

Michael Rieth

List of Publications by Year in descending order

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180
papers

7,130
citations

53794

45
h-index

66911

78
g-index

186
all docs

186
docs citations

186
times ranked

3221
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent progress in research on tungsten materials for nuclear fusion applications in Europe. Journal of Nuclear Materials, 2013, 432, 482-500.	2.7	610
2	Present development status of EUROFER and ODS-EUROFER for application in blanket concepts. Fusion Engineering and Design, 2005, 75-79, 989-996.	1.9	412
3	Recent progress in R&D on tungsten alloys for divertor structural and plasma facing materials. Journal of Nuclear Materials, 2013, 442, S181-S189.	2.7	272
4	Developing structural, high-heat flux and plasma facing materials for a near-term DEMO fusion power plant: The EU assessment. Journal of Nuclear Materials, 2014, 455, 277-291.	2.7	210
5	Development of advanced high heat flux and plasma-facing materials. Nuclear Fusion, 2017, 57, 092007.	3.5	189
6	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
7	Development of next generation tempered and ODS reduced activation ferritic/martensitic steels for fusion energy applications. Nuclear Fusion, 2017, 57, 092005.	3.5	177
8	Review on the EFDA programme on tungsten materials technology and science. Journal of Nuclear Materials, 2011, 417, 463-467.	2.7	157
9	Development of a helium-cooled divertor: Material choice and technological studies. Journal of Nuclear Materials, 2007, 367-370, 1416-1421.	2.7	146
10	Behavior of tungsten under irradiation and plasma interaction. Journal of Nuclear Materials, 2019, 519, 334-368.	2.7	129
11	Development of a helium-cooled divertor concept: design-related requirements on materials and fabrication technology. Journal of Nuclear Materials, 2004, 329-333, 1594-1598.	2.7	120
12	Materials R&D for a timely DEMO: Key findings and recommendations of the EU Roadmap Materials Assessment Group. Fusion Engineering and Design, 2014, 89, 1586-1594.	1.9	120
13	European DEMO divertor target: Operational requirements and material-design interface. Nuclear Materials and Energy, 2016, 9, 171-176.	1.3	119
14	High heat flux componentsâ€”Readiness to proceed from near term fusion systems to power plants. Fusion Engineering and Design, 2010, 85, 93-108.	1.9	113
15	Displacement cascades in Feâ€”Cr: A molecular dynamics study. Journal of Nuclear Materials, 2006, 349, 119-132.	2.7	110
16	Conceptual design studies for the European DEMO divertor: Rationale and first results. Fusion Engineering and Design, 2016, 109-111, 1598-1603.	1.9	108
17	Limitations of W and Wâ€”1%La ₂ O ₃ for use as structural materials. Journal of Nuclear Materials, 2005, 342, 20-25.	2.7	105
18	Ductilisation of tungsten (W): On the shift of the brittle-to-ductile transition (BDT) to lower temperatures through cold rolling. International Journal of Refractory Metals and Hard Materials, 2016, 54, 351-369.	3.8	97

