Oliver J Roberts

List of Publications by Year
in descending order

116 papers	9,486 citations	136950 32 h-index	36028 97 g-index
118 all docs	118 docs citations	118 times ranked	10330 citing authors

#	Article	IF	Citations
1	Multi-messenger Observations of a Binary Neutron Star Merger[*]. Astrophysical Journal Letters, 2017, 848, L12.	8.3	2,805
2	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.	8.3	2,314
3	An Ordinary Short Gamma-Ray Burst with Extraordinary Implications: Fermi-GBM Detection of GRB 170817A. Astrophysical Journal Letters, 2017, 848, L14.	8.3	1,038
4	FERMI GBM OBSERVATIONS OF LIGO GRAVITATIONAL-WAVE EVENT GW150914. Astrophysical Journal Letters, 2016, 826, L6.	8.3	246
5	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. Astrophysical Journal Letters, 2016, 826, L13.	8.3	210
6	THE THIRD FERMI GBM GAMMA-RAY BURST CATALOG: THE FIRST SIX YEARS. Astrophysical Journal, Supplement Series, 2016, 223, 28.	7.7	191
7	The Fourth Fermi-GBM Gamma-Ray Burst Catalog: A Decade of Data. Astrophysical Journal, 2020, 893, 46.	4.5	175
8	A very-high-energy component deep in the Î³-ray burst afterglow. Nature, 2019, 575, 464-467.	27.8	166
9	Observation of inverse Compton emission from a long Î³-ray burst. Nature, 2019, 575, 459-463.	27.8	146
10	The generalized centroid difference method for picosecond sensitive determination of lifetimes of nuclear excited states using large fast-timing arrays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 726, 191-202.	1.6	81
11	Lightning leader altitude progression in terrestrial gammaâ€ray flashes. Geophysical Research Letters, 2015, 42, 7792-7798.	4.0	80
12	TheFermiGBM gamma-ray burst time-resolved spectral catalog: brightest bursts in the first four years. Astronomy and Astrophysics, 2016, 588, A135.	5.1	80
13	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>94</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mi>I²</mml:mi></mml:mrow></mml:math> -Decay Half-Lives of Neutron-Rich <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>Cs</mml:mi></mml:mrow><mml:mprescripts /><mml:mrow><mml:mn>55</mml:mn></mml:mrow><mml:none /></mml:mmultiscripts></mml:mrow></mml:math> to <mml:math	7.8	68
14	Germanium-gated Î³â€“Î³ fast timing of excited states in fission fragments using the EXILL&FATIMA spectrometer. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 763, 210-220.	1.6	58
15	The spectroscopy of individual terrestrial gammaâ€ray flashes: Constraining the source properties. Journal of Geophysical Research: Space Physics, 2016, 121, 11,346.	2.4	57
16	The First Fermiâ€GBM Terrestrial Gamma Ray Flash Catalog. Journal of Geophysical Research: Space Physics, 2018, 123, 4381-4401.	2.4	57
17	Lifetime measurements of the first <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:mrow><mml:mo>+</mml:mo></mml:mrow> states in 104,106Zr: Evolution of ground-state deformations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 750, 448-452.	4.1	52
18	MAGNETAR-LIKE X-RAY BURSTS FROM A ROTATION-POWERED PULSAR, PSR J1119â€“6127. Astrophysical Journal Letters, 2016, 829, L25.	8.3	51

