Carla Andreani

List of Publications by Year
in descending order

220 papers	4,608 citations	94433 37 h-index	144013 57 g-index
224 all docs	224 docs citations	224 times ranked	2157 citing authors

#	Article	IF	Citations
1	Neutron diffraction methods for the study of residual stress fields. Advances in Physics, 1985, 34, 445-473.	14.4	433
2	Measurement of momentum distribution of lightatoms and molecules in condensed matter systems using inelastic neutron scattering. Advances in Physics, 2005, 54, 377-469.	14.4	219
3	Research opportunities with compact accelerator-driven neutron sources. Physics Reports, 2016, 654, 1-58.	25.6	91
4	The instrument suite of the European Spallation Source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 957, 163402.	1.6	90
5	Excess of Proton Mean Kinetic Energy in Supercooled Water. Physical Review Letters, 2008, 100, 127802.	7.8	84
6	Electron-volt neutron spectroscopy: beyond fundamental systems. Advances in Physics, 2017, 66, 1-73.	14.4	81
7	Reconstruction of the orientational pair-correlation function from neutron-diffraction data: The case of liquid hydrogen iodide. Physical Review E, 1993, 47, 2598-2605.	2.1	77
8	A New Hardware/Software Platform and a New 1/E Neutron Source for Soft Error Studies: Testing FPGAs at the ISIS Facility. IEEE Transactions on Nuclear Science, 2007, 54, 1184-1189.	2.0	77
9	Measurement of internal stress within bulk materials using neutron diffraction. NDT International, 1981, 14, 249-254.	0.0	75
10	Proton Momentum Distribution of Liquid Water from Room Temperature to the Supercritical Phase. Physical Review Letters, 2008, 100, 177801.	7.8	75
11	Microscopic structure of low temperature liquid ammonia: A neutron diffraction experiment. Journal of Chemical Physics, 1995, 102, 7650-7655.	3.0	74
12	VESUVIO: a novel instrument for performing spectroscopic studies in condensed matter with eV neutrons at the ISIS facility. Physica B: Condensed Matter, 2000, 276-278, 200-201.	2.7	72
13	Proton quantum coherence observed in water confined in silica nanopores. Journal of Chemical Physics, 2007, 127, 154501.	3.0	68
14	Direct Measurement of Competing Quantum Effects on the Kinetic Energy of Heavy Water upon Melting. Journal of Physical Chemistry Letters, 2013, 4, 3251-3256.	4.6	64
15	Facility for fast neutron irradiation tests of electronics at the ISIS spallation neutron source. Applied Physics Letters, 2008, 92, 114101.	3.3	63
16	Dynamics of hydrogen atoms in superoxide dismutase by quasielastic neutron scattering. Biophysical Journal, 1995, 68, 2519-2523.	0.5	62
17	Initial state effects in deep inelastic neutron scattering. Physical Review B, 1989, 39, 2022-2028.	3.2	58
18	Characterisation of the incident beam and current diffraction capabilities on the VESUVIO spectrometer. Measurement Science and Technology, 2017, 28, 095501.	2.6	55

