Giovanni Romanelli

List of Publications by Year
in descending order

77	955	430874 18	526287 27
papers	citations	h-index	g-index

79	79	79	470
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electron-volt neutron spectroscopy: beyond fundamental systems. Advances in Physics, 2017, 66, 1-73.	14.4	81
2	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
3	Characterisation of the incident beam and current diffraction capabilities on the VESUVIO spectrometer. Measurement Science and Technology, 2017, 28, 095501.	2.6	55
4	Unraveling the Ground-State Structure of BaZrO₃ by Neutron Scattering Experiments and First-Principles Calculations. Chemistry of Materials, 2020, 32, 2824-2835.	6.7	41
5	Temperature dependence of the zero point kinetic energy in ice and water above room temperature. Chemical Physics, 2013, 427, 111-116.	1.9	34
6	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
7	Nuclear dynamics and phase polymorphism in solid formic acid. Physical Chemistry Chemical Physics, 2017, 19, 9064-9074.	2.8	33
8	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
9	Evolution of Hydrogen Dynamics in Amorphous Ice with Density. Journal of Physical Chemistry Letters, 2015, 6, 2038-2042.	4.6	28
10	Soft confinement of water in graphene-oxide membranes. Carbon, 2016, 108, 199-203.	10.3	27
11	Atomic Quantum Dynamics in Materials Research. Experimental Methods in the Physical Sciences, 2017, , 403-457.	0.1	27
12	Pion generalized parton distributions within a fully covariant constituent quark model. European Physical Journal C, 2016, 76, 1.	3.9	21
13	Neutron total cross-section of hydrogenous and deuterated 1- and 2-propanol and n-butanol measured using the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 870, 84-89.	1.6	21
14	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
15	On the line-shape analysis of Compton profiles and its application to neutron scattering. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 819, 84-88.	1.6	20
16	Neutrons for Cultural Heritageâ€"Techniques, Sensors, and Detection. Sensors, 2020, 20, 502.	3.8	19
17	VESUVIO+: The Current Testbed for a Next-generation Epithermal Neutron Spectrometer. Journal of Physics: Conference Series, 2018, 1021, 012026.	0.4	18
18	Measurement of neutron total cross sections at the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 971, 164096.	1.6	18

#	Article	IF	Citations
19	An effective hydrogen scattering cross section for time-of-flight neutron experiments with simple organic molecules. Journal of Applied Crystallography, 2019, 52, 1233-1237.	4.5	17
20	The Harmonic Picture of Nuclear Mean Kinetic Energies in Heavy Water. Journal of Physics: Conference Series, 2014, 571, 012003.	0.4	16
21	Temperature dependence of the kinetic energy in the Zr40Be60 amorphous alloy. JETP Letters, 2017, 105, 591-594.	1.4	15
22	Data analysis of neutron Compton scattering experiments using MANTID. Journal of Physics: Conference Series, 2018, 1055, 012016.	0.4	15
23	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
24	Visualization of the Catalyzed Nuclear-Spin Conversion of Molecular Hydrogen Using Energy-Selective Neutron Imaging. Journal of Physical Chemistry C, 2019, 123, 11745-11751.	3.1	14
25	Non-destructive quantitation of hydrogen via mass-resolved neutron spectroscopy. Analyst, The, 2019, 144, 3936-3941.	3.5	13
26	The onset of the tetrabonded structure in liquid water. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	12
27	Dynamics of supercooled confined water measured by deep inelastic neutron scattering. Frontiers of Physics, 2018, 13, 1.	5.0	11
28	Hydrogen Dynamics in Supercritical Water Probed by Neutron Scattering and Computer Simulations. Journal of Physical Chemistry Letters, 2020, 11, 9461-9467.	4.6	11
29	Mass-selective neutron spectroscopy of glassy versus polycrystalline structures in binary mixtures of beryllium and zirconium. Journal of Physics: Conference Series, 2018, 1055, 012004.	0.4	10
30	Determination of the scattering cross section of calcium using the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 927, 443-450.	1.6	10
31	Glass Transition in Rice Pasta as Observed by Combined Neutron Scattering and Time-Domain NMR. Polymers, 2021, 13, 2426.	4.5	10
32	Hydrogen mean force and anharmonicity in polycrystalline and amorphous ice. Frontiers of Physics, 2018, 13, 1.	5.0	9
33	Optimization of detection strategies for epithermal neutron spectroscopy using photon-sensitive detectors. Review of Scientific Instruments, 2019, 90, 073901.	1.3	9
34	Hydrogen dynamics in solid formic acid: insights from simulations with quantum colored-noise thermostats. Journal of Physics: Conference Series, 2018, 1055, 012003.	0.4	8
35	Development of a ceramic double thick GEM detector for transmission measurements at the VESUVIO instrument at ISIS. Journal of Instrumentation, 2021, 16, P06003.	1.2	8
36	Inelastic and deep inelastic neutron spectroscopy of water molecules under ultra-confinement. Journal of Physics: Conference Series, 2018, 1055, 012002.	0.4	7

