

Neil S Sullivan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2822990/publications.pdf>

Version: 2024-02-01

122
papers

2,870
citations

257450

24
h-index

175258

52
g-index

126
all docs

126
docs citations

126
times ranked

1628
citing authors

#	ARTICLE	IF	CITATIONS
1	Search for Invisible Axion Dark Matter with the Axion Dark Matter Experiment. Physical Review Letters, 2018, 120, 151301.	7.8	384
2	Extended Search for the Invisible Axion with the Axion Dark Matter Experiment. Physical Review Letters, 2020, 124, 101303.	7.8	275
3	Results from a High-Sensitivity Search for Cosmic Axions. Physical Review Letters, 1998, 80, 2043-2046.	7.8	162
4	Large-scale microwave cavity search for dark-matter axions. Physical Review D, 2001, 64, .	4.7	154
5	Improved rf cavity search for halo axions. Physical Review D, 2004, 69, .	4.7	153
6	Evidence for quadrupolar glass phases in solid hydrogen at reduced ortho concentrations. Physical Review B, 1978, 17, 5016-5024.	3.2	149
7	Bose glass and Mott glass of quasiparticles in a doped quantum magnet. Nature, 2012, 489, 379-384.	27.8	111
8	Piezoelectrically Tuned Multimode Cavity Search for Axion Dark Matter. Physical Review Letters, 2018, 121, 261302.	7.8	91
9	Quantum tunneling and motional narrowing of HD NMR line shapes in solid hcpH ₂ . Physical Review B, 1981, 23, 3197-3207.	3.2	79
10	Experimental Constraints on the Axion Dark Matter Halo Density. Astrophysical Journal, 2002, 571, L27-L30.	4.5	71
11	Search for nonvirialized axionic dark matter. Physical Review D, 2011, 84, .	4.7	71
12	Measurements of the nuclear spin-lattice relaxation times in BCC3He for high magnetic fields, high molar volumes, and low temperatures. Journal of Low Temperature Physics, 1985, 59, 45-81.	1.4	65
13	Direct Measurement of the Bose-Einstein Condensation Universality Class in NiCl ₂ ·4SC(NH ₂) ₂ at Ultralow Temperatures. Physical Review Letters, 2008, 101, 187205.	7.8	64
14	New behavior for the density dependence of vacancy formation and mobility in bccHe ₃ at high molar volumes. Physical Review B, 1984, 30, 2940-2943.	3.2	57
15	Design and performance of the ADMX SQUID-based microwave receiver. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 656, 39-44.	1.6	56
16	Orientational ordering in a dilute system of classical interacting quadrupoles : (N ₂ -Ar) solid mixtures. Journal De Physique (Paris), Lettres, 1982, 43, 793-799.	2.8	47
17	Cryogenic cavity detector for a large-scale cold dark-matter axion search. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 444, 569-583.	1.6	45
18	NMR pulse studies of molecular solids: ¹⁵ N ₂ and H ₂ . II. Stimulated echoes and slow rotational motions. Journal of Physics C: Solid State Physics, 1982, 15, 4895-4911.	1.5	38

