

# Pierre Capel

## List of Publications by Year in descending order

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72

papers

1,052

citations

430874

18

h-index

414414

32

g-index

75

all docs

75

docs citations

75

times ranked

437

citing authors

#	ARTICLE	IF	CITATIONS
1	<math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi> $\hat{\pm}$ </mml:mi></math> -nucleus optical potentials from chiral effective field theory <math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>N</mml:mi><mml:mi>N</mml:mi></mml:mrow></math> interactions. <i>Physical Review C</i> , 2022, 105, .	2.9	3
2	Simulating core excitation in breakup reactions of halo nuclei using an effective three-body force. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022, 825, 136847.	4.1	5
3	Combining Halo-EFT Descriptions of Nuclei and Precise Models of Nuclear Reactions. <i>Few-Body Systems</i> , 2022, 63, .	1.5	2
4	Detailed study of the eikonal reaction theory for the breakup of one-neutron halo nuclei. <i>Physical Review C</i> , 2021, 103, . <i>Halo effective field theory analysis of one-neutron knockout reactions of</i> <math>^{11}\text{Be}</math> and <math>^{15}\text{C}</math>. <i>Physical Review C</i> , 2021, 104,	2.9	2
5	<math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:math>^{11}\text{Be}</mml:math> and <math>^{15}\text{C}</math>.	2.9	12
6	Dispersion relations applied to double-folding potentials from chiral effective field theory. <i>Physical Review C</i> , 2020, 102, .	2.9	10
7	From Halo Effective Field Theory to the study of breakup and transfer reactions: reliably probing the halo structure of $^{11}\text{Be}$ and $^{15}\text{C}$ . <i>Journal of Physics: Conference Series</i> , 2020, 1610, 012010.	0.4	0
8	Study of cluster structures in nuclei through the ratio method. <i>European Physical Journal A</i> , 2020, 56, 1.	2.5	3
9	Sensitivity of one-neutron knockout of halo nuclei to their nuclear structure. <i>Journal of Physics: Conference Series</i> , 2020, 1643, 012088.	0.4	1
10	Solving the apparent inconsistency between GSI and RIKEN estimates of $^{11}\text{Be}$ $d\text{B}(\text{E})/d\text{E}$ . <i>Journal of Physics: Conference Series</i> , 2020, 1643, 012101.	0.4	0
11	Nucleus-nucleus potentials from local chiral EFT interactions. <i>Journal of Physics: Conference Series</i> , 2020, 1643, 012084.	0.4	0
12	Recent advances in the description of reactions involving exotic nuclei. <i>Journal of Physics: Conference Series</i> , 2020, 1643, 012073.	0.4	0
13	The eikonal model of reactions involving exotic nuclei; Roy Glauber's legacy in today's nuclear physics. <i>SciPost Physics Proceedings</i> , 2020, .	0.4	2
14	Extension of the ratio method to proton-rich nuclei. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2019, 46, 105111.	3.6	1
15	<math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:math>^{11}\text{Be}</mml:math> : From halo effective field theory structure to the study of transfer, breakup, and radiative-capture reactions. <i>Physical Review C</i> , 2019, 100, .	2.9	18
16	Reliable extraction of the $d\text{B}(\text{E})/d\text{E}$ for $^{11}\text{Be}$ from its breakup at 520 MeV/nucleon. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 790, 367-371.	4.1	27
17	Sensitivity of one-neutron knockout to the nuclear structure of halo nuclei. <i>Physical Review C</i> , 2019, 100, .	2.9	10
18	Introduction to Nuclear-Reaction Theory. <i>Springer Proceedings in Physics</i> , 2019, , 33-74.	0.2	0