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19	Influence of microstructure and notch fabrication on impact bending properties of tungsten materials. International Journal of Refractory Metals and Hard Materials, 2010, 28, 679-686.	3.8	88
20	Recent status and improvement of reduced-activation ferritic-martensitic steels for high-temperature service. Journal of Nuclear Materials, 2016, 479, 515-523.	2.7	87
21	Materials for DEMO and reactor applications – boundary conditions and new concepts. Physica Scripta, 2016, T167, 014002.	2.5	85
22	Precipitation in AISI 316L(N) during creep tests at 550 and 600°C up to 10 years. Journal of Nuclear Materials, 2007, 362, 132-138.	2.7	84
23	Tungsten foil laminate for structural divertor applications – Basics and outlook. Journal of Nuclear Materials, 2012, 423, 1-8.	2.7	79
24	Embrittlement behaviour of different international low activation alloys after neutron irradiation. Journal of Nuclear Materials, 1998, 258-263, 1147-1152.	2.7	76
25	Progress in the engineering design and assessment of the European DEMO first wall and divertor plasma facing components. Fusion Engineering and Design, 2016, 109-111, 917-924.	1.9	74
26	Fissile core and Tritium-Breeding Blanket: structural materials and their requirements. Comptes Rendus Physique, 2008, 9, 287-302.	0.9	70
27	A brief summary of the progress on the EFDA tungsten materials program. Journal of Nuclear Materials, 2013, 442, S173-S180.	2.7	69
28	Towards reduced activation structural materials data for fusion DEMO reactors. Nuclear Fusion, 2005, 45, 649-655.	3.5	66
29	Review on the EFDA work programme on nano-structured ODS RAF steels. Journal of Nuclear Materials, 2011, 417, 149-153.	2.7	66
30	Review of candidate welding processes of RAFM steels for ITER test blanket modules and DEMO. Journal of Nuclear Materials, 2011, 417, 43-50.	2.7	64
31	Effect of neutron irradiation on the microstructure of tungsten. Nuclear Materials and Energy, 2016, 9, 480-483.	1.3	64
32	Tungsten foil laminate for structural divertor applications – Analyses and characterisation of tungsten foil. Journal of Nuclear Materials, 2012, 424, 197-203.	2.7	63
33	Tensile properties of baseline and advanced tungsten grades for fusion applications. International Journal of Refractory Metals and Hard Materials, 2018, 75, 153-162.	3.8	61
34	Tungsten as a Structural Divertor Material. Advances in Science and Technology, 0, , .	0.2	60
35	Mechanical and microstructural investigations of tungsten and doped tungsten materials produced via powder injection molding. Nuclear Materials and Energy, 2015, 3-4, 22-31.	1.3	60
36	European cross-cutting research on structural materials for Generation IV and transmutation systems. Journal of Nuclear Materials, 2009, 392, 316-323.	2.7	59

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37	Ductilisation of tungsten (W): Tungsten laminated composites. International Journal of Refractory Metals and Hard Materials, 2017, 69, 66-109.	3.8	57
38	Mechanical properties of tungsten: Recent research on modified tungsten materials in Japan. Journal of Nuclear Materials, 2021, 543, 152506.	2.7	55
39	The effect of tantalum on the mechanical properties of a 9Cr-2W-0.25V-0.07Ta-0.1C steel. Journal of Nuclear Materials, 1999, 273, 146-154.	2.7	53
40	Ductilisation of tungsten (W): On the increase of strength AND room-temperature tensile ductility through cold-rolling. International Journal of Refractory Metals and Hard Materials, 2017, 64, 261-278.	3.8	52
41	Tungsten foil laminate for structural divertor applications – Tensile test properties of tungsten foil. Journal of Nuclear Materials, 2013, 434, 357-366.	2.7	51
42	The nature of the brittle-to-ductile transition of ultra fine grained tungsten (W) foil. International Journal of Refractory Metals and Hard Materials, 2015, 50, 9-15.	3.8	51
43	European materials development: Results and perspective. Fusion Engineering and Design, 2019, 146, 1300-1307.	1.9	50
44	EXACT NUMERICAL SOLUTION OF SCHRÖDINGER'S EQUATION FOR A PARTICLE IN AN INTERACTION POTENTIAL OF GENERAL SHAPE. International Journal of Modern Physics B, 2002, 16, 4081-4092.	2.0	46
45	Influence of helium on impact properties of reduced-activation ferritic/martensitic Cr-steels. Journal of Nuclear Materials, 1999, 271-272, 450-454.	2.7	45
46	Investigation on different oxides as candidates for nano-sized ODS particles in reduced-activation ferritic (RAF) steels. Journal of Nuclear Materials, 2013, 442, 444-448.	2.7	45
47	Microstructure and mechanical properties of a W-2wt.%Y ₂ O ₃ composite produced by sintering and hot forging. Journal of Nuclear Materials, 2013, 442, S225-S228.	2.7	43
48	Improvement of reduced activation 9%Cr steels by ausforming. Nuclear Materials and Energy, 2016, 6, 12-17.	1.3	43
49	The European effort towards the development of a demo structural material: Irradiation behaviour of the European reference RAFM steel EUROFER. Fusion Engineering and Design, 2006, 81, 917-923.	1.9	42
50	Stability of an exciton bound to an ionized donor in quantum dots. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 308, 219-225.	2.1	40
51	Modelling irradiation effects in fusion materials. Fusion Engineering and Design, 2007, 82, 2413-2421.	1.9	40
52	Ductilisation of tungsten (W) through cold-rolling: R-curve behaviour. International Journal of Refractory Metals and Hard Materials, 2016, 58, 22-33.	3.8	40
53	Advanced materials for a damage resilient divertor concept for DEMO: Powder-metallurgical tungsten-fibre reinforced tungsten. Fusion Engineering and Design, 2017, 124, 964-968.	1.9	40
54	Charpy impact properties of pure tungsten plate material in as-received and recrystallized condition (1h at 2000°C (2273K)). Journal of Nuclear Materials, 2013, 442, S204-S207.	2.7	38

