

Joaquin Gomez-Camacho

List of Publications by Year in descending order

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147
papers

2,945
citations

159585
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148
all docs

148
docs citations

148
times ranked

939
citing authors

#	ARTICLE	IF	CITATIONS
1	Binding-energy asymmetry in absorption explored through CDCC extended for complex potentials. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 832, 137252.	4.1	6
2	Research facilities and highlights at the Centro Nacional de Aceleradores (CNA). European Physical Journal Plus, 2021, 136, 1.	2.6	8
3	Excited states in α -excitation of nuclei. European Physical Journal Plus, 2021, 136, 1.	2.6	1
4	Algebraic discrete variable representation approaches: application to interatomic effective potentials. Molecular Physics, 2021, 119, e1876264.	1.7	3
5	Focus point on small and medium particle accelerator facilities in Europe. European Physical Journal Plus, 2021, 136, 1.	2.6	1
6	Unitary group approach to describe interatomic potentials in 3D systems. Molecular Physics, 2020, 118, e1662959.	1.7	5
7	Novel solid ^{40}He targets for experimental studies on nuclear reactions: $^{6}\text{Li} + ^{40}\text{He}$ differential cross-section measurement at incident energy of 5.5 MeV. European Physical Journal Plus, 2020, 135, 1.	2.6	2
8	Algebraic DVR Approaches Applied to Describe the Stark Effect. Symmetry, 2020, 12, 1719.	2.2	7
9	Description of continuum structures in a discrete basis: Three-body resonances and two-nucleon decays. SciPost Physics Proceedings, 2020, , .	0.4	2
10	Breakup mechanisms in the α -excitation of nuclei. European Physical Journal Plus, 2020, 135, 1.	2.6	1
11	Identifying structures in the continuum: Application to α -excitation of nuclei. Physical Review C, 2019, 99, 114602.	1.7	17
12	Interaction of He_8 with Pb_{208} at near-barrier energies: He_4 and He_6 production. Physical Review C, 2018, 98, .	2.9	10
13	An approach to establish a connection between algebraic and configuration spaces: $\text{su}(1/2 + 1)$ algebraic model for vibrational excitations. Molecular Physics, 2018, 116, 2254-2269.	1.7	7
14	An approach to establish the connection between configuration and $\text{su}(n + 1)$ algebraic spaces in molecular physics: application to ammonia. Molecular Physics, 2017, 115, 3206-3223.	1.7	8
15	Scattering of the He-8 Nucleus. European Physical Journal Plus, 2017, 132, 1.	7.8	53
16	Scattering of halo nuclei on heavy targets at energies around the Coulomb barrier: The case of ^{11}Be on ^{197}Au . EPJ Web of Conferences, 2017, 163, 00045.	0.3	1
17	Three-body radiative capture reactions. EPJ Web of Conferences, 2017, 165, 01010.	0.3	1
18	Reaction theory: Status and perspectives. EPJ Web of Conferences, 2016, 117, 06002.	0.3	1

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19	measurement of near-barrier He elastic scattering. Comparison with theory http://www.w3.org/1998/Math/MathML		
20	Characterization and Validation of a-Si Magnetron-Sputtered Thin Films as Solid He Targets with High Stability for Nuclear Reactions. ACS Omega, 2016, 1, 1229-1238.	3.5	12
21	Determining astrophysical three-body radiative capture reaction rates from inclusive Coulomb break-up measurements. Physical Review C, 2016, 93, .	2.9	5
22	Study of the Near-barrier Scattering of ^8He on ^{208}Pb . Acta Physica Polonica B, 2016, 47, 841.	0.8	1
23	Recent Developments for the Calculation of Elastic and Non-elastic Breakup of Weakly-bound Nuclei. Acta Physica Polonica B, 2016, 47, 821.	0.8	0
24	Transfer induced by core excitation within an extended distorted-wave Born approximation method. Physical Review C, 2015, 92, .	2.9	13
25	Simultaneous analysis of the elastic scattering and breakup channel for the reaction $\text{Li} + \text{Pb}$ $\text{Li} + \text{Pb}$ at energies near the Coulomb barrier. Physical Review C, 2015, 92,	2.9	29
26	11Li structural information from inclusive break-up measurements. EPJ Web of Conferences, 2015, 88, 01003.	0.3	0
27	Core excitations in the structure and reactions of halo nuclei. EPJ Web of Conferences, 2014, 66, 03053.	0.3	0
28	Elastic and break-up of the 1n-halo 11Be nucleus. EPJ Web of Conferences, 2014, 66, 03023.	0.3	3
29	Scattering of light halo nuclei on heavy target at energies around the Coulomb barrier. EPJ Web of Conferences, 2014, 66, 03086.	0.3	0
30	Reaction of the Halo Nucleus ^{11}Be on Heavy Targets at Energies Around the Coulomb Barrier. Acta Physica Polonica B, 2014, 45, 375.	0.8	5
31	Near barrier scattering of ^8He on ^{208}Pb . EPJ Web of Conferences, 2014, 66, 03058.	0.3	2
32	Study of the break-up channel in $\text{Li} + \text{Pb}$ collisions at energies around the Coulomb barrier. Journal of Physics: Conference Series, 2014, 515, 012004.	0.4	0
33	Breakup on $\text{Li} + \text{Pb}$ at Energies Around the Coulomb Barrier. EPJ Web of Conferences, 2014, 66, 03086.	7.8	66
34	Elastic Scattering of $^8\text{He} + ^{208}\text{Pb}$ at 22 MeV. Acta Physica Polonica B, 2013, 44, 467.	0.8	4
35	Elastic Scattering for the $^{11}\text{Be} + ^{64}\text{Zn}$ System Close to the Coulomb Barrier. Acta Physica Polonica B, 2013, 44, 463.	0.8	2
36	Core excitation effects in halo nuclei using a transformed oscillator basis. , 2013, , .	0	