#	ARTICLE	IF	CITATIONS
19	From <i>&lt;ab initio&gt;</i> structure predictions to reaction calculations via EFT. Journal of Physics: Conference Series, 2018, 1023, 012010.	0.4	4
20	Dissecting reaction calculations using halo effective field theory and <i>&lt;ab initio&gt;</i> input. Physical Review C, 2018, 98, .	2.9	25
21	<i>Systematic analysis of the peripherality of the &lt;math&gt;\text{Be}^{10}&lt;/math&gt; transfer reaction and extraction of the asymptotic normalization constant.</i> Physical Review C, 2018, 98, . xmlNs:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Be</mml:mi><mml:mprescripts /><mml:mn>10</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mrow><mml:mi>d</mml:mi><mml:mi></mml:mi><mml:mo>)</mml:mrow></mml:math> transfer reaction and extraction of the asymptotic normalization constant. Physical Review C, 2018, 98, .	2.9	21
22	Extraction of the ANC from the $\text{Be}^{10}(d, p) \text{Be}^{11}$ transfer reaction using the ADWA method. Journal of Physics: Conference Series, 2018, 1023, 012021.	0.4	1
23	Low-energy corrections to the eikonal description of elastic scattering and breakup of one-neutron halo nuclei in nuclear-dominated reactions. Physical Review C, 2018, 98, .	2.9	9
24	Double-folding potentials from chiral effective field theory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 782, 668-674.	4.1	16
25	Energy dependence of nonlocal optical potentials. Physical Review C, 2017, 96, .	2.9	19
26	Analysis of corrections to the eikonal approximation. Physical Review C, 2017, 96, .	2.9	7
27	Reconciling Coulomb breakup and neutron radiative capture. Physical Review C, 2017, 96, .	2.9	8
28	Extension of the ratio method to low energy. Physical Review C, 2016, 93, .	2.9	4
29	Recent developments in the eikonal description of the breakup of exotic nuclei. Journal of Physics: Conference Series, 2016, 724, 012005.	0.4	2
30	Extending the Eikonal Approximation to Low Energy., 2015, .	0	
31	The ratio method: a new way to look at halo nuclei. EPJ Web of Conferences, 2014, 66, 03014.	0.3	1
32	Analysis of a low-energy correction to the eikonal approximation. Physical Review C, 2014, 90, .	2.9	17
33	Study of clustering structures through breakup reactions. Journal of Physics: Conference Series, 2014, 569, 012035.	0.4	0
34	Open issues in extracting nuclear-structure information from the breakup of exotic nuclei. Journal of Physics G: Nuclear and Particle Physics, 2014, 41, 094002.	3.6	4
35	Mechanisms of direct reactions with halo nuclei. Journal of Physics: Conference Series, 2013, 436, 012040.	0.4	0
36	The ratio method: A new tool to study one-neutron halo nuclei. Physical Review C, 2013, 88, .	2.9	10

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37	Near-Far Description of Elastic and Breakup Reactions of Halo Nuclei. <i>Journal of Physics: Conference Series</i> , 2013, 420, 012069.	0.4	0
38	ARE PRESENT REACTION THEORIES FOR STUDYING RARE ISOTOPES GOOD ENOUGH?. , 2013, , .		0
39	Comparing nonperturbative models of the breakup of neutron-halo nuclei. <i>Physical Review C</i> , 2012, 85, .	2.9	40
40	Breakup Reaction Models for Two- and Three-Cluster Projectiles. <i>Lecture Notes in Physics</i> , 2012, , 121-163.	0.7	20
41	$^{17}\text{F}$ breakup reactions: A touchstone for indirect measurements. <i>Journal of Physics: Conference Series</i> , 2011, 312, 042022.	0.4	0
42	Deducing physical properties of weakly bound states from low-energy scattering data. Application to $^{16}\text{O}$ and $^{12}\text{C} + \text{He}$ . <i>Journal of Physics: Conference Series</i> , 2011, 312, 082040.	0.4	7
43	Benchmarking models of breakup reactions. <i>Journal of Physics: Conference Series</i> , 2011, 312, 082015.	0.4	3
44	One-neutron halo structure by the ratio method. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2011, 705, 112-115.	4.1	15
45	Asymptotic normalization of mirror states and the effect of couplings. <i>Physical Review C</i> , 2011, 84, .	2.9	9
46	$^{17}\text{F}$ BREAKUP REACTIONS: A TOUCHSTONE FOR INDIRECT MEASUREMENTS. <i>International Journal of Modern Physics E</i> , 2011, 20, 831-834.	1.0	0
47	COUPLING EFFECTS IN THE EXTRACTION OF SPECTROSCOPIC FACTORS. <i>International Journal of Modern Physics E</i> , 2011, 20, 934-937.	1.0	0
48	[sup 17]F breakup reactions: a touchstone for indirect measurements. , 2011, , .		0
49	Influence of the halo upon angular distributions for elastic scattering and breakup. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2010, 693, 448-451.	4.1	10
50	Probing the weakly-bound neutron orbit of $\text{Ne}$ with total reaction and one-neutron removal cross sections. <i>Physical Review C</i> , 2010, 81, .	2.9	77
51	Influence of low-energy scattering on loosely bound states. <i>Physical Review C</i> , 2010, 81, .	2.9	55
52	Deducing spectroscopic factors from wave-function asymptotics. <i>Physical Review C</i> , 2010, 82, .	2.9	6
53	PROBING THE WEAKLY-BOUND NEUTRON ORBIT OF $^{31}\text{Ne}$ WITH ONE-NEUTRON REMOVAL REACTIONS. <i>Modern Physics Letters A</i> , 2010, 25, 1882-1885.	1.2	4
54	Four-body calculation of $\text{He}_6$ breakup with the Coulomb-corrected eikonal method. <i>Physical Review C</i> , 2009, 79, .	2.9	47

