## Yiran Mao

List of Publications by Year in descending order

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ΥΙΡΑΝ ΜΑΟ

#	Article	IF	CITATIONS
1	Materials for DEMO and reactor applications—boundary conditions and new concepts. Physica Scripta, 2016, T167, 014002.	2.5	85
2	Influence of the interface strength on the mechanical properties of discontinuous tungsten fiber-reinforced tungsten composites produced by field assisted sintering technology. Composites Part A: Applied Science and Manufacturing, 2018, 107, 342-353.	7.6	68
3	The influence of annealing on yttrium oxide thin film deposited by reactive magnetron sputtering: Process and microstructure. Nuclear Materials and Energy, 2017, 10, 1-8.	1.3	52
4	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
5	Improved pseudo-ductile behavior of powder metallurgical tungsten short fiber-reinforced tungsten (W/W). Nuclear Materials and Energy, 2018, 15, 214-219.	1.3	36
6	New oxidation-resistant tungsten alloys for use in the nuclear fusion reactors. Physica Scripta, 2017, T170, 014012.	2.5	34
7	Advanced smart tungsten alloys for a future fusion power plant. Plasma Physics and Controlled Fusion, 2017, 59, 064003.	2.1	27
8	Development and characterization of powder metallurgically produced discontinuous tungsten fiber reinforced tungsten composites. Physica Scripta, 2017, T170, 014005.	2.5	23
9	On the nature of carbon embrittlement of tungsten fibers during powder metallurgical processes. Fusion Engineering and Design, 2019, 145, 18-22.	1.9	21
10	Materials development for new high heat-flux component mock-ups for DEMO. Fusion Engineering and Design, 2019, 146, 1431-1436.	1.9	21
11	Design of tungsten fiber-reinforced tungsten composites with porous matrix. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 817, 141361.	5.6	20
12	Fracture behavior of random distributed short tungsten fiber-reinforced tungsten composites. Nuclear Fusion, 2019, 59, 086034.	3.5	16
13	Modeling and validation of chemical vapor deposition of tungsten for tungsten fiber reinforced tungsten composites. Surface and Coatings Technology, 2020, 381, 124745.	4.8	13
14	Smart first wall materials for intrinsic safety of a fusion power plant. Fusion Engineering and Design, 2018, 136, 878-882.	1.9	12
15	Development of tungsten fiber-reinforced tungsten with a porous matrix. Physica Scripta, 2020, T171, 014030.	2.5	12
16	Fiber Volume Fraction Influence on Randomly Distributed Short Fiber Tungsten Fiberâ€Reinforced Tungsten Composites. Advanced Engineering Materials, 2020, 22, 1901242.	3.5	11
17	Influence of the Size Effect on the Microstructures of the DWDS- and Bridgman-Solidified Single-Crystal CMSX-4 Superalloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 76-84.	2.1	9
18	The use of tungsten yarns in the production for W <sub> <i>f</i> </sub> /W. Physica Scripta, 2020, T171, 014061.	2.5	7

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#	Article	IF	CITATIONS
19	Improving the W Coating Uniformity by a COMSOL Model-Based CVD Parameter Study for Denser Wf/W Composites. Metals, 2021, 11, 1089.	2.3	7
20	Modeling and experimental validation of a W <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1974" altimg="si81.svg"&gt;<mml:msub><mml:mrow /&gt;<mml:mrow><mml:mi></mml:mi></mml:mrow></mml:mrow </mml:msub>/W-fabrication by chemical</mml:math 	1.3	6
21	vapor deposition and infiltration. Nuclear Materials and Energy, 2021, 28, 101048. Spark Plasma Sintering Produced W-Fiber-Reinforced Tungsten Composites. , 2019, , 239-261.		5
22	Characteristics of Microstructure Evolution during FAST Joining of the Tungsten Foil Laminate. Metals, 2021, 11, 886.	2.3	4
23	Tungsten fiber reinforced tungsten (Wf/W) using yarn based textile preforms. Physica Scripta, 2021, 96, 124063.	2.5	4
24	Longitudinal and shear wave velocities in pure tungsten and tungsten fiber-reinforced tungsten composites. Physica Scripta, 2017, T170, 014024.	2.5	3