

# Catherine Pappas

## List of Publications by Year in descending order

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95  
papers

1,877  
citations

257101

24  
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276539

41  
g-index

99  
all docs

99  
docs citations

99  
times ranked

1880  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chiral Paramagnetic Skyrmion-like Phase in MnSi. <i>Physical Review Letters</i> , 2009, 102, 197202.	2.9	277
2	Generalized Spin-Glass Relaxation. <i>Physical Review Letters</i> , 2009, 102, 097202.	2.9	146
3	Temperature Dependence of the Primary Relaxation in 1-Hexyl-3-methylimidazolium bis{(trifluoromethyl)sulfonyl}imide. <i>Journal of Physical Chemistry B</i> , 2009, 113, 8469-8474.	1.2	76
4	New magnetic phase of the chiral skyrmion material $\text{Cu}_2\text{OSeO}_3$ . <i>Science Advances</i> , 2018, 4, eaat7323.	4.7	66
5	Applications of remanent supermirror polarizers. <i>Physica B: Condensed Matter</i> , 1999, 267-268, 320-327.	1.3	53
6	Interpretation of X-ray diffraction patterns of (nuclear) graphite. <i>Carbon</i> , 2014, 69, 17-24.	5.4	51
7	The polarizing beam splitter guide at BENSC. <i>Physica B: Condensed Matter</i> , 1995, 213-214, 939-941.	1.3	49
8	Multiple low-temperature skyrmionic states in a bulk chiral magnet. <i>Npj Quantum Materials</i> , 2019, 4, .	1.8	49
9	Phase diagram and magnetic relaxation phenomena in $\text{Cu}_2\text{OSeO}_3$ . <i>Physical Review B</i> , 2016, 94, .	1.1	43
10	Interaction of precipitation with austenite-to-ferrite phase transformation in vanadium micro-alloyed steels. <i>Acta Materialia</i> , 2019, 181, 10-24.	3.8	41
11	Magnetic fluctuations and correlations in MnSi: Evidence for a chiral skyrmion spin liquid phase. <i>Physical Review B</i> , 2011, 83, .	1.1	40
12	Spin-glass critical behaviour in the non-dilute disordered insulator $\text{CsNiFeF}_6$ . <i>Journal De Physique</i> , 1985, 46, 637-648.	1.8	36
13	Magnetic Fluctuations, Precursor Phenomena, and Phase Transition in MnSi under a Magnetic Field. <i>Physical Review Letters</i> , 2017, 119, 047203.	2.9	35
14	Design and performance of a novel neutron powder diffractometer: PEARL at TU Delft. <i>Journal of Applied Crystallography</i> , 2016, 49, 1398-1401.	1.9	34
15	Magnetic relaxation phenomena in the chiral magnet $\text{Cu}_2\text{OSeO}_3$ : An ac susceptibility study. <i>Physical Review B</i> , 2016, 94, .	1.1	32
16	Very low field susceptibility of the highly frustrated $\text{CsMnFeF}_6$ and $\text{CsNiFeF}_6$ compounds. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1982, 89, 423-426.	0.9	31
17	Reorientations, relaxations, metastabilities, and multidomains of skyrmion lattices. <i>Physical Review B</i> , 2017, 96, .	1.1	31
18	Quantitative Neutron Dark-field Imaging through Spin-Echo Interferometry. <i>Scientific Reports</i> , 2015, 5, 16576.	1.6	30

