Nhan Viet Tran

List of Publications by Year
in descending order

49 papers	2,480 citations	361413 20 h-index	233421 45 g-index
49 all docs	49 docs citations	49 times ranked	5705 citing authors

#	Article	IF	Citations
1	Event generator tunes obtained from underlying event and multiparton scattering measurements. European Physical Journal C, 2016, 76, 155.	3.9	499
2	Observation of a new boson with mass near 125 GeV in pp collisions at $ sqrt{s}=7 $ and 8 TeV. Journal of High Energy Physics, 2013, 2013, 1.	4.7	320
3	Extraction and validation of a new set of CMS pythia8 tunes from underlying-event measurements. European Physical Journal C, 2020, 80, 4.	3.9	198
4	Pileup per particle identification. Journal of High Energy Physics, 2014, 2014, 1.	4.7	182
5	Jet substructure at the Large Hadron Collider. Reviews of Modern Physics, 2019, 91, .	45.6	128
6	Precision luminosity measurement in proton–proton collisions at $$sqrt{s} = 13,hbox {TeV}$$ in 2015 and 2016 at CMS. European Physical Journal C, 2021, 81, 800.	3.9	123
7	Measurements of inclusive W and Z cross sections in pp collisions at $ sqrt {s} = 7 $ TeV. Journal of High Energy Physics, 2011, 2011, 1.	4.7	122
8	CMS tracking performance results from early LHC operation. European Physical Journal C, 2010, 70, 1165-1192.	3.9	120
9	Measurements of properties of the Higgs boson decaying into the four-lepton final state in pp collisions at $$ sqrt{s}=13 $$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	101
10	M3: a new muon missing momentum experiment to probe (g − 2)μ and dark matter at Fermilab. Journal of High Energy Physics, 2018, 2018, 1.	4.7	82
11	Thinking outside the ROCs: Designing Decorrelated Taggers (DDT) for jet substructure. Journal of High Energy Physics, 2016, 2016, 1.	4.7	75
12	Fast convolutional neural networks on FPGAs with hls4ml. Machine Learning: Science and Technology, 2021, 2, 045015.	5.0	47
13	Compressing deep neural networks on FPGAs to binary and ternary precision with <tt>hls4ml</tt>. Machine Learning: Science and Technology, 2021, 2, 015001.	5.0	45
14	Scrutinizing the Higgs signal and background in the 2e2μ golden channel. Journal of High Energy Physics, 2013, 2013, 1.	4.7	36
15	Measurements of production cross sections of the Higgs boson in the four-lepton final state in proton–proton collisions at $$sqrt{s} = 13,ext {TeV} $$. European Physical Journal C, 2021, 81, 488.	3.9	35
16	FPGA-Accelerated Machine Learning Inference as a Service for Particle Physics Computing. Computing and Software for Big Science, 2019, 3, 1.	2.9	34
17	Distance-Weighted Graph Neural Networks on FPGAs for Real-Time Particle Reconstruction in High Energy Physics. Frontiers in Big Data, 2020, 3, 598927.	2.9	31
18	Search for light bosons in decays of the 125 GeV Higgs boson in proton-proton collisions at s = 8 $$ sqrt{s}=8 $$ TeV. Journal of High Energy Physics, 2017, 2017, 1.	4.7	29