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19	Magnetic Transition from the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mn>4</mml:mn><mml:mo mathvariant="bold">+</mml:mo></mml:msup></mml:math>to<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mn>2</mml:mn><mml:mo mathvariant="bold">+</mml:mo></mml:msup></mml:math>Resonance in<mml:math xmlns:mml="http://...	7.8	50
20	A LaBr3: Ce fast-timing array for DESPEC at FAIR. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 748, 91-95.	1.6	50
21	THE WIND NEBULA AROUND MAGNETAR SWIFT J1834.9â€“0846. Astrophysical Journal, 2016, 824, 138.	4.5	50
22	The Fermi-GBM Gamma-Ray Burst Spectral Catalog: 10 yr of Data. Astrophysical Journal, 2021, 913, 60.	4.5	49
23	The ROSPHERE Î³-ray spectroscopy array. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 837, 1-10.	1.6	48
24	The Ups and Downs of Accreting X-Ray Pulsars: Decade-long Observations with the Fermi Gamma-Ray Burst Monitor. Astrophysical Journal, 2020, 896, 90.	4.5	48
25	Fermi and Swift Observations of GRB 190114C: Tracing the Evolution of High-energy Emission from Prompt to Afterglow. Astrophysical Journal, 2020, 890, 9.	4.5	48
26	Burst Properties of the Most Recurring Transient Magnetar SGR J1935+2154. Astrophysical Journal, 2020, 893, 156.	4.5	45
27	SUPPLEMENT: â€œLOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914â€•(2016, ApJL, 826, L13). Astrophysical Journal, Supplement Series, 2016, 225, 8.	7.7	44
28	Ground detection of terrestrial gamma ray flashes from distant radio signals. Geophysical Research Letters, 2016, 43, 8728-8734.	4.0	41
29	Experimental study of the lifetime and phase transition in neutron-rich <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Zr</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>98</mml:mn><mml:mo>,</mml:mo><mml:mn>100</mml:mn><mml:mo>,</mml:mo><mml:mn>102</mml:mn><mml:mn... Physical Review C, 2017, 96, .	2.9	38
30	Fermi/GBM View of the 2019 and 2020 Burst Active Episodes of SGR J1935+2154. Astrophysical Journal Letters, 2020, 902, L43.	8.3	37
31	Rapid spectral variability of a giant flare from a magnetar in NGCÂ253. Nature, 2021, 589, 207-210.	27.8	36
32	Identification of a Local Sample of Gamma-Ray Bursts Consistent with a Magnetar Giant Flare Origin. Astrophysical Journal Letters, 2021, 907, L28.	8.3	33
33	SEARCHING THE GAMMA-RAY SKY FOR COUNTERPARTS TO GRAVITATIONAL WAVE SOURCES: FERMI GAMMA-RAY BURST MONITORÂAND LARGE AREA TELESCOPE OBSERVATIONS OF LVT151012 AND GW151226. Astrophysical Journal, 2017, 835, 82.	4.5	32
34	Broadband X-ray burst spectroscopy of the fast-radio-burst-emitting Galactic magnetar. Nature Astronomy, 2021, 5, 408-413.	10.1	31
35	On the Interpretation of the Fermi-GBM Transient Observed in Coincidence with LIGO Gravitational-wave Event GW150914. Astrophysical Journal Letters, 2018, 853, L9.	8.3	30
36	Low Frequency Radio Pulses Produced by Terrestrial Gammaâ€Ray Flashes. Geophysical Research Letters, 2019, 46, 6990-6997.	4.0	30

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37	A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. Astrophysical Journal, 2019, 871, 90.	4.5	30
38	Abrupt shape transition at neutron number <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>N</mml:mi><mml:mo>=</mml:mo><mml:mn>60</mml:mn></mml:mrow></mml:math>: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>B</mml:mi><mml:mo>(</mml:mo><mml:mi>E2</mml:mi></mml:mrow></mml:math> values in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="bold">	2.9	29
39	FATIMA â€“ FAst TIMing Array for DESPEC at FAIR. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 969, 163967.	1.6	29
40	Shape coexistence at the proton drip-line: First identification of excited states in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">Pb</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>180</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>. Physical Review C, 2010, 82, .	2.9	28
41	Fermi GBM Observations of GRB 150101B: A Second Nearby Event with a Short Hard Spike and a Soft Tail. Astrophysical Journal Letters, 2018, 863, L34.	8.3	28
42	Localisation of gamma-ray interaction points in thick monolithic CeBr 3 and LaBr 3 :Ce scintillators. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 844, 81-89.	1.6	27
43	Synchrotron cooling in energetic gamma-ray bursts observed by theFermiGamma-Ray Burst Monitor. Astronomy and Astrophysics, 2015, 573, A81.	5.1	26
44	Very High Frequency Radio Emissions Associated With the Production of Terrestrial Gammaâ€Ray Flashes. Geophysical Research Letters, 2018, 45, 2097-2105.	4.0	26
45	Characteristics of Radio Emissions Associated With Terrestrial Gammaâ€Ray Flashes. Journal of Geophysical Research: Space Physics, 2018, 123, 5933-5948.	2.4	26
46	Electromagnetic transition rates in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>N</mml:mi><mml:mo>=</mml:mo><mml:mn>80</mml:mn></mml:mrow></mml:math>nucleus <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msubsup><mml:mrow /><mml:mrow><mml:mn>58</mml:mn></mml:mrow><mml:mn>138</mml:mn></mml:msubsup></mml:math>Ce. Physical Review C, 2013, 87, .	2.9	25
47	Long-lived K isomer and enhanced Î³ vibration in the neutron-rich nucleus 172Dy: Collectivity beyond double midshell. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 760, 641-646.	4.1	24
48	Fermi-GBM GRBs with Characteristics Similar to GRB 170817A. Astrophysical Journal, 2019, 876, 89.	4.5	24
49	Evaluation of Automated Fermi GBM Localizations of Gamma-Ray Bursts. Astrophysical Journal, 2020, 895, 40.	4.5	24
50	Shape evolution in the neutron-rich osmium isotopes: Prompt<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi><mml:mtext>-ray</mml:mtext></mml:math>spectroscopy of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">Os</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>196</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>. Physical Review C, 2014, 90, .	2.9	23
51	Performance of a monolithic LaBr3:Ce crystal coupled to an array of silicon photomultipliers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 810, 107-119.	1.6	23
52	iPTF17cw: An Engine-driven Supernova Candidate Discovered Independent of a Gamma-Ray Trigger. Astrophysical Journal, 2017, 847, 54.	4.5	23
53	Half-life of the yrast <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mn>2</mml:mn><mml:mo>+</mml:mo></mml:msup></mml:math>state in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>188</mml:mn></mml:msup></mml:math>W: Evolution of deformation and collectivity in neutron-rich tungsten isotopes. Physical Review C, 2013, 88, .	2.9	21
54	Analysis of Sub-threshold Short Gamma-Ray Bursts in Fermi GBM Data. Astrophysical Journal, 2018, 862, 152.	4.5	21