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37	Scattering of $[sup 8]He$ on $[sup 208]Pb$ at 22 MeV., 2013, , .	0	
38	Elastic scattering and direct reactions of the $1n$ halo $[sup 11]Be$ nucleus on $[sup 64]Zn$ near the barrier. Journal of Physics: Conference Series, 2012, 381, 012050.	0.4	2
39	Stabilization method in two-body systems with core excitations., 2012, , .	1	
40	Do Halo Nuclei Follow Rutherford Elastic Scattering at Energies Below the Barrier? The Case of $[sup 11]Li$. Physical Review Letters, 2012, 109, 262701. Experimental study of the collision $[sup 11]Li + [sup 64]Zn$ around the Coulomb barrier. Physical Review C, 2012, 85, .	7.8	127
41	+ $[sup 11]Li + [sup 64]Zn$ around the Coulomb barrier. Physical Review C, 2012, 85, .	2.9	103
42	Particle motion in a deformed potential using a transformed oscillator basis. Physical Review C, 2012, 85, .	2.9	24
43	An algebraic description of anharmonic diatom-diatom inelastic collisions in the semiclassical approximation. Molecular Physics, 2012, 110, 2003-2018.	1.7	0
44	New states in $[sup 18]Na$ and $[sup 19]Mg$ observed in the two-proton decay of $[sup 19]Mg$. Physical Review C, 2012, 85, .	2.9	13
45	Scattering of the halo nucleus $[sup 11]Li$ and its core $[sup 9]Li$ on $[sup 208]Pb$ at energies around the Coulomb barrier. Journal of Physics: Conference Series, 2012, 381, 012085.	0.4	1
46	Core excitation effects in the breakup of halo nuclei., 2012, , .	3	
47	An algebraic approach to the collinear collision $N + N \rightarrow 2 + 2$ in the semiclassical approximation. International Journal of Quantum Chemistry, 2012, 112, 16-27. Elastic scattering and $[sup 11]Li + [sup 11]Li$ -particle production in $[sup 11]Li + [sup 11]Li$.	2.0	2
48	+ $[sup 11]Li + [sup 11]Li$. EPJ Web of Conferences, 2011, 17, 13001.	2.9	80
49	Reactions induced by $[sup 11]Be$ beam at REX-ISOLDE. EPJ Web of Conferences, 2011, 17, 13001.	0.3	0
50	Fusion of $[sup 8]He$ with $[sup 206]Pb$ around Coulomb barrier energies. EPJ Web of Conferences, 2011, 17, 16009.	0.3	3
51	Structure effects in the reactions $[sup 9,10,11]Be + [sup 64]Zn$ at the Coulomb barrier. Journal of Physics: Conference Series, 2011, 267, 012012.	0.4	2
52	Scattering of $[sup 9]Li$ on $[sup 208]Pb$ at energies around the Coulomb barrier. EPJ Web of Conferences, 2011, 17, 16002.	0.3	5
53	Elastic scattering of Beryllium isotopes near the Coulomb barrier., 2011, , .	0	
54	The $[sup 9,10,11]Be + [sup 64]Zn$ reaction studied in inverse kinematics at 3.15 MeV/nucleon using the REX-ISOLDE post-accelerator. Physical Review C, 2011, 84, .	2.9	13