#	ARTICLE	IF	CITATIONS
55	BREAKUP OF HALO NUCLEI WITHIN A DYNAMICAL EIKONAL APPROXIMATION. International Journal of Modern Physics E, 2008, 17, 2315-2319. <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mi> $\hat{t}^2$ </mml:mi> </mml:math>-Delayed Deuteron Emission from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mmultiscripts><mml:mi>Li</mml:mi> <mml:mprescripts /><mml:none /><mml:mn>11</mml:mn></mml:mmultiscripts></mml:math>; Decay of the Halo. Physical Review Letters, 2008, 101, 212501.	1.0	1
56	Coulomb-corrected eikonal description of the breakup of halo nuclei. Physical Review C, 2008, 78, .	7.8	38
57	Charged-particle channels in the $\hat{t}^2$ -decay of [sup 11]Li. AIP Conference Proceedings, 2007, , .	2.9	46
58	Peripherality of breakup reactions. Physical Review C, 2007, 75, .	0.4	1
59	Analysis of Coulomb breakup experiments of B8 with a dynamical eikonal approximation. Physical Review C, 2007, 76, .	2.9	30
60	Dynamical eikonal approximation in breakup reactions of Be11. Physical Review C, 2006, 73, .	2.9	62
61	Influence of the projectile description on breakup calculations. AIP Conference Proceedings, 2006, , .	0.4	0
62	Influence of the projectile description on breakup calculations. Physical Review C, 2006, 73, .	2.9	30
63	Time-dependent analysis of the nuclear and Coulomb dissociation of 11Be. AIP Conference Proceedings, 2005, , .	0.4	0
64	Coupling-in-the-continuum effects in Coulomb dissociation of halo nuclei. Physical Review C, 2005, 71, .	2.9	24
65	Collisions of Halo Nuclei within a Dynamical Eikonal Approximation. Physical Review Letters, 2005, 95, 082502.	7.8	75
66	Time-dependent analysis of the breakup of Be11 on C12 at 67 MeV/nucleon. Physical Review C, 2004, 70, .	2.9	85
67	HIGHER-ORDER RESOLUTION OF THE TIME-DEPENDENT SCHRÖDINGER EQUATION. , 2004, , .	0	
68	Fourth-order factorization of the evolution operator for time-dependent potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 317, 337-342.	2.1	18
69	Time-dependent analysis of the Coulomb breakup of weakly-bound nuclei. Nuclear Physics A, 2003, 722, C328-C334.	1.5	1
70	Supersymmetric elimination of forbidden states in the Coulomb breakup of the 11Be halo nucleus. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 552, 145-148.	4.1	11
71	Time-dependent analysis of the breakup of halo nuclei. Physical Review C, 2003, 68, .	2.9	63