#	ARTICLE	IF	CITATIONS
19	Quantum diffusion of vacancies and impurities in solid hydrogen. Physical Review Letters, 1989, 62, 1528-1531.	7.8	36
20	Precise and efficient in situ ortho \leftrightarrow para-hydrogen converter. Cryogenics, 1990, 30, 734-735.	1.7	36
21	Orientalional ordering in solid hydrogen. Canadian Journal of Physics, 1987, 65, 1463-1470.	1.1	33
22	Nuclear spin-spin relaxation of isotopic impurities in solid hydrogen. Physical Review B, 1992, 45, 2800-2808.	3.2	31
23	Very high sensitivity ac capacitance bridge for the dielectric study of molecular solids at low temperatures. Review of Scientific Instruments, 1999, 70, 4055-4058.	1.3	31
24	Cavity design for high-frequency axion dark matter detectors. Review of Scientific Instruments, 2015, 86, 123305.	1.3	31
25	Orientalional order \leftrightarrow disorder transitions in solid hydrogen. Canadian Journal of Chemistry, 1988, 66, 908-914.	1.1	22
26	Orientalional Ordering of Frustrated Molecular Quadrupoles: NMR Studies of N ₂ -Ar Solid Mixtures. Physical Review Letters, 1994, 73, 2720-2723.	7.8	22
27	Nuclear Resonance Spectrometers Using Field Effect Transistors. Review of Scientific Instruments, 1971, 42, 462-465.	1.3	21
28	Critical slowing-down in spin glasses: Quadrupolar glass phase of solid H ₂ . Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1981, 107, 189-190.	0.9	21
29	Orientalional ordering in solid hydrogen. Journal De Physique, 1976, 37, 981-989.	1.8	21
30	Efficient fast-recovery scheme for NMR pulse spectrometers. Revue De Physique Appliquée, 1983, 18, 253-261.	0.4	20
31	Splitting of NMR spectrum of solid hydrogen. Physics Letters, Section A: General, Atomic and Solid State Physics, 1972, 39, 23-24.	2.1	19
32	NMR studies of vacancy motion in solid hydrogen. Physical Review B, 1990, 42, 1929-1939.	3.2	19
33	NMR studies of the orientational ordering in dilute solid N ₂ -Ar mixtures. Journal of Low Temperature Physics, 1996, 103, 49-70.	1.4	18
34	NMR Study of the Dynamics of ^3He Impurities in the Proposed Supersolid State of Solid ^4He . Physical Review Letters, 2011, 106, 185303.	7.8	18
35	Unusual Mott transition in multiferroic PbCrO ₃ . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15320-15325.	7.1	18
36	Axion Dark Matter Experiment: Detailed design and operations. Review of Scientific Instruments, 2021, 92, 124502.	1.3	18

#	ARTICLE	IF	CITATIONS
37	Orientational Ordering in Monolayer Films of Molecular Hydrogen on Boron Nitride. <i>Journal of Low Temperature Physics</i> , 1999, 114, 173-201.	1.4	15
38	Integrated circuit Robinson oscillator for NMR detection. <i>Review of Scientific Instruments</i> , 1977, 48, 664-668.	1.3	14
39	Orientational Order Parameters in Solid Hydrogen: A Density Matrix Approach. <i>Molecular Crystals and Liquid Crystals</i> , 1987, 142, 141-156.	0.8	14
40	Local ordering in dilute ortho-para-hydrogen mixtures at low temperatures. <i>Journal of Low Temperature Physics</i> , 1988, 72, 1-24.	1.4	14
41	New Evidence for Zero-Temperature Relaxation in a Spin-Polarized Fermi Liquid. <i>Physical Review Letters</i> , 2003, 90, 105301.	7.8	13
42	Boron nitride as a substrate for H ₂ monolayer studies. <i>Journal of Low Temperature Physics</i> , 1992, 89, 653-656.	1.4	12
43	The National High Magnetic Field Laboratory. <i>Physica B: Condensed Matter</i> , 2001, 294-295, 505-511.	2.7	12
44	Anomalous ortho-para conversion of solid hydrogen in constrained geometries. <i>Physical Review B</i> , 1991, 44, 9932-9935.	3.2	11
45	Asymmetries of local arsenic bonding sites in As _x S _{1-x} and As _x Se _{1-x} glasses. <i>Physical Review B</i> , 2003, 67, .	3.2	11
46	NMR Studies of ³ He Droplets in Dilute ³ He- ⁴ He Solid Solutions. <i>Journal of Low Temperature Physics</i> , 2011, 162, 167-173.	1.4	11
47	NMR Studies of ³ He Impurities in ⁴ He in the Proposed Supersolid Phase. <i>Journal of Low Temperature Physics</i> , 2010, 158, 584-589.	1.4	9
48	EXACT PHASE DIAGRAMS FOR THE CONDENSATION OF A KAGOMÉ LATTICE GAS WITH THREE-PARTICLE INTERACTIONS. <i>International Journal of Modern Physics B</i> , 1993, 07, 2831-2857.	2.0	8
49	A NEXT-GENERATION CAVITY MICROWAVE EXPERIMENT TO SEARCH FOR DARK-MATTER AXIONS. <i>International Journal of Modern Physics D</i> , 1994, 03, 33-42.	2.1	8
50	Molecular solid glasses: new insights into frustrated systems. <i>New Journal of Physics</i> , 2001, 3, 17-17.	2.9	8
51	A Novel Design of a Low Temperature Preamplifier for Pulsed NMR Experiments of Dilute ³ He in Solid ⁴ He. <i>Journal of Low Temperature Physics</i> , 2010, 158, 692-696.	1.4	8
52	NMR investigation of the low-temperature dynamics of solid ⁴ He doped with ³ He impurities. <i>Physical Review B</i> , 2013, 87, .	3.2	8
53	The Orientational Ordering in Dilute Solid N ₂ -Ar Mixtures. <i>Journal of Low Temperature Physics</i> , 1998, 111, 365-370.	1.4	7
54	Critical Concentrations for the Orientational Ordering of Molecular Hydrogen in 2D. <i>Journal of Low Temperature Physics</i> , 1998, 113, 705-710.	1.4	7