#	Article	IF	Citations
19	YAP scintillators for resonant detection of epithermal neutrons at pulsed neutron sources. Review of Scientific Instruments, 2004, 75, 4880-4890.	1.3	52
20	Single particle dynamics in fluid and solid hydrogen sulphide: An inelastic neutron scattering study. Journal of Chemical Physics, 2001, 114, 387.	3.0	46
21	Deep inelastic neutron scattering from fluid hydrogen and deuterium: From vibrational excitations to the impulse approximation. Physical Review B, 1999, 60, 10008-10021.	3.2	44
22	Resolution of the VESUVIO spectrometer for High-energy Inelastic Neutron Scattering experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 552, 463-476.	1.6	44
23	Foil cycling technique for the VESUVIO spectrometer operating in the resonance detector configuration. Review of Scientific Instruments, 2006, 77, 095103.	1.3	44
24	Spherical momentum distribution of the protons in hexagonal ice from modeling of inelastic neutron scattering data. Journal of Chemical Physics, 2012, 136, 024504.	3.0	43
25	A new approach to impulsive neutron scattering. Journal of Physics C: Solid State Physics, 1986, 19, L835-L840.	1.5	42
26	Resolution in deep inelastic neutron scattering using pulsed neutron sources. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1989, 276, 297-305.	1.6	41
27	Cadmiumâ€“Zincâ€“Telluride photon detector for epithermal neutron spectroscopyâ€”pulse height response characterisation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 526, 477-492.	1.6	41
28	DINS measurements on VESUVIO in the Resonance Detector configuration: proton mean kinetic energy in water. Journal of Instrumentation, 2006, 1, P04001-P04001.	1.2	41
29	Structural characterization of diatomic fluids by diffraction studies. Reports on Progress in Physics, 1991, 54, 731-788.	20.1	40
30	Electron-volt spectroscopy at a pulsed neutron source using a resonance detector technique. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 481, 509-520.	1.6	39
31	A resonant detector for high-energy inelastic neutron scattering experiments. Applied Physics Letters, 2004, 85, 5454-5456.	3.3	39
32	Characterization of the neutron field at the ISIS-VESUVIO facility by means of a bonner sphere spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 612, 143-148.	1.6	39
33	Single-crystal diamond detector for time-resolved measurements of a pulsed fast-neutron beam. Europhysics Letters, 2010, 92, 68003.	2.0	39
34	The quantum nature of the OH stretching mode in ice and water probed by neutron scattering experiments. Journal of Chemical Physics, 2013, 139, 074504.	3.0	39
35	Proton dynamics in supercritical water. Journal of Chemical Physics, 2001, 115, 11243-11248.	3.0	38
36	Fabrication of 3D metallic photonic crystals by X-ray lithography. Microelectronic Engineering, 2003, 67-68, 479-486.	2.4	38

#	Article	IF	Citations
37	Double difference method in deep inelastic neutron scattering on the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 497, 535-549.	1.6	38
38	Light and neutron scattering studies of the OH stretching band in liquid and supercritical water. Journal of Chemical Physics, 1998, 108, 450-454.	3.0	36
39	CdZnTe Î³ detector for deep inelastic neutron scattering on the VESUVIO spectrometer. Applied Physics A: Materials Science and Processing, 2004, 78, 903-913.	2.3	34
40	Temperature dependence of the zero point kinetic energy in ice and water above room temperature. Chemical Physics, 2013, 427, 111-116.	1.9	34
41	Fission diamond detectors for fast-neutron ToF spectroscopy. Europhysics Letters, 2011, 94, 62001.	2.0	33
42	Direct Measurements of Quantum Kinetic Energy Tensor in Stable and Metastable Water near the Triple Point: An Experimental Benchmark. Journal of Physical Chemistry Letters, 2016, 7, 2216-2220.	4.6	33
43	Deep-Inelastic Neutron Scattering Determination of the Single-Particle Kinetic Energy in Solid and LiquidH3e. Physical Review Letters, 2001, 86, 4584-4587.	7.8	32
44	A combined INS and DINS study of proton quantum dynamics of ice and water across the triple point and in the supercritical phase. Chemical Physics, 2013, 427, 106-110.	1.9	32
45	Quantum and classical behavior of single-particle dynamics in dense liquidHe4. Physical Review B, 1994, 50, 12744-12746.	3.2	31
46	TOSCA: a world class inelastic neutron spectrometer. Physica B: Condensed Matter, 1997, 241-243, 154-156.	2.7	30
47	Interaction of single water molecules with silanols in mesoporous silica. Physical Chemistry Chemical Physics, 2011, 13, 6022.	2.8	30
48	Absolute measurements of the stretching mode density of states in polycrystalline ice Ih. Journal of Chemical Physics, 1985, 83, 750-753.	3.0	29
49	Deep inelastic neutron scattering offD2andH2and momentum distributions of nuclei in diatomic molecules. Physical Review B, 1995, 51, 8854-8863.	3.2	29
50	Orientational correlations and hydrogen bonding in liquid hydrogen chloride. Journal of Chemical Physics, 1997, 107, 214-221.	3.0	29
51	Imaging of cultural heritage objects using neutron resonances. Journal of Analytical Atomic Spectrometry, 2011, 26, 992.	3.0	29
52	Neutron resonance transmission imaging for 3D elemental mapping at the ISIS spallation neutron source. Journal of Analytical Atomic Spectrometry, 2015, 30, 745-750.	3.0	29
53	Measurement of the kinetic energy in through the superfluid transition by very high-energy neutron scattering. Journal of Physics Condensed Matter, 1997, 9, 10639-10649.	1.8	28
54	Diamond detectors for fast neutron measurements at pulsed spallation sources. Journal of Instrumentation, 2012, 7, C05015-C05015.	1.2	28

