

Alisher Kadyrov

List of Publications by Year in descending order

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157
papers

2,291
citations

236612

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315357

38
g-index

158
all docs

158
docs citations

158
times ranked

807
citing authors

#	ARTICLE	IF	CITATIONS
1	Effective one-electron approach to proton collisions with molecular hydrogen. European Physical Journal D, 2022, 76, 1.	0.6	12
2	Taking the Convergent Close-Coupling Method beyond Helium: The Utility of the Hartree-Fock Theory. Atoms, 2022, 10, 22.	0.7	3
3	State-selective electron capture in collisions of fully stripped neon ions with ground-state hydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2022, 55, 115201.	0.6	7
4	Analysis of the $3\text{He}(\hat{1}\pm, \hat{1}^3)7\text{Be}$ and $3\text{H}(\hat{1}\pm, \hat{1}^3)7\text{Li}$ astrophysical direct capture reactions in a modified potential-model approach. Nuclear Physics A, 2021, 1006, 122108.	0.6	11
5	Extraction of Ps-formation cross-sections from single-centre positron-scattering calculations. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 095201.	0.6	2
6	Integrated total and state-selective cross sections for bare beryllium ion collisions with atomic hydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 175201.	0.6	12
7	Differential study of proton-helium collisions at intermediate energies: Elastic scattering, excitation, and electron capture. Physical Review A, 2021, 104, .	1.0	17
8	Positron-impact direct ionization of lithium, sodium and potassium atoms. European Physical Journal D, 2021, 75, 1.	0.6	1
9	Factor and rate of Be^7 H^+ collisions at intermediate energies: Elastic scattering, excitation, and electron capture. Physical Review A, 2021, 104, .	1.1	7
10	Effective single-electron treatment of ion collisions with multielectron targets without using the independent-event model. Physical Review A, 2021, 104, .	1.0	10
11	Proton-helium collisions at intermediate energies: Singly differential ionization cross sections. Physical Review A, 2021, 104, .	1.0	16
12	Collisions of antiprotons with excited positronium atoms. Physical Review A, 2021, 104, .	1.0	5
13	Calculations of positron scattering on the hydrogen molecular ion. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 015203.	0.6	5
14	Proton scattering from ground and excited states of atomic hydrogen. Journal of Physics: Conference Series, 2020, 1412, 152031.	0.3	0
15	Trojan horse method as an indirect approach to study resonant reactions in nuclear astrophysics. European Physical Journal A, 2020, 56, 1.	1.0	6
16	Singly differential cross sections for direct scattering, electron capture, and ionization in proton-hydrogen collisions. Physical Review A, 2020, 102, .	1.0	10
17	Charge transfer in Li^6 H^+ collisions at intermediate energies: Elastic scattering, excitation, and electron capture. Physical Review A, 2020, 102, .	0.6	11
18	Charge transfer in positronium-proton collisions: comparison of classical and quantum-mechanical theories. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 155201.	0.6	5