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55	Optimization and limitations of known DEMO divertor concepts. Fusion Engineering and Design, 2012, 87, 718-721.	1.9	36
56	New insights into microstructure of neutron-irradiated tungsten. Scientific Reports, 2021, 11, 7572.	3.3	36
57	Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250-450°C. Journal of Nuclear Materials, 2000, 283-287, 353-357.	2.7	35
58	Development of EUROFER97 database and material property handbook. Fusion Engineering and Design, 2018, 135, 9-14.	1.9	35
59	Effects of neutron irradiation on the brittle to ductile transition in single crystal tungsten. Journal of Nuclear Materials, 2019, 527, 151799.	2.7	34
60	Innovative materials for Gen IV systems and transmutation facilities: The cross-cutting research project GETMAT. Nuclear Engineering and Design, 2011, 241, 3514-3520.	1.7	33
61	Tungsten modified by potassium doping and rhenium addition for fusion reactor applications. Fusion Engineering and Design, 2020, 152, 111445.	1.9	33
62	Creep strength of reduced activation ferritic/martensitic steel Eurofer™97. Fusion Engineering and Design, 2005, 75-79, 1003-1008.	1.9	32
63	Tungsten (W) Laminate Pipes for Innovative High Temperature Energy Conversion Systems. Advanced Engineering Materials, 2015, 17, 491-501.	3.5	32
64	Choice of a low operating temperature for the DEMO EUROFER97 divertor cassette. Fusion Engineering and Design, 2017, 124, 655-658.	1.9	32
65	Tungsten foil laminate for structural divertor applications – Joining of tungsten foils. Journal of Nuclear Materials, 2013, 436, 47-55.	2.7	30
66	Production, microstructure and mechanical properties of two different austenitic ODS steels. Journal of Nuclear Materials, 2017, 487, 348-361.	2.7	30
67	A review of impact properties of tungsten materials. Fusion Engineering and Design, 2018, 135, 196-203.	1.9	30
68	Development of welding technologies for the manufacturing of European Tritium Breeder blanket modules. Journal of Nuclear Materials, 2011, 417, 36-42.	2.7	29
69	The Impact of Refractory Material Properties on the Helium Cooled Divertor Design. Fusion Science and Technology, 2012, 61, 381-384.	1.1	28
70	Enhancing the DEMO divertor target by interlayer engineering. Fusion Engineering and Design, 2015, 98-99, 1216-1220.	1.9	28
71	Correlation of microstructural and mechanical properties of neutron irradiated EUROFER97 steel. Journal of Nuclear Materials, 2020, 538, 152231.	2.7	28
72	Specific welds for test blanket modules. Journal of Nuclear Materials, 2009, 386-388, 471-474.	2.7	27

