Peter Fouquet

List of Publications by Citations

93 papers	2,062 citations	23 h-index	41 g-index
99 ext. papers	2,291 ext. citations	4.7 avg, IF	4.35 L-index

#	Paper	IF	Citations
93	Chiral paramagnetic skyrmion-like phase in MnSi. *Physical Review Letters*, **2009**, 102, 197202	7.4	219
92	Generalized spin-glass relaxation. *Physical Review Letters*, **2009**, 102, 097202	7.4	124
91	Ultrahigh-resolution spin-echo measurement of surface potential energy landscapes. *Science*, **2004**, 304, 1790-3	33.3	84
90	Thermodynamic, structural, and dynamic properties of supercooled water confined in mesoporous MCM-41 studied with calorimetric, neutron diffraction, and neutron spin echo measurements. *Journal of Chemical Physics*, **2008**, 129, 054702	3.9	82
89	Quasi-Elastic Neutron Scattering Studies on Clay Interlayer-Space Highlighting the Effect of the Cation in Confined Water Dynamics. *Journal of Physical Chemistry C*, **2008**, 112, 13982-13991	3.8	80
88	The van der Waals potential between metastable atoms and solid surfaces: Novel diffraction experiments vs. theory. *Europhysics Letters*, **2002**, 59, 357-363	1.6	72
87	Measurement of single-molecule frictional dissipation in a prototypical nanoscale system. *Nature Physics*, **2009**, 5, 561-564	16.2	68
86	Liquid 1-propanol studied by neutron scattering, near-infrared, and dielectric spectroscopy. *Journal of Chemical Physics*, **2014**, 140, 124501	3.9	60
85	Anomalous relaxation of self-assembled alkyl nanodomains in high-order poly(n-alkyl methacrylates). *Soft Matter*, **2008**, 4, 1792	3.6	59
84	Thermal energy He3 spin-echo spectrometer for ultrahigh resolution surface dynamics measurements. *Review of Scientific Instruments*, **2005**, 76, 053109	1.7	59
83	Interplay between static and dynamic polar correlations in relaxor Pb(Mg1/3Nb2/3)O3. *Physical Review B*, **2010**, 81,	3.3	53
82	Crossover behavior of critical helix fluctuations in MnSi. *Physical Review B*, **2010**, 81,	3.3	48
81	Hexapole magnet system for thermal energy 3He atom manipulation. *Review of Scientific Instruments*, **2001**, 72, 3834-3841	1.7	42
80	Observation of microscopic CO dynamics on Cu(001) using 3He spin-echo spectroscopy. *Physical Review Letters*, **2004**, 93, 156103	7.4	39
79	A benchmark for protein dynamics: Ribonuclease A measured by neutron scattering in a large wavevector-energy transfer range. *Chemical Physics*, **2008**, 345, 305-314	2.3	37
78	Graphene on Ni(111): Electronic Corrugation and Dynamics from Helium Atom Scattering. *Journal of Physical Chemistry C*, **2015**, 119, 25983-25990	3.8	36
77	Magnetic fluctuations and correlations in MnSi: Evidence for a chiral skyrmion spin liquid phase. *Physical Review B*, **2011**, 83,	3.3	36

