Benoit Cerutti

List of Publications by Year
in descending order

27 papers	1,360 citations	430874 18 h-index	642732 23 g-index
27 all docs	27 docs citations	27 times ranked	1593 citing authors

#	Article	IF	Citations
1	Intra-pulse variability induced by plasmoid formation in pulsar magnetospheres. Astronomy and Astrophysics, 2022, 661, A130.	5.1	2
2	Synthetic gamma-ray light curves of Kerr black hole magnetospheric activity from particle-in-cell simulations. Astronomy and Astrophysics, 2021, 650, A163.	5.1	27
3	Formation of giant plasmoids at the pulsar wind termination shock: A possible origin of the inner-ring knots in the Crab Nebula. Astronomy and Astrophysics, 2021, 656, A91.	5.1	6
4	A global model of particle acceleration at pulsar wind termination shocks. Astronomy and Astrophysics, 2020, 642, A123.	5.1	17
5	Proton acceleration in pulsar magnetospheres. Astronomy and Astrophysics, 2020, 635, A138.	5.1	31
6	Multidimensional Simulations of Ergospheric Pair Discharges around Black Holes. Physical Review Letters, 2020, 124, 145101.	7.8	47
7	Dissipation of the striped pulsar wind and non-thermal particle acceleration: 3D PIC simulations. Astronomy and Astrophysics, 2020, 642, A204.	5.1	34
8	First-Principles Plasma Simulations of Black-Hole Jet Launching. Physical Review Letters, 2019, 122, 035101.	7.8	109
9	Pulsar Radio Emission Mechanism: Radio Nanoshots as a Low-frequency Afterglow of Relativistic Magnetic Reconnection. Astrophysical Journal Letters, 2019, 876, L6.	8.3	60
10	Gamma-ray pulsars: what have we learned from ab initio kinetic simulations?. Rendiconti Lincei, 2019, 30, 89-92.	2.2	1
11	Particle acceleration and radiation in pulsars: New insights from kinetic simulations. Nuclear and Particle Physics Proceedings, 2018, 297-299, 85-90.	0.5	0
12	Particle-in-cell simulations of pair discharges in a starved magnetosphere of a Kerr black hole. Astronomy and Astrophysics, 2018, 616, A184.	5.1	48
13	Electrodynamics of Pulsar Magnetospheres. Space Science Reviews, 2017, 207, 111-136.	8.1	69
14	Dissipation of the striped pulsar wind. Astronomy and Astrophysics, 2017, 607, A134.	5.1	47
15	Particle Acceleration in Pulsar Wind Nebulae: PIC Modelling. Astrophysics and Space Science Library, 2017, , 247-277.	2.7	13
16	Polarized synchrotron emission from the equatorial current sheet in gamma-ray pulsars. Monthly Notices of the Royal Astronomical Society: Letters, 2016, 463, L89-L93.	3.3	27
17	Modelling high-energy pulsar light curves from first principles. Monthly Notices of the Royal Astronomical Society, 2016, 457, 2401-2414.	4.4	132
18	Pulsar-Wind Nebulae. Space Sciences Series of ISSI, 2016, , 399-447.	0.0	0

#	Article	IF	Citations
19	Electrodynamics of Pulsar Magnetospheres. Space Sciences Series of ISSI, 2016, , 111-136.	0.0	0
20	Particle acceleration in axisymmetric pulsar current sheets. Monthly Notices of the Royal Astronomical Society, 2015, 448, 606-619.	4.4	129
21	AB INITIO PULSAR MAGNETOSPHERE: THREE-DIMENSIONAL PARTICLE-IN-CELL SIMULATIONS OF OBLIQUE PULSARS. Astrophysical Journal Letters, 2015, 801, L19.	8.3	144
22	Pulsar-Wind Nebulae. Space Science Reviews, 2015, 191, 391-439.	8.1	69
23	Energetic constraints on a rapid gamma-ray flare in PKS 1222+216. Monthly Notices of the Royal Astronomical Society, 2012, 425, 2519-2529.	4.4	38
24	EXTREME PARTICLE ACCELERATION IN MAGNETIC RECONNECTION LAYERS: APPLICATION TO THE GAMMA-RAY FLARES IN THE CRAB NEBULA. Astrophysical Journal, 2012, 746, 148.	4.5	136
25	The gamma-ray emitting region of the jet in Cyg X-3. Monthly Notices of the Royal Astronomical Society, 2012, 421, 2956-2968.	4.4	40
26	RECONNECTION-POWERED LINEAR ACCELERATOR AND GAMMA-RAY FLARES IN THE CRAB NEBULA. Astrophysical Journal Letters, 2011, 737, L40.	8.3	134
27	Massive stars at (very) high energies: Î³-ray binaries. Proceedings of the International Astronomical Union, 2010, 6, 581-586.	0.0	0