

Marc Vanderhaeghen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8312587/publications.pdf>

Version: 2024-02-01

132
papers

7,785
citations

53794

45
h-index

49909

87
g-index

133
all docs

133
docs citations

133
times ranked

5263
citing authors

#	ARTICLE	IF	CITATIONS
1	The proton charge radius. <i>Reviews of Modern Physics</i> , 2022, 94, .	45.6	50
2	Expanding Nuclear Physics Horizons with the Gamma Factory. <i>Annalen Der Physik</i> , 2022, 534, .	2.4	21
3	X17 Discovery Potential in the $\hat{\Gamma}^3 N$ process. <i>Physical Review Letters</i> , 2019, 123, 091802.	7.8	4
4	Dispersive analysis of the $\hat{\Gamma}^3 N$ process at Jefferson Lab. <i>Physical Review Letters</i> , 2019, 123, 091802.	4.1	7
5	Dispersive evaluation of the Lamb shift in muonic deuterium from chiral effective field theory. <i>Physical Review C</i> , 2021, 103, .	2.9	11
6	Leading-order QED radiative corrections to timelike Compton scattering on the proton. <i>Physical Review D</i> , 2021, 103, .	4.7	3
7	The proton charge radius extracted from the initial-state radiation experiment at MAMI. <i>European Physical Journal A</i> , 2021, 57, 1.	2.5	21
8	Data-driven dispersive analysis of the $\hat{\Gamma}^3 N$ and $\hat{\Gamma}^3 N$ scattering. <i>Physical Review D</i> , 2021, 103, .	4.7	11
9	An experimental program with high duty-cycle polarized and unpolarized positron beams at Jefferson Lab. <i>European Physical Journal A</i> , 2021, 57, 1.	2.5	17
10	Soft-photon radiative corrections to the $\hat{\Gamma}^3 N$ process. <i>Physical Review D</i> , 2021, 104, .	4.7	1
11	The anomalous magnetic moment of the muon in the Standard Model. <i>Physics Reports</i> , 2020, 887, 1-166.	25.6	790
12	Low-energy doubly virtual Compton scattering from dilepton electroproduction on a nucleon. <i>Physical Review C</i> , 2020, 102, .	2.9	5
13	$\hat{\Gamma}^3$ photoproduction on the proton at the Electron-Ion Collider. <i>Physical Review D</i> , 2020, 102, .	4.7	27
14	Neutron skins of atomic nuclei: per aspera ad astra. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2019, 46, 093003.	3.6	83
15	Leading order corrections to the Bethe-Heitler process in the $\hat{\Gamma}^3 p$ reaction. <i>Physical Review D</i> , 2019, 100, .	4.7	10
16	Theoretical analysis of the $\hat{\Gamma}^3 p$ process. <i>EPJ Web of Conferences</i> , 2019, 199, 02005.	0.3	5
17	Dilepton photoproduction on a deuteron target. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 797, 134872.	4.1	2
18	Dispersive analysis of the $\hat{\Gamma}^3 N$ process. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 789, 366-372.	4.1	42

#	ARTICLE	IF	CITATIONS
19	Sum rules across the unpolarized Compton processes involving generalized polarizabilities and moments of nucleon structure functions. Physical Review D, 2018, 97, .	4.7	18
20	Dispersion Theory in Electromagnetic Interactions. Annual Review of Nuclear and Particle Science, 2018, 68, 75-103.	10.2	23
21	Soft-photon corrections to the Bethe-Heitler process in the $\gamma p \rightarrow \gamma p$ reaction. Physical Review D, 2010, 97, .	4.7	9
22	Tomographic image of the proton. Physical Review D, 2017, 95, .	4.7	33
23	First measurement of proton's charge form factor at very low Q2 with initial state radiation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 771, 194-198.	4.1	37
24	Spin-dependent sum rules connecting real and virtual Compton scattering verified. Physical Review D, 2017, 95, .	4.7	10
25	Two-photon exchange contribution to elastic γp -proton scattering: Full dispersive treatment of γp scattering. Physical Review D, 2018, 97, .	4.7	26
26	Two-photon exchange corrections to elastic γp -proton scattering: Full dispersive treatment of γp scattering. Physical Review D, 2018, 97, .	4.7	20
27	Generalized polarizabilities of the nucleon in baryon chiral perturbation theory. European Physical Journal C, 2017, 77, 1.	3.9	13
28	Beam normal spin asymmetry for the $\gamma p \rightarrow \gamma p$ reaction. Physical Review D, 2018, 97, .	4.7	15
29	Analysis of Deeply Virtual Compton Scattering data at Jefferson Lab and proton tomography. European Physical Journal A, 2017, 53, 1.	2.5	21
30	Accessing the real part of the forward γp scattering amplitude from γp scattering. Physical Review D, 2018, 97, .	4.7	36
31	Two-photon exchange correction to muon γp photoproduction on protons around threshold. European Physical Journal C, 2016, 76, 1.	3.9	34
32	Timelike Compton scattering off the neutron and generalized parton distributions. European Physical Journal A, 2016, 52, 1.	2.5	9
33	Lepton Universality Test in the Photoproduction of γp on a Proton Target. Physical Review Letters, 2015, 115, 221804.	7.8	15
34	Timelike Compton scattering off the proton and generalized parton distributions. European Physical Journal A, 2015, 51, 1.	2.5	26
35	Dispersive evaluation of the D-term form factor in deeply virtual Compton scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 739, 133-138.	4.1	59
36	Nuclear-structure contribution to the Lamb shift in muonic deuterium. Physical Review A, 2014, 89, .	2.5	51