76	Protein diffusion in crowded electrolyte solutions. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2010**, 1804, 68-75	4	35
75	Molecular dynamics simulations of the diffusion of benzene sub-monolayer films on graphite basal plane surfaces. *Carbon*, **2009**, 47, 2627-2639	10.4	32
74	Bending stiffness of biological membranes: what can be measured by neutron spin echo?. *European Physical Journal E*, **2013**, 36, 75	1.5	31
73	Diffusion and vibration of CO molecules adsorbed on a Cu(100) surface: A periodic density functional theory study. *Journal of Chemical Physics*, **2003**, 119, 509-514	3.9	30
72	Low-energy vibrational dynamics of ultrathin organic adlayers: alkanethiols adsorbed on copper. *Surface Science*, **2000**, 462, 135-142	1.8	29
71	Neutron spin echo measurements of monolayer and capillary condensed water in MCM-41 at low temperatures. *Journal of Physics Condensed Matter*, **2012**, 24, 064101	1.8	23
70	A refined He-LiF(001) potential from selective adsorption resonances measured with high-resolution helium spin-echo spectroscopy. *Journal of Chemical Physics*, **2007**, 126, 104702	3.9	23
69	Observation of Metallization Transition of 2D Alkali Metal Films. *Physical Review Letters*, **1999**, 83, 360-363	7.4	23
68	Solitary Magnons in the S=5/2 Antiferromagnet CaFe_{2}O_{4}. *Physical Review Letters*, **2016**, 117, 017201	7.4	21
67	Quasi-elastic Neutron Scattering Investigation of the Hydrogen Surface Self-Diffusion on Polymer Electrolyte Membrane Fuel Cell Catalyst Support. *Journal of Physical Chemistry C*, **2008**, 112, 3121-3125	3.8	21
66	Low aberration permanent hexapole magnet for atom and molecular beam research. *Review of Scientific Instruments*, **2004**, 75, 1963-1970	1.7	21
65	Static and dynamic studies of hydrogen adsorption on nanoporous carbon gels. *International Journal of Hydrogen Energy*, **2019**, 44, 18169-18178	6.7	20
64	Neutron spin-echo studies of hemoglobin and myoglobin: multiscale internal dynamics. *Journal of Molecular Biology*, **2010**, 397, 423-35	6.5	20
63	Metastable (23S) helium atom scattering from NiO(100) and Cu(100) surfaces. *Surface Science*, **1998** , 400, 140-154	1.8	20
62	Spin dynamics, short-range order, and spin freezing in Y0.5Ca0.5BaCo4O7. *Physical Review B*, **2011**, 83,	3.3	19
61	Ground state of the geometrically frustrated compound Tb2Sn2O7. *Journal of Physics Condensed Matter*, **2007**, 19, 446206	1.8	19
60	Neutron spin-echo investigation of slow spin dynamics in kagomé bilayer frustrated magnets as evidence for phonon assisted relaxation in SrCr9xGa12-9xO19. *Physical Review Letters*, **2006**, 97, 047203	7.4	19
59	Nanostructuration of ionic liquids: impact on the cation mobility. A multi-scale study. *Nanoscale*, **2017**, 9, 1901-1908	7.7	18

58	Hidden magnetic frustration by quantum relaxation in anisotropic Nd langasite. *Physical Review Letters*, **2008**, 100, 237204	7.4	18
57	Fluctuation dynamics of bilayer vesicles with intermonolayer sliding: experiment and theory. *Chemistry and Physics of Lipids*, **2015**, 185, 61-77	3.7	17
56	High-resolution neutron scattering study of Tb2Mo2O7: A geometrically frustrated spin glass. *Physical Review B*, **2010**, 81,	3.3	17
55	The wide-angle neutron spin echo spectrometer project WASP. *Journal of Neutron Research*, **2007**, 15, 39-47	0.5	17
54	de Gennes slowing in a liquid metal revisited: a neutron spin-echo study. *Physical Review E*, **2006**, 73, 032202	2.4	16
53	Structure and dynamics investigations of a partially hydrogenated graphene/Ni(111) surface. *Carbon*, **2017**, 114, 504-510	10.4	15
52	Hindered water motions in hardened cement pastes investigated over broad time and length scales. *ACS Applied Materials & Interfaces*, **2009**, 1, 2154-62	9.5	15
51	Mesoscale Dynamics in Melts of Single-Chain Polymeric Nanoparticles. *Macromolecules*, **2019**, 52, 6935-6942	5.5	14
50	The origin of persistent spin dynamics and residual entropy in the stuffed spin ice Ho2.3Ti1.7O7 *Journal of Physics Condensed Matter*, **2007**, 19, 342201	1.8	14
49	Probing cooperative jump-diffusion in zeolites: Neutron spin cho measurements and molecular dynamics simulations of benzene in NaX. *Microporous and Mesoporous Materials*, **2006**, 90, 307-313	5.3	14
48	Tracking the effects of rigidity percolation down to the liquid state: relaxational dynamics of binary chalcogen melts. *Physical Review Letters*, **2008**, 100, 245902	7.4	13
47	Measurements of molecule diffusion on surfaces using neutron and helium spin echo. *Physica B: Condensed Matter*, **2006**, 385-386, 269-271	2.8	13
46	Instrument design and optimization using genetic algorithms. *Review of Scientific Instruments*, **2006** , 77, 105107	1.7	13
45	Dipolar Spin Ice States with a Fast Monopole Hopping Rate in CdEr_{2}X_{4} (X=Se, S). *Physical Review Letters*, **2018**, 120, 137201	7.4	12
44	Ionic Liquids: evidence of the viscosity scale-dependence. *Scientific Reports*, **2017**, 7, 2241	4.9	12
43	Dynamic spin correlations in stuffed spin ice Ho2+xTi2 O7 *Physical Review B*, **2008**, 77,	3.3	12
42	Growth and dynamics of ultrathin barium films on Cu(100). *Surface Science*, **2001**, 473, 227-235	1.8	12
41	Proton Dynamics in Hydrated BaZr0.9M0.1O2.95 (M = Y and Sc) Investigated with Neutron Spin cho. *Journal of Physical Chemistry C*, **2016**, 120, 13963-13969	3.8	12