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19	Effect of Electron Capture on Spectral Line Broadening in Hot Dense Plasmas. Physical Review Letters, 2020, 124, 055003.	2.9	16
20	Calculations of electron scattering on H-like ions. Physical Review A, 2020, 101, .	1.0	3
21	One-center close-coupling approach to two-center rearrangement collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 145201.	0.6	15
22	Electron capture, excitation and ionization in $\text{He}^{2+} \text{H}$ and $\text{H}^{+} \text{He}^{+}$ collisions. Plasma Physics and Controlled Fusion, 2019, 61, 095005.	0.9	20
23	fusion extracted using the Tr	1.1	24
24	Spin asymmetry in electron-impact ionization. Physical Review A, 2019, 100, .	1.0	6
25	Convergent close-coupling calculations of positron scattering on $\text{H}\hat{\alpha}^{\cdot}$. Physical Review A, 2019, 100, .	1.0	2
26	Laser-driven production of the antihydrogen molecular ion. Physical Review A, 2019, 100, .	1.0	9
27	New method of analytic continuation of elastic-scattering data to the negative-energy region, and asymptotic normalization coefficients for O17 and C13. Physical Review C, 2019, 100, .	1.1	4
28	Configuration space method to calculate rearrangement matrix elements. Computer Physics Communications, 2019, 239, 64-71.	3.0	4
29	Wave-packet continuum-discretization approach to proton collisions with helium. Physical Review A, 2019, 99, .	1.0	24
30	Theory of Surrogate Nuclear and Atomic Reactions with Three Charged Particles in the Final State Proceeding Through a Resonance in the Intermediate Subsystem. Few-Body Systems, 2019, 60, 1.	0.7	4
31	Positron-impact electronic excitations and mass stopping power of H^{2+} . Physical Review A, 2019, 99, .	1.0	7
32	Development of convergent close-coupling approach to hadron interactions with matter. Journal of Physics: Conference Series, 2019, 1154, 012013.	0.3	1
33	Balmer emission induced by proton impact on atomic hydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 105701.	0.6	14
34	Proton-beam stopping in hydrogen. Physical Review A, 2019, 99, .	1.0	10
35	Fully differential cross sections for single ionization of helium by energetic protons. Physical Review A, 2019, 100, .	1.0	17
36	State-of-the-Art Reviews on Energetic Ion-Atom and Ion-Molecule Collisions. Interdisciplinary Research on Particle Collisions and Quantitative Spectroscopy, 2019, , .	0.5	17

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37	Extrapolation of scattering data to the negative-energy region. II. Applicability of effective range functions within an exactly solvable model. Physical Review C, 2018, 97, .	1.1	17
38	Two-center convergent close-coupling approach to positronium-helium-ion collisions. Physical Review A, 2018, 97, .	1.0	7
39	Wave-packet continuum-discretization approach to ion-atom collisions including rearrangement: Application to differential ionization in proton-hydrogen scattering. Physical Review A, 2018, 97, .	1.0	45
40	Astrophysical He^3 and He^4 capture process in a three-body model. II. Reaction rates and primordial abundance. Physical Review C, 2018, 98, .	1.1	21
41	Near-Threshold Cross Sections for Electron and Positron Impact Ionization of Atomic Hydrogen. Physical Review Letters, 2018, 121, 203401. Theoretical study of the H^{\pm} capture process in a three-body model. II. Reaction rates and primordial abundance. Physical Review C, 2018, 98, .	2.9	14
42	astrophysical capture process in a three-body model. II. Reaction rates and primordial abundance. Physical Review C, 2018, 98, .	1.1	21
43	Extrapolation of scattering data to the negative-energy region. III. Application to the $\text{p}^{\pm}\text{O}16$ system. Physical Review C, 2018, 98, .	1.1	9
44	Ionization and electron capture in collisions of bare carbon ions with hydrogen. Physical Review A, 2018, 98, .	1.0	20
45	Antihydrogen formation in low-energy antiproton collisions with excited-state positronium atoms. Hyperfine Interactions, 2018, 239, 1.	0.2	3
46	Proton scattering from excited states of atomic hydrogen. Plasma Physics and Controlled Fusion, 2018, 60, 095009.	0.9	24
47	Convergent close-coupling approach to positron scattering on He^+ . European Physical Journal D, 2018, 72, 1.	0.6	3
48	Hybrid approach to calculating proton stopping power in hydrogen. Journal of Physics: Conference Series, 2017, 777, 012010.	0.3	4
49	Convergent close-coupling approach to light and heavy projectile scattering on atomic and molecular hydrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 202001.	0.6	34
50	Pigmy resonances, transfer, and separable potentials. AIP Conference Proceedings, 2017, . . Effective two-body model for spectra of clusters of H^{\pm} .	0.3	0
51	H^2 and H^3 capture process in a three-body model. II. Reaction rates and primordial abundance. Physical Review C, 2018, 98, .	1.1	6
52	Wave-packet continuum-discretization approach to single ionization of helium by antiprotons and energetic protons. Physical Review A, 2017, 96, .	1.0	27
53	Quantum suppression of antihydrogen formation in positronium-antiproton scattering. Nature Communications, 2017, 8, 1544.	5.8	25
54	Extrapolation of scattering data to the negative-energy region. Physical Review C, 2017, 95, .	1.1	18