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55	Evidence of strong effects of the ^{11}Be halo structure on reaction processes at energies around the Coulomb barrier. <i>Journal of Physics: Conference Series</i> , 2011, 312, 082020.	0.4	0
56	Dynamic studies of ^{11}Li and its core ^{9}Li on ^{208}Pb near the Coulomb barrier. <i>AIP Conference Proceedings</i> , 2010, , .	0.4	0
57	Elastic Scattering and Reaction Mechanisms of the Halo Nucleus Be^{11} around the Coulomb Barrier. <i>Physical Review Letters</i> , 2010, 105, 022701.	7.8	163
58	Exploring continuum structures with a pseudo-state basis. <i>Physical Review C</i> , 2010, 82, .	2.9	27
59	Spectroscopy of proton-unbound nuclei by tracking their decay products in-flight: One- and two-proton decays off $\text{F}^{15}, \text{Ne}^{16}$, and Na^{19} . <i>Physical Review C</i> , 2010, 82, .	2.9	43
60	STRUCTURE EFFECTS IN COLLISIONS INDUCED BY HALO AND WEAKLY BOUND NUCLEI AROUND THE COULOMB BARRIER. <i>International Journal of Modern Physics E</i> , 2010, 19, 1236-1240. $\text{F}^{15}, \text{Ne}^{16}, \text{Na}^{19}$	1.0	2
61	Ne^{16}	2.9	37
62	Signature of a strong coupling with the continuum in $^{11}\text{Be} + ^{120}\text{Sn}$ scattering at the Coulomb barrier. <i>European Physical Journal A</i> , 2009, 42, 461.	2.5	34
63	Four-body continuum-discretized coupled-channels calculations. <i>Physical Review C</i> , 2009, 80, .	2.9	72
64	Analytical transformed harmonic oscillator basis for continuum discretized coupled channels calculations. <i>Physical Review C</i> , 2009, 80, .	2.9	30
65	A novel approach to precipitation series completion in climatological datasets: application to Andalusia. <i>International Journal of Climatology</i> , 2008, 28, 1525-1534.	3.5	54
66	Study of the elastic scattering of ^6He on ^{208}Pb at energies around the Coulomb barrier. <i>Nuclear Physics A</i> , 2008, 803, 30-45.	1.5	148
67	Four-body continuum-discretized coupled-channels calculations using a transformed harmonic oscillator basis. <i>Physical Review C</i> , 2008, 77, .	2.9	103
68	An approach to the study of the continuum effects in systems of interacting Morse oscillators. <i>Molecular Physics</i> , 2008, 106, 1275-1289.	1.7	9
69	Algebraic description of the inelastic collision between an atom and a Morse oscillator in one dimension. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 145203. $\text{Mg}^{19}, \text{Ne}^{16}$	1.5	12
70	$\text{Mg}^{19}, \text{Ne}^{16}$	2.9	71
71	An algebraic model to describe atom-diatom inelastic collisions in the semiclassical approximation. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 4513-4527.	1.5	11
72	Observation of Two-Proton Radioactivity of Mg^{19} by Tracking the Decay Products. <i>Physical Review Letters</i> , 2007, 99, 182501.	7.8	129

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73	Detnix Project: Dispersion, Structure and Tracking of Exotic Nuclei. Nuclear Physics A, 2007, 787, 443-450.		1.5	0
74	Three-body approaches for inclusive breakup reactions. Nuclear Physics A, 2007, 787, 463-470.		1.5	5
75	Improved di-neutron cluster model for He^6 scattering. Physical Review C, 2007, 75, .		2.9	76
76	Exploring the He^6 continuum sea through proton inelastic collisions. European Physical Journal: Special Topics, 2007, 150, 13-14.		2.6	0
77	Continuum effects: Structure and reactions of He^6 . European Physical Journal: Special Topics, 2007, 150, 51-52.		2.6	7
78	$\bar{\nu}$ -particle production in the scattering of He^6 by ^{208}Pb at energies around the Coulomb barrier. Nuclear Physics A, 2007, 792, 2-17.		1.5	45
79	Coulomb breakup in a transformed harmonic oscillator basis. Physical Review C, 2006, 73, . Investigation of the <math altimg="s1.gif" overflow="scroll"> xmls:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xi="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:mm="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x		2.9	19
80	Study of ^{10}Li via the $^{9}\text{Li}(^{2}\text{H},\alpha\gamma)$ reaction at REX-ISOLDE. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 642, 449-454.		4.1	11
81	Long range absorption in the scattering of He^6 on ^{208}Pb and ^{197}Au at 27 MeV. Nuclear Physics A, 2006, 765, 294-306.		1.5	59
82	Uncorrelated scattering approximation revisited. Nuclear Physics A, 2005, 748, 112-135.		1.5	0
83	Low energy reactions with radioactive ions at REX-ISOLDE—the $^{9}\text{Li}+^{2}\text{H}$ case. Nuclear Physics A, 2005, 748, 374-392.		1.5	19
84	Three-body continuum discretization in a basis of transformed harmonic oscillator states. Physical Review C, 2005, 72, .		2.9	45
85	Three-body continuum-discretized coupled-channel calculations for He^6 scattering from heavy nuclei. Physical Review C, 2005, 72, .		2.9	54
86	Scattering of He^6 at energies around the Coulomb barrier. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1953-S1958.		3.6	33
87	Quantum mechanical description of Stern-Gerlach experiments. Physical Review A, 2005, 71, .		2.5	20
88	Matrix elements of u and p for the modified Pöschl-Teller potential. Journal of Physics A, 2004, 37, 5237-5242.		1.6	8
89	Describing resonances in a discrete basis. Physical Review C, 2004, 69, .		2.9	12