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73	W-Based Alloys for Advanced Divertor Designs: Options and Environmental Impact of State-of-the-Art Alloys. <i>Fusion Science and Technology</i> , 2011, 60, 185-189.	1.1	27
74	Microstructural and mechanical characterization of annealed tungsten (W) and potassium-doped tungsten foils. <i>International Journal of Refractory Metals and Hard Materials</i> , 2015, 48, 145-149.	3.8	27
75	Irradiation effects in tungsten-copper laminate composite. <i>Journal of Nuclear Materials</i> , 2016, 481, 134-146.	2.7	27
76	Tensile and impact properties of tungsten-rhenium alloy for plasma-facing components in fusion reactor. <i>Fusion Engineering and Design</i> , 2019, 148, 111323.	1.9	27
77	Microstructure and hardening induced by neutron irradiation in single crystal, ITER specification and cold rolled tungsten. <i>International Journal of Refractory Metals and Hard Materials</i> , 2021, 98, 105522.	3.8	27
78	Improvement of impact properties of tungsten by potassium doping. <i>Fusion Engineering and Design</i> , 2019, 140, 48-61.	1.9	24
79	Materials for in-vessel components. <i>Fusion Engineering and Design</i> , 2022, 174, 112994.	1.9	23
80	A comprising steady-state creep model for the austenitic AISI 316 L(N) steel. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 915-919.	2.7	22
81	Charpy impact properties of martensitic 10.6% Cr steel (MANET-I) before and after neutron exposure. <i>Fusion Engineering and Design</i> , 1995, 29, 365-370.	1.9	21
82	Investigation of European tungsten materials exposed to high heat flux H/He neutral beams. <i>Journal of Nuclear Materials</i> , 2013, 442, S256-S260.	2.7	21
83	Neutron irradiation tolerance of potassium-doped and rhenium-alloyed tungsten. <i>Journal of Nuclear Materials</i> , 2021, 553, 153009.	2.7	21
84	Charpy impact properties of low activation alloys for fusion applications after neutron irradiation. <i>Journal of Nuclear Materials</i> , 1996, 233-237, 351-355.	2.7	20
85	Impact Bending Tests on Selected Refractory Materials. <i>Advanced Materials Research</i> , 2008, 59, 101-104.	0.3	20
86	Mechanical properties and microstructure characterization of Eurofer97 steel variants in EUROfusion program. <i>Fusion Engineering and Design</i> , 2019, 146, 2227-2232.	1.9	20
87	TEM characterization on new 9% Cr advanced steels thermomechanical treated after tempering. <i>Journal of Nuclear Materials</i> , 2018, 500, 1-10.	2.7	19
88	Comparison of K-doped and pure cold-rolled tungsten sheets: Tensile properties and brittle-to-ductile transition temperatures. <i>Journal of Nuclear Materials</i> , 2021, 544, 152664.	2.7	19
89	Low activation steels welding with PWHT and coating for ITER test blanket modules and DEMO. <i>Journal of Nuclear Materials</i> , 2011, 409, 156-162.	2.7	18
90	Interfacial characterization by TEM and nanoindentation of W-Eurofer brazed joints for the first wall component of the DEMO fusion reactor. <i>Materials Characterization</i> , 2018, 142, 162-169.	4.4	18

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91	The brittle-to-ductile transition in cold-rolled tungsten sheets: the rate-limiting mechanism of plasticity controlling the BDT in ultrafine-grained tungsten. <i>Journal of Materials Science</i> , 2020, 55, 12314-12337.	3.7	18
92	Fracture Behaviour of Tungsten Based Alloys Depending on Microstructure and Notch Fabrication Method. <i>Fusion Science and Technology</i> , 2009, 56, 1018-1022.	1.1	16
93	First-Principles Modeling of Tungsten-Based Alloys for Fusion Power Plant Applications. <i>Key Engineering Materials</i> , 0, 465, 15-20.	0.4	16
94	Effect of helium implantation on mechanical properties of EUROFER97 evaluated by nanoindentation. <i>Journal of Nuclear Materials</i> , 2014, 448, 301-309.	2.7	16
95	Tungsten laminates made of ultrafine-grained (UFG) tungsten foil " Ageing of tungsten-titanium (W-Ti) laminates. <i>International Journal of Refractory Metals and Hard Materials</i> , 2015, 51, 264-274.	3.8	16
96	Improvement of EUROFER's mechanical properties by optimized chemical compositions and thermo-mechanical treatments. <i>Nuclear Materials and Energy</i> , 2018, 16, 88-94.	1.3	16
97	Diffusion weld study for Test Blanket Module fabrication. <i>Fusion Engineering and Design</i> , 2009, 84, 1602-1605.	1.9	15
98	Recent progress in the assessment of irradiation effects for in-vessel fusion materials: tungsten and copper alloys. <i>Nuclear Fusion</i> , 2022, 62, 026045.	3.5	15
99	Tungsten-tantalum alloys for fusion reactor applications. <i>Journal of Nuclear Materials</i> , 2022, 566, 153740.	2.7	15
100	Creep-fatigue interaction and related structure property correlations of EUROFER97 steel at 550°C by decoupling creep and fatigue load. <i>Journal of Nuclear Materials</i> , 2011, 417, 16-19.	2.7	13
101	Microstructural anisotropy of ferritic ODS alloys after different production routes. <i>Fusion Engineering and Design</i> , 2015, 98-99, 1986-1990.	1.9	13
102	Investigation of precipitate in an austenitic ODS steel containing a carbon-rich process control agent. <i>Nuclear Materials and Energy</i> , 2018, 15, 237-243.	1.3	13
103	Microstructural investigation of an extruded austenitic oxide dispersion strengthened steel containing a carbon-containing process control agent. <i>Journal of Nuclear Materials</i> , 2019, 516, 335-346.	2.7	13
104	Fracture behavior of tungsten-based composites exposed to steady-state/transient hydrogen plasma. <i>Nuclear Fusion</i> , 2020, 60, 046029.	3.5	13
105	Plastic deformation in advanced tungsten-based alloys for fusion applications studied by mechanical testing and TEM. <i>International Journal of Refractory Metals and Hard Materials</i> , 2021, 95, 105409.	3.8	13
106	TEM study of mechanically alloyed ODS steel powder. <i>Journal of Nuclear Materials</i> , 2012, 428, 165-169.	2.7	12
107	Characterization of ODS (Oxide Dispersion Strengthened) Eurofer/Eurofer dissimilar electron beam welds. <i>Journal of Nuclear Materials</i> , 2013, 442, S552-S556.	2.7	12
108	Optimization of growth parameters for growth of high quality heteroepitaxial 3C-SiC films at 1200°C. <i>Thin Solid Films</i> , 2015, 577, 88-93.	1.8	12