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55	Solving close-coupling equations in momentum space without singularities for charged targets. Computer Physics Communications, 2017, 212, 55-58.	3.0	7
56	Low-energy γ -mixing collisions of excited positronium with protons and antiprotons. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 134001.	0.6	3
57	Indirect methods in nuclear astrophysics. Journal of Physics: Conference Series, 2016, 703, 012007.	0.3	9
58	Solution of the proton-hydrogen scattering problem using a quantum-mechanical two-center convergent close-coupling method. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 115203.	0.6	46
59	Near-threshold behavior of positronium-antiproton scattering. Physical Review A, 2016, 94, .	1.0	20
60	Structure of ^{23}Al from a multi-channel algebraic scattering model based on mirror symmetry. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 095104.	1.4	7
61	Importance of resonance widths in low-energy scattering of weakly bound light-mass nuclei. Physical Review C, 2016, 94, .	1.1	7
62	Wave-packet continuum-discretization approach to ion-atom collisions: Nonrearrangement scattering. Physical Review A, 2016, 94, .	1.0	40
63	Heating due to momentum transfer in low-energy positronium-antiproton scattering. Physical Review A, 2016, 94, .	1.0	12
64	Calculation of antihydrogen formation via antiproton scattering with excited positronium. Physical Review A, 2016, 93, .	1.0	36
65	Polarization of Lyman- α emission in proton-hydrogen collisions studied using a semiclassical two-center convergent close-coupling approach. Physical Review A, 2016, 93, .	1.0	33
66	Theoretical study of the ^6Li capture process in a three-body model. Physical Review C, 2016, 94, .	1.1	25
67	Recent progress in the description of positron scattering from atoms using the convergent close-coupling theory. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 222002.	0.6	58
68	Antiproton stopping power data for radiation therapy simulations. Physica Medica, 2016, 32, 1827-1832.	0.4	7
69	Internal consistency in the close-coupling approach to positron collisions with atoms. European Physical Journal D, 2016, 70, 1.	0.6	16
70	Accurate solution of the proton-hydrogen three-body scattering problem. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 03LT01.	0.6	16
71	Antiproton stopping in atomic targets. Physical Review A, 2015, 92, .	1.0	22
72	Convergent close coupling versus the generalized Sturmian function approach: Wave-function analysis. Physical Review A, 2015, 92, .	1.0	4