40	A helium atom scattering study of the adsorption of NO on Pt(111). *Journal of Chemical Physics*, **2000**, 112, 7600-7605	3.9	10
39	Benzene diffusion on graphite described by a rough hard disk model. *Carbon*, **2014**, 79, 183-191	10.4	9
38	Orphan Spins in the S=5/2 Antiferromagnet CaFe_{2}O_{4}. *Physical Review Letters*, **2017**, 119, 257204	7.4	9
37	Ballistic Diffusion in Polyaromatic Hydrocarbons on Graphite. *Journal of Physical Chemistry Letters*, **2016**, 7, 5285-5290	6.4	9
36	Diffusion of molecular hydrogen in carbon aerogel. *Carbon*, **2016**, 98, 572-581	10.4	8
35	Mapping Microstructural Dynamics up to the Nanosecond of the Conjugated Polymer P3HT in the Solid State. *Chemistry of Materials*, **2019**, 31, 9635-9651	9.6	8
34	Surface Diffusion Studies Using Neutron and Helium Spin-echo Spectroscopy. *Zeitschrift Fur Physikalische Chemie*, **2010**, 224, 61-81	3.1	8
33	Melts of single-chain nanoparticles: A neutron scattering investigation. *Journal of Applied Physics*, **2020**, 127, 044305	2.5	7
32	The H5 guide system□he latest innovative guide system at the ILL. *Neutron News*, **2015**, 26, 11-14	0.4	7
31	The Internal Network Dynamics of Poly(NIPAM) Based Copolymer Micro- and Macrogels: A Comparative Neutron Spin-Echo Study. *Zeitschrift Fur Physikalische Chemie*, **2014**, 228,	3.1	7
30	Global optimization of an entire neutron guide hall. *Journal of Applied Crystallography*, **2011**, 44, 483-488	3.8	7
29	Questions arising for future surface diffusion studies using scattering techniques--the case of benzene diffusion on graphite basal plane surfaces. *Journal of Physics Condensed Matter*, **2010**, 22, 304014	1.8	7
28	Dopant Concentration and Short-Range Structure Dependence of Diffusional Proton Dynamics in Hydrated BaInxZr1⊠O3⊠/2 (x = 0.10 and 0.50). *Journal of Physical Chemistry C*, **2010**, 114, 3292-3296	3.8	7
27	Slow and static spin correlations in Dy(2 + x)Ti(2 - x)O(7 - □ *Journal of Physics Condensed Matter*, **2011**, 23, 164220	1.8	7
26	Ultrafast molecular transport on carbon surfaces: The diffusion of ammonia on graphite. *Carbon*, **2018**, 126, 23-30	10.4	6
25	Role of Dynamic Asymmetry on the Collective Dynamics of Comblike Polymers: Insights from Neutron Spin-Echo Experiments and Coarse-Grained Molecular Dynamics Simulations. *Macromolecules*, **2016**, 49, 4989-5000	5.5	6
24	Monitoring of electronic poisoning of ultrathin alkali metal films by oxygen and carbon monoxide adsorption. *Surface Science*, **2000**, 454-456, 256-261	1.8	6
23	Modulation of hemoglobin dynamics by an allosteric effector. *Protein Science*, **2017**, 26, 505-514	6.3	5