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109	Technology readiness assessment of materials for DEMO in-vessel applications. Journal of Nuclear Materials, 2021, 550, 152906.	2.7	12
110	Evolution of microstructure in neutron irradiated cold rolled tungsten and its correlation with hardness. Fusion Engineering and Design, 2021, 172, 112784.	1.9	12
111	Transmutation and activation analysis for divertor materials in a HCLL-type fusion power reactor. Journal of Nuclear Materials, 2009, 386-388, 789-792.	2.7	11
112	He-Cooled Divertor Development Towards DEMO. Fusion Science and Technology, 2009, 56, 1013-1017.	1.1	11
113	Deep drawing of tungsten plates for structural divertor applications in future fusion devices. Fusion Engineering and Design, 2011, 86, 2949-2953.	1.9	11
114	Numerical exploration into the potential of tungsten reinforced CuCrZr matrix composites. Journal of Nuclear Materials, 2016, 470, 13-29.	2.7	11
115	Processing of complex near-net-shaped tungsten parts by PIM. Nuclear Materials and Energy, 2018, 16, 71-75.	1.3	11
116	The brittle-to-ductile transition in cold-rolled tungsten sheets: On the loss of room-temperature ductility after annealing and the phenomenon of 45Å° embrittlement. International Journal of Refractory Metals and Hard Materials, 2020, 93, 105347.	3.8	11
117	High pulse number thermal shock testing of tungsten alloys produced by powder injection molding. Nuclear Materials and Energy, 2019, 20, 100680.	1.3	10
118	Technological aspects in blanket design: Effects of micro-alloying and thermo-mechanical treatments of EUROFER97 type steels after neutron irradiation. Fusion Engineering and Design, 2021, 168, 112645.	1.9	10
119	Low temperature embrittlement behaviour of different ferritic-martensitic alloys for fusion applications. Journal of Nuclear Materials, 1996, 233-237, 229-232.	2.7	9
120	Investigations of dissimilar welds of the high temperature steels P91 and PM2000. Fusion Engineering and Design, 2013, 88, 2539-2542.	1.9	9
121	Advances in Additive Manufacturing of fusion materials. Fusion Engineering and Design, 2021, 167, 112309.	1.9	9
122	Technological Processes for Steel Applications in Nuclear Fusion. Applied Sciences (Switzerland), 2021, 11, 11653.	2.5	9
123	Modelling structural and plasma facing materials for fusion power plants: Recent advances and outstanding issues in the EURATOM fusion materials programme. Journal of Nuclear Materials, 2011, 417, 1042-1049.	2.7	8
124	Measurements and controls implementation for WEST. Fusion Engineering and Design, 2017, 123, 1029-1032.	1.9	8
125	Deformation behaviour and microstructural evolution of EUROFER97-2 under low cycle fatigue conditions. Materials Characterization, 2019, 158, 109943.	4.4	8
126	DEMO structural materials qualification and development. Fusion Engineering and Design, 2021, 170, 112513.	1.9	8

