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	AB INITIO PULSAR MAGNETOSPHERE: THREE-DIMENSIONAL PARTICLE-IN-CELL SIMULATIONS OF OBLIQUE PULSARS. Astrophysical Journal Letters, 2015, 801, L19.	8.3	144
2	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
3	RECONNECTION-POWERED LINEAR ACCELERATOR AND GAMMA-RAY FLARES IN THE CRAB NEBULA. Astrophysical Journal Letters, 2011, 737, L40.	8.3	134
4	Modelling high-energy pulsar light curves from first principles. Monthly Notices of the Royal Astronomical Society, 2016, 457, 2401-2414.	4.4	132
5	Particle acceleration in axisymmetric pulsar current sheets. Monthly Notices of the Royal Astronomical Society, 2015, 448, 606-619.	4.4	129
6	First-Principles Plasma Simulations of Black-Hole Jet Launching. Physical Review Letters, 2019, 122, 035101.	7.8	109
7	Pulsar-Wind Nebulae. Space Science Reviews, 2015, 191, 391-439.	8.1	69
8	Electrodynamics of Pulsar Magnetospheres. Space Science Reviews, 2017, 207, 111-136.	8.1	69
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	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
11	Dissipation of the striped pulsar wind. Astronomy and Astrophysics, 2017, 607, A134.	5.1	47
12	Multidimensional Simulations of Ergospheric Pair Discharges around Black Holes. Physical Review Letters, 2020, 124, 145101.	7.8	47
13	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
14	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
15	Dissipation of the striped pulsar wind and non-thermal particle acceleration: 3D PIC simulations. Astronomy and Astrophysics, 2020, 642, A204.	5.1	34
16	Proton acceleration in pulsar magnetospheres. Astronomy and Astrophysics, 2020, 635, A138.	5.1	31
17	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
18	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

#	Article	IF	Citations
19	A global model of particle acceleration at pulsar wind termination shocks. Astronomy and Astrophysics, 2020, 642, A123.	5.1	17
20	Particle Acceleration in Pulsar Wind Nebulae: PIC Modelling. Astrophysics and Space Science Library, 2017, , 247-277.	2.7	13
21	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
22	Intra-pulse variability induced by plasmoid formation in pulsar magnetospheres. Astronomy and Astrophysics, 2022, 661, A130.	5.1	2
23	Gamma-ray pulsars: what have we learned from ab initio kinetic simulations?. Rendiconti Lincei, 2019, 30, 89-92.	2.2	1
24	Massive stars at (very) high energies: Î³-ray binaries. Proceedings of the International Astronomical Union, 2010, 6, 581-586.	0.0	0
25	Particle acceleration and radiation in pulsars: New insights from kinetic simulations. Nuclear and Particle Physics Proceedings, 2018, 297-299, 85-90.	0.5	0
26	Pulsar-Wind Nebulae. Space Sciences Series of ISSI, 2016, , 399-447.	0.0	0
27	Electrodynamics of Pulsar Magnetospheres. Space Sciences Series of ISSI, 2016, , 111-136.	0.0	0