

# Anne Jung

## List of Publications by Year in descending order

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68  
papers

749  
citations

516710

16  
h-index

610901

24  
g-index

72  
all docs

72  
docs citations

72  
times ranked

408  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanonickel Coated Aluminum Foam for Enhanced Impact Energy Absorption. <i>Advanced Engineering Materials</i> , 2011, 13, 23-28.	3.5	60
2	New hybrid foam materials for impact protection. <i>International Journal of Impact Engineering</i> , 2014, 64, 30-38.	5.0	55
3	Microstructural characterisation and experimental determination of a multiaxial yield surface for open-cell aluminium foams. <i>Materials and Design</i> , 2017, 131, 252-264.	7.0	44
4	Micromechanical characterisation of Ni/Al hybrid foams by nano- and microindentation coupled with EBSD. <i>Acta Materialia</i> , 2016, 102, 38-48.	7.9	37
5	Strain-rate effects in Ni/Al composite metal foams from quasi-static to low-velocity impact behaviour. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016, 85, 1-11.	7.6	32
6	Open-cell aluminium foams with graded coatings as passively controllable energy absorbers. <i>Materials and Design</i> , 2015, 87, 36-41.	7.0	31
7	Microtensile testing of open-cell metal foams – Experimental setup, micromechanical properties. <i>Materials and Design</i> , 2015, 88, 1021-1030.	7.0	31
8	Hybrid Auxetic Structures: Structural Optimization and Mechanical Characterization. <i>Advanced Engineering Materials</i> , 2021, 23, 2001393.	3.5	29
9	Microstructural Analysis of Electrochemical Coated Open-Cell Metal Foams by EBSD and Nanoindentation. <i>Advanced Engineering Materials</i> , 2014, 16, 15-20.	3.5	27
10	In-situ and ex-situ microtensile testing of individual struts of Al foams and Ni/Al hybrid foams. <i>Materials and Design</i> , 2018, 153, 104-119.	7.0	27
11	Experimental and numerical investigation of single pores for identification of effective metal foams properties. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2018, 98, 682-695.	1.6	22
12	Protective Performance of Hybrid Metal Foams as MMOD Shields. <i>Procedia Engineering</i> , 2015, 103, 294-301.	1.2	21
13	Electrodeposition of Nanocrystalline Metals on Open Cell Metal Foams: Improved Mechanical Properties. <i>ECS Transactions</i> , 2010, 25, 165-172.	0.5	20
14	Synthesis and Mechanical Properties of Novel Ni/PU Hybrid Foams: A New Economic Composite Material for Energy Absorbers. <i>Advanced Engineering Materials</i> , 2016, 18, 532-541.	3.5	20
15	Micromechanical Characterization of Metal Foams. <i>Advanced Engineering Materials</i> , 2019, 21, 1900237.	3.5	19
16	Correlative digital image correlation and infrared thermography measurements for the investigation of the mesoscopic deformation behaviour of foams. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 130, 165-180.	4.8	19
17	Microstructural damage behaviour of Al foams. <i>Acta Materialia</i> , 2021, 208, 116739.	7.9	16
18	Yield surfaces for solid foams: A review on experimental characterization and modeling. <i>GAMM Mitteilungen</i> , 2018, 41, e201800002.	5.5	13

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19	Improving DIC Accuracy in Experimental Setups. <i>Advanced Engineering Materials</i> , 2019, 21, 1900092.	3.5	13
20	A microsphere-based material model for open cell metal foams. <i>Continuum Mechanics and Thermodynamics</i> , 2020, 32, 255-267.	2.2	13
21	Dual-energy X-ray micro-CT imaging of hybrid Ni/Al open-cell foam. <i>Journal of Instrumentation</i> , 2016, 11, C01005-C01005.	1.2	12
22	Thermographic investigation of strain rate effects in Al foams and Ni/Al hybrid foams. <i>Materials and Design</i> , 2018, 160, 363-370.	7.0	11
23	Design Study for Multifunctional 3D Reentrant Auxetics. <i>Advanced Engineering Materials</i> , 2022, 24, 2100816.	3.5	11
24	Magnetic field-assisted electroforming of complex geometries. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 2721-2729.	2.5	10
25	Micro-structural motivated phenomenological modelling of metal foams: experiments and modelling. <i>Archive of Applied Mechanics</i> , 2015, 85, 1147-1160.	2.2	10
26	Modelling of metal foams by a modified elastic law. <i>Mechanics of Materials</i> , 2016, 101, 61-70.	3.2	10
27	Micro-tensile behavior of struts extracted from an aluminum foam. <i>Materials Characterization</i> , 2020, 166, 110456.	4.4	10
28	Multiscale microsphere modelling of open-cell metal foams enriched by statistical analysis of geometric parameters. <i>Mechanics of Materials</i> , 2020, 142, 103295.	3.2	9
29	Numerical and experimental investigations of the electrodeposition process on open porous foams, determination of the parameter influence on the coating homogeneity. <i>International Journal of Heat and Mass Transfer</i> , 2021, 180, 121791.	4.8	8
30	Study of the magnetic flux density distribution of nickel coated aluminum foams. <i>Journal of Physics: Conference Series</i> , 2010, 200, 082011.	0.4	7
31	Experiments, modeling and simulation of the magnetic behavior of inhomogeneously coated nickel/aluminum hybrid foams. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 378, 178-185.	2.3	7
32	TESTING OF HYBRID NICKEL-POLYURETHANE FOAMS AT HIGH STRAIN-RATES USING HOPKINSON BAR AND DIGITAL IMAGE CORRELATION. <i>Acta Polytechnica CTU Proceedings</i> , 0, 18, 72.	0.3	7
33	Thermal shock resistivity of hybrid carbon foam materials: Experiments and model predictions. <i>Mechanics of Materials</i> , 2015, 82, 13-27.	3.2	6
34	Multiaxial failure surface of PVC foams and monitoring of deformation bands by three-dimensional digital image correlation. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 130, 195-215.	4.8	6
35	Multiscale characterisation and simulation of open cell metal foams. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800211.	0.2	5
36	Parameter identification for open cell aluminium foams using inverse calculation. <i>Computers and Mathematics With Applications</i> , 2020, 79, 2644-2654.	2.7	5