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127	Metallic Nanoclusters: Computational Investigations of their Applicability as Building Blocks in Nanotechnology. Journal of Computational and Theoretical Nanoscience, 2004, 1, 40-46.	0.4	8
128	Mechanical Properties and Microstructure of HFR-Irradiated Ferritic/Martensitic Low-Activation Alloys. , 2000, , 597-611.		8
129	Effect of ageing and specimen size on the impact properties of MANET II steel. International Journal of Pressure Vessels and Piping, 1997, 74, 39-47.	2.6	7
130	KATHELO: A new high heat flux component testing facility. Fusion Engineering and Design, 2013, 88, 854-857.	1.9	7
131	Overview of the Structural Materials Program for Fusion Reactors under EFDA. Fusion Science and Technology, 2014, 66, 38-45.	1.1	7
132	Micro-structural effects of irradiation temperature and helium content in neutron irradiated B-alloyed Eurofer97-1 steel. Nuclear Materials and Energy, 2018, 17, 40-47.	1.3	7
133	Additive manufacturing technologies for EUROFER97 components. Journal of Nuclear Materials, 2021, 548, 152859.	2.7	7
134	Fabrication routes for advanced first wall design alternatives. Nuclear Fusion, 2021, 61, 116067.	3.5	7
135	Microstructure and precipitation behavior of advanced RAFM steels for high-temperature applications on fusion reactors. Materials Characterization, 2021, 180, 111443.	4.4	7
136	Fe-Cr-V ferritic steels for possible nuclear applications. Journal of Nuclear Materials, 2011, 409, 140-146.	2.7	6
137	Radiation damage studies in fusion reactor steels by means of small-angle neutron scattering (SANS). Physica B: Condensed Matter, 2018, 551, 407-412.	2.7	6
138	Long-term stability of the microstructure of austenitic ODS steel rods produced with a carbon-containing process control agent. Journal of Nuclear Materials, 2019, 523, 111-120.	2.7	6
139	Impact of materials technology on the breeding blanket design – Recent progress and case studies in materials technology. Fusion Engineering and Design, 2021, 166, 112275.	1.9	6
140	THERMAL STABILITY AND SPECIFIC MATERIAL PROPERTIES OF NANOSYSTEMS. Modern Physics Letters B, 2000, 14, 621-629.	1.9	5
141	State of the art: development of a helium-cooled divertor for demo. , 0, , .		5
142	Technology Developments at KIT Towards a Magnetic Confinement Fusion Power Plant. Fusion Science and Technology, 2012, 61, 64-69.	1.1	5
143	Post-irradiation microstructural examination of EUROFER-ODS steel irradiated at 300°C and 400°C. Journal of Nuclear Materials, 2021, 557, 153259.	2.7	5
144	Irradiation hardening and ductility loss of Eurofer97 steel variants after neutron irradiation to ITER-TBM relevant conditions. Fusion Engineering and Design, 2021, 173, 112935.	1.9	5