#	Article	IF	Citations
55	Evolution of Hydrogen Dynamics in Amorphous Ice with Density. Journal of Physical Chemistry Letters, 2015, 6, 2038-2042.	4.6	28
56	Quantum effects in water: proton kinetic energy maxima in stable and supercooled liquid. Brazilian Journal of Physics, 2009, 39, 318-321.	1.4	27
57	Virtual unrolling and deciphering of Herculaneum papyri by X-ray phase-contrast tomography. Scientific Reports, 2016, 6, 27227.	3.3	27
58	Soft confinement of water in graphene-oxide membranes. Carbon, 2016, 108, 199-203.	10.3	27
59	Atomic Quantum Dynamics in Materials Research. Experimental Methods in the Physical Sciences, 2017, , 403-457.	0.1	27
60	Neutron diffraction study of the partial pair correlation functions of liquid hydrogen sulphide. Molecular Physics, 1991, 73, 407-415.	1.7	25
61	Resolution function in deep inelastic neutron scattering using the Foil Cycling Technique. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 570, 498-510.	1.6	25
62	Neutron-diffraction study of liquid hydrogen iodide. Physical Review A, 1992, 46, 4709-4716.	2.5	24
63	Deep inelastic neutron scattering from fluid para- and orthohydrogen. Journal of Physics Condensed Matter, 1998, 10, 7091-7111.	1.8	24
64	Temperature dependence of neutron-induced soft errors in SRAMs. Microelectronics Reliability, 2012, 52, 289-293.	1.7	24
65	VESUVIOâ€"the double difference inverse geometry spectrometer at ISIS. Physica B: Condensed Matter, 2004, 350, E659-E662.	2.7	23
66	Aggregation States of AÎ²1â€“40, AÎ²1â€“42 and AÎ²p3â€“42 Amyloid Beta Peptides: A SANS Study. International Journal of Molecular Sciences, 2019, 20, 4126.	4.1	23
67	Fission diamond detector tests at the ISIS spallation neutron source. Nuclear Physics, Section B, Proceedings Supplements, 2011, 215, 313-315.	0.4	22
68	The structure of liquid bromine. Molecular Physics, 1985, 55, 887-899.	1.7	21
69	? detectors for Deep Inelastic Neutron Scattering in the 1-100 eV energy region. Applied Physics A: Materials Science and Processing, 2002, 74, s189-s190.	2.3	21
70	The resonant detector and its application to epithermal neutron spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 529, 293-300.	1.6	21
71	Neutron-Induced Upsets in NAND Floating Gate Memories. IEEE Transactions on Device and Materials Reliability, 2012, 12, 437-444.	2.0	21
72	Neutron diffraction from liquid hydrogen bromide: Study of the orientational correlations. Physical Review B, 1994, 49, 3811-3820.	3.2	20

#	Article	IF	Citations
73	Probing the effects of 2D confinement on hydrogen dynamics in water and ice adsorbed in graphene oxide sponges. Physical Chemistry Chemical Physics, 2015, 17, 31680-31684.	2.8	20
74	Composition and corrosion phases of Etruscan Bronzes from Villanovan Age. Measurement Science and Technology, 2008, 19, 034004.	2.6	19
75	-Ray background sources in the VESUVIO spectrometer at ISIS spallation neutron source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, 121-124.	1.6	19
76	Measurements of gamma-ray background spectra at spallation neutron source beamlines. Journal of Analytical Atomic Spectrometry, 2014, 29, 1897-1903.	3.0	19
77	Isotope identification capabilities using time resolved prompt gamma emission from epithermal neutrons. Journal of Instrumentation, 2016, 11, C03060-C03060.	1.2	19
78	First analysis of ancient burned human skeletal remains probed by neutron and optical vibrational spectroscopy. Science Advances, 2019, 5, eaaw1292.	10.3	19
79	Neutrons for Cultural Heritageâ€"Techniques, Sensors, and Detection. Sensors, 2020, 20, 502.	3.8	19
80	VESUVIO+: The Current Testbed for a Next-generation Epithermal Neutron Spectrometer. Journal of Physics: Conference Series, 2018, 1021, 012026.	0.4	18
81	Diamond detectors for fast neutron irradiation experiments. Nuclear Physics, Section B, Proceedings Supplements, 2011, 215, 242-246.	0.4	17
82	Egyptian metallic inks on textiles from the 15th century BCE unravelled by non-invasive techniques and chemometric analysis. Scientific Reports, 2019, 9, 7310.	3.3	17
83	Neutron-diffraction study of liquid iodine. Physical Review A, 1991, 44, 5018-5024.	2.5	16
84	The Harmonic Picture of Nuclear Mean Kinetic Energies in Heavy Water. Journal of Physics: Conference Series, 2014, 571, 012003.	0.4	16
85	Neutronic developments on TOSCA and VESPA: Progress to date. Physica B: Condensed Matter, 2019, 562, 107-111.	2.7	16
86	Neutron-induced soft errors in advanced flash memories. , 2008, , .		15
87	A nondestructive stratigraphic and radiographic neutron study of Lorenzo Ghibertiâ€™s reliefs from paradise and north doors of Florence baptistery. Journal of Applied Physics, 2009, 106, 074909.	2.5	15
88	Orthodontic archwire composition and phase analyses by neutron spectroscopy. Dental Materials Journal, 2017, 36, 282-288.	1.8	15
89	Compositionâ€•Nanostructure Steered Performance Predictions in Steel Wires. Nanomaterials, 2019, 9, 1119.	4.1	15
90	Neutron diffraction study of liquid fluorine at 77K. Molecular Physics, 1986, 57, 931-938.	1.7	14

