

# Anette M Karlsson

## List of Publications by Year in descending order

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37  
papers

2,067  
citations

257450

24  
h-index

345221

36  
g-index

37  
all docs

37  
docs citations

37  
times ranked

1303  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical response of fuel cell membranes subjected to a hygro-thermal cycle. <i>Journal of Power Sources</i> , 2006, 161, 987-996.	7.8	274
2	An experimental investigation of humidity and temperature effects on the mechanical properties of perfluorosulfonic acid membrane. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 425, 297-304.	5.6	247
3	Mechanical behavior of fuel cell membranes under humidity cycles and effect of swelling anisotropy on the fatigue stresses. <i>Journal of Power Sources</i> , 2007, 170, 345-358.	7.8	222
4	Mechanical properties of a reinforced composite polymer electrolyte membrane and its simulated performance in PEM fuel cells. <i>Journal of Power Sources</i> , 2008, 175, 817-825.	7.8	132
5	Mechanical behavior of bio-inspired laminated composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 211-220.	7.6	116
6	Stresses in Proton Exchange Membranes Due to Hygro-Thermal Loading. <i>Journal of Fuel Cell Science and Technology</i> , 2006, 3, 119-124.	0.8	115
7	Constitutive response and mechanical properties of PFSA membranes in liquid water. <i>Journal of Power Sources</i> , 2010, 195, 483-492.	7.8	62
8	Image analyses of two crustacean exoskeletons and implications of the exoskeletal microstructure on the mechanical behavior. <i>Journal of Materials Research</i> , 2008, 23, 2854-2872.	2.6	61
9	Effect of time-dependent material properties on the mechanical behavior of PFSA membranes subjected to humidity cycling. <i>Journal of Power Sources</i> , 2012, 214, 365-376.	7.8	60
10	Aspects of fatigue failure mechanisms in polymer fuel cell membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011, 49, 1506-1517.	2.1	59
11	An experimental investigation of strain rate, temperature and humidity effects on the mechanical behavior of a perfluorosulfonic acid membrane. <i>Journal of Power Sources</i> , 2012, 214, 130-136.	7.8	56
12	Numerical Investigation of Mechanical Durability in Polymer Electrolyte Membrane Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2010, 157, B705.	2.9	55
13	Strain response of thermal barrier coatings captured under extreme engine environments through synchrotron X-ray diffraction. <i>Nature Communications</i> , 2014, 5, 4559.	12.8	50
14	On TGO creep and the initiation of a class of fatigue cracks in thermal barrier coatings. <i>Surface and Coatings Technology</i> , 2009, 203, 3549-3558.	4.8	44
15	Stress-Strain Behavior of Perfluorosulfonic Acid Membranes at Various Temperatures and Humidities: Experiments and Phenomenological Modeling. <i>Journal of Fuel Cell Science and Technology</i> , 2009, 6, .	0.8	39
16	Effect of gas diffusion layer modulus and land-groove geometry on membrane stresses in proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2011, 196, 4646-4654.	7.8	39
17	Time-dependent mechanical response of a composite PFSA membrane. <i>Journal of Power Sources</i> , 2013, 228, 256-269.	7.8	39
18	Mechanics-based analysis of selected features of the exoskeletal microstructure of <i>Popillia japonica</i> . <i>Journal of Materials Research</i> , 2009, 24, 3253-3267.	2.6	38

#	ARTICLE	IF	CITATIONS
19	Numerical evaluation of crack growth in polymer electrolyte fuel cell membranes based on plastically dissipated energy. <i>Journal of Power Sources</i> , 2016, 316, 114-123.	7.8	38
20	Micromechanics model based on the nanostructure of PFSA membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 2404-2417.	2.1	29
21	Mechanics-based model for non-affine swelling in perfluorosulfonic acid (PFSA) membranes. <i>Polymer</i> , 2009, 50, 2481-2491.	3.8	29
22	Time-dependent mechanical behavior of proton exchange membrane fuel cell electrodes. <i>Journal of Power Sources</i> , 2014, 245, 543-552.	7.8	28
23	Numerical evaluation of Paris-regime crack growth rate based on plastically dissipated energy. <i>Engineering Fracture Mechanics</i> , 2014, 124-125, 155-166.	4.3	28
24	Structure-property relationship in ionomer membranes. <i>Polymer</i> , 2010, 51, 1457-1464.	3.8	27
25	Piezospectroscopic evaluation and damage identification for thermal barrier coatings subjected to simulated engine environments. <i>Surface and Coatings Technology</i> , 2017, 323, 30-38.	4.8	26
26	Synchrotron X-ray measurement techniques for thermal barrier coated cylindrical samples under thermal gradients. <i>Review of Scientific Instruments</i> , 2013, 84, 083904.	1.3	25
27	Numerical evaluation of fatigue crack growth in polymers based on plastically dissipated energy. <i>International Journal of Fatigue</i> , 2017, 94, 89-96.	5.7	23
28	Monitoring Local Strain in a Thermal Barrier Coating System Under Thermal Mechanical Gas Turbine Operating Conditions. <i>Jom</i> , 2015, 67, 1528-1539.	1.9	19
29	On cracks and delaminations of thermal barrier coatings due to indentation testing: Experimental investigations. <i>Acta Materialia</i> , 2008, 56, 4080-4090.	7.9	14
30	On stresses induced in a thermal barrier coating due to indentation testing. <i>Computational Materials Science</i> , 2009, 44, 1178-1191.	3.0	14
31	Implementation of a plastically dissipated energy criterion for three dimensional modeling of fatigue crack growth. <i>International Journal of Fatigue</i> , 2013, 54, 47-55.	5.7	14
32	In situ analysis of fatigue crack propagation in polymer foams. <i>Engineering Fracture Mechanics</i> , 2013, 101, 23-32.	4.3	12
33	In situ analysis of crack propagation in polymer foams. <i>Journal of Materials Science</i> , 2011, 46, 5487-5494.	3.7	9
34	Capturing the Competing Influence of Thermal and Mechanical Loads on the Strain of Turbine Blade Coatings via High Energy X-rays. <i>Coatings</i> , 2018, 8, 320.	2.6	9
35	Stresses in Proton Exchange Membranes Due to Hydration-Dehydration Cycles. , 2005, , 207.		6
36	Fatigue crack propagation in polyvinylchloride and polyethersulfone polymer foams. <i>Journal of Sandwich Structures and Materials</i> , 2014, 16, 42-65.	3.5	6

#	ARTICLE	IF	CITATIONS
37	A double cantilever beam specimen for foam core fracture characterization. Journal of Sandwich Structures and Materials, 2012, 14, 281-295.	3.5	3