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91	Tensor analyzing powers for Li-7 induced transfer breakup reactions. Physical Review C, 2004, 69, .	2.9	6	
92	Ansu(1, 1) dynamical algebra for the Morse potential. Journal of Physics A, 2004, 37, 1805-1820.	1.6	35	
93	Discretizing the Continuum. Few-Body Systems, 2004, 34, 45.	1.5	0	
94	Probing additional dimensions in the universe with neutron experiments. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 582, 15-20.	4.1	29	
95	Ansu(1, 1) dynamical algebra for the PÃ¶schl-Teller potential. Journal of Physics A, 2004, 37, 877-893.	1.6	23	
96	Elastic scattering of the halo nucleus ^6He from ^{208}Pb above the Coulomb barrier. Nuclear Physics A, 2003, 728, 339-349.	1.5	86	
97	Deviations from the adiabatic approximation in heavy-ion dynamic polarization potentials. Nuclear Physics A, 2003, 724, 113-124.	1.5	6	
98	Reaction mechanisms in the scattering of ^8Li on ^{208}Pb around the Coulomb barrier. Physical Review C, 2003, 68, .	2.9	28	
99	Continuum discretization using orthogonal polynomials. Physical Review A, 2003, 67, .	2.5	10	
100	Continuum coupling in one-dimensional scattering using a transformed harmonic oscillator basis. Physical Review A, 2002, 65, .	2.5	8	
101	Continuum discretization for weakly bound nuclei. European Physical Journal D, 2002, 52, C563-C570.	0.4	0	
102	Polarisation in Nuclear Reaction., 2002, , 1414-1432.		1	
103	The uncorrelated scattering approximation for the scattering of weakly bound systems. Nuclear Physics A, 2001, 689, 547-550.	1.5	4	
104	A shell-model analysis of the proton emission from ^{31}Cl using Gamow wave functions. Nuclear Physics A, 2001, 694, 424-436.	1.5	2	
105	Uncorrelated scattering approximation for the scattering and breakup of weakly bound nuclei on heavy targets. Nuclear Physics A, 2001, 695, 143-166.	1.5	4	
106	Continuum discretization in a basis of transformed harmonic-oscillator states. Physical Review A, 2001, 63, .	2.5	29	
107	Coupling to breakup channels using a transformed harmonic oscillator basis. Physical Review C, 2001, 65, .	2.9	37	
108	A New Basis Set for Continuum Discretization. Few-Body Systems, 2001, , 217-224.	0.2	9	