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91	Close-coupling approach to antiproton-impact ionisation of H_2 with analytical spherical averaging. Journal of Physics: Conference Series, 2014, 488, 102032.	0.3	1
92	Benchmark calculation of hydrogen (antihydrogen) formation at rest in positronium-proton (-antiproton) scattering. Physical Review A, 2013, 87, .	1.0	12
93	Threshold behavior of positronium formation in positron-alkali-metal scattering. Physical Review A, 2013, 87, .	1.0	11
94	Target Structure-Induced Suppression of the Ionization Cross Section for Low-Energy Antiproton-Molecular Hydrogen Collisions: Theoretical Confirmation. Physical Review Letters, 2013, 111, 173201.	2.9	26
95	Fully quantal close-coupling approach to antiproton-hydrogen collisions. Journal of Physics: Conference Series, 2012, 388, 082015.	0.3	1
96	Convergent close coupling calculations for positron-magnesium scattering. Journal of Physics: Conference Series, 2012, 388, 072007.	0.3	0
97	Kinematically complete picture of positron-impact ionisation of hydrogen. Journal of Physics: Conference Series, 2012, 388, 072009.	0.3	0
98	Two-center convergent close-coupling calculations for positron-lithium and positron-sodium collisions. Journal of Physics: Conference Series, 2012, 388, 072011.	0.3	1
99	Two-center convergent-close-coupling calculations of positron scattering on magnesium. Physical Review A, 2012, 86, .	1.0	21
100	Fully differential cross section for single ionization in energetic C_6^+ -He collisions. Physical Review A, 2012, 86, .	1.0	21
101	Two-center convergent-close-coupling calculations for positron-sodium collisions. Physical Review A, 2012, 85, .	1.0	16
102	Electron- and photon-impact atomic ionisation. Physics Reports, 2012, 520, 135-174.	10.3	127
103	Convergent close-coupling calculations of helium single ionization by antiproton impact. Physical Review A, 2011, 84, .	1.0	18
104	Close-coupling calculations of 64.6 eV e-He ionization. Journal of Physics: Conference Series, 2011, 288, 012002.	0.3	2
105	Differential ionization in antiproton-hydrogen collisions within the convergent-close-coupling approach. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 165203.	0.6	15
106	Coupled-channel integral-equation approach to antiproton-hydrogen collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 075204.	0.6	26
107	Convergent close-coupling approach to positron and antiproton collisions with atoms. Journal of Physics: Conference Series, 2011, 262, 012028.	0.3	2
108	Benchmark Calculations of Electron-Impact Differential Cross Sections. , 2011, , .		0

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109	A two-centre convergent close-coupling approach to positron-helium collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 031001.	0.6	21
110	Convergence study of the close-coupling approach to positron-helium collisions. Journal of Physics: Conference Series, 2010, 199, 012021.	0.3	2
111	Spin-resolved electron-impact ionisation of atoms. Journal of Physics: Conference Series, 2010, 212, 012017.	0.3	1
112	Convergent close-coupling calculations of positron scattering on metastable helium. Physical Review A, 2010, 82, .	1.0	12
113	Single ionization of helium by electron impact. Physical Review A, 2010, 81, .	1.0	22
114	Two-center convergent close-coupling calculations for positron-lithium collisions. Physical Review A, 2010, 82, .	1.0	27
115	Surface-Integral Approach to the Coulomb Few-Body Scattering Problem. EPJ Web of Conferences, 2010, 3, 04014.	0.1	0
116	Unitary correlation in nuclear reaction theory: Separation of nuclear reactions and spectroscopic factors. Physical Review C, 2010, 82, .	1.1	42
117	Multiconfigurational two-centre convergent close-coupling approach to positron scattering on helium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 125203.	0.6	33
118	Three-dimensional integral-equation approach to proton- and antiproton-hydrogen collisions. Physical Review A, 2009, 80, .	1.0	14
119	Scattering theory with the Coulomb potential. Journal of Physics: Conference Series, 2009, 194, 012017.	0.3	1
120	Surface-integral formulation of scattering theory. Annals of Physics, 2009, 324, 1516-1546.	1.0	72
121	Generalisation of scattering theory to charged particles. Journal of Physics: Conference Series, 2009, 185, 012017.	0.3	0
122	Convergent close-coupling calculations of positron-helium collisions. Journal of Physics: Conference Series, 2009, 194, 072009.	0.3	1
123	Near-threshold positron-hydrogen ionization. Few-Body Systems, 2008, 44, 221-223.	0.7	1
124	Coulomb Breakup Problem. Physical Review Letters, 2008, 101, 230405.	2.9	34
125	Trojan Horse as an indirect technique in nuclear astrophysics. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 014016.	1.4	54
126	RECENT PROGRESS IN ATOMIC IONISATION THEORY. , 2008, , .		0