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19	Spin-glass-like H-T phase diagram for the frustrated insulator CsNiFeF6. Journal of Physics C: Solid State Physics, 1984, 17, 1303-1315.	1.5	29
20	Extended skyrmion lattice scattering and long-time memory in the chiral magnet $\text{FeCoSi}$ . Physical Review B, 2016, 94, .	1.1	29
21	Wide angle NSE: the multidetector spectrometer SPAN at BENSC. Physica B: Condensed Matter, 2000, 283, 365-371.	1.3	28
22	Dynamic scaling in spin glasses. Physical Review B, 2003, 68, .	1.1	27
23	The high-resolution neutron spin-echo spectrometer for the SNS with $\lambda = 4.1 \text{ \AA}$ . Physica B: Condensed Matter, 2004, 350, 147-150.	1.3	26
24	Universality of the helimagnetic transition in cubic chiral magnets: Small angle neutron scattering and neutron spin echo spectroscopy studies of FeCoSi. Physical Review B, 2017, 95, .	1.1	24
25	From nanopores to macropores: Fractal morphology of graphite. Carbon, 2016, 96, 541-547.	5.4	23
26	Field-driven metamorphoses of isolated skyrmions within the conical state of cubic helimagnets. Physical Review B, 2021, 104, .	1.1	21
27	The wide-angle neutron spin echo spectrometer project WASP. Journal of Neutron Research, 2007, 15, 39-47.	0.4	20
28	Influence of neutron irradiation on the microstructure of nuclear graphite: An X-ray diffraction study. Journal of Nuclear Materials, 2017, 487, 323-330.	1.3	20
29	Magnetization and ac susceptibility study of the cubic chiral magnet $\text{MnSi}$ . Physical Review B, 2018, 98, .	1.1	20
30	Evolution of helimagnetic correlations in $\text{MnSi}$ with doping: A small-angle neutron scattering study. Physical Review B, 2018, 98, .	1.1	20
31	Field dependent critical fluctuations above $T_g$ in the ESR line width of the spin glass $\text{AgMn}$ . European Physical Journal B, 1986, 63, 351-364.	0.6	19
32	Polarized neutron imaging: A spin-echo approach. Physica B: Condensed Matter, 2011, 406, 2415-2418.	1.3	18
33	Frequency-dependent susceptibility and Mossbauer experiments in CsNiFeF6. Journal of Physics C: Solid State Physics, 1985, 18, 2817-2830.	1.5	17
34	Skyrmion clusters and conical droplets in bulk helimagnets with cubic anisotropy. Physical Review B, 2019, 99, .	1.1	17
35	Performance of the multidetector NSE spectrometer SPAN at BENSC. Physica B: Condensed Matter, 1999, 267-268, 285-288.	1.3	16
36	Skyrmions and spirals in MnSi under hydrostatic pressure. Physical Review B, 2019, 100, .	1.1	15

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37	Field and anisotropy driven transformations of spin spirals in cubic skyrmion hosts. <i>Physical Review Research</i> , 2020, 2, .	1.3	15
38	Coexistence of superconductivity and disordered magnetism in oxygen deficient YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 1988, 153-155, 1669-1670.	0.6	14
39	New Twist in Chiral Magnets. <i>Physics Magazine</i> , 0, 5, .	0.1	13
40	Probing Jump Diffusion in Crystalline Solids with Neutron Spin-Echo Spectroscopy. <i>Physical Review Letters</i> , 2001, 87, 175901.	2.9	12
41	Spin textures induced by quenched disorder in a reentrant spin glass: Vortices versus "frustrated" skyrmions. <i>Physical Review B</i> , 2018, 98, .	1.1	12
42	Evolution of the precipitate composition during annealing of vanadium micro-alloyed steels by in-situ SANS. <i>Acta Materialia</i> , 2020, 201, 217-230.	3.8	12
43	Magnetic properties of some amorphous alloys containing light rare earth (LRE) ions. <i>Journal of Magnetism and Magnetic Materials</i> , 1980, 15-18, 97-98.	1.0	11
44	Polarimetric neutron spin echo: Feasibility and first results. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2008, 592, 420-427.	0.7	11
45	1.5ÅGPa compact double-wall clamp cell for SANS and NSE studies at low temperatures and high magnetic fields. <i>Journal of Neutron Research</i> , 2018, 20, 25-33.	0.4	11
46	Evolutionary programming for neutron instrument optimisation. <i>Physica B: Condensed Matter</i> , 2006, 385-386, 1349-1351.	1.3	10
47	Field dependent critical fluctuations above T <sub>g</sub> in the ESR linewidth of the spin glass Ag:Mn. <i>Journal of Magnetism and Magnetic Materials</i> , 1986, 54-57, 179-180.	1.0	9
48	The novel NSE spectrometer at BER II. <i>Journal of Neutron Research</i> , 1996, 5, 35-39.	0.4	9
49	The novel multidetector neutron spin echo spectrometer SPAN at BENS. <i>Physica B: Condensed Matter</i> , 2000, 276-278, 162-163.	1.3	9
50	Temperature dependence of local chain dynamics in atactic polypropylene: a neutron spin-echo study. <i>Physica B: Condensed Matter</i> , 2001, 301, 157-162.	1.3	9
51	Phase-transformation and precipitation kinetics in vanadium micro-alloyed steels by in-situ, simultaneous neutron diffraction and SANS. <i>Acta Materialia</i> , 2021, 220, 117317.	3.8	8
52	Specific heat measurements in the highly frustrated CsMnFeF <sub>6</sub> and CsNiFeF <sub>6</sub> compounds. <i>Journal of Magnetism and Magnetic Materials</i> , 1983, 31-34, 1391-1392.	1.0	7
53	Unusual critical dynamics in AuFe re-entrant ferromagnets. <i>Physica B: Condensed Matter</i> , 1992, 180-181, 359-360.	1.3	7
54	Positron and thermal desorption studies on He ion implanted nuclear graphite. <i>Journal of Physics: Conference Series</i> , 2014, 505, 012014.	0.3	7

