluids B, 1990, 2, 2941-2960.	1.7	48

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55	Peaked density profiles in circular-limiter H-modes on the TFTR tokamak. <i>Physical Review Letters</i> , 1990, 65, 424-427.	7.8	58
56	Progress in the neutral beam injection heating experiment on the Tokamak fusion test reactor. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1989, 40-41, 996-999.	1.4	0
57	Baldur: A one-dimensional plasma transport code. <i>Computer Physics Communications</i> , 1988, 49, 275-398.	7.5	115
58	Bootstrap current in TFTR. <i>Physical Review Letters</i> , 1988, 60, 1306-1309.	7.8	170
59	Transport and stability studies on TFTR. <i>Plasma Physics and Controlled Fusion</i> , 1988, 30, 1391-1403.	2.1	26
60	High power neutral beam heating experiments on TFTR with balanced and unbalanced momentum input. <i>Plasma Physics and Controlled Fusion</i> , 1987, 29, 1235-1245.	2.1	31
61	High-temperature plasmas in a tokamak fusion test reactor. <i>Physical Review Letters</i> , 1987, 58, 1004-1007.	7.8	238
62	Experimental results from the TFTR tokamak. <i>Philosophical Transactions of the Royal Society A</i> , 1987, 322, 147-162.	1.1	0
63	Long and short term trends in vessel conditioning of TFTR. <i>Journal of Nuclear Materials</i> , 1987, 145-147, 781-786.	2.7	7
64	Neutral beam injection on the Tokamak fusion test reactor. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1987, 24-25, 741-745.	1.4	3
65	Confinement studies of neutral beam heated discharges in TFTR. <i>Plasma Physics and Controlled Fusion</i> , 1986, 28, 17-27.	2.1	56
66	Tokamak Fusion Test Reactor gas injection control system design and operation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1986, 4, 317-321.	2.1	6
67	TFTR confinement results. <i>Plasma Physics and Controlled Fusion</i> , 1986, 28, 1329-1340.	2.1	15
68	TFTR Plasma Feedback Systems. <i>Fusion Science and Technology</i> , 1985, 8, 1807-1812.	0.6	10
69	Confinement Studies In TFTR. <i>Fusion Science and Technology</i> , 1985, 8, 657-663.	0.6	8
70	Magnetic diagnostics and feedback control on TFTR (invited). <i>Review of Scientific Instruments</i> , 1985, 56, 941-946.	1.3	14
71	Acceleration of Beam Ions during Major-Radius Compression in the Tokamak Fusion Test Reactor. <i>Physical Review Letters</i> , 1985, 55, 2587-2590.	7.8	10
72	TFTR Initial operations. <i>Plasma Physics and Controlled Fusion</i> , 1984, 26, 11-22.	2.1	45

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73	Thermal energy confinement scaling in PDX limiter discharges. Nuclear Fusion, 1984, 24, 1303-1334.	3.5	40
74	Initial Confinement Studies of Ohmically Heated Plasmas in the Tokamak Fusion Test Reactor. Physical Review Letters, 1984, 52, 1492-1495.	7.8	26
75	Initial conditioning of the TFTR vacuum vessel. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1984, 2, 1188-1192.	2.1	20
76	Initial limiter and getter operation in TFTR. Journal of Nuclear Materials, 1984, 128-129, 1-9.	2.7	35
77	Particle fueling and impurity control in PDX. Journal of Nuclear Materials, 1984, 128-129, 330-339.	2.7	30
78	First-Wall and limiter conditioning in TFTR. Journal of Nuclear Materials, 1984, 128-129, 861-866.	2.7	18
79	Study of High-Beta Magnetohydrodynamic Modes and Fast-Ion Losses in PDX. Physical Review Letters, 1983, 50, 891-895.	7.8	380
80	Ion Heating with High-Power Perpendicular Neutral-Beam Injection in the Poloidal Divertor Experiment (PDX). Physical Review Letters, 1982, 49, 326-329.	7.8	16
81	Improvement of Plasma Radial Position Control in PDX through an Automated Learning Procedure. IEEE Transactions on Plasma Science, 1982, 10, 99-105.	1.3	0
82	Impurity levels and power loading in the pdx tokamak with high power neutral beam injection. Journal of Nuclear Materials, 1982, 111-112, 343-354.	2.7	41
83	Fusion neutron production during deuterium neutral-beam injection into the PLT tokamak. Nuclear Fusion, 1981, 21, 67-81.	3.5	84
84	New techniques for calculating heat and particle source rates due to neutral beam injection in axisymmetric tokamaks. Journal of Computational Physics, 1981, 43, 61-78.	3.8	523
85	Exposure and development models used in electron beam lithography. Journal of Vacuum Science and Technology, 1981, 19, 1-17.	1.9	50
86	Radiation losses in PLT during neutral-beam and ICRF heating experiments. Nuclear Fusion, 1981, 21, 981-991.	3.5	37
87	PDX Divertor operation. Journal of Nuclear Materials, 1980, 93-94, 213-219.	2.7	20
88	The effect of current profile evolution on plasma-limiter interaction and the energy confinement time. Nuclear Fusion, 1979, 19, 1307-1317.	3.5	50
89	Low-Z impurity transport in tokamaks. Nuclear Fusion, 1979, 19, 607-632.	3.5	82
90	Titanium Density Measurements in the Pdx Tokamak Using a Ti XVII Forbidden Line. Nuclear Fusion, 1979, 19, 1681-1683.	3.5	10

