

Joerg Pretz

List of Publications by Year in descending order

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134
papers

10,083
citations

44069

48
h-index

32842

100
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136
all docs

136
docs citations

136
times ranked

6062
citing authors

#	ARTICLE	IF	CITATIONS
1	<p> $\int_{-1}^{1} \frac{1}{\sqrt{1-x^2}} dx = \arcsin(x) \Big _{-1}^{1} = \frac{\pi}{2} - \left(-\frac{\pi}{2}\right) = \pi$ </p>	4.7	742
2	Probing transversity by measuring \hat{b} polarisation in SIDIS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 824, 136834.	4.1	2
3	Influence of electron cooling on the polarization lifetime of a horizontally polarized storage ring beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 987, 164797.	1.6	1
4	Beam-based alignment at the Cooler Synchrotron COSY as a prerequisite for an electric dipole moment measurement. Journal of Instrumentation, 2021, 16, T02001-T02001.	1.2	5
5	Spin density matrix elements in exclusive Ω meson muoproduction. European Physical Journal C, 2021, 81, 1.	3.9	7
6	CPEDM: A Storage Ring Facility for Charged-Particle EDM Searches. Nuclear Physics News, 2021, 31, 27-29.	0.4	0
7	Oscillations of a suspended slinky. European Journal of Physics, 2021, 42, 045008.	0.6	1
8	Triangle Singularity as the Origin of the π^0 Singularity. Physical Review Letters, 2021, 126, 082301.	11.1	110
9	First detection of collective oscillations of a stored deuteron beam with an amplitude close to the quantum limit. Physical Review Accelerators and Beams, 2021, 24, .	1.6	5
10	Antiproton over proton and $K^{\bar{0}}$ over K^+ multiplicity ratios at high z in DIS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 807, 135600.	4.1	3
11	Contribution of exclusive diffractive processes to the measured azimuthal asymmetries in SIDIS. Nuclear Physics B, 2020, 956, 115039.	2.5	3
12	Measurement of the cross section for hard exclusive π^0 muoproduction on the proton. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 805, 135454.	4.1	16
13	Statistical sensitivity estimates for oscillating electric dipole moment measurements in storage rings. European Physical Journal C, 2020, 80, 107.	3.9	14
14	Electric Dipole Moment Measurements at Storage Rings. Journal of Physics: Conference Series, 2020, 1586, 012043.	0.4	1
15	Measurement of deuteron carbon vector analyzing powers in the kinetic energy range 170–380 MeV. European Physical Journal A, 2020, 56, 1.	2.5	5
16	A new beam polarimeter at COSY to search for electric dipole moments of charged particles. Journal of Instrumentation, 2020, 15, P12005-P12005.	1.2	4
17	Extraction of azimuthal asymmetries using optimal observables. European Physical Journal C, 2019, 79, 47.	3.9	6
18	Transverse extension of partons in the proton probed in the sea-quark range by measuring the DVCS cross section. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 793, 188-194.	4.1	25

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37	First measurement of the Sivers asymmetry for gluons using SIDIS data. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 772, 854-864.	4.1	19
38	Phase Locking the Spin Precession in a Storage Ring. Physical Review Letters, 2017, 119, 014801.	7.8	33
39	Leading-order determination of the gluon polarisation from semi-inclusive deep inelastic scattering data. European Physical Journal C, 2017, 77, 1.	3.9	12
40	Multiplicities of charged pions and charged hadrons from deep-inelastic scattering of muons off an isoscalar target. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 764, 1-10.	4.1	28
41	Improved method to extract nucleon helicity distributions using event weighting. Journal of Instrumentation, 2017, 12, P02007-P02007.	1.2	0
42	Spin tune mapping as a novel tool to probe the spin dynamics in storage rings. Physical Review Accelerators and Beams, 2017, 20, .	1.6	30
43	Amplitude estimation of a sine function based on confidence intervals and Bayes' theorem. Journal of Instrumentation, 2016, 11, P05003-P05003.	1.2	2
44	A storage ring experiment to detect a proton electric dipole moment. Review of Scientific Instruments, 2016, 87, 115116.	1.3	85
45	Longitudinal double spin asymmetries in single hadron quasi-real photoproduction at high p T. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 753, 573-579.	4.1	5
46	Interplay among transversity induced asymmetries in hadron leptonproduction. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 753, 406-411.	4.1	11
47	How to Reach a Thousand-Second in-Plane Polarization Lifetime with $0.97 \hat{a}^{\prime} \text{GeV} < /math>$ The Spin Structure Function $g_1^p < /math>$ 	7.8	57
48	Odd and even partial waves of $g_1^p < /math>$ of the proton and a test of the Bjorken sum rule. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 753, 18-28.	4.1	89
49	Project Overview and Status of Charged Particle EDM Searches in Storage Rings. , 2016, , .		0
50	New Method for a Continuous Determination of the Spin Tune in Storage Rings and Implications for Precision Experiments. Physical Review Letters, 2015, 115, 094801.	7.8	53
51	Observation of a New Narrow Axial-Vector Meson $a_1 < /math>$ $T_j \text{ ETQq1 } 1.0784314 \text{ rgBT } / \text{Overlock } 10 \text{ Tf } 50 \text{ 167 Td } < /math>$	7.8	60
52	The COMPASS setup for physics with hadron beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 779, 69-115.	1.6	59
53	Search for exclusive photoproduction of $Z < /math>$ at COMPASS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 742, Odd and even partial waves of $\hat{f} < /math>$ 	4.1	43
54	Odd and even partial waves of $\hat{f} < /math>$ Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 740, 303-311.	4.1	43