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127	Near-Threshold Positron-Impact Ionization of Atomic Hydrogen. <i>Physical Review Letters</i> , 2007, 98, 263202.	2.9	33
128	Positron-impact ionisation of hydrogen near the threshold. <i>Journal of Physics: Conference Series</i> , 2007, 88, 012062.	0.3	1
129	Unified Theory of Scattering for Arbitrary Potentials. , 2007, , .		0
130	Theory of Electron Impact Ionization of Atoms. <i>AIP Conference Proceedings</i> , 2006, , .	0.3	0
131	Leading asymptotic terms of the three-body Coulomb scattering wave function. <i>Physical Review A</i> , 2006, 73, .	1.0	14
132	On-shell coupled-channel approach to proton-hydrogen collisions without partial-wave expansion. <i>Physical Review A</i> , 2006, 73, .	1.0	17
133	Few-body problems in nuclear astrophysics. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2005, 31, S1413-S1415.	1.4	1
134	Theory of atomic ionization and the coulomb three-body breakup. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	0
135	Few-body problems in nuclear astrophysics. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	0
136	Scattering theory for arbitrary potentials. <i>Physical Review A</i> , 2005, 72, .	1.0	16
137	Direct solution of the three-dimensional Lippmann-Schwinger equation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, 509-515.	0.6	16
138	Three Body Coulomb Scattering above the Ionization Threshold. <i>Physica Scripta</i> , 2004, 110, 247.	1.2	1
139	Theory of electron-impact ionization of atoms. <i>Physical Review A</i> , 2004, 70, .	1.0	27
140	Integral Representation for the Electron-Atom Ionization Amplitude which is Free of Ambiguity and Divergence Problems. <i>Physical Review Letters</i> , 2003, 91, 253202.	2.9	22
141	Unambiguous ionization amplitudes for electron-hydrogen scattering. <i>Physical Review A</i> , 2003, 68, .	1.0	15
142	Asymptotic behavior of the Coulomb three-body scattered wave. <i>Physical Review A</i> , 2003, 68, .	1.0	36
143	Asymptotic form of the electron-hydrogen scattered wave. <i>Physical Review A</i> , 2003, 67, .	1.0	20
144	Various problems in electron-atom collision theory. <i>AIP Conference Proceedings</i> , 2003, , .	0.3	0

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145	Two-center convergent close-coupling approach to positron-hydrogen collisions. <i>Physical Review A</i> , 2002, 66, .	1.0	101
146	Protons in collision with hydrogen atoms: Influence of unitarity and multiple scattering. <i>Nuclear Physics A</i> , 2001, 689, 525-528.	0.6	1
147	Convergent close-coupling calculations of the S-wave model of positron-hydrogen scattering. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2000, 171, 119-125.	0.6	5
148	Convergence of two-centre expansions in positron-hydrogen collisions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, L635-L640.	0.6	26
149	Proton-Hydrogen Charge Exchange and Elastic Scattering in the Faddeev Approach. <i>Few-Body Systems</i> , 2000, , 75-79.	0.2	0
150	Three-body approach to proton-hydrogen charge exchange and elastic scattering. <i>Physical Review A</i> , 1999, 60, 314-322.	1.0	27
151	Exact and approximate triangle amplitudes for (in-)elastic three-body processes with charged particles. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1997, 30, 3659-3675.	0.6	4
152	Approximate triangle amplitude for three-body charge exchange processes. <i>Physical Review A</i> , 1996, 53, 2438-2442.	1.0	8
153	Triangle amplitude with off-shell Coulomb T-matrix for exchange reactions in atomic and nuclear physics. <i>Physical Review A</i> , 1996, 54, 4091-4105.	1.0	9
154	"Triangle" diagram with off-shell Coulomb T-matrix for (in-)elastic atomic and nuclear three-body processes. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1995, 28, 5137-5150.	0.6	11
155	Charge-exchange reactions in a three-body eikonal approach. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1994, 27, 4653-4674.	0.6	16
156	Electron capture in proton collisions with alkali atoms as a three-body problem. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1992, 25, 213-219.	0.6	23
157	Three-body approach to the atomic reactions of electron transfer. II. Calculation of total cross sections. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1990, 23, 4151-4164.	0.6	20