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91	Observations of changes in residual gas and surface composition with discharge cleaning in PLT. Journal of Vacuum Science and Technology, 1979, 16, 752-757.	1.9	21
92	Neutral-Beam-Heating Results from the Princeton Large Torus. Physical Review Letters, 1979, 43, 270-274.	7.8	114
93	Volt-second consumption during the start-up phase of PLT. Nuclear Fusion, 1979, 19, 1519-1522.	3.5	20
94	Effects of tungsten radiation on the behaviour of PLT tokamak discharges. Nuclear Fusion, 1978, 18, 1305-1307.	3.5	38
95	Low-Z impurities in the PLT Tokamak. Plasma Physics, 1978, 20, 723-734.	0.9	29
96	Plasma Edge Cooling during rf Heating. Physical Review Letters, 1978, 40, 1649-1651.	7.8	34
97	Quenching of the current-driven ion-wave instability in the trapped-electron regime in a toroidal plasma. Physics of Fluids, 1977, 20, 95.	1.4	11
98	Energy loss rates of energetic ions injected into the FM-1 spherator. Physics of Fluids, 1977, 20, 1571.	1.4	2
99	Neoclassical conductivity of a tokamak plasma. Nuclear Fusion, 1977, 17, 611-614.	3.5	140
100	RF-heating near the lower hybrid frequency in the FM-1 spherator. Nuclear Fusion, 1976, 16, 419-426.	3.5	4
101	Carbon influx flow rate in an Ohmically heated plasma in the FM-1 spherator. Nuclear Fusion, 1976, 16, 797-804.	3.5	3
102	Effects of low-Z impurities during the start-up phase of a large tokamak. Nuclear Fusion, 1976, 16, 775-781.	3.5	34
103	Inhibition of the Current-Driven Ion-Wave Instability in the Trapped-Electron Regime in the FM-1 Spherator. Physical Review Letters, 1976, 36, 726-729.	7.8	6
104	Observation of inverted population levels in the FM-1 spherator. Applied Physics Letters, 1976, 29, 537-539.	3.3	13
105	Observation of magnetic islands in the FM-1 spherator. Physics of Fluids, 1976, 19, 1805.	1.4	2
106	Energy dissipation in a thin polymer film by electron beam scattering: Experiment. Journal of Applied Physics, 1975, 46, 2528-2537.	2.5	47
107	Impurity Transport in the FM-1 Spherator. Physical Review Letters, 1974, 33, 1272-1275.	7.8	4
108	Experimental study of forbidden optical transitions in a dense, laser-produced plasma. Physical Review A, 1974, 10, 265-277.	2.5	17

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109	Energy dissipation in a thin polymer film by electron beam scattering. Journal of Applied Physics, 1974, 45, 2551-2566.	2.5	139
110	Stark profiles of forbidden and allowed transitions in a dense, laser produced helium plasma. Journal of Physics B: Atomic and Molecular Physics, 1972, 5, 1017-1030.	1.6	12
111	PBX-M upgrade for advanced stabilization and profile control studies. , 0, , .		1
112	The operation of the TFTR tritium system. , 0, , .		1
113	Control of TFTR during DT operations. , 0, , .		0