#	ARTICLE	IF	CITATIONS
55	Orientational Ordering in Ultra-Thin Films of Quantum Rotors on Boron Nitride. Journal of Low Temperature Physics, 1998, 110, 597-602.	1.4	7
56	Avoided Mode Crossings in Cylindrical Microwave Cavities. Physical Review Applied, 2019, 12, .	3.8	7
57	Ultralow power low noise ultrahigh frequency magnetic resonance spectrometer. Review of Scientific Instruments, 1992, 63, 157-162.	1.3	6
58	Mechanisms of Primary Relaxation near Orientational-Glass and Structural-Glass Transitions. Journal of Low Temperature Physics, 2001, 122, 224-413.	1.4	6
59	Determination of the Ortho-Para Ratio in Gaseous Hydrogen Mixtures. Journal of Low Temperature Physics, 2004, 134, 401-406.	1.4	6
60	NMR Studies of Quantum Rotors Confined in Zeolite. Journal of Low Temperature Physics, 2010, 158, 509-514.	1.4	6
61	Nuclear Spin Relaxometry of ^3He Atoms Confined in Mesoporous MCM-41. Journal of Low Temperature Physics, 2019, 196, 308-313.	1.4	6
62	Nuclear spin-lattice relaxation of HD impurities in solid hydrogen. Physical Review B, 1992, 46, 2814-2820.	3.2	5
63	Nuclear spin coupling of ^3He to metallic Sb at low temperatures. European Physical Journal D, 1996, 46, 219-220.	0.4	5
64	New Phases for the Orientational Ordering of Quantum Rotors: H ₂ on Hexagonal BN. Journal of Low Temperature Physics, 1998, 111, 533-543.	1.4	5
65	Nonlinear spin dynamics of dilute ^3He - ^4He at very high B/T. Physica B: Condensed Matter, 2000, 284-288, 313-314.	2.7	5
66	The National High Magnetic Field Laboratory Ultra-High B/T Facility. Physica B: Condensed Matter, 2001, 294-295, 519-522.	2.7	5
67	Dielectric Constant Measurements of Solid ^4He . Journal of Low Temperature Physics, 2011, 162, 407-411.	1.4	5
68	Shifts of ortho-H ₂ NMR lines relative to HD in solid H ₂ . Physica B: Condensed Matter, 1994, 194-196, 957-958.	2.7	4
69	Nuclear Spin Relaxation of Powdered Metallic Antimony in Liquid ^3He . Journal of Low Temperature Physics, 1998, 112, 21-45.	1.4	4
70	Ultra-Low Temperature Thermometry Using Zeeman Perturbed NQR. Journal of Low Temperature Physics, 1998, 110, 763-778.	1.4	4
71	Spin Transport in Very Dilute ^3He - ^4He at Very High B/T. Journal of Low Temperature Physics, 2002, 126, 109-114.	1.4	4
72	Dynamics of HD Molecules Trapped in Cages of Zeolite. Journal of Low Temperature Physics, 2011, 162, 121-126.	1.4	4