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37	Identification of strain fields in pure Al and hybrid Ni/Al metal foams using X-ray micro-tomography under loading. <i>Journal of Instrumentation</i> , 2016, 11, C11017-C11017.	1.2	4
38	Replication of microstructured tools for electrochemical machining applications. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 82, 197-209.	3.0	4
39	Experimental investigation of initial yield surfaces of solid foams and their evolution under subsequent loading. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 791, 139762.	5.6	4
40	Investigation of Strain-Rate Effects in Ni/PU Hybrid Foams under Low-Impact Velocities. <i>Advanced Engineering Materials</i> , 2020, 22, 1901589.	3.5	4
41	Neural Networks for Structural Optimisation of Mechanical Metamaterials. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2021, 20, e202000238.	0.2	4
42	Blast wave mitigation with galvanised polyurethane foam in a sandwich cladding. <i>Shock Waves</i> , 2021, 31, 525-540.	1.9	4
43	High strain-rate compression experiments on Ni/PU hybrid metal foams using the split-Hopkinson pressure bar technique. <i>Advanced Engineering Materials</i> , 0, , 2100872.	3.5	3
44	Application of Ultraviolet (UV) Radiation and Fluorescence for DIC Measurements - Quality Improvement. <i>Optics and Lasers in Engineering</i> , 2022, 158, 107140.	3.8	3
45	Optimized design for modified auxetic structures based on a neural network approach. <i>Materials Today Communications</i> , 2022, 32, 103931.	1.9	3
46	Thermo-mechanical modelling of cellular hybrid refractories. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 459-460.	0.2	2
47	Strain-rate dependence for Ni/Al hybrid foams. <i>EPJ Web of Conferences</i> , 2015, 94, 04030.	0.3	2
48	Modelling and Simulation of the Coating Process on Open Porous Metal Foams. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2018, 18, e201800254.	0.2	2
49	Investigation of the Electrodeposition Parameters on the Coating Process on Open Porous Media. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019, 19, e201900106.	0.2	2
50	Ni/Al-Hybrid Cellular Foams: An Interface Study by Combination of 3D-Phase Morphology Imaging, Microbeam Fracture Mechanics and In Situ Synchrotron Stress Analysis. <i>Materials</i> , 2021, 14, 3473.	2.9	2
51	A method for determining the parameters in a rheological model for viscoelastic materials by minimizing Tikhonov functionals. , 2022, 30, 141-165.		2
52	Investigation of the Structural Coating Homogeneity in Open-Porous Nickel/Polyurethane Hybrid Foams Produced by Flow-Controlled Electrodeposition. <i>Advanced Engineering Materials</i> , 2022, 24, .	3.5	2
53	Numerical analysis of Ni/Al hybrid metal foams using the finite cell method. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2015, 15, 299-300.	0.2	1
54	Thermo-mechanical modelling of cellular ceramic composites by a multiphase approach of porous media. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2015, 15, 393-394.	0.2	1

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55	Characterization of Ni/Al hybrid foam from atomic to microscale. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 283-284.	0.2	1
56	Experimental and numerical investigation of metal foams undergoing large deformations. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 345-346.	0.2	1
57	Investigation of strain-rate effects in Al foams and Ni/Al hybrid foams on different scales. Proceedings in Applied Mathematics and Mechanics, 2017, 17, 317-318.	0.2	1
58	In-situ and ex-situ micro mechanical testing of open-cell metal foams. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800213.	0.2	1
59	Development of a simulation model for the automatic optimization of tools for tube embossing. CIRP Journal of Manufacturing Science and Technology, 2019, 26, 50-69.	4.5	1
60	Effect of Pretreatment on Interface Stability and Morphology of Ni/Al Hybrid Foams by in situ Microcantilever Fracture Experiment. Procedia Structural Integrity, 2019, 17, 206-213.	0.8	1
61	Noise reduction for DIC measurements. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900077.	0.2	1
62	Micromechanical Characterisation of Ni/PU Hybrid Foams. Materials, 2020, 13, 3746.	2.9	1
63	DIC Measurements on Single Struts of Ni/PU Hybrid Foams' Damage Behaviour During Three-Point Bending. Advanced Structured Materials, 2020, , 423-430.	0.5	1
64	Analysis of an open foam generated from computerized tomography scans of physical foam samples. International Journal for Numerical Methods in Engineering, 2022, 123, 4267-4295.	2.8	1
65	A microscopically motivated continuum model for cellular materials. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 421-422.	0.2	0
66	Thermo-mechanically coupled modelling of cellular MgO refractories under thermal shock. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 429-430.	0.2	0
67	Development of a simulation model for the automatic optimization of tools for multi-dimensional tube forming. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900185.	0.2	0
68	Modelling of cellular materials by a microsphere-based material model. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900081.	0.2	0