

Paul M Mummery

List of Publications by Year in descending order

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41
papers

1,113
citations

471509

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395702

33
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41
all docs

41
docs citations

41
times ranked

1213
citing authors

#	ARTICLE	IF	CITATIONS
1	Large-Scale Modeling of Damage and Failure of Nuclear Graphite Moderated Reactor. Journal of Pressure Vessel Technology, Transactions of the ASME, 2022, 144, .	0.6	4
2	Using porous random fields to predict the elastic modulus of unoxidized and oxidized superfine graphite. Materials and Design, 2022, 220, 110840.	7.0	5
3	Assessment of the fracture toughness of neutron-irradiated nuclear graphite by 3D analysis of the crack displacement field. Carbon, 2021, 171, 882-893.	10.3	17
4	Mimicking irradiation-induced cracking of nuclear graphite using bromine intercalation. Scripta Materialia, 2021, 199, 113889.	5.2	4
5	The distribution and selective decontamination of carbon-14 from nuclear graphite. Journal of Nuclear Materials, 2021, 556, 153167.	2.7	8
6	Analysis of dynamic fracture and fragmentation of graphite bricks by combined XFEM and cohesive zone approach. International Journal of Pressure Vessels and Piping, 2019, 171, 117-124.	2.6	2
7	Characterisation of the spatial variability of material properties of Gilsocarbon and NBG-18 using random fields. Journal of Nuclear Materials, 2018, 511, 91-108.	2.7	14
8	Dynamic fracture analysis by explicit solid dynamics and implicit crack propagation. International Journal of Solids and Structures, 2017, 110-111, 113-126.	2.7	14
9	The effects of ion irradiation on the micromechanical fracture strength and hardness of a self-passivating tungsten alloy. Journal of Nuclear Materials, 2017, 486, 34-43.	2.7	6
10	Micro X-ray computed tomography image-based two-scale homogenisation of ultra high performance fibre reinforced concrete. Construction and Building Materials, 2017, 130, 230-240.	7.2	70
11	Dynamic fracture effects on remote stress amplification in AGR graphite bricks. Nuclear Engineering and Design, 2017, 323, 280-289.	1.7	5
12	An understanding of lattice strain, defects and disorder in nuclear graphite. Carbon, 2017, 124, 314-333.	10.3	85
13	Crack healing behaviour of Cr ₂ AlC MAX phase studied by X-ray tomography. Journal of the European Ceramic Society, 2017, 37, 441-450.	5.7	41
14	Investigating the effects of stress on the pore structures of nuclear grade graphites. Journal of Nuclear Materials, 2016, 470, 216-228.	2.7	6
15	Effect of rhenium irradiations on the mechanical properties of tungsten for nuclear fusion applications. Journal of Nuclear Materials, 2016, 477, 42-49.	2.7	15
16	Fracture strength testing of a self-passivating tungsten alloy at the micrometre scale. Philosophical Magazine, 2016, 96, 3570-3585.	1.6	3
17	Spatial variability in the mechanical properties of Gilsocarbon. Carbon, 2016, 110, 497-517.	10.3	21
18	A meso-scale approach to modelling stable dynamic crack propagation in glass under rate-dependent loading. Procedia Structural Integrity, 2016, 2, 381-388.	0.8	2

#	ARTICLE	IF	CITATIONS
19	Practical Application of the Stochastic Finite Element Method. Archives of Computational Methods in Engineering, 2016, 23, 171-190.	10.2	99
20	Spatial variability in the coefficient of thermal expansion induces pre-service stresses in computer models of virgin Gilsocarbon bricks. Journal of Nuclear Materials, 2015, 465, 793-804.	2.7	17
21	The characterisation and modelling of manufacturing porosity of a 2-D carbon/carbon composite. Journal of Composite Materials, 2014, 48, 2815-2829.	2.4	6
22	FAFNIR: Strategy and risk reduction in accelerator driven neutron sources for fusion materials irradiation data. Fusion Engineering and Design, 2014, 89, 2108-2113.	1.9	11
23	Mechanical properties and in situ crack growth observation of SiC/SiC composites. Ceramics International, 2014, 40, 7481-7485.	4.8	17
24	SiC/SiC composite fabricated with carbon nanotube interface layer and a novel precursor LPVCS. Fusion Engineering and Design, 2014, 89, 131-136.	1.9	20
25	Effect of heat treatment on microstructure and mechanical properties of PIP-SiC/SiC composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 808-811.	5.6	73
26	Fabrication and characterization of 2.5D and 3D SiCf/SiC composites. Fusion Engineering and Design, 2013, 88, 2453-2456.	1.9	18
27	Thermal diffusivity of polymers by modified angstrm method. Polymer Testing, 2010, 29, 107-112.	4.8	24
28	Characterisation of residual principal stresses and their implications on failure of railway rails. Engineering Failure Analysis, 2010, 17, 1273-1284.	4.0	18
29	Comparative study of predictive FE methods for mechanical properties of nuclear composites. Journal of Nuclear Materials, 2009, 383, 247-253.	2.7	20
30	Analysis of crack propagation in nuclear graphite using three-point bending of sandwiched specimens. Journal of Nuclear Materials, 2008, 372, 141-151.	2.7	38
31	Observation of microstructure deformation and damage in nuclear graphite. Engineering Fracture Mechanics, 2008, 75, 3633-3645.	4.3	46
32	Effect of recycling on the thermal properties of polymers. Polymer Testing, 2007, 26, 216-221.	4.8	24
33	X-ray tomography observation of crack propagation in nuclear graphite. Materials Science and Technology, 2006, 22, 1045-1051.	1.6	54
34	Thermal diffusivity of polymers by the laser flash technique. Polymer Testing, 2005, 24, 628-634.	4.8	154
35	The role of residual stress in the fracture properties of a natural ceramic. Journal of Materials Chemistry, 2005, 15, 947.	6.7	18
36	Mtodo de fio quente na determinao das propriedades trmicas de polmeros. Polimeros, 2004, 14, 354-359.	0.7	10

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37	Propiedades térmicas de polímeros por métodos transientes de troca de calor. Polimeros, 2003, 13, 265-269.	0.7	2
38	The Effects of Service Lifetime and Duty on the Residual Stress in Railway Rails. Materials Science Forum, 2002, 404-407, 761-766.	0.3	4
39	Processing, microstructure, and physical properties of interpenetrating Al ₂ O ₃ /Ni composites. Materials Science and Technology, 2000, 16, 747-752.	1.6	21
40	The influence of microstructure on the fracture behaviour of particulate metal matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 135, 221-224.	5.6	92
41	Studying SiC/SiC Composites by X-Ray Tomography. Key Engineering Materials, 0, 602-603, 416-421.	0.4	5