Caterina Braggio

List of Publications by Year
in descending order

67
papers

1,325
citations

361413

20
h-index

361022

35
g-index

68
all docs

68
docs citations

68
times ranked

968
citing authors

#	Article	IF	Citations
1	A novel experimental approach for the detection of the dynamical Casimir effect. Europhysics Letters, 2005, 70, 754-760.	2.0	145
2	Searching for galactic axions through magnetized media: The QUAX proposal. Physics of the Dark Universe, 2017, 15, 135-141.	4.9	127
3	Galactic axions search with a superconducting resonant cavity. Physical Review D, 2019, 99, .	4.7	98
4	Axion Search with a Quantum-Limited Ferromagnetic Haloscope. Physical Review Letters, 2020, 124, 171801.	7.8	92
5	Search for invisible axion dark matter of mass <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">m</mml:mi></mml:mrow><mml:mrow><mml:mi>a</mml:mi></mml:mrow></mml:msub><mml:mo>=</mml:mo with the QUAXâ€" <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>a</mml:mi><mml:mi. Physical Review D, 2021, 103, .	4.7	78
6	Semiconductor microwave mirror for a measurement of the dynamical Casimir effect. Review of Scientific Instruments, 2004, 75, 4967-4970.	1.3	64
7	MIR status report: an experiment for the measurement of the dynamical Casimir effect. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 164024.	2.1	59
8	Operation of a ferromagnetic axion haloscope at $$m_a=58,upmu mathrm {eV}$$ m a = 58 Î¼ eV. European Physical Journal C, 2018, 78, 1.	3.9	51
9	Optical Manipulation of a Magnon-Photon Hybrid System. Physical Review Letters, 2017, 118, 107205.	7.8	46
10	MIR: An experiment for the measurement of the dynamical Casimir effect. Journal of Physics: Conference Series, 2009, 161, 012028.	0.4	40
11	Multi-GHz tunable-repetition-rate mode-locked Nd:GdVO4 laser. Optics Express, 2005, 13, 5302.	3.4	34
12	Improved constraints on monopoleâ€"dipole interaction mediated by pseudo-scalar bosons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 773, 677-680.	4.1	34
13	Optomechanical Rydberg-Atom Excitation via Dynamic Casimir-Polder Coupling. Physical Review Letters, 2014, 113, 023601.	7.8	31
14	Axion dark matter detection by laser induced fluorescence in rare-earth doped materials. Scientific Reports, 2017, 7, 15168.	3.3	25
15	High-gain diode-pumped amplifier for generation of microjoule-level picosecond pulses. Optics Express, 2006, 14, 9244.	3.4	23
16	The QUAX-g g experiment to search for monopole-dipole Axion interaction. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 842, 109-113.	1.6	22
17	Microwave Losses in a DC Magnetic Field in Superconducting Cavities for Axion Studies. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	22
18	Axion dark matter detection by laser spectroscopy of ultracold molecular oxygen: a proposal. New Journal of Physics, 2015, 17, 113025.	2.9	21

#	ARTICLE	IF	CITATIONS
19	Realization of a high quality factor resonator with hollow dielectric cylinders for axion searches. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 985, 164641.	1.6	21
20	The QUAX proposal: a search of galactic axion with magnetic materials. Journal of Physics: Conference Series, 2016, 718, 042051.	0.4	20
21	Cavity magnon polariton based precision magnetometry. Applied Physics Letters, 2020, 117, .	3.3	20
22	Magnon-driven dynamics of a hybrid system excited with ultrafast optical pulses. Communications Physics, 2020, 3, .	5.3	15
23	Laser system generating 250-mJ bunches of 5-GHz repetition rate, 12-ps pulses. Optics Express, 2008, 16, 15811.	3.4	14
24	Characterization of a low noise microwave receiver for the detection of vacuum photons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 603, 451-455.	1.6	14
25	An active electron polarized scintillating GSO target for neutrino physics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 694, 335-340.	1.6	13
26	A laser system for the parametric amplification of electromagnetic fields in a microwave cavity. Review of Scientific Instruments, 2011, 82, 115107.	1.3	12
27	Particle detection through the quantum counter concept in YAG:Er3+. Applied Physics Letters, 2015, 107, .	3.3	12
28	High quality factor photonic cavity for dark matter axion searches. Review of Scientific Instruments, 2020, 91, 094701.	1.3	12
29	Coherent coupling between multiple ferrimagnetic spheres and a microwave cavity at millikelvin temperatures. Physical Review B, 2021, 104, .	3.2	12
30	High- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Q</mml:mi></mml:math> Microwave Dielectric Resonator for Axion Dark-Matter Haloscopes. Physical Review Applied, 2022, 17, .	3.8	10
31	Resonance frequency shift in a cavity with a thin conducting film near a conducting wall. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 363, 33-37.	2.1	9
32	A Re-Entrant ${hbox{MgB}}_{2}$ Cavity for Dynamic Casimir Experiment. IEEE Transactions on Applied Superconductivity, 2011, 21, 745-747.	1.7	9
33	Design and Implementation of Component Circuits of an SFQ Half-Precision Floating-Point Adder Using 10-kA/cm^{2} Nb Process. IEEE Transactions on Applied Superconductivity, 2011, 21, 827-830.	1.7	9
34	Cascade superfluorescence in Er:YLF. Physical Review Research, 2021, 3, .	3.6	9
35	Spontaneous formation of a macroscopically extended coherent state. Physical Review Research, 2020, 2, .	3.6	9
36	Cathodo- and radioluminescence of Tm3+: YAG and Nd3+: YAG in an extended wavelength range. Journal of Luminescence, 2017, 190, 29-36.	3.1	8