#	ARTICLE	IF	CITATIONS
73	Nuclear Spin Relaxation of Very Dilute ³ He impurities in Solid ⁴ He. Journal of Physics: Conference Series, 2012, 400, 012031.	0.4	4
74	Search for 5 × 10 ⁻⁹ eV Axions with ADMX Four-Cavity Array. Springer Proceedings in Physics, 2020, , 53-62.	0.2	4
75	Cryogenic UHF FET oscillator for magnetic resonance detection. Cryogenics, 1988, 28, 32-35.	1.7	3
76	Quantum diffusion in the solid heliums. Applied Magnetic Resonance, 1995, 8, 361-372.	1.2	3
77	NMR Studies of Submonolayer ³ He Adsorbed on Hexagonal Boron Nitride. Journal of Low Temperature Physics, 2000, 121, 489-494.	1.4	3
78	The Orientational Ordering of Molecular Hydrogen in 2D. Journal of Low Temperature Physics, 2000, 120, 89-106.	1.4	3
79	New Results of Ultra-Low Temperature Experiments in the Second Landau Level in a Two-Dimensional Electron System. Journal of Low Temperature Physics, 2004, 134, 579-583.	1.4	3
80	The National High Magnetic Field Laboratory Ultra-High B/T Facility. Physica B: Condensed Matter, 2004, 346-347, 649-653.	2.7	3
81	Giant Viscosity Enhancement in a Spin-Polarized Fermi Liquid. Physical Review Letters, 2007, 99, 095301.	7.8	3
82	Measurements of the Dielectric Constant of Solid Helium at Low Temperatures. Journal of Low Temperature Physics, 2012, 168, 251-257.	1.4	3
83	Lattice Relaxation in Solid ⁴ He: Effect on Dynamics of ³ He Impurities. Journal of Low Temperature Physics, 2014, 175, 133-139.	1.4	3
84	Lattice Relaxation of ⁴ He with ³ He Impurities: NMR Studies. Journal of Physics: Conference Series, 2014, 568, 012017.	0.4	3
85	NMR Studies of ³ He Films on Boron Nitride. Journal of Physics: Conference Series, 2014, 568, 012018.	0.4	3
86	Nuclear magnetic resonance studies of tunneling in quantum solids at very low temperatures. Progress in Nuclear Magnetic Resonance Spectroscopy, 2015, 90-91, 74-91.	7.5	3
87	Phase separation in dilute solutions of ³ He in solid ⁴ He. Physical Review B, 2017, 95, .	3.2	3
88	NMR Studies of the Dynamics of 1D ³ He in ⁴ He Plated MCM-41. Journal of Low Temperature Physics, 2020, 201, 146-153.	1.4	3
89	Multistage separator column for ortho-hydrogen and para-deuterium production. Cryogenics, 1993, 33, 1008-1009.	1.7	2
90	A new orientational glass in low concentration N ₂ -Ar solid mixtures. European Physical Journal D, 1996, 46, 513-514.	0.4	2