22	The application of quasi-elastic neutron scattering techniques (QENS) in surface diffusion studies. *European Physical Journal: Special Topics*, **2012**, 213, 149-163	2.3	5
21	Low energy spin dynamics in the spin ice Ho2Sn2O7. *Journal of Physics Condensed Matter*, **2012**, 24, 076008	2.8	5
20	METASTABLE (23S) HELIUM ATOM SCATTERING FROM MOLECULAR ADSORBATES ON Pd AND Cu SURFACES. *Surface Review and Letters*, **1999**, 06, 103-107	1.1	5
19	Motion of water monomers reveals a kinetic barrier to ice nucleation on graphene. *Nature Communications*, **2021**, 12, 3120	17.4	5
18	From a one-dimensional crystal to a one-dimensional liquid: A comprehensive dynamical study of C60 peapods. *Physical Review B*, **2013**, 87,	3.3	4
17	Collective Motions and Mechanical Response of a Bulk of Single-Chain Nano-Particles Synthesized by Click-Chemistry. *Polymers*, **2020**, 13,	4.5	4
16	Transverse and longitudinal spin-fluctuations in INVAR FeNi. *Journal of Physics Condensed Matter*, **2019**, 31, 025802	1.8	3
15	The structure of deuterated benzene films adsorbed on the graphite (0001) basal plane: what happens below and above the monolayer coverage?. *Physical Chemistry Chemical Physics*, **2014**, 16, 22116-21	3.6	3
14	Design and experimental tests of a novel neutron spin analyzer for wide angle spin echo spectrometers. *Review of Scientific Instruments*, **2009**, 80, 095105	1.7	3
13	Evidence for two disparate spin dynamic regimes within Fe-substituted La0.7Pb0.3(Mn1−xFex)O3 (0?x?0.2) colossal magnetoresistive manganites: Neutron spin-echo measurements. *Physical Review B*, **2007**, 76,	3.3	3
12	Metallization and demetallization of clean and oxygen-covered ultrathin alkali metal films on GaAs(1 0 0). *Applied Surface Science*, **2001**, 180, 286-292	6.7	3
11	A theoretical study of rotational and translational diffusion dynamics of molecules with a six-fold point symmetry adsorbed on a hexagonal lattice by neutron scattering. *Journal of Physics Condensed Matter*, **2012**, 24, 104007	1.8	2
10	Neutron spectroscopy study of the diffusivity of hydrogen in MoS. *Physical Chemistry Chemical Physics*, **2021**, 23, 7961-7973	3.6	2
9	Permeability modes in fluctuating lipid membranes with DNA-translocating pores. *Advances in Colloid and Interface Science*, **2017**, 247, 543-554	14.3	1
8	Dynamical scaling and critical scattering in pure and disordered ferromagnets probed by NSE. *Physica B: Condensed Matter*, **2007**, 397, 102-104	2.8	1
7	Ultra-fast diffusion of hydrogen in a novel mesoporous N-doped carbon. *Carbon*, **2020**, 166, 307-315	10.4	1
6	Metastable antiphase boundary ordering in CaFe2O4. *Physical Review B*, **2021**, 104,	3.3	1
5	A neutron spin echo study of low-temperature water confined in the spherical silica pores of SBA-16. *Physical Chemistry Chemical Physics*, **2017**, 19, 10502-10510	3.6	

4	Neutron Scattering in Brazil and Argentina. *Neutron News*, **2014**, 25, 2-2	0.4
3	Characteristics of the magnetic order in CeCu2Si2revealed by neutron spin-echo measurements. *Journal of Physics: Conference Series*, **2010**, 200, 012009	0.3
2	Neutron spin-echo on magnetic single crystals in the quantum limit. *Physica B: Condensed Matter*, **2007**, 397, 95-98	2.8
1	Phonon-assisted relaxation in a frustrated antiferromagnet. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, 1325-1327	2.8