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109	Application of Gamov Wavefunctions to Beta Delayed Nucleon Emission. Few-Body Systems, 2001, , 188-195.	0.2	0
110	Configuration localized wave functions: General formalism and applications to vibrational spectroscopy of diatomic molecules. Physical Review A, 2000, 61, .	2.5	12
111	Semiclassical description of Stern-Gerlach experiments. Physical Review A, 2000, 63, .	2.5	16
112	Dipole Polarizability in the Scattering of Li below the Coulomb Barrier. Physical Review Letters, 1999, 82, 1387-1390.	7.8	28
113	Comment on "Pairing interaction and Galilei invariance". Physical Review C, 1999, 59, 2952-2953.	2.9	1
114	Configuration localized Morse wave functions: Application to vibrational transitions in anharmonic diatomic molecules. Physical Review A, 1999, 59, 1852-1858.	2.5	8
115	Analytic evaluation of Franck-Condon integrals for anharmonic vibrational wave functions. Physical Review A, 1999, 59, 3462-3470.	2.5	28
116	Dipole polarizability in deuteron scattering around the Coulomb barrier. Nuclear Physics A, 1999, 648, 141-156.	1.5	9
117	Effects of the electric dipole polarizability in the scattering of polarized ^7Li from ^{208}Pb at 27 MeV. Nuclear Physics A, 1998, 641, 188-202.	1.5	15
118	Analysis of proton transfer in polarized ^7Li scattering by ^{208}Pb at 33 MeV. Nuclear Physics A, 1998, 628, 203-220.	1.5	5
119	Semiclassical description of scattering with internal degrees of freedom. Nuclear Physics A, 1998, 636, 70-84.	1.5	5
120	Scattering of low-energy electrons by polar molecules: An analytic approach. Physical Review A, 1998, 58, 1174-1182.	2.5	0
121	Spin-orbit dynamic polarization potential due to dipole Coulomb excitation. Nuclear Physics A, 1997, 625, 685-696.	1.5	4
122	Dipole Coulomb excitation in ^{11}Be scattering. Nuclear Physics A, 1997, 612, 82-90.	1.5	13
123	Study of polarized ^7Li scattering from ^{208}Pb at 33 MeV. Nuclear Physics A, 1997, 614, 112-128.	1.5	19
124	Anthropogenic contamination of an estuarine system evaluated by PIXE. Nuclear Instruments & Methods in Physics Research B, 1996, 109-110, 506-510.	1.4	11
125	Double-folding model analysis of the threshold anomaly in the scattering of polarized ^7Li from ^{208}Pb . Nuclear Physics A, 1996, 605, 417-431.	1.5	19
126	Study of the threshold anomaly in the scattering of polarized ^7Li from ^{208}Pb . Nuclear Physics A, 1995, 582, 357-368.	1.5	27

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127	Dynamic polarization potential induced by dipole Coulomb excitation to break-up states in ^{11}Li scattering. Nuclear Physics A, 1995, 583, 817-820.	1.5	34
128	Tensor analyzing powers for Li^7 breakup. Physical Review C, 1995, 52, 3201-3211.	2.9	7
129	Analytic description of the scattering of electrons by molecules. Physical Review A, 1995, 51, 3799-3811.	2.5	3
130	$^{208}\text{Pb}(^{7}\text{Li},^{6}\text{Li})^{209}\text{Pb}$ reaction at 33 MeV and its effect on elastic scattering. Nuclear Physics A, 1994, 575, 412-428.	1.5	12
131	Dynamic polarization potential induced by dipole Coulomb excitation. Nuclear Physics A, 1994, 579, 273-284.	1.5	68
132	Analytic approximations for the dynamic polarization effects due to Coulomb excitation. Nuclear Physics A, 1994, 580, 156-172.	1.5	14
133	Threshold anomaly in non-central forces. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 300, 303-307.	4.1	3
134	Environmental control of Tinto and Odiel river basins by PIXE. Nuclear Instruments & Methods in Physics Research B, 1993, 75, 334-337.	1.4	10
135	Deviations from tidal symmetry in polarized ^{7}Li excitation. Journal of Physics G: Nuclear and Particle Physics, 1992, 18, 367-378.	3.6	4
136	Geometric interpretation of the effect of the quadrupole force in the collisions of deformed nuclei. Physical Review C, 1992, 45, 1339-1346.	2.9	3
137	Reorientation and coupling effects in polarized heavy ion fusion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 279, 218-222.	4.1	2
138	Spurious effects of the pairing force on the dipole sum rule. Nuclear Physics A, 1991, 528, 144-158.	1.5	4
139	Combining PIXE and XRF with gamma-ray transmission to get accurate analysis of archaeological bronzes. Nuclear Instruments & Methods in Physics Research B, 1990, 50, 226-230.	1.4	9
140	Neutron transfer reactions induced by polarized ^{7}Li . Nuclear Physics A, 1989, 496, 403-428.	1.5	9
141	Tidal symmetry in nuclear reactions: application to the scattering of polarised projectiles. Journal of Physics G: Nuclear Physics, 1988, 14, 609-628.	0.8	39
142	Tidal symmetry in nuclear reactions: application to the reaction cross sections of polarized projectiles. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 185, 310-315.	4.1	6
143	Tidal symmetry in nuclear reactions: application to the scattering of polarised projectiles. Journal of Physics G: Nuclear Physics, 1986, 12, L235-L241.	