#	Article	IF	Citations
19	Measurements of Higgs boson production cross sections and couplings in the diphoton decay channel at $\sqrt{\mathrm{s}}$ = 13 TeV. Journal of High Energy Physics, 2021, 2021, 1.	4.7	27
20	A Reconfigurable Neural Network ASIC for Detector Front-End Data Compression at the HL-LHC. IEEE Transactions on Nuclear Science, 2021, 68, 2179-2186.	2.0	25
21	Applications and Techniques for Fast Machine Learning in Science. Frontiers in Big Data, 2022, 5, 787421.	2.9	20
22	Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into Ï„ leptons in pp collisions at s = 8 $\sqrt{s}=8$ TeV. Journal of High Energy Physics, 2016, 2016, 1.	4.7	19
23	Search for low-mass dilepton resonances in Higgs boson decays to four-lepton final states in protonâ€"proton collisions at $\sqrt{s}=13,\text{ TeV}$. European Physical Journal C, 2022, 82, 290.	3.9	18
24	Real-time artificial intelligence for accelerator control: A study at the Fermilab Booster. Physical Review Accelerators and Beams, 2021, 24, .	1.6	15
25	GPU-Accelerated Machine Learning Inference as a Service for Computing in Neutrino Experiments. Frontiers in Big Data, 2020, 3, 604083.	2.9	14
26	Lepton-nucleus cross section measurements for DUNE with the LDMX detector. Physical Review D, 2020, 101, .	4.7	13
27	Search for supersymmetry in final states with two or three soft leptons and missing transverse momentum in proton-proton collisions at $\sqrt{s}$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	13
28	Multi-Vdd Design for Content Addressable Memories (CAM): A Power-Delay Optimization Analysis. Journal of Low Power Electronics and Applications, 2018, 8, 25.	2.0	12
29	Search for a right-handed W boson and a heavy neutrino in proton-proton collisions at $\sqrt{s}$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	12
30	GPU coprocessors as a service for deep learning inference in high energy physics. Machine Learning: Science and Technology, 2021, 2, 035005.	5.0	11
31	Dissecting jets and missing energy searches using n-body extended simplified models. Journal of High Energy Physics, 2016, 2016, 1.	4.7	8
32	Intelliquench: An Adaptive Machine Learning System for Detection of Superconducting Magnet Quenches. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	8
33	FPGAs-as-a-Service Toolkit (FaaST). , 2020, , .		7
34	Inclusive and differential cross section measurements of single top quark production in association with a Z boson in proton-proton collisions at $\sqrt{s}$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	6
35	Search for heavy resonances decaying to ZZ or ZW and axion-like particles mediating nonresonant ZZ or ZH production at $\sqrt{s}$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	6
36	*Algean* : An Open Framework for Deploying Machine Learning on Heterogeneous Clusters. ACM Transactions on Reconfigurable Technology and Systems, 2022, 15, 1-32.	2.5	5

#	Article	IF	Citations
37	Search for flavor-changing neutral current interactions of the top quark and the Higgs boson decaying to a bottom quark-antiquark pair at $$ sqrt{s} $$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
38	Search for long-lived particles decaying into muon pairs in proton-proton collisions at $$ sqrt{s} $$ = 13 TeV collected with a dedicated high-rate data stream. Journal of High Energy Physics, 2022, 2022, .	4.7	5
39	Measurement and QCD analysis of double-differential inclusive jet cross sections in proton-proton collisions at $$ sqrt{s} $$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	5
40	A methodology for power characterization of associative memories. , 2015, , .		4
41	Search for higgsinos decaying to two Higgs bosons and missing transverse momentum in proton-proton collisions at $$ sqrt{s} $$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, .	4.7	4
42	A content addressable memory with multi-Vdd scheme for low power tunable operation. , 2017, , .		2
43	Search for a heavy resonance decaying into a top quark and a W boson in the lepton+jets final state at $$ sqrt{s} $$ = 13 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
44	Measurement of the inclusive $$ mathrm{t}overline{mathrm{t}} $$ production cross section in proton-proton collisions at $$ sqrt{s} $$ = 5.02 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	2
45	Search for heavy resonances decaying to a pair of Lorentz-boosted Higgs bosons in final states with leptons and a bottom quark pair at $$ sqrt{s} $$= 13 TeV. Journal of High Energy Physics, 2022, 2022, .	4.7	2
46	Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory. IEEE Transactions on Nuclear Science, 2020, 67, 2111-2118.	2.0	1
47	Study of dijet events with large rapidity separation in proton-proton collisions at $$ sqrt{s} $$ = 2.76 TeV. Journal of High Energy Physics, 2022, 2022, 1.	4.7	1
48	Observation of B^{0} $$ightarrow $$ $$uppsi $$(2S)K$$^0_mathrm {S}uppi ^+uppi ^-$$ and B$$^0_mathrm {s}$$ $$ightarrow $$ $$uppsi $$(2S)K$$^0_mathrm {S}$$ decays. European Physical Journal C, 2022, 82, .	3.9	1
49	Prospects for a measurement of the W boson mass in the all-jets final state at hadron colliders. Journal of High Energy Physics, 2019, 2019, 1.	4.7	0