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55	Wide angle NSE:the spectrometer SPAN at BENSC. Physica B: Condensed Matter, 2001, 297, 14-17.	1.3	6
56	Temperature dependence of three-point correlation functions of viscous liquids: the case of glycerol. Journal of Physics Condensed Matter, 2008, 20, 494240.	0.7	6
57	Evolution of helimagnetic correlations when approaching the quantum critical point of $MnSi$ . Physical Review Research, 2021, 3, .	1.6	6
58	Ferromagnetic critical correlations and dynamics in AuFe reentrant ferromagnets. Journal of Applied Physics, 1996, 79, 6158.	1.1	5
59	What neutrons do tell us about the nature of (spin) glasses?. Physica B: Condensed Matter, 2000, 276-278, 543-546.	1.3	5
60	Experimental evidence for dynamic scaling in spin glasses. Applied Physics A: Materials Science and Processing, 2002, 74, s907-s909.	1.1	5
61	Fibre formation in calcium caseinate influenced by solvent isotope effect and drying method – A neutron spectroscopy study. Chemical Engineering Science, 2019, 207, 1270-1277.	1.9	5
62	Analysis of SESANS data by a numerical Hankel transform implementation in SasView. Journal of Neutron Research, 2020, 22, 57-70.	0.4	5
63	Diffusion in solids studied by nuclear resonant X-ray and neutron scattering. Journal of Synchrotron Radiation, 2002, 9, 210-214.	1.0	4
64	Going to the limits of NSE. Physica B: Condensed Matter, 2005, 356, 206-212.	1.3	4
65	Design and experimental tests of a novel neutron spin analyzer for wide angle spin echo spectrometers. Review of Scientific Instruments, 2009, 80, 095105.	0.6	4
66	Spherical neutron polarimetry applied to spin-echo and time-of-flight spectroscopy. Physica B: Condensed Matter, 2009, 404, 2624-2628.	1.3	4
67	Magnetism and magnetic materials probed with neutron scattering. Journal of Magnetism and Magnetic Materials, 2014, 350, 86-87.	1.0	4
68	Feasibility and applications of the spin-echo modulation option for a small angle neutron scattering instrument at the European Spallation Source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 856, 119-132.	0.7	4
69	The frequency dependence of the AC susceptibility of rare-earth-doped scandium spin glasses. Journal of Physics C: Solid State Physics, 1987, 20, 2759-2772.	1.5	3
70	A novel approach to modelling non-exponential spin glass relaxation. Physica B: Condensed Matter, 2007, 397, 99-101.	1.3	3
71	Challenges in neutron spin echo spectroscopy. Physica B: Condensed Matter, 2009, 404, 2578-2581.	1.3	3
72	Upgrade Program for the Cold Neutron Instrumentation of the Helmholtz-Zentrum Berlin. Neutron News, 2009, 20, 16-19.	0.1	3