#	Article	IF	Citations
37	Massive silicon or germanium detectors at cryogenic temperature. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 412-415.	1.6	7
38	Generation of microwave radiation by nonlinear interaction of a high-power, high-repetition rate, 1064â€‰â€‰nm laser in KTiOPO_4 crystals. Optics Letters, 2013, 38, 4465.	3.3	7
39	Experimental setup for the growth of solid crystals of inert gases for particle detection. Review of Scientific Instruments, 2017, 88, 113303.	1.3	7
40	Particle detection in rare gas solids: DEMIURGOS experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162434.	1.6	6
41	The measurement of a single-mode thermal field with a microwave cavity parametric amplifier. New Journal of Physics, 2013, 15, 013044.	2.9	5
42	A contactless microwave-based diagnostic tool for high repetition rate laser systems. Review of Scientific Instruments, 2014, 85, 023105.	1.3	5
43	Spectroscopy of Alkali Atoms in Solid Matrices of Rare Gases: Experimental Results and Theoretical Analysis. Applied Sciences (Switzerland), 2022, 12, 6492.	2.5	5
44	Reply to the Comment by W.-J. Kim et al.. Europhysics Letters, 2007, 78, 21003.	2.0	4
45	One-cm-thick Si detector at LHe temperature. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 580, 1327-1330.	1.6	3
46	Experimental study of microwave photon statistics under parametric amplification from a single-mode thermal state in a cavity. Physical Review A, 2013, 88, .	2.5	3
47	A new technique for infrared scintillation measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 855, 13-15.	1.6	3
48	Generation of microwave fields in cavities with laser-excited nonlinear media: competition between the second- and third-order optical nonlinearities. Journal of Optics (United Kingdom), 2018, 20, 095502.	2.2	3
49	GaAs as a Bright Cryogenic Scintillator for the Detection of Low-Energy Electron Recoils From MeV/c² Dark Matter. IEEE Transactions on Nuclear Science, 2019, 66, 2333-2337.	2.0	3
50	A feasibility study for a low energy threshold particle detector in a xenon crystal. Journal of Instrumentation, 2020, 15, C03004-C03004.	1.2	3
51	Microwave emission by nonlinear crystals irradiated with a high-intensity, mode-locked laser. Journal of Optics (United Kingdom), 2016, 18, 065503.	2.2	2
52	Novel approaches in low energy threshold detectors for Dark Matter searches. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 244-246.	1.6	2
53	Laser-induced microwave generation with nonlinear optical crystals. , 2014, , .		1
54	Large area photodetector based on microwave cavity perturbation techniques. Journal of Applied Physics, 2014, 116, 044513.	2.5	1

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55	High infrared light yield of Erbium-doped fluoride crystals. Journal of Luminescence, 2020, 219, 116883.	3.1	1
56	Direct excitation of the magnetisation in photon-magnon hybrid systems with an infrared laser pulse. Measurement Science and Technology, 2021, 32, 055903.	2.6	1
57	Searching Axions through Coupling with Spin: The QUAX Experiment. Springer Proceedings in Physics, 2018, , 143-150.	0.2	1
58	Operation of a Ferromagnetic Axion Haloscope. Springer Proceedings in Physics, 2020, , 97-103.	0.2	1
59	Large volume cryogenic silicon detectors. Nuclear Physics, Section B, Proceedings Supplements, 2009, 197, 78-82.	0.4	0
60	Microwave signal generation based on the interaction of mode-locked laser pulses with a nonlinear optical crystal. , 2014, , .		0
61	X-ray detection by direct modulation of losses in a laser cavity. Applied Physics Letters, 2020, 117, 234101.	3.3	0
62	MIR: A PROPOSAL FOR THE MEASUREMENT OF THE NON-STATIONARY CASIMIR EFFECT. , 2006, , .		0
63	PHOTON GENERATION FROM THE VACUUM: AN EXPERIMENT TO DETECT THE DCE. , 2008, , .		0
64	New detectors for axions. , 2017, , .		0
65	Dark matter search by laser spectroscopy. , 2019, , .		0
66	New ideas on prospective low energy threshold detectors for dark matter searches. International Journal of Modern Physics Conference Series, 2020, 50, 2060009.	0.7	0
67	Searching for dark matter through magnetized media: The QUAX proposal of a ferromagnetic axion haloscope. , 2022, , .		0