#	ARTICLE	IF	CITATIONS
37	Two-photon exchange corrections to elastic electron-proton scattering at large momentum transfer within the SCET approach. Journal of High Energy Physics, 2013, 2013, 1.	4.7	38
38	Theoretical framework to analyze searches for hidden light gauge bosons in electron scattering fixed target experiments. Physical Review D, 2013, 88, .	4.7	47
39	Generalized parton distributions in the valence region from deeply virtual compton scattering. Reports on Progress in Physics, 2013, 76, 066202.	20.1	136
40	Virtual Compton scattering and the generalized polarizabilities of the proton at $Q^2 = 1.76 \text{ GeV}^2$. Physical Review C, 2012, 86, .	2.9	15
41	Colloquium: The Shape of Hadrons. Reviews of Modern Physics, 2012, 84, 1231-1251.	45.6	19
42	Long Range Structure of the Nucleon. Nuclear Physics News, 2011, 21, 14-22.	0.4	13
43	Higher-order proton structure corrections to the Lamb shift in muonic hydrogen. Physical Review A, 2011, 84, .	2.5	96
44	Light-front transverse charge densities. Journal of Physics: Conference Series, 2011, 295, 012050.	0.4	0
45	Determination of two-photon exchange amplitudes from elastic electron-proton scattering data. European Physical Journal A, 2011, 47, 1.	2.5	37
46	Electromagnetic excitation of nucleon resonances. European Physical Journal: Special Topics, 2011, 198, 141-170.	2.6	103
47	Nucleon polarizabilities in real and virtual Compton scattering: Recent theoretical issues. European Physical Journal: Special Topics, 2011, 198, 269-285.	2.6	5
48	Unified framework for generalized and transverse-momentum dependent parton distributions within a 3Q light-cone picture of the nucleon. Journal of High Energy Physics, 2011, 2011, 1.	4.7	102
49	Transverse Beam Spin Asymmetries at Backward Angles in Elastic Electron-Proton and Quasielastic Electron-Deuteron Scattering. Physical Review Letters, 2011, 107, 022501.	7.8	26
50	Search for Effects Beyond the Born Approximation in Polarization Transfer Observables in Elastic Scattering. Physical Review Letters, 2011, 106, 132501.	7.8	80
51	Light-Front Interpretation of Proton Generalized Polarizabilities. Physical Review Letters, 2010, 104, 112001.	7.8	22
52	Two-Photon Exchange in Elastic Electron-Proton Scattering: A QCD Factorization Approach. Physical Review Letters, 2009, 103, 092004.	7.8	61
53	Quark transverse charge densities in the from lattice QCD. Nuclear Physics A, 2009, 825, 115-144.	1.5	59
54	Empirical transverse charge densities in the deuteron. European Physical Journal A, 2009, 41, 1-5.	2.5	30

#	ARTICLE	IF	CITATIONS
55	<p>magnetic properties of the</p> $\int_0^1 \frac{1}{x} \ln \left(\frac{1+x}{1-x} \right) dx$ <p>Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 747 Td (stretchy="false")</p> <p>xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" style="font-family: serif; font-size: 1em;"> $\int_0^1 \frac{1}{x} \ln \left(\frac{1+x}{1-x} \right) dx$ </p>		