#	Article	IF	Citations
91	X-Ray Diffraction Structure of Liquid Hydrogen Sulphide. Europhysics Letters, 1988, 5, 145-149.	2.0	14
92	Phonon Density of States from a Crystal?analyzer Inverse-geometry Spectrometer: A Study on Ordered Solid Hydrogen Sulfide and Hydrogen Chloride. Journal of Neutron Research, 2003, 11, 123-143.	1.1	14
93	He4adsorbed in cylindrical silica nanopores: Effect of size on the single-atom mean kinetic energy. Physical Review B, 2007, 75, .	3.2	14
94	Radiative neutron capture as a counting technique at pulsed spallation neutron sources: a review of current progress. Reports on Progress in Physics, 2016, 79, 094301.	20.1	14
95	Compositional studies of functional orthodontic archwires using prompt-gamma activation analysis at a pulsed neutron source. Journal of Analytical Atomic Spectrometry, 2017, 32, 1420-1427.	3.0	14
96	A neutron study of sealed pottery from the grave-goods of Kha and Merit. Journal of Analytical Atomic Spectrometry, 2017, 32, 1342-1347.	3.0	14
97	Measurement of the para-hydrogen concentration in the ISIS moderators using neutron transmission and thermal conductivity. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 888, 88-95.	1.6	14
98	The Oâ€“H stretching band in ice Ih derived via eV neutron spectroscopy on VESUVIO using the new very low angle detector bank. Applied Physics A: Materials Science and Processing, 2006, 83, 453-460.	2.3	13
99	The structure of liquid sulphuric acid. Molecular Physics, 1986, 58, 299-306.	1.7	12
100	Single-particle dynamics in fluid hydrogen and deuterium. Journal of Physics Condensed Matter, 2000, 12, A139-A145.	1.8	12
101	Ground state proton dynamics in stable phases of water. Chemical Physics Letters, 2011, 518, 1-6.	2.6	12
102	Measurement of proton momentum distributions using a direct geometry instrument. Journal of Physics: Conference Series, 2014, 571, 012007.	0.4	12
103	Fast neutron irradiation tests of flash memories used in space environment at the ISIS spallation neutron source. AIP Advances, 2018, 8, .	1.3	12
104	The onset of the tetrabonded structure in liquid water. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	12
105	A procedure for multiple scattering corrections in a neutron incoherent inelastic scattering experiment. Nuclear Instruments & Methods in Physics Research B, 1989, 36, 216-221.	1.4	11
106	Temperature dependence of the dynamics of superoxide dismutase by quasi-elastic neutron scattering. Physica B: Condensed Matter, 1996, 226, 56-60.	2.7	11
107	Pietropaoloet al.Reply:. Physical Review Letters, 2009, 103, .	7.8	11
108	Scaling trends of neutron effects in MLC NAND Flash memories. , 2010, , .		11