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55	Analysis of Individual Terrestrial Gammaâ€Ray Flashes With Lightning Leader Models and Fermi Gammaâ€Ray Burst Monitor Data. Journal of Geophysical Research: Space Physics, 2019, 124, 7170-7183.	2.4	21
56	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>B</mml:mi><mml:mo>(</mml:mo><mml:mi>E</mml:mi> in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">Kr</mml:mi><mml:mpresc. Physical Review C, 2014, 90, .	2.9	20
57	K-mixing in the doubly mid-shell nuclide 170Dy and the role of vibrational degeneracy. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 762, 404-408.	4.1	20
58	Full-shell x-ray optics development at NASA Marshall Space Flight Center. Journal of Astronomical Telescopes, Instruments, and Systems, 2019, 5, 1.	1.8	17
59	Compton scattering in terrestrial gamma-ray flashes detected with the Fermi gamma-ray burst monitor. Physical Review D, 2014, 90, .	4.7	16
60	A Wolter imager on the Z machine to diagnose warm x-ray sources. Review of Scientific Instruments, 2018, 89, 10G115.	1.3	16
61	Shape evolution of neutron-rich <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Mo</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>106</mml:mn><mml:mo>,</mml:mo><mml:mn>108</mml:mn><mml:mo>,</mml:mo><mml:mn>110</mml:mn> isotopes in the triaxial degree of freedom. Physical Review C, 2020, 101, .	2.9	16
62	Giant dipole resonance built on hot rotating nuclei produced during evaporation of light particles from theMo88compound nucleus. Physical Review C, 2015, 91, .	2.9	15
63	Terrestrial gamma ray flashes due to particle acceleration in tropical storm systems. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3374-3395.	3.3	15
64	Fermi Observations of the LIGO Event GW170104. Astrophysical Journal Letters, 2017, 846, L5.	8.3	15
65	Gamma-Ray and Radio-Frequency Radiation from Thunderstorms Observed from Space and Ground. Scientific Reports, 2020, 10, 7286.	3.3	15
66	Lifetime of the yrast<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msup><mml:mi>I</mml:mi><mml:mi>Ï€</mml:mi></mml:msup> and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>E</mml:mi><mml:mn>1</mml:mn></mml:mrow></mml:m in the transitional nucleus<mml:math	2.9	12
67	xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>δ</mml:mi></mml:math> anal mathv. spectroscopy of the neutron-rich platinum isotope <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Pt</mml:mi><mml:mprescripts /><mml:none /><mml:mn>200</mml:mn></mml:mmultiscripts></mml:math> toward the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>N</mml:mi><mml:mo>=</mml:mo><mml:mn>126</mml:mn>	2.9	12
68	A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. Astrophysical Journal, 2020, 893, 100.	4.5	12
69	Precision Lifetime Measurements Using LaBr3Detectors With Stable and Radioactive Beams. EPJ Web of Conferences, 2013, 63, 01008.	0.3	11
70	Development of glass-ceramic scintillators for gamma-ray astronomy. Journal of Physics: Conference Series, 2015, 620, 012002.	0.4	11
71	Test of the SO(6) selection rule in 196Pt using cold-neutron capture. Nuclear Physics A, 2015, 934, 1-7.	1.5	11
72	Design and raytrace simulations of a multilayer-coated Wolter x-ray optic for the Z machine at Sandia National Laboratories. Review of Scientific Instruments, 2018, 89, 10G113.	1.3	10