#	ARTICLE	IF	CITATIONS
73	Chiral effective-field theory in the $\hat{\pi}^+(1232)$ region: Pion electroproduction on the nucleon. Physical Review D, 2006, 73, .	4.7	73
74	Measurement of Deeply Virtual Compton Scattering with a Polarized-Proton Target. Physical Review Letters, 2006, 97, 072002.	7.8	98
75	<small>xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:tbl_struct="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x</small>	4.1	39
76	Normal Spin Asymmetries in Elastic Electron-Proton Scattering. Nuclear Physics A, 2005, 755, 273-276.	1.5	0
77	Transverse single spin asymmetry in elastic electron-proton scattering. European Physical Journal A, 2005, 24, 33-34.	2.5	0
78	Electromagnetic Nucleon-to-Delta Transition in Chiral Effective-Field Theory. Physical Review Letters, 2005, 95, 232001.	7.8	72
79	Unitary model for the $\hat{\pi}^+\hat{\pi}^0$ reaction and the magnetic dipole moment of the $\hat{\pi}^+(1232)$. Physical Review C, 2005, 71, .	2.9	20
80	Nucleon form factors from generalized parton distributions. Physical Review D, 2005, 72, .	4.7	229
81	Two-photon exchange contribution to elastic electron-nucleon scattering at large momentum transfer. Physical Review D, 2005, 72, .	4.7	147
82	New predictions for generalized spin polarizabilities from heavy baryon chiral perturbation theory. Physical Review D, 2004, 70, .	4.7	20
83	Higher moments of nucleon spin structure functions in heavy baryon chiral perturbation theory and in a resonance model. Physical Review D, 2004, 69, .	4.7	14
84	Partonic Calculation of the Two-Photon Exchange Contribution to Elastic Electron-Proton Scattering at Large Momentum Transfer. Physical Review Letters, 2004, 93, 122301.	7.8	193
85	Resonance estimates for single spin asymmetries in elastic electron-nucleon scattering. Physical Review C, 2004, 70, .	2.9	55
86	Measurement of the Generalized Polarizabilities of the Proton in Virtual Compton Scattering at $Q^2=0.92$ and 1.76 GeV ² . Physical Review Letters, 2004, 93, 122001.	7.8	33
87	Generalized parton distributions, nucleon form factors, and large- t processes. Annalen Der Physik, 2004, 13, 740-748.	2.4	2
88	Beam normal spin asymmetry in elastic lepton-nucleon scattering. Nuclear Physics A, 2004, 741, 234-248.	1.5	49
89	$SU(6)$ -BREAKING SYMMETRY AND THE RATIO OF PROTON MOMENTUM DISTRIBUTIONS. , 2004, , .		0
90	Magnetic dipole moment of the $S_{11}(1535)$ from the $\hat{\pi}^+\hat{\pi}^0$ reaction. Nuclear Physics A, 2003, 723, 205-225.	1.5	28

#	ARTICLE	IF	CITATIONS
91	Magnetic moment of the S11 (1535) resonance. Nuclear Physics A, 2003, 721, C731-C734.	1.5	0
92	Dispersion relations in real and virtual Compton scattering. Physics Reports, 2003, 378, 99-205.	25.6	209
93	Quark model predictions for the SU(6)-breaking ratio of the proton momentum distributions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 552, 149-158.	4.1	4
94	How to Reconcile the Rosenbluth and the Polarization Transfer Methods in the Measurement of the Proton Form Factors. Physical Review Letters, 2003, 91, 142303.	7.8	292
95	Exclusive electromagnetic production of strangeness on the nucleon: Regge analysis of recent data. Physical Review C, 2003, 68, .	2.9	33
96	Reggeized model for π^0 photoproduction. Physical Review C, 2003, 68, .	2.9	97
97	Double Deeply Virtual Compton Scattering off the Nucleon. Physical Review Letters, 2003, 90, 012001.	7.8	58
98	Burkhardt-Cottingham sum rule and forward spin polarizabilities in heavy baryon chiral perturbation theory. Physical Review D, 2003, 67, .	4.7	39
99	Helicity-dependent twist-two and twist-three generalized parton distributions in light-front QCD. Physical Review D, 2003, 67, .	4.7	21
100	Generalized Spin Polarizabilities of the Nucleon in Heavy-Baryon Chiral Perturbation Theory at Order $O(p^4)$. Physical Review Letters, 2002, 89, 272002.	7.8	24
101	Off-forward matrix elements in light-front Hamiltonian QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 542, 245-254.	4.1	20
102	Dispersion relation formalism for virtual Compton scattering off the proton. European Physical Journal A, 2001, 11, 185-208.	2.5	53
103	Hard exclusive reactions and the structure of hadrons. Progress in Particle and Nuclear Physics, 2001, 47, 401-515.	14.4	681
104	Dispersion relation formalism for real and virtual Compton scattering and nucleon polarizabilities. Nuclear Physics A, 2001, 684, 357-359.	1.5	0
105	Deeply virtual Compton scattering on the nucleon: Study of the twist-3 effects. Physical Review D, 2001, 63, .	4.7	92
106	Magnetic dipole moment of the $\rho^+(1232)$ from the $\gamma p \rightarrow \rho^+ n$ reaction. Physical Review C, 2001, 64, .	2.9	38
107	Inelastic photon scattering and the magnetic moment of the $\rho^+(1232)$ resonance. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 484, 236-242.	4.1	26
108	The first virtual compton scattering experiment at MAMI. Nuclear Physics A, 2000, 666-667, 44-47.	1.5	2