#	Article	IF	Citations
109	Pulsed neutron gamma-ray logging in archaeological site survey. Measurement Science and Technology, 2013, 24, 125903.	2.6	11
110	Egyptian Grave Goods of Kha and Merit Studied by Neutron and Gamma Techniques. Angewandte Chemie - International Edition, 2018, 57, 7375-7379.	13.8	11
111	Hydrogen Dynamics in Supercritical Water Probed by Neutron Scattering and Computer Simulations. Journal of Physical Chemistry Letters, 2020, 11, 9461-9467.	4.6	11
112	Neutron and X-ray diffraction patterns of aqueous sulphuric acid solutions. Molecular Physics, 1987, 62, 765-773.	1.7	10
113	Model-independent analysis of inelastic-neutron-scattering data at high momentum transfer. Physical Review B, 1996, 54, 6255-6262.	3.2	10
114	Single-particle mean kinetic energy in low-density supercritical 4 He. Europhysics Letters, 2000, 50, 202-208.	2.0	10
115	Kinetic energy of He atoms in liquid4Heâ^'3Hemixtures. Physical Review B, 2003, 68, .	3.2	10
116	Simultaneous and integrated neutron-based techniques for material analysis of a metallic ancient flute. Measurement Science and Technology, 2013, 24, 095601.	2.6	10
117	Temperature dependence of molecular kinetic energy in dense fluid parahydrogen. Europhysics Letters, 1997, 37, 329-334.	2.0	9
118	Photon detectors for epithermal neutron scattering at high-Ï‰ and low-q. Physica B: Condensed Matter, 2004, 350, E857-E859.	2.7	9
119	Development of the very low angle detector for epithermal neutron scattering at low momentum transfers. IEEE Transactions on Nuclear Science, 2005, 52, 1092-1097.	2.0	9
120	Mean kinetic energy of helium atoms in fluid3He and3Heâ€“4He mixtures. Journal of Physics Condensed Matter, 2006, 18, 5587-5596.	1.8	9
121	Epithermal neutron instrumentation at ISIS. Journal of Physics: Conference Series, 2014, 571, 012005.	0.4	9
122	Hydrogen mean force and anharmonicity in polycrystalline and amorphous ice. Frontiers of Physics, 2018, 13, 1.	5.0	9
123	Optimization of detection strategies for epithermal neutron spectroscopy using photon-sensitive detectors. Review of Scientific Instruments, 2019, 90, 073901.	1.3	9
124	PRISMA - a spectrometer for the measurement of coherent excitations on a pulsed spallation neutron source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1987, 254, 333-341.	1.6	8
125	Diffraction Studies of Liquid Deuterium Sulphide. Europhysics Letters, 1989, 8, 441-446.	2.0	8
126	Constant-q data representation in Neutron Compton scattering on the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 594, 244-252.	1.6	8

#	Article	IF	Citations
127	Novel Neutron Imaging Techniques for Cultural Heritage Objects. Neutron Scattering Applications and Techniques, 2009, , 229-252.	0.2	8
128	Non destructive neutron diffraction measurements of cavities, inhomogeneities, and residual strain in bronzes of Ghibertiâ€™s relief from the Gates of Paradise. Journal of Applied Physics, 2011, 109, 064908.	2.5	8
129	Compact accelerator-driven neutron sources. European Physical Journal Plus, 2016, 131, 1.	2.6	8
130	Characterization of Î³-ray background at IMAT beamline of ISIS Spallation Neutron Source. Journal of Instrumentation, 2017, 12, P08005-P08005.	1.2	8
131	Cu-based alloys as a benchmark for T-PGAA quantitative analysis at spallation neutron sources. Journal of Analytical Atomic Spectrometry, 2020, 35, 331-340.	3.0	8
132	Observations of the dispersion relation of the O-D stretching modes in heavy ice Ih. Journal of Physics C: Solid State Physics, 1983, 16, 3055-3060.	1.5	7
133	Assessment of a silicon detector for pulsed neutron scattering experiments. Physica B: Condensed Matter, 2004, 350, E853-E856.	2.7	7
134	Pressure dependence of protein dynamics investigated using elastic and quasielastic neutron scattering. Journal of Physics Condensed Matter, 2005, 17, S3101-S3109.	1.8	7
135	Factors impacting the temperature dependence of soft errors in commercial SRAMs. , 2008, , .		7
136	Neutrons and music: Imaging investigation of ancient wind musical instruments. Nuclear Instruments & Methods in Physics Research B, 2014, 336, 63-69.	1.4	7
137	FLUKA simulations and benchmark measurements of the YAP(Ce) scintillators installed on the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 969, 164012.	1.6	7
138	Thermal neutron cross sections of amino acids from average contributions of functional groups. Journal of Physics Condensed Matter, 2021, 33, 285901.	1.8	7
139	On the dynamical properties of liquid hydrogen chloride: a light scattering experiment. Molecular Physics, 1981, 44, 445-457.	1.7	6
140	Incoherent neutron scattering on polycrystalline ice Ih. Journal of Physics C: Solid State Physics, 1983, 16, L513-L516.	1.5	6
141	Vibrational density of states in polycrystalline sulphuric acid. Molecular Physics, 1989, 66, 747-755.	1.7	6
142	Comparison of Cadmiumâ€“Zincâ€“Telluride semiconductor and Yttriumâ€“Aluminumâ€“Perovskite scintillator as photon detectors for epithermal neutron spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 567, 337-340.	1.6	6
143	Texture and structure studies on marbles from Villa Adriana via neutron diffraction technique. Journal of Neutron Research, 2006, 14, 55-58.	1.1	6
144	A silicon photomultiplier readout for time of flight neutron spectroscopy with Î³-ray detectors. Review of Scientific Instruments, 2009, 80, 095108.	1.3	6

