Engineering feasibility of controlled fusion: A Review

Nuclear Fusion 9, 183-203 DOI: 10.1088/0029-5515/9/3/001

Citation Report

#	Article	IF	CITATIONS
1	Final report of the IAEA Panel on international co-operation in controlled fusion research and its application. Nuclear Fusion, 1970, 10, 413-421.	3.5	6
2	Scattering Probability for Fast Test Particles in a Plasma. Physical Review A, 1970, 2, 2019-2024.	2.5	7
3	Some factors in the choice of D-D, D-T or D-3He mirror fusion power systems. Nuclear Fusion, 1971, 11, 471-484.	3.5	2
4	Controlled Nuclear Fusion: Status and Outlook. Science, 1971, 172, 797-808.	12.6	22
5	Plasma heating by energetic particles. Nuclear Fusion, 1971, 11, 447-456.	3.5	59
6	Nuclear energy the source for the future. Die Naturwissenschaften, 1973, 60, 501-506.	1.6	2
7	Energy loss of charged particles in Maxwellian plasmas. Nuclear Fusion, 1973, 13, 133-138.	3.5	28
8	Laser Driven Fusion. IEEE Transactions on Plasma Science, 1973, 1, 13-26.	1.3	33
9	The effect of a metallic reflector upon cyclotron radiation. Nuclear Fusion, 1973, 13, 7-16.	3.5	26
10	Operating regimes of controlled thermonuclear reactors and stability against fundamental-mode excursions in particle densities and temperatures. Nuclear Fusion, 1973, 13, 843-861.	3.5	32
11	Characteristics of stationary and start-up heating of a D-T fusion reactor by means of fast-neutral-beam injection. Nuclear Fusion, 1973, 13, 761-763.	3.5	13
12	Anomalously confined tokamak reactor. Nuclear Fusion, 1973, 13, 753-755.	3.5	7
13	A Review of Fusion-Fission (Hybrid) Concepts. Nuclear Technology, 1973, 20, 161-178.	1.2	70
14	Thermalization of test particles in plasmas. Physical Review A, 1974, 10, 644-656.	2.5	3
15	Plasma transport in tokamak reactors. Nuclear Fusion, 1974, 14, 353-358.	3.5	2
16	Reactivity of closed fusion reactor systems for advanced fuels. Nuclear Fusion, 1974, 14, 579-581.	3.5	2
17	Oxygen effects on the corrosion of niobium and tantalum by liquid lithium. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1974, 5, 875-879.	1.4	24
18	Plasma confinement in multiple mirror systems. II. Experiment and reactor calculation. Physics of Fluids, 1974, 17, 1302.	1.4	44

	CHATON R	N REPORT		
#	Article	IF	Citations	
19	Nuclear Fusion Power and the Environment. Environmental Conservation, 1974, 1, 251-262.	1.3	11	
20	Influences of Charged Fusion Products on the Low-Frequency Gradient Instabilities in a Thermonuclear Plasma. Journal of the Physical Society of Japan, 1975, 39, 221-228.	1.6	2	
21	Scaling laws for steady-state fusion plasmas. Plasma Physics, 1975, 17, 1071-1082.	0.9	0	
22	Power balance and stress problems of internal-conductor systems. Nuclear Fusion, 1975, 15, 39-47.	3.5	4	
23	Fusion reactor systems. Reviews of Modern Physics, 1975, 47, 7-41.	45.6	77	
24	Time-dependent solution of Fokker-Planck equation for alpha-particles and its effect on alpha-particle heating characteristics in a D-T fusion reactor. Nuclear Fusion, 1976, 16, 287-293.	3.5	26	
25	An approximate theory of steady-state and dynamic characteristics of alpha-particle-heated DT-fusion reactors. Nuclear Fusion, 1977, 17, 919-928.	3.5	14	
26	New Lens System Using Toroidal Magnetic Field for Intense Ion Beam. Japanese Journal of Applied Physics, 1977, 16, 491-496.	1.5	6	
27	Plasma power balance models for self-sustained tokamak reactors. Nuclear Fusion, 1977, 17, 955-968.	3.5	4	
28	Energy distribution of fast test particles slowing down in plasmas. I. Time-independent energy spectra in infinite medium. Physical Review A, 1977, 15, 1659-1667.	2.5	1	
29	Comments on ''Generalized criterion for feasibility of controlled fusion and its application to nonideal Dâ€Ð systems''. Journal of Applied Physics, 1977, 48, 415-417.	2.5	7	
30	Energy Optimization of a Cycled Tokamak. Nuclear Technology, 1977, 36, 285-293.	1.2	0	
31	Thermonuclear Fusion Power. International Journal of Energy Research, 1977, 1, 5-23.	4.5	1	
32	Self-consistent analysis of alpha-particle heating of a fast-solenoid plasma. Nuclear Fusion, 1979, 19, 313-326.	3.5	4	
33	Dynamic Analysis of a Fusion System Using the System Transfer Function. Nuclear Technology, 1979, 45, 244-248.	1.2	1	
34	The Influence of Physics Parameters on Tokamak Reactor Design. Nuclear Technology, 1979, 43, 28-41.	1.2	11	
35	Multigroup representation of fusion product orbits in a plasma column. Journal of Computational Physics, 1980, 34, 330-347.	3.8	2	
36	Trends and Developments in Magnetic Confinement Fusion Reactor Concepts. Nuclear Technology/Fusion, 1981, 1, 5-78.	0.5	27	