#	ARTICLE	IF	CITATIONS
91	Molecular spectroscopy at very high magnetic fields. International Journal of Quantum Chemistry, 1997, 64, 629-633.	2.0	2
92	Coupling of the Nuclear Spin Alignment of Quadrupolar Nuclei to ^3He at Interfaces. Journal of Low Temperature Physics, 1998, 113, 323-328.	1.4	2
93	Cryogenic Mass Gauging in a Free-Falling Storage Tank. Journal of Low Temperature Physics, 2004, 134, 437-442.	1.4	2
94	Kapton Capacitance Thermometry at Low Temperatures and in High Magnetic Fields. Journal of Low Temperature Physics, 2007, 148, 899-902.	1.4	2
95	NMR Study of HD Adsorbed in a Z-type Metal-Organic Framework. Journal of Physics: Conference Series, 2012, 400, 012024.	0.4	2
96	Interactions and Diffusion of Methane and Hydrogen in Microporous Structures: Nuclear Magnetic Resonance (NMR) Studies. Materials, 2013, 6, 2464-2482.	2.9	2
97	Magneto-electric Effect and Dielectric Susceptibility Measurement Technique at Very Low Temperature. Journal of Low Temperature Physics, 2017, 187, 627-632.	1.4	2
98	First-principles study of an $S=1$ quasi one-dimensional quantum molecular magnetic material. Physical Review B, 2021, 103, .	3.2	1
99	Nuclear spin-relaxation in ^3He films. Physica B: Condensed Matter, 2003, 329-333, 140-141.	2.7	1
100	Memory effects for glass-like states of solid N_2/Ar mixtures. Physica B: Condensed Matter, 2003, 329-333, 1223-1224.	2.7	1
101	Thermal hysteresis of the dielectric susceptibility of solid oxygen in the audio frequency range. Physical Review B, 2008, 77, .	3.2	1
102	Molecular glasses: NMR and dielectric susceptibility measurements. Journal of Structural Chemistry, 2016, 57, 301-307.	1.0	1
103	Quantum Tunneling of ^3He in Solid ^4He : A New Analysis. Journal of Low Temperature Physics, 2016, 185, 354-362.	1.4	1
104	Orientalional Glasses: NMR and Electric Susceptibility Studies. Magnetochemistry, 2017, 3, 33.	2.4	1
105	Anomalous frequency dependence of magneto-electric effect in doped DTN. Physica B: Condensed Matter, 2021, 608, 412875.	2.7	1
106	Symmetry Breaking in Haloscope Microwave Cavities. Springer Proceedings in Physics, 2018, , 21-29.	0.2	1
107	On the orientational ordering in the quadrupolar glass phase of solid ortho-para hydrogen mixtures. AIP Conference Proceedings, 1983, , .	0.4	0
108	Analog simulation of interacting diatomic molecules on two-dimensional lattices. American Journal of Physics, 1987, 55, 565-570.	0.7	0

#	ARTICLE	IF	CITATIONS
109	Field-resolved NQR spectroscopy for ultra-low temperature thermometry. AIP Conference Proceedings, 1989, , .	0.4	0
110	Low-Energy Excitations in the Orientational Glass State of Solid Hydrogen. Physica Status Solidi (B): Basic Research, 1989, 155, K109.	1.5	0
111	Orientational ordering in thick films of molecular hydrogen on BN. European Physical Journal D, 1996, 46, 515-516.	0.4	0
112	Relaxation in Powdered Metallic Antimony in Contact with Liquid ³ He. Journal of Low Temperature Physics, 1998, 110, 369-374.	1.4	0
113	ORDER/DISORDER TRANSITIONS OF ORTHO-PARA HYDROGEN MONOLAYERS AT LOW TEMPERATURES. International Journal of Modern Physics B, 2002, 16, 3127-3130.	2.0	0
114	INVESTIGATION OF MULTIPLE-SPIN EXCHANGE IN 2D FILMS OF ³ He: NMR STUDIES. International Journal of Modern Physics B, 2002, 16, 3123-3126.	2.0	0
115	Orientational ordering in monolayers of ortho-para hydrogen. Low Temperature Physics, 2003, 29, 736-739.	0.6	0
116	Measurements of the Nuclear Spin Relaxation Times for Small Grains of Solid Hydrogen Suspended in Liquid Helium. Journal of Low Temperature Physics, 2004, 134, 775-780.	1.4	0
117	Ortho-Para Hydrogen Ratiometer Design. AIP Conference Proceedings, 2006, , .	0.4	0
118	Measurements of the nuclear spin-spin relaxation times for commensurate ³ He-Ne films adsorbed on hexagonal boron nitride. Journal of Physics: Conference Series, 2009, 150, 032099.	0.4	0
119	NMR studies of methane and hydrogen in microporous materials. Low Temperature Physics, 2016, 42, 76-79.	0.6	0
120	NMR studies of the dynamics of HD adsorbed in MCM-41. Microporous and Mesoporous Materials, 2020, 294, 109921.	4.4	0
121	ORDER/DISORDER TRANSITIONS OF ORTHO-PARA HYDROGEN MONOLAYERS AT LOW TEMPERATURES. , 2002, , .		0
122	INVESTIGATION OF MULTIPLE-SPIN EXCHANGE IN 2D FILMS OF ³ He: NMR STUDIES. , 2002, , .		0