#	Article	IF	Citations
145	Enhancement of counting statistics and noise reduction in the forward-scattering detectors on the VESUVIO spectrometer. Journal of Physics: Conference Series, 2018, 1055, 012008.	0.4	6
146	Gamma background characterization on VESUVIO: before and after the moderator upgrade. Journal of Physics: Conference Series, 2018, 1055, 012009.	0.4	6
147	MWCNT/rGO/natural rubber latex dispersions for innovative, piezo-resistive and cement-based composite sensors. Scientific Reports, 2021, 11, 18975.	3.3	6
148	Electronic structure of FCC Fe-Mn alloys. I. Charge-density measurements. Journal of Physics F: Metal Physics, 1987, 17, 1419-1423.	1.6	5
149	Density of vibrational states in hydrogen bonded crystals. Molecular Physics, 1989, 68, 681-686.	1.7	5
150	Low frequency dynamics in the enzyme superoxide dismutase revealed by inelastic neutron scattering. Physica B: Condensed Matter, 1997, 234-236, 223-224.	2.7	5
151	Atomic and molecular momentum distributions in quantum fluids by Neutron Compton Scattering. Physica B: Condensed Matter, 1997, 234-236, 329-330.	2.7	5
152	High-resolution complex structures for two-dimensional photonic crystals realized by x-ray diffraction lithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 748.	1.6	5
153	Prompt gamma activation analysis and time of flight neutron diffraction on â€˜black boxesâ€™ in the â€˜Ancient Charmâ€™ project. Journal of Radioanalytical and Nuclear Chemistry, 2008, 278, 661-664.	1.5	5
154	Advances on detectors for low-angle scattering of epithermal neutrons. Measurement Science and Technology, 2008, 19, 047001.	2.6	5
155	Comment on â€œHigh-energy neutron scattering from hydrogen using a direct geometry spectrometerâ€: Physical Review B, 2011, 84, .	3.2	5
156	From neutron Compton profiles to momentum distribution: Assessment of direct numerical determination. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 704, 36-39.	1.6	5
157	A Python Algorithm to Analyze Inelastic Neutron Scattering Spectra Based on the y-Scale Formalism. Journal of Chemical Theory and Computation, 2020, 16, 7671-7680.	5.3	5
158	The effective isotropy of the hydrogen local potential in biphenyl and other hydrocarbons. Journal of Chemical Physics, 2020, 153, 234306.	3.0	5
159	The neutron cross section of barite-enriched concrete for radioprotection shielding in the range 1 meVâ€“1 keV. European Physical Journal Plus, 2021, 136, 1.	2.6	5
160	Looking for Minor Phenolic Compounds in Extra Virgin Olive Oils Using Neutron and Raman Spectroscopies. Antioxidants, 2021, 10, 643.	5.1	5
161	Orientational correlation in liquid hydrogen halides: The special case of HCl. Journal of Molecular Liquids, 1998, 78, 217-223.	4.9	4
162	Dynamics of trypsin under pressure. Physica B: Condensed Matter, 2000, 276-278, 510-511.	2.7	4