#	Article	IF	CITATIONS
37	Thermonuclear burn in wall-confined plasmas. Physics of Fluids, 1981, 24, 970.	1.4	8
38	Fast-ion thermalization in non-circular tokamaks with large-banana-width effects. Nuclear Fusion, 1981, 21, 1431-1446.	3.5	36
39	Physics of Fusion Fuel Cycles. Nuclear Technology/Fusion, 1982, 2, 9-28.	0.5	67
40	Effect of nuclear elastic scattering on energetic-fusion-product slowing-down. Nuclear Fusion, 1983, 23, 195-200.	3.5	4
41	Calculation of Energy Transport by Cyclotron Radiation in Fusion Plasmas. Nuclear Technology/Fusion, 1983, 3, 293-303.	0.5	31
42	The Impact and Implications of Compact Design in The Development of Magnetic Fusion Power. Nuclear Technology/Fusion, 1983, 4, 332-341.	0.5	2
43	Computational Methods for Fast-Ion Slowing Using a Unified Slowing Down Theory. Nuclear Technology/Fusion, 1983, 3, 273-279.	0.5	5
44	Monte Carlo simulation of energy balance in a pure 3He migma of 4 MeV. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1988, 271, 79-88.	1.6	1
45	Measurements of the differential cross sections for recoil tritons in 4Heâ^'3T scattering at energies between 0.5 and 2.5 MeV. Nuclear Instruments & Methods in Physics Research B, 1988, 30, 123-127.	1.4	9
46	Modelling of neutral beam current drive and bootstrap effects in a tokamak test reactor. Nuclear Fusion, 1989, 29, 1769-1783.	3.5	15
47	Sensitivity Studies on Ignition in Ignitor. Fusion Science and Technology, 1991, 19, 78-85.	0.6	6
48	Effects of sawtooth activity in Ignitor. Plasma Physics and Controlled Fusion, 1992, 34, 1493-1501.	2.1	6
49	Fusion Power Economy of Scale. Fusion Science and Technology, 1993, 24, 97-111.	0.6	18
50	The physics of magnetic fusion reactors. Reviews of Modern Physics, 1994, 66, 1015-1103.	45.6	72
51	Ignited and High- <i>Q</i> Plasmas in Ignitor. Fusion Science and Technology, 1994, 25, 278-289.	0.6	5
52	Commercial tokamak reactor potential with advanced tokamak operation. Nuclear Fusion, 1995, 35, 551-573.	3.5	57
53	Helium transport and exhaust experiments in tokamaks. Journal of Nuclear Materials, 1997, 241-243, 68-81.	2.7	15
54	Direct plasmadynamic conversion of plasma thermal power to electricity. IEEE Transactions on Plasma	1.3	1

CITATION REPORT

#	Article	IF	CITATIONS
55	On the potential for direct or MHD conversion of power from a novel plasma source to electricity for microdistributed power applications. IEEE Transactions on Plasma Science, 2002, 30, 1568-1578.	1.3	10
56	50 years of fusion research. Nuclear Fusion, 2010, 50, 014004.	3.5	30
57	Calculation of Thermal Fluence from Extremely High-Energy Emission in Air. IEEE Transactions on Nuclear Science, 2015, 62, 1395-1398.	2.0	1
58	Sputtering of solids with neutrons. Topics in Applied Physics, 1983, , 179-229.	0.8	8
59	The Hydrogen Economy. , 1972, , 226-280.		36
60	FUSION – FIRST WALL PROBLEMS. , 1976, , 91-140.		4
61	Nuclear Fusion Rate Enhancement in Solid-State Environments. SSRN Electronic Journal, 0, , .	0.4	0
62	Roles of resonant muonic molecule in new kinetics model and muon catalyzed fusion in compressed gas. Scientific Reports, 2022, 12, 6393.	3.3	5
63	Perspectives on the use of advanced nuclear energy systems for new energy vehicles. , 2022, , .		0
64	Assessment of the ITER divertor bolometer diagnostic performance. Nuclear Materials and Energy, 2023, 37, 101552.	1.3	0

CITATION REPORT