

Christian Bachmann

List of Publications by Year in descending order

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1446
citing authors

#	ARTICLE	IF	CITATIONS
1	Overview of EU DEMO design and R&D activities. Fusion Engineering and Design, 2014, 89, 882-889.	1.9	263
2	DEMO design activity in Europe: Progress and updates. Fusion Engineering and Design, 2018, 136, 729-741.	1.9	224
3	Overview of the design approach and prioritization of R&D activities towards an EU DEMO. Fusion Engineering and Design, 2016, 109-111, 1464-1474.	1.9	178
4	Objectives and status of EUROfusion DEMO blanket studies. Fusion Engineering and Design, 2016, 109-111, 1199-1206.	1.9	168
5	Overview of the DEMO staged design approach in Europe. Nuclear Fusion, 2019, 59, 066013.	3.5	156
6	Neutronics requirements for a DEMO fusion power plant. Fusion Engineering and Design, 2015, 98-99, 2134-2137.	1.9	95
7	The physics and technology basis entering European system code studies for DEMO. Nuclear Fusion, 2017, 57, 016011.	3.5	84
8	Overview over DEMO design integration challenges and their impact on component design concepts. Fusion Engineering and Design, 2018, 136, 87-95.	1.9	77
9	The DEMO wall load challenge. Nuclear Fusion, 2017, 57, 046002.	3.5	65
10	Initial DEMO tokamak design configuration studies. Fusion Engineering and Design, 2015, 98-99, 1423-1426.	1.9	51
11	Progress in EU Breeding Blanket design and integration. Fusion Engineering and Design, 2018, 136, 782-792.	1.9	50
12	Issues and strategies for DEMO in-vessel component integration. Fusion Engineering and Design, 2016, 112, 527-534.	1.9	47
13	Divertor of the European DEMO: Engineering and technologies for power exhaust. Fusion Engineering and Design, 2022, 175, 113010.	1.9	47
14	Activation, decay heat, and waste classification studies of the European DEMO concept. Nuclear Fusion, 2017, 57, 046015.	3.5	44
15	Wall protection strategies for DEMO plasma transients. Fusion Engineering and Design, 2018, 136, 410-414.	1.9	39
16	Choice of a low operating temperature for the DEMO EUROFER97 divertor cassette. Fusion Engineering and Design, 2017, 124, 655-658.	1.9	32
17	Methodological approach for DEMO neutronics in the European PPPT programme: Tools, data and analyses. Fusion Engineering and Design, 2017, 123, 26-31.	1.9	30
18	Key design integration issues addressed in the EU DEMO pre-concept design phase. Fusion Engineering and Design, 2020, 156, 111595.	1.9	28

#	ARTICLE	IF	CITATIONS
19	Optimization of the first wall for the DEMO water cooled lithium lead blanket. Fusion Engineering and Design, 2015, 98-99, 1206-1210.	1.9	25
20	Limitations of transient power loads on DEMO and analysis of mitigation techniques. Fusion Engineering and Design, 2016, 109-111, 1067-1071.	1.9	25
21	Initial definition of structural load conditions in DEMO. Fusion Engineering and Design, 2017, 124, 633-637.	1.9	21
22	Integrated design strategy for EU-DEMO first wall protection from plasma transients. Fusion Engineering and Design, 2022, 177, 113067.	1.9	21
23	Thermal-hydraulics of helium cooled First Wall channels and scoping investigations on performance improvement by application of ribs and mixing devices. Fusion Engineering and Design, 2016, 109-111, 1123-1129.	1.9	20
24	Progress in EU-DEMO in-vessel components integration. Fusion Engineering and Design, 2017, 124, 562-566.	1.9	20
25	Effect of engineering constraints on charged particle wall heat loads in DEMO. Fusion Engineering and Design, 2017, 124, 385-390.	1.9	19
26	Impact of plasma-wall interaction and exhaust on the EU-DEMO design. Nuclear Materials and Energy, 2021, 26, 100897.	1.3	18
27	Integration concept of an Electron Cyclotron System in DEMO. Fusion Engineering and Design, 2021, 168, 112653.	1.9	18
28	Containment structures and port configurations. Fusion Engineering and Design, 2022, 174, 112966.	1.9	18
29	Initial configuration studies of the upper vertical port of the European DEMO. Fusion Engineering and Design, 2019, 146, 2469-2473.	1.9	17
30	Critical design issues in DEMO and solution strategies. Fusion Engineering and Design, 2019, 146, 178-181.	1.9	17
31	Impact of plasma thermal transients on the design of the EU DEMO first wall protection. Fusion Engineering and Design, 2020, 158, 111713.	1.9	16
32	European DEMO first wall shaping and limiters design and analysis status. Fusion Engineering and Design, 2020, 158, 111676.	1.9	15
33	Conceptual study of the remote maintenance of the DEMO breeding blanket. Fusion Engineering and Design, 2022, 177, 113077.	1.9	15
34	On the EU approach for DEMO architecture exploration and dealing with uncertainties. Fusion Engineering and Design, 2016, 109-111, 1158-1162.	1.9	13
35	Dynamic thermal-hydraulic modelling of the EU DEMO HCPB breeding blanket cooling loops. Progress in Nuclear Energy, 2016, 93, 116-132.	2.9	12
36	Initial port integration concept for EC and NB systems in EU DEMO tokamak. Fusion Engineering and Design, 2019, 146, 1642-1646.	1.9	12