#	Article	IF	Citations
163	Title is missing!. Journal of Low Temperature Physics, 2002, 126, 57-62.	1.4	4
164	The very low angle detector for high-energy inelastic neutron scattering on the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 589, 296-303.	1.6	4
165	Modern and Historical Engineering Components Investigated by Neutron Diffraction on ENGIN-X. Journal of Solid Mechanics and Materials Engineering, 2012, 6, 408-418.	0.5	4
166	Discussion: Measurement and Instrumentation. Journal of Physics: Conference Series, 2014, 571, 012010.	0.4	4
167	High-energy neutrons characterization of a safety critical computing system. , 2017, , .		4
168	The road to a station for epithermal and thermal neutron analysis. Journal of Physics: Conference Series, 2018, 1055, 012017.	0.4	4
169	SANS study of Amyloid<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e303" altimg="si64.gif"><mml:msub><mml:mrow><mml:mi>Î²</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub><mml:mo>â^’</mml:mo></mml:math> Unfolded monomers in DMSO, multidimensional aggregates in water medium. Physica A: Statistical Mechanics and Its Applications, 2019, 517, 385-391.	2.6	4
170	Light scattering from hydrogen and deuterium halides. Physics Letters, Section A: General, Atomic and Solid State Physics, 1979, 74, 335-336.	2.1	3
171	Vibrational density of states of the hydrogen sites in hydrogen-bonded molecular solids. Journal of Molecular Structure, 1991, 250, 385-393.	3.6	3
172	On the multiple scattering corrections in an inelastic neutron scattering experiment. Nuclear Instruments & Methods in Physics Research B, 1991, 61, 123-126.	1.4	3
173	Stretching density of states of the deuterium sites in polycrystalline D2O. Molecular Physics, 1991, 73, 737-743.	1.7	3
174	Asymptotic behaviour of the scaling function in deep inelastic neutron scattering. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 171, 76-80.	2.1	3
175	Development of resonant detectors for epithermal neutron spectroscopy at pulsed neutron sources. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 259-260.	1.6	3
176	Short-time single particle dynamics in quantum and molecular systems. Physica B: Condensed Matter, 2004, 350, 231-238.	2.7	3
177	Development of new instrumentation for epithermal neutron scattering at very low angles. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 535, 121-125.	1.6	3
178	Development of the Very Low Angle Detector (VLAD) for detection of epithermal neutrons at low momentum transfers. Nuclear Physics, Section B, Proceedings Supplements, 2006, 150, 421-425.	0.4	3
179	Structure and Single Proton Dynamics of Bulk Supercooled Water. Journal of Molecular Liquids, 2007, 136, 236-240.	4.9	3
180	Diamond detector for high rate monitors of fast neutrons beams. , 2012, , .		3

#	Article	IF	Citations
181	Localization of inclusions in multiple prompt gamma ray analysis: a feasibility study. Journal of Physics: Conference Series, 2013, 470, 012001.	0.4	3
182	Discussion: Nuclear Quantum Dynamics - Protons and Beyond. Journal of Physics: Conference Series, 2014, 571, 012004.	0.4	3
183	Absolute efficiency calibration of a coaxial HPGe detector for quantitative PGAA and T-PGAA. Journal of Physics: Conference Series, 2018, 1055, 012010.	0.4	3
184	Validation of a new data-analysis software for multiple-peak analysis of Î³ spectra at ISIS pulsed Neutron and Muon Source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 938, 51-55.	1.6	3
185	Sumerian Pottery Technology Studied Through Neutron Diffraction and Chemometrics at Abu Tbeirah (Iraq). Geosciences (Switzerland), 2019, 9, 74.	2.2	3
186	THE RESONANCE DETECTOR SPECTROMETER FOR NEUTRON SPECTROSCOPY IN THE EV ENERGY REGION. , 2003, , .		3
187	A new experimental method for phase diagram determinations by neutron absorption spectroscopy. Nuclear Instruments & Methods in Physics Research B, 1990, 52, 199-205.	1.4	2
188	Recent developments of the e.VERDI project at ISIS. Physica B: Condensed Matter, 2004, 350, E837-E840.	2.7	2
189	VLAD for epithermal neutron scattering experiments at large energy transfers. Journal of Physics: Conference Series, 2006, 41, 451-459.	0.4	2
190	Investigation of high-energy inelastic neutron scattering from liquid water confined in silica xerogel. Physica B: Condensed Matter, 2006, 385-386, 1095-1097.	2.7	2
191	Investigation of Residual Stress Distribution of Wheel Rims Using Neutron Diffraction. Materials Science Forum, 2011, 681, 522-526.	0.3	2
192	Neutron and alpha SER in advanced NAND Flash memories. , 2013, , .		2
193	Applications of Compact Accelerator-driven Neutron Sources: An Updated Assessment from the Perspective of Materials Research in Italy. Physics Procedia, 2014, 60, 228-237.	1.2	2
194	Egyptian Grave Goods of Kha and Merit Studied by Neutron and Gamma Techniques. Angewandte Chemie, 2018, 130, 7497-7501.	2.0	2
195	Neutrons matter: VII international workshop on electron-Volt neutron spectroscopy â€“ A preface to the workshop proceedings. Journal of Physics: Conference Series, 2018, 1055, 011001.	0.4	2
196	Setup and experimental results analysis of COTS Camera and SRAMs at the ISIS neutron facility. , 2018, , .		2
197	Neutrons Matter â€“ VII International Workshop on Electron-Volt Neutron Spectroscopy. Neutron News, 2018, 29, 4-6.	0.2	2
198	Neutron Diffraction and (n, Î³)-Based Techniques for Cultural Heritage. , 2019, , 61-77.		2