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145	NOVEL NUMERICAL METHOD FOR THE SOLUTION OF SCHRÖDINGER'S EQUATION: EXCITON ENERGY OF CdS QUANTUM DOTS. International Journal of Modern Physics B, 2002, 16, 4093-4103.	2.0	4
146	Manufacturing and characterization of PIM-W materials as plasma facing materials. Physica Scripta, 2016, T167, 014056.	2.5	4
147	The brittle-to-ductile transition in cold-rolled tungsten sheets: Contributions of grain and subgrain boundaries to the enhanced ductility after pre-deformation. Nuclear Materials and Energy, 2020, 25, 100769.	1.3	4
148	Fabrication of HCPB breeding blanket components using the additive manufacturing processes of selective laser melting and cold spray. Fusion Engineering and Design, 2020, 160, 112026.	1.9	4
149	Structure and phonon density of states in nanoclusters: Molecular dynamics study for Al. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1610.	1.6	3
150	V-alloy embrittlement by irradiation in a cooling gas environment. Journal of Nuclear Materials, 2000, 283-287, 498-502.	2.7	3
151	Formation and growth of complex precipitates in 316L austenitic steel during long-term annealing experiments. Journal of Materials Science, 2008, 43, 2541-2549.	3.7	3
152	A fail-safe and cost effective fabrication route for blanket First Walls. Journal of Nuclear Materials, 2013, 442, 538-541.	2.7	3
153	Manufacturing, high heat flux testing and post mortem analyses of a W-PIM mock-up. Nuclear Materials and Energy, 2019, 20, 100688.	1.3	3
154	Elucidating the microstructure of tungsten composite materials produced by powder injection molding. Nuclear Materials and Energy, 2020, 24, 100766.	1.3	3
155	Master Curve Fracture Toughness Characterization of Eurofer97 Using Miniature Multi-Notch Bend Bar Specimens for Fusion Applications. , 2018, , .		3
156	Welcome to the < >Journal of Computational and Theoretical Nanoscience</ >. Journal of Computational and Theoretical Nanoscience, 2004, 1, 1-2.	0.4	3
157	Master Curve Fracture Toughness Characterization of Eurofer97 Steel Variants Using Miniature Multi-Notch Bend Bar Specimens for Fusion Applications. , 2019, , .		3
158	Charpy impact tests of tungsten fiber-reinforced composite from ~150 Å°C to 1000 Å°C. Materials Letters, 2022, 311, 131526.	2.6	3
159	Effect of neutron irradiation on ductility of tungsten foils developed for tungsten-copper laminates. Nuclear Materials and Energy, 2022, 30, 101133.	1.3	3
160	Nanoscale insights into the corrosion of EUROFER by lithium ceramics. Corrosion Science, 2022, 199, 110190.	6.6	3
161	Dissipative dynamics of a parabolic confined particle in the presence of magnetic field. Physica A: Statistical Mechanics and Its Applications, 2001, 292, 238-254.	2.6	2
162	Computational Engineering of Metallic Nanostructures and Nanomachines. Journal of Nanoscience and Nanotechnology, 2002, 2, 679-685.	0.9	2

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163	Neutron diffraction stress determination in W-laminates for structural divertor applications. Nuclear Materials and Energy, 2015, 3-4, 37-42.	1.3	2
164	Experimental Investigation of EU-DEMO Breeding Blanket First Wall Mock-Ups in Support of the Manufacturing and Material Development Programmes. Energies, 2021, 14, 7580.	3.1	2
165	Electronic States of Nano-Systems. International Journal of Modern Physics B, 1997, 11, 767-777.	2.0	1
166	Assessment of copper based materials for the Water-Cooled Divertor concept of the DEMO European Fusion reactor. , 2013, , .		1
167	Creep-Fatigue Interaction in Eurofer 3 Electron Beam Welds. Fusion Science and Technology, 2014, 66, 131-135.	1.1	1
168	Testing candidate interlayers for an enhanced water-cooled divertor target. Fusion Engineering and Design, 2015, 98-99, 1323-1327.	1.9	1
169	Assessment of industrial nitriding processes for fusion steel applications. Nuclear Materials and Energy, 2017, 13, 90-98.	1.3	1
170	Cavity formation and hardness change in He implanted EUROFER97 and EU-ODS EUROFER. Nuclear Materials and Energy, 2020, 22, 100717.	1.3	1
171	Microstructural features in additively manufactured EUROFER97 components. Fusion Engineering and Design, 2021, 173, 112813.	1.9	1
172	Special Issues, Special Sections, and Papers on Basic Physics. Journal of Computational and Theoretical Nanoscience, 2004, 1, 341-342.	0.4	1
173	On the mechanical alloying of novel austenitic dual-precipitation strengthened steels. Materials and Design, 2022, 213, 110316.	7.0	1
174	S/TEM examination and nanomechanical response of W-Eurofer joints brazed with Cu interlayers. Nuclear Materials and Energy, 2022, 31, 101155.	1.3	1
175	Computational Engineering of Metallic Nanostructures and Nanomachines. Journal of Nanoscience and Nanotechnology, 2002, 2, 679-685.	0.9	1
176	Innovative 1000K sodium loop for qualification of new materials for applications in CSP field. AIP Conference Proceedings, 2022, , .	0.4	1
177	Can Biological Effects Emerge from Inorganic Nano-Systems?. , 2002, , 179-197.		0
178	Self-organizing processes in connection with metastable nanocluster states. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1433-1438.	2.1	0
179	Electron in an Interaction Potential of General Shape. Journal of Computational and Theoretical Nanoscience, 2005, 2, 362-369.	0.4	0
180	3D Structural Analysis of Selected High-Temperature Materials. Praktische Metallographie/Practical Metallography, 2018, 55, 424-446.	0.3	0