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37	Rationale for the selection of the operating temperature of the DEMO vacuum vessel. Fusion Engineering and Design, 2019, 146, 1096-1099.	1.9	12
38	Electromagnetic analysis activities in support of the Breeding Blanket during the DEMO Pre-Conceptual Design Phase: Methodology and main results. Fusion Engineering and Design, 2021, 166, 112285.	1.9	10
39	Structural pre-conceptual design studies for an EU DEMO equatorial EC port plug and its port integration. Fusion Engineering and Design, 2020, 161, 111885.	1.9	9
40	DEMO tritium breeding performances with different in-vessel components configurations. Fusion Engineering and Design, 2021, 166, 112319.	1.9	9
41	The EU DEMO equatorial outboard limiter "Design and port integration concept. Fusion Engineering and Design, 2020, 158, 111647.	1.9	8
42	Structural load specification for ITER tokamak components. , 2009, , .		7
43	Structural analysis of DEMO divertor cassette body and design study based on RCC-MRx. Fusion Engineering and Design, 2017, 124, 628-632.	1.9	7
44	Dynamic behaviour of DEMO vacuum vessel during plasma vertical displacement events. Fusion Engineering and Design, 2020, 159, 111876.	1.9	7
45	Sweeping control performance on DEMO device. Fusion Engineering and Design, 2021, 171, 112640.	1.9	7
46	Mechanical support concept of the DEMO breeding blanket. Fusion Engineering and Design, 2021, 173, 112840.	1.9	7
47	Initial integration concept of the DEMO lower horizontal port. Fusion Engineering and Design, 2019, 146, 2667-2670.	1.9	5
48	Integrated design of tokamak building concepts including ex-vessel maintenance. Fusion Engineering and Design, 2022, 177, 113068.	1.9	5
49	Impact of the flowing activated water on maintenance and electronic functioning for the pre-conceptual design of the European DEMO fusion reactor. Fusion Engineering and Design, 2020, 153, 111499.	1.9	4
50	Assessment of sky-shine in DEMO during breeding blanket maintenance. Fusion Engineering and Design, 2021, 167, 112348.	1.9	4
51	Vacuum vessel Upper Port design assessment of the European DEMO. Fusion Engineering and Design, 2019, 138, 10-15.	1.9	3
52	Status of the DEMO blanket attachment system and remaining challenges. Fusion Engineering and Design, 2020, 151, 111357.	1.9	3
53	Integration of DEMO hazard piping into the tokamak building. Fusion Engineering and Design, 2021, 168, 112415.	1.9	3
54	Pre-conceptual design of DEMO upper port duct bellows. Fusion Engineering and Design, 2018, 136, 1130-1134.	1.9	2

#	ARTICLE	IF	CITATIONS
55	Design and verification of a non-self-supported cryostat for the DEMO tokamak. Fusion Engineering and Design, 2020, 161, 111964.	1.9	2
56	Radiation level in the DEMO tokamak complex due to activated flowing water: Impact on the architecture of the building. Fusion Engineering and Design, 2021, 166, 112373.	1.9	2
57	Assessment of residual heat removal from activated breeding blanket segment during remote handling in DEMO. Fusion Engineering and Design, 2021, 173, 112891.	1.9	2
58	CFD analysis of the natural circulation of helium in the DEMO cryostat during a leak accident. Fusion Engineering and Design, 2020, 158, 111752.	1.9	1
59	Shutdown dose rate calculations with modified DEMO single sector model. Fusion Engineering and Design, 2021, 171, 112569.	1.9	1
60	Influence of DEMO vacuum vessel shell thickness on its electromagnetic response. Fusion Engineering and Design, 2021, 173, 112828.	1.9	1
61	Magnetic Confinement Fusionâ€™Technology: Fusion Core. , 2021, , 554-575.		1
62	EU-DEMO Breeding Blanket temperature evaluation before remote maintenance operation. Fusion Engineering and Design, 2019, 146, 2561-2566.	1.9	0