#	Article	IF	Citations
199	Ultralow Power System-on-Chip SRAM Characterization by Alpha and Neutron Irradiation. IEEE Transactions on Nuclear Science, 2021, 68, 2598-2608.	2.0	2
200	Time-resolved prompt-gamma activation analysis at spallation neutron sources and applications to cultural heritage, security, and radiation protection. Physics Open, 2021, 7, 100073.	1.5	2
201	Evaluation of the imaging performance of the TECNOMUSE muon tomograph and its feasibility in a real scenario. European Physical Journal Plus, 2021, 136, 1.	2.6	2
202	Hydrogen Detection Limits and Instrument Sensitivity of High-Resolution Broadband Neutron Spectrometers. Analytical Chemistry, 2022, 94, 5023-5028.	6.5	2
203	Development of the very low angle detector for epithermal neutron scattering at low momentum transfers. , 0, , .		1
204	Neutron resonance capture analysis and chemometric tools: an integrated approach. Journal of Physics: Conference Series, 2018, 1055, 012005.	0.4	1
205	A complementary compact laser based neutron source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 909, 323-326.	1.6	1
206	Hydrogen nuclear mean kinetic energy in water down the Mariana Trench: Competition of pressure and salinity. Journal of Chemical Physics, 2020, 153, 134306.	3.0	1
207	Chemometrics tools for Advanced Spectroscopic Analyses. Journal of Physics: Conference Series, 2020, 1548, 012030.	0.4	1
208	Neutron irradiation of an ARM Cortex-M0 Core. , 2018, , .		1
209	Vibrational dephasing in liquid hydrogen chloride. Molecular Physics, 1983, 48, 593-597.	1.7	0
210	PRISMA: A Unique Phonon Spectrometer. Europhysics News, 1990, 21, 147-151.	0.3	0
211	Energy-resolved neutron radiography. Physica B: Condensed Matter, 1991, 174, 572-576.	2.7	0
212	An X-ray diffraction study of liquid chlorine. Molecular Physics, 1994, 82, 1181-1186.	1.7	0
213	Temperature dependence of single-particle kinetic energy in fluid parahydrogen. Physica B: Condensed Matter, 1997, 234-236, 334-336.	2.7	0
214	Deep inelastic neutron scattering from fluid and solid H2and D2. Neutron News, 2000, 11, 21-25.	0.2	0
215	Probing Our Heritage with Neutronsâ€"One Successful Story. Neutron Scattering Applications and Techniques, 2017, , 3-18.	0.2	0
216	Towards a compact Laser based Neutron source. Journal of Physics: Conference Series, 2018, 1021, 012011.	0.4	0

#	Article	IF	Citations
217	Effect of coating systems as a barrier to humidity for lutherie woods studied by neutron radiography. Journal of Cultural Heritage, 2020, 43, 255-260.	3.3	0
218	Towards Neutron Scattering Identification of Olive Oilâ€™s Antioxidant Properties. Neutron News, 0, , 1-2.	0.2	0
219	Initial State Effects in Deep Inelastic Neutron Scattering. , 1989, , 355-359.		0
220	Are Hydrogen Bonds Present in Hydrogen Halides Liquids Other Than HF?. , 1994, , 113-118.		0