#	Article	IF	Citations
37	Kinetic energy and radial momentum distribution of hydrogen and oxygen atoms of water confined in silica hydrogel in the temperature interval 170â€“325 K. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	7
38	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
39	Thermal neutron cross sections of amino acids from average contributions of functional groups. Journal of Physics Condensed Matter, 2021, 33, 285901.	1.8	7
40	Experimental validation of the temperature behavior of the ENDF/B-VIII.0 thermal scattering kernel for light water. EPJ Web of Conferences, 2020, 239, 14001.	0.3	7
41	Validated scattering kernels for triphenylmethane at cryogenic temperatures. EPJ Web of Conferences, 2020, 239, 14002.	0.3	7
42	A tale of two foils: ISIS TS-1 water moderators. Journal of Physics: Conference Series, 2018, 1021, 012039.	0.4	6
43	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
44	Gamma background characterization on VESUVIO: before and after the moderator upgrade. Journal of Physics: Conference Series, 2018, 1055, 012009.	0.4	6
45	Discovery of new neutron-moderating materials at ISIS Neutron and Muon Source. EPJ Web of Conferences, 2020, 239, 17008.	0.3	6
46	MWCNT/rGO/natural rubber latex dispersions for innovative, piezo-resistive and cement-based composite sensors. Scientific Reports, 2021, 11, 18975.	3.3	6
47	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
48	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
49	The effective isotropy of the hydrogen local potential in biphenyl and other hydrocarbons. Journal of Chemical Physics, 2020, 153, 234306.	3.0	5
50	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
51	Looking for Minor Phenolic Compounds in Extra Virgin Olive Oils Using Neutron and Raman Spectroscopies. Antioxidants, 2021, 10, 643.	5.1	5
52	Procedure for the determination of effective temperatures employing VESUVIO spectrometer. Journal of Physics: Conference Series, 2018, 1055, 012013.	0.4	4
53	The road to a station for epithermal and thermal neutron analysis. Journal of Physics: Conference Series, 2018, 1055, 012017.	0.4	4
54	Development of neutron scattering kernels for cold neutron reflector materials. Journal of Neutron Research, 2021, 23, 167-177.	1.1	4

#	Article	IF	Citations
55	Pion Tensor Generalized Parton Distributions in a Covariant Constituent Quark Model. Few-Body Systems, 2012, 52, 301-306.	1.5	3
56	Exploring the Pion Phenomenology Within a Fully Covariant Constituent Quark Model. Few-Body Systems, 2013, 54, 769-777.	1.5	3
57	Discussion: Nuclear Quantum Dynamics - Protons and Beyond. Journal of Physics: Conference Series, 2014, 571, 012004.	0.4	3
58	Fractal dimension as a scaling law for nuclear quantum effects: a neutron Compton scattering study on carbon allotropes. Journal of Physics: Conference Series, 2018, 1055, 012007.	0.4	3
59	A McStas simulation of the incident neutron beam on the VESUVIO spectrometer. Journal of Physics: Conference Series, 2018, 1055, 012014.	0.4	3
60	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
61	Neutron-resonance capture analysis on the VESUVIO spectrometer: Towards high-throughput material characterisation. Journal of Physics: Conference Series, 2018, 1055, 012015.	0.4	3
62	Proton Dynamics in Palladiumâ€“Silver: An Inelastic Neutron Scattering Investigation. Molecules, 2020, 25, 5587.	3.8	3
63	Spin isomers in the ISIS TS1 cryogenic hydrogen moderator. Journal of Physics: Conference Series, 2018, 1021, 012057.	0.4	2
64	Nitrogen doping and the performance of superconducting radio-frequency niobium cavities: insights from neutron diffraction and neutron Compton scattering. Journal of Physics: Conference Series, 2018, 1055, 012006.	0.4	2
65	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
66	Model selection in neutron Compton scattering - a Bayesian approach with physical constraints. Journal of Physics: Conference Series, 2018, 1055, 012012.	0.4	2
67	Robust measurement of para-ortho H₂ ratios to characterise the ISIS hydrogen moderators. Journal of Physics: Conference Series, 2018, 1021, 012055.	0.4	2
68	Neutrons Matter â€“ VII International Workshop on Electron-Volt Neutron Spectroscopy. Neutron News, 2018, 29, 4-6.	0.2	2
69	Determination of effective temperatures of hydrogenated and deuterated alcohols using the VESUVIO spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 989, 164948.	1.6	2
70	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
71	Nuclear kinetic energies from final-state effects in the harmonic limit. Journal of Physics: Conference Series, 2018, 1055, 012011.	0.4	1
72	Reply to â€œComment to â€˜Dynamics of supercooled confined water measured by deep inelastic neutron scatteringâ€™ by Y. Finkelstein and R. Morehâ€¦ Frontiers of Physics, 2019, 14, 1.	5.0	1

#	Article	IF	Citations
73	Neutron Compton Scattering: from proton momentum distribution to muonium hyperfine coupling constant in the isopropyl radical. Journal of Physics Communications, 2019, 3, 113003.	1.2	1
74	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
75	Molecular Spectroscopy Science Meetingâ€"MSSM2016. Neutron News, 2017, 28, 15-16.	0.2	0
76	Exploring ultra-fast proton dynamics in water under a static electric field. Europhysics Letters, 2021, 133, 57002.	2.0	0
77	Towards Neutron Scattering Identification of Olive Oilâ€™s Antioxidant Properties. Neutron News, 0, , 1-2.	0.2	0