#	ARTICLE	IF	CITATIONS
109	Deeply virtual compton scattering. Nuclear Physics A, 2000, 666-667, 234-243.	1.5	0
110	Dispersion relation formalism for virtual Compton scattering and the generalized polarizabilities of the nucleon. Physical Review C, 2000, 62, .	2.9	18
111	Higher order polarizabilities of the proton. Physical Review C, 2000, 61, .	2.9	70
112	QED radiative corrections to virtual Compton scattering. Physical Review C, 2000, 62, .	2.9	100
113	First Determination of Generalized Polarizabilities of the Proton by a Virtual Compton Scattering Experiment. Physical Review Letters, 2000, 85, 708-711.	7.8	63
114	Deeply virtual electroproduction of photons and mesons on the nucleon: Leading order amplitudes and power corrections. Physical Review D, 1999, 60, .	4.7	243
115	Fixed-t-subtracted dispersion relations for Compton scattering off the nucleon. Physical Review C, 1999, 61, .	2.9	65
116	Exclusive electroproduction of vector mesons, pseudoscalar mesons and photons in the Bjorken regime. Nuclear Physics A, 1999, 654, 602c-607c.	1.5	2
117	Virtual Compton scattering off the nucleon. Progress in Particle and Nuclear Physics, 1998, 41, 125-190.	14.4	146
118	Hard Electroproduction of Photons and Mesons on the Nucleon. Physical Review Letters, 1998, 80, 5064-5067.	7.8	128
119	Pseudoscalar meson photoproduction at high energies: from the Regge regime to the hard scattering regime. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 400, 6-11.	4.1	42
120	Double polarization observables in virtual Compton scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 402, 243-250.	4.1	23
121	Electroinduced two-nucleon knockout and correlations in nuclei. Nuclear Physics A, 1997, 624, 581-622.	1.5	58
122	Pion and kaon photoproduction at high energies: forward and intermediate angles. Nuclear Physics A, 1997, 627, 645-678.	1.5	247
123	Reply to "Comment on "Multinucleon mechanisms in ($\hat{1}^3,N$) and ($\hat{1}^3,NN$) reactions"â€™. Physical Review C, 1996, 54, 3313-3314.	2.9	4
124	Short-range correlations in ($e,e\hat{e}^2p$) and ($e,e\hat{e}^2pp$) reactions on complex nuclei. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 350, 1-7.	4.1	23
125	The $12C(e, e\hat{e}^2p)$ and $12C(e, e\hat{e}^2pp)$ reactions in the $\hat{1}^p$ -resonance region. Nuclear Physics A, 1995, 587, 697-720.	1.5	21
126	Proton photoproduction from $12C$. Nuclear Physics A, 1995, 593, 463-487.	1.5	29

#	ARTICLE	IF	CITATIONS
127	Pion photoproduction through the $\hat{\rho}$ resonance region: relativistic versus non-relativistic unitary models. Nuclear Physics A, 1995, 595, 219-258.	1.5	23
128	Multinucleon mechanisms in $(\hat{1}^3, N)$ and $(\hat{1}^3, NN)$ reactions. Physical Review C, 1994, 49, 2704-2715.	2.9	35
129	Effects of the final-state interaction in $(\hat{1}^3, pn)$ and $(\hat{1}^3, pp)$ processes. Nuclear Physics A, 1994, 568, 828-854.	1.5	56
130	On meson-exchange and $\hat{\rho}$ -isobar currents in the two-nucleon photoabsorption mechanism. Nuclear Physics A, 1994, 580, 551-576.	1.5	21
131	Absorption mechanisms in photon induced two-body knockout. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 316, 17-22.	4.1	14
132	Do proton-neutron pairs behave like quasideuterons in the photoabsorption process?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 291, 213-217.	4.1	24