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73	Growth of trigonal gadolinium fluoride in a glass-ceramic for scintillation and optical applications. Journal of the European Ceramic Society, 2018, 38, 4739-4748.	5.7	10
74	Half-life Measurements of Excited States in ^{132}Te, ^{134}Xe. Acta Physica Polonica B, 2013, 44, 403.	0.8	9
75	xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Z</mml:mi></mml:math> boundary of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>N</mml:mi><mml:mo>=</mml:mo><mml:mn>88</mml:mn> â€“90 shape phase transition: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Ce</mml:mi><mml:mprescripts	2.9	9
76	Gamma-ray Spectroscopy in the Vicinity of ^{108}Zr. Acta Physica Polonica B, 2015, 46, 721.	0.8	8
77	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>K</mml:mi></mml:math> selection in the decay of the <mml:math		

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91	BURST AND OUTBURST CHARACTERISTICS OF MAGNETAR 4U 0142+61. Astrophysical Journal, 2017, 835, 68.	4.5	4
92	PROBING THE 12C - 12C AND 12C - 16O MOLECULAR STATES BY RADIATIVE CAPTURE REACTIONS: PRESENT STATUS AND FUTURE. International Journal of Modern Physics E, 2011, 20, 793-796.	1.0	3
93	Isomer Spectroscopy of Neutron-rich ^{165,167}Tb. Acta Physica Polonica B, 2017, 48, 601.	0.8	3
94	Status of the EURICA Project After One Year at RIKEN. , 2014, , .		3
95	In Search of Short Gamma-Ray Burst Optical Counterparts with the Zwicky Transient Facility. Astrophysical Journal, 2022, 932, 40.	4.5	3
96	Title is missing!. Acta Physica Polonica B, 2011, 42, 729.	0.8	2
97	[sup 7]Li-induced reactions for fast-timing with LaBr[sub 3]:Ce detectors. , 2012, , .		2
98	Isomer spectroscopy of neutron-rich 168Tb103. Radiation Physics and Chemistry, 2017, 140, 493-496.	2.8	2
99	Isomeric and Î² -decay spectroscopy of Ho173,174. Physical Review C, 2020, 102, .	2.9	2
100	Title is missing!. Acta Physica Polonica B, 2011, 42, 721.	0.8	1
101	Development of a fast-timing LaBr3(Ce) array for NuSTAR. Journal of Physics: Conference Series, 2012, 381, 012124.	0.4	1
102	Heavy rotation â€“ evolution of quadrupole collectivity centred at the neutron-rich doubly mid-shell nucleus 170Dy. AIP Conference Proceedings, 2015, , .	0.4	1
103	Î² Decay Half-Lives of A â¼ 110 Nuclei on the r-Process Path. , 2015, , .		1
104	Nuclear Structure at the Extremes; In-beam Î³-ray Spectroscopy of [sup 180]Pb. , 2011, , .		0
105	Electromagnetic Transition Rate Measurements in theN=80 Isotone,¹³⁸Ce. Journal of Physics: Conference Series, 2012, 381, 012057.	0.4	0
106	Development of a LaBr3(Ce) Fast-timing Array for FAIR. EPJ Web of Conferences, 2013, 63, 01018.	0.3	0
107	Study of shape transition in the neutron-rich Os isotopes. EPJ Web of Conferences, 2014, 66, 02057.	0.3	0
108	First results of the (n,Î³) EXILL campaigns at the Institut Laue Langevin using EXOGAM and FATIMA. Journal of Physics: Conference Series, 2014, 533, 012026.	0.4	0

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109	Applications of Novel Scintillators for Research and Industry (ANSRI 2015). Journal of Physics: Conference Series, 2015, 620, 011001.	0.4	0
110	Shape Evolution in Neutron-Rich Ru Nuclei. , 2015, , .		0
111	Isomer-delayed gamma-ray spectroscopy of neutron-rich 166Tb. EPJ Web of Conferences, 2017, 146, 10009.	0.3	0
112	The boundary of the N=90 shape phase transition: 148Ce. Journal of Physics: Conference Series, 2018, 1023, 012022.	0.4	0
113	Lifetime measurement in neutron-rich A~100 nuclei. EPJ Web of Conferences, 2018, 193, 05003.	0.3	0
114	Î²-Î³ and isomeric decay spectroscopy of 168Dy. EPJ Web of Conferences, 2018, 178, 02023.	0.3	0
115	Radio Frequency Emissions Associated With Multiâ€Pulsed Terrestrial Gammaâ€Ray Flashes. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA027928.	2.4	0
116	Half-Life Measurements of (2_{1}^{ + }) States in the Vicinity of 108Zr and their Implications for Ground-State Deformations. , 2015, , .		0