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73	FISH: A thermal neutron imaging station at HOR Delft. Journal of Archaeological Science: Reports, 2018, 20, 369-373.	0.2	3
74	Furnace for in situ and simultaneous studies of nano-precipitates and phase transformations in steels by SANS and neutron diffraction. Review of Scientific Instruments, 2020, 91, 123903.	0.6	3
75	Neutron spin-echo spectroscopy for diffusion in crystalline solids. Physical Review B, 2002, 66, .	1.1	2
76	Wide-angle NSE and TOF: the spectrometer SPAN at BENSC. Applied Physics A: Materials Science and Processing, 2002, 74, s286-s288.	1.1	2
77	Characterization of trehalose aqueous solutions by neutron spin echo. Applied Physics A: Materials Science and Processing, 2002, 74, s461-s462.	1.1	2
78	New polarizing guide for neutron wavelengths above 2.5 Å.... Journal of Physics: Conference Series, 2010, 251, 012081.	0.3	2
79	How to polarise all neutrons in one beam: a high performance polariser and neutron transport system. Journal of Physics: Conference Series, 2016, 746, 012015.	0.3	2
80	Neutron-Spin-Echo Spectroscopy and Magnetism. , 2006, , 521-542.		2
81	Field-induced vortex-like textures as a probe of the critical line in reentrant spin glasses. Scientific Reports, 2021, 11, 20753.	1.6	2
82	Dynamics of spin freezing in the re-entrant spin glass FeNiMn. Physica B: Condensed Matter, 2004, 350, E1051-E1054.	1.3	1
83	Aspects of Neutron Spin-echo Spectrometer Operation on a Pulsed Source. Journal of Neutron Research, 2005, 13, 63-66.	0.4	1
84	Spin freezing in the re-entrant spin glass FeNiMn close to the frustration limit. Physica B: Condensed Matter, 2007, 397, 105-107.	1.3	1
85	Dynamical scaling and critical scattering in pure and disordered ferromagnets probed by NSE. Physica B: Condensed Matter, 2007, 397, 102-104.	1.3	1
86	Multiple skyrmionic states and oblique spirals in bulk cubic helimagnets. , 2021, , 347-366.		1
87	Magnetic phase diagram and cluster glasslike properties of stage-1 graphite-intercalated $\text{FeCl}_3$ . Physical Review B, 2022, 105, .		
88	Ferromagnetic critical correlations in AuFe re-entrant ferromagnets. Physica B: Condensed Matter, 1997, 241-243, 594-596.	1.3	0
89	Neutron spin echo measurements on the Jahn-Teller system $\text{CsCuCl}_3$ . Physica B: Condensed Matter, 2000, 276-278, 312-313.	1.3	0
90	Realization of wide angle NSE: The spectrometer SPAN. Neutron News, 2001, 12, 19-24.	0.1	0

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91	HMI holds workshop on neutron spin echo spectroscopy. Neutron News, 2001, 12, 4-5.	0.1	0
92	Quasielastic neutron scattering experiment on water using TOFLAR (Time Of Flight and LARmor) Tj ETQq0 0 0 rgBT/Overlock_10 Tf 50 7	0.1	0
93	Semi-analytical calculations of intrinsic field magnetic field inhomogeneities for a Neutron Spin Echo spectrometer at the ESS. Journal of Neutron Research, 2020, 21, 167-180.	0.4	0
94	Diffusion Studies in Ordered Alloys. , 2003, , 229-237.		0
95	Polarimetric neutron spin echo spectroscopy. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C189-C189.	0.3	0