#	ARTICLE	IF	CITATIONS
55	Collins and Sivers asymmetries in muon production of pions and kaons off transversely polarised protons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 744, 250-259.	4.1	81
56	Measurement of the Charged-Pion Polarizability. Physical Review Letters, 2015, 114, 062002.	7.8	36
57	Measuring the polarization of a rapidly precessing deuteron beam. Physical Review Special Topics: Accelerators and Beams, 2014, 17, .	1.8	31
58	A high-statistics measurement of transverse spin effects in dihadron production from muon-proton semi-inclusive deep-inelastic scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 736, 124-131.	4.1	64
59	Spin alignment and violation of the OZI rule in exclusive $\bar{\Lambda}^0$ and $\bar{\Lambda}^+$ production in pp collisions. Nuclear Physics B, 2014, 886, 1078-1101.	2.5	4
60	Measurement of azimuthal hadron asymmetries in semi-inclusive deep inelastic scattering off unpolarised nucleons. Nuclear Physics B, 2014, 886, 1046-1077.	2.5	55
61	Measurement of radiative widths of $a_2(1320)$ and π_{12} (1670). European Physical Journal A, 2014, 50, 1.	2.5	12
62	Transverse target spin asymmetries in exclusive muon production. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 731, 19-26.	4.1	18
63	Hadron production in the scattering of muons at 160 GeV/c. European Physical Journal C, 2013, 73, 1.	4.7	6
64	Hadron transverse momentum distributions in muon deep inelastic scattering at 160 GeV/c. European Physical Journal C, 2013, 73, 1.	3.9	57
65	Study of $\Lambda(1385)$ and $\Sigma(1321)$ hyperon and antihyperon production in deep inelastic muon scattering. European Physical Journal C, 2013, 73, 1.	3.9	7
66	Leading order determination of the gluon polarisation from DIS events with high-pT hadron pairs. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 922-930.	4.1	45
67	Measurement of permanent electric dipole moments of charged hadrons in storage rings. Hyperfine Interactions, 2013, 214, 111-117.	0.5	36
68	Leading and next-to-leading order gluon polarization in the nucleon and longitudinal double spin asymmetries from open charm muon production. Physical Review D, 2013, 87, .	4.7	55
69	Measurement of permanent electric dipole moments of charged hadrons in storage rings. , 2013, , 111-117.		1
70	First Measurement of Chiral Dynamics in muon production. Physical Review Letters, 2012, 108, 192001.	7.8	18
71	Exclusive muon production on transversely polarised protons and deuterons. Nuclear Physics B, 2012, 865, 1-20.	2.5	18
72	D ⁺ and D meson production in muon nucleon interactions at 160 GeV/c. European Physical Journal C, 2012, 72, 1.	3.9	5

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73	I \hat{A} Experimental investigation of transverse spin asymmetries in $\hat{1}/4$ -p SIDIS processes: Collins asymmetries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 717, 376-382.	4.1	101
74	II \hat{A} Experimental investigation of transverse spin asymmetries in $\hat{1}/4$ -p SIDIS processes: Sivers asymmetries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 717, 383-389.	4.1	111
75	Implementation of mean-timing and subsequent logic functions on an FPGA. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 672, 13-20.	1.6	1
76	Transverse spin effects in hadron-pair production from semi-inclusive deep inelastic scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 713, 10-16.	4.1	70
77	Comparison of methods to extract an asymmetry parameter from data. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 659, 456-461.	1.6	5
78	Azimuthal asymmetries of charged hadrons produced by high-energy muons scattered off longitudinally polarised deuterons. European Physical Journal C, 2010, 70, 39-49.	3.9	31
79	The spin-dependent structure function of the proton $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll" \rangle \langle \text{mml:m} \text{subsup} \rangle \langle \text{mml:mi} \rangle \text{g} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:m} \text{subsup} \rangle \langle \text{mml:mi} \rangle \text{and a test of the Bjorken sum rule. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 690, 466-472.$	4.1	142
80	Measurement of the Collins and Sivers asymmetries on transversely polarised protons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 692, 240-246.	4.1	142
81	Quark helicity distributions from longitudinal spin asymmetries in muon \hat{A} proton and muon \hat{A} deuteron scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 693, 227-235.	4.1	118
82	Future plans at COMPASS. EPJ Web of Conferences, 2010, 3, 07019.	0.3	0
83	Observation of a resonance in Diffractive Dissociation of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:m} \text{sup} \rangle \langle \text{mml:mi} \rangle \text{J} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{PC} \langle \text{mml:mi} \rangle \langle \text{mml:m} \text{sup} \rangle \langle \text{mml:mi} \rangle \text{GeV} \langle \text{mml:mi} \rangle \langle \text{mml:m} \text{sup} \rangle \langle \text{mml:mi} \rangle \text{Physical Review Letters, 2010, 104, 241803.$	7.8	112
84	Improved limit on the muon electric dipole moment. Physical Review D, 2009, 80, .	4.7	215
85	Simultaneous determination of signal and background asymmetries. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 602, 594-596.	1.6	10
86	Measurement of the Gluon Polarization in the Nucleon at COMPASS. Nuclear Physics, Section B, Proceedings Supplements, 2009, 186, 70-73.	0.4	0
87	Collins and Sivers asymmetries for pions and kaons in muon \hat{A} deuteron DIS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 673, 127-135.	4.1	207
88	Gluon polarisation in the nucleon and longitudinal double spin asymmetries from open charm muon production. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 676, 31-38.	4.1	36
89	Flavour separation of helicity distributions from deep inelastic muon \hat{A} deuteron scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 680, 217-224.	4.1	66
90	Measurement of the longitudinal spin transfer to \hat{b} and $\$ \{ \text{varLambda} \} \$$ hyperons in polarised muon DIS. European Physical Journal C, 2009, 64, 171.	3.9	32

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91	The polarised valence quark distribution from semi-inclusive DIS. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 660, 458-465.	4.1	72
92	Search for Lorentz and C violation Effects in Muon Spin Precession. Physical Review Letters, 2008, 100, 091602.	7.8	57
93	A new measurement of the Collins and Sivers asymmetries on a transversely polarised deuteron target. Nuclear Physics B, 2007, 765, 31-70.	2.5	203
94	Statistical equations and methods applied to the precision muon experiment at BNL. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 579, 1096-1116.	1.6	8
95	The COMPASS experiment at CERN. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 577, 455-518.	1.6	388
96	The deuteron spin-dependent structure function F_2^D . Nuclear Physics Letters, 2007, 658, 1-6.	4.1	258
97	Measurement of the spin structure of the deuteron in the DIS region. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 612, 154-164.	4.1	48
98	Double spin asymmetry in exclusive \bar{D} muoproduction at COMPASS. European Physical Journal C, 2007, 52, 255-265.	3.9	19
99	Spin Physics with COMPASS. , 2007, , .		0
100	Final report of the E821 muon anomalous magnetic moment measurement at BNL. Physical Review D, 2006, 73, .	4.7	1,800
101	Gluon polarization in the nucleon from quasi-real photoproduction of high- Q^2 π^0 . Physical Review Letters, 2005, 94, 202002.	4.1	118
102	Measurement of the spin structure of the deuteron in the DIS region. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 612, 154-164.	4.1	111
103	The COMPASS trigger system for muon scattering. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 550, 217-240.	1.6	13
104	First Measurement of the Transverse Spin Asymmetries of the Deuteron in Semi-inclusive Deep Inelastic Scattering. Physical Review Letters, 2005, 94, 202002.	7.8	275
105	Spin asymmetries for events with high- Q^2 hadrons in DIS and an evaluation of the gluon polarization. Physical Review D, 2004, 70, .	4.7	96
106	Measurement of the Negative Muon Anomalous Magnetic Moment to 0.7 ppm. Physical Review Letters, 2004, 92, 161802.	7.8	628
107	Measurement of the muon anomalous magnetic moment to 0.7 ppm. Nuclear Physics, Section B, Proceedings Supplements, 2003, 117, 373-384.	0.4	1
108	News from the muon ($g-2$) experiment at BNL. Nuclear Physics, Section B, Proceedings Supplements, 2003, 116, 215-219.	0.4	5

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109	Publisher's Note: Measurement of the Positive Muon Anomalous Magnetic Moment to 0.7 ppm [Phys. Rev. Lett. 89, 101804 (2002)]. Physical Review Letters, 2002, 89, .	7.8	145
110	Recent results and current status of the muon $g-2$ experiment at BNL. Canadian Journal of Physics, 2002, 80, 1355-1364.	1.1	2
111	Recent results from the BNL $g-2$ experiment. Nuclear Physics, Section B, Proceedings Supplements, 2002, 111, 200-205.	0.4	0
112	The superconducting inflector for the BNL $g-2$ experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 491, 23-40.	1.6	37
113	Muon $g-2$ experiment at Brookhaven National Laboratory. Nuclear Physics, Section B, Proceedings Supplements, 2002, 105, 156-159.	0.4	0
114	Measurement of the Positive Muon Anomalous Magnetic Moment to 0.7 ppm. Physical Review Letters, 2002, 89, 101804.	7.8	378
115	Precise Measurement of the Positive Muon Anomalous Magnetic Moment. Physical Review Letters, 2001, 86, 2227-2231.	7.8	489
116	A quad 500 MHz waveform digitizer with differential trigger for use in the muon $g-2$ experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 450, 391-398.	1.6	5
117	Measurement of the SMC muon beam polarisation using the asymmetry in the elastic scattering off polarised electrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 443, 1-19.	1.6	12
118	Improved measurement of the positive muon anomalous magnetic moment. Physical Review D, 2000, 62, .	4.7	70
119	Spin asymmetries A_1 of the proton and the deuteron in the low x and low Q^2 region from polarized high energy muon scattering. Physical Review D, 1999, 60, .	4.7	69
120	A large Streamer Chamber muon tracking detector in a high-flux fixed-target application. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 435, 354-374.	1.6	2
121	The polarized double cell target of the SMC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 437, 23-67.	1.6	45
122	Polarised quark distributions in the nucleon from semi-inclusive spin asymmetries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 420, 180-190.	4.1	148
123	Measurement of proton and nitrogen polarization in ammonia and a test of equal spin temperature. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 419, 60-82.	1.6	14
124	Next-to-leading order QCD analysis of the spin structure function g_1 . Physical Review D, 1998, 58, .	4.7	117
125	Spin asymmetries A_1 and structure functions g_1 of the proton and the deuteron from polarized high energy muon scattering. Physical Review D, 1998, 58, .	4.7	266
126	Spin structure of the proton from polarized inclusive deep-inelastic muon-proton scattering. Physical Review D, 1997, 56, 5330-5358.	4.7	233

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127	The spin-dependent structure function $g_1(x)$ of the proton from polarized deep-inelastic muon scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 412, 414-424.	4.1	74
128	The spin-dependent structure function $g_1(x)$ of the deuteron from polarized deep-inelastic muon scattering. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 396, 338-348.	4.1	97
129	A line-shape analysis for spin-1 NMR signals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 398, 109-125.	1.6	17
130	Polarisation of valence and non-strange sea quarks in the nucleon from semi-inclusive spin asymmetries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 369, 93-100.	4.1	95
131	Large enhancement of deuteron polarization with frequency modulated microwaves. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 372, 339-343.	1.6	22
132	A new measurement of the spin-dependent structure function $g_1(x)$ of the deuteron. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 357, 248-254.	4.1	149
133	Spin asymmetry in muon-proton deep inelastic scattering on a transversely-polarized target. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 336, 125-130.	4.1	89
134	Measurement of the spin-dependent structure function $g_1(x)$ of the proton. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 329, 399-406.	4.1	311