Jeremy Pencer

List of Publications by Year in descending order

47 papers	2,032 citations	331670 21 h-index	243625 44 g-index
49 all docs	49 docs citations	49 times ranked	2405 citing authors

#	Article	IF	Citations
1	Lipid Bilayer Structure Determined by the Simultaneous Analysis of Neutron and X-Ray Scattering Data. Biophysical Journal, 2008, 95, 2356-2367.	0.5	518
2	Curvature Effect on the Structure of Phospholipid Bilayers. Langmuir, 2007, 23, 1292-1299.	3.5	124
3	â€œBicellarâ€•Lipid Mixtures as used in Biochemical and Biophysical Studies. Die Naturwissenschaften, 2005, 92, 355-366.	1.6	117
4	Osmotically Induced Shape Changes of Large Unilamellar Vesicles Measured by Dynamic Light Scattering. Biophysical Journal, 2001, 81, 2716-2728.	0.5	100
5	Effects of Vesicle Size and Shape on Static and Dynamic Light Scattering Measurements. Langmuir, 2003, 19, 7488-7497.	3.5	95
6	Bilayer thickness and thermal response of dimyristoylphosphatidylcholine unilamellar vesicles containing cholesterol, ergosterol and lanosterol: A small-angle neutron scattering study. Biochimica Et Biophysica Acta - Biomembranes, 2005, 1720, 84-91.	2.6	92
7	Detection of submicron-sized raft-like domains in membranes by small-angle neutron scattering. European Physical Journal E, 2005, 18, 447-458.	1.6	91
8	Influence of cholesterol on the bilayer properties of monounsaturated phosphatidylcholine unilamellar vesicles. European Physical Journal E, 2007, 23, 247-254.	1.6	87
9	Effect of Cations on the Structure of Bilayers Formed by Lipopolysaccharides Isolated from Pseudomonas aeruginosa PAO1. Journal of Physical Chemistry B, 2008, 112, 8057-8062.	2.6	82
10	Spontaneously Formed Unilamellar Vesicles with Path-Dependent Size Distribution. Langmuir, 2005, 21, 6656-6661.	3.5	66
11	Method of separated form factors for polydisperse vesicles. Journal of Applied Crystallography, 2006, 39, 293-303.	4.5	59
12	Optical changes in unilamellar vesicles experiencing osmotic stress. Biophysical Journal, 1996, 71, 2701-2715.	0.5	58
13	What determines the thickness of a biological membrane. General Physiology and Biophysics, 2009, 28, 117-125.	0.9	47
14	The study of liposomes, lamellae and membranes using neutrons and X-rays. Current Opinion in Colloid and Interface Science, 2007, 12, 17-22.	7.4	41
15	Small-angle neutron scattering from large unilamellar vesicles: An improved method for membrane thickness determination. Physical Review E, 2000, 61, 3003-3008.	2.1	38
16	Characterization of anisotropic poly(vinyl alcohol) hydrogel by small- and ultra-small-angle neutron scattering. Journal of Chemical Physics, 2009, 130, 034903.	3.0	29
17	Comparison of Solution Structures and Stabilities of Native, Partially Unfolded and Partially Refolded Pepsin. Biochemistry, 2006, 45, 13982-13992.	2.5	28
18	Small-Angle Neutron Scattering to Detect Rafts and Lipid Domains. Methods in Molecular Biology, 2007, 398, 231-244.	0.9	27

#	Article	IF	Citations
19	Scattering from laterally heterogeneous vesicles. II. The form factor. Journal of Applied Crystallography, 2007, 40, 513-525.	4.5	25
20	Interaction of the full-length Bax protein with biomimetic mitochondrial liposomes: A small-angle neutron scattering and fluorescence study. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 384-401.	2.6	24
21	Atomistic simulations and experimental measurements of helium nano-bubbles in nickel. Journal of Nuclear Materials, 2017, 495, 475-483.	2.7	23
22	Molecular dynamics study of the role of symmetric tilt grain boundaries on the helium distribution in nickel. Journal of Nuclear Materials, 2018, 502, 86-94.	2.7	23
23	Atomistic simulation study of the hydrogen diffusion in nickel. Computational Materials Science, 2018, 152, 374-380.	3.0	22
24	Scattering from laterally heterogeneous vesicles. I. Model-independent analysis. Journal of Applied Crystallography, 2006, 39, 791-796.	4.5	21
25	The influence of curvature on membrane domains. European Biophysics Journal, 2008, 37, 665-671.	2.2	20
26	Density functional theory-based derivation of an interatomic pair potential for helium impurities in nickel. Journal of Nuclear Materials, 2016, 479, 240-248.	2.7	20
27	Molecular dynamics study of hydrogen-vacancy interactions in Î±-zirconium. Journal of Nuclear Materials, 2018, 511, 341-352.	2.7	16
28	Atomistic simulation study of the helium effects on the deformation behavior in nickel bicrystals. Journal of Nuclear Materials, 2019, 516, 247-254.	2.7	15
29	A comparative analysis of the phonon properties in UO2 using the Boltzmann transport equation coupled with DFTâ€¯+â€¯U and empirical potentials. Computational Materials Science, 2020, 177, 109594.	3.0	15
30	A CANADIAN PERSPECTIVE ON PROGRESS IN THORIA FUEL SCIENCE AND TECHNOLOGY. CNL Nuclear Review, 0, , 1-17.	0.6	14
31	Spontaneously Forming Ellipsoidal Phospholipid Unilamellar Vesicles and Their Interactions with Helical Domains of Saposin C. Langmuir, 2006, 22, 11028-11033.	3.5	13
32	The Supersafe^{Â©} Reactor: A Small Modular Pressure Tube SCWR. AECL Nuclear Review, 2012, 1, 13-18.	0.1	10
33	Nuclear data sensitivity and uncertainty for the Canadian supercritical water-cooled reactor. Annals of Nuclear Energy, 2014, 63, 587-593.	1.8	9
34	Molecular dynamics modelling of the thermal conductivity of off-stoichiometric UO2Â±x and (UyPu1â^'y)O2Â±x using equilibrium molecular dynamics. Annals of Nuclear Energy, 2019, 131, 317-324.	1.8	9
35	Development of a Polarizable Interatomic Potential for Molten Lithium, Sodium, and Potassium Nitrate. Journal of Physical Chemistry B, 2020, 124, 4751-4761.	2.6	9
36	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si105.svg"><mml:mrow><mml:mi mathvariant="italic">DFT</mml:mi><mml:mo linebreak="badbreak">+</mml:mo><mml:mi>U</mml:mi></mml:mrow></mml:math> approach on the electronic and thermal properties of hypostoichiometric <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si106.svg"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">UO</mml:mi	1.8	8

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37	Scattering from laterally heterogeneous vesicles. III. Reconciling past and present work. Journal of Applied Crystallography, 2007, 40, 771-772.	4.5	7
38	Domains on a Sphere: Neutron Scattering, Models, and Mathematical Formalism. Chemistry and Physics of Lipids, 2019, 222, 47-50.	3.2	7
39	Intersecting polymers in lipid bilayers: cliques, static order parameters and lateral diffusion. Biochimica Et Biophysica Acta - Biomembranes, 1993, 1150, 189-198.	2.6	5
40	Nuclear data sensitivity and uncertainty for the Canadian supercritical water-cooled reactor II: Full core analysis. Annals of Nuclear Energy, 2015, 75, 635-644.	1.8	5
41	Applicability of 2NN-MEAM potentials in the prediction of temperature and oxygen-dependent elastic properties of titanium. Computational Materials Science, 2016, 125, 110-116.	3.0	4
42	Finite-size effects in biomimetic smectic films. Physical Review E, 2004, 70, 062902.	2.1	3
43	Implications of alpha-decay for long term storage of advanced heavy water reactor fuels. Annals of Nuclear Energy, 2017, 110, 400-405.	1.8	2
44	Methodology to Design Simulated Irradiated Fuel by Maximizing Integral Indices (ck, E, G). Journal of Nuclear Engineering and Radiation Science, 2016, 2, .	0.4	1
45	COMPARISON OF DPA AND HELIUM PRODUCTION IN CANDIDATE FUEL CLADDING MATERIALS FOR THE CANADIAN SCWR. CNL Nuclear Review, 0, , 1-7.	0.6	1
46	Erratum, for â€œThe Supersafe^{Â©} Reactor: A Small Modular Pressure Tube SCWRâ€• AECL Nuclear Review, 2013, 2, 119-119.	0.1	0
47	A SOLID MODERATOR PHYSICS ASSESSMENT FOR THE CANADIAN SCWR. CNL Nuclear Review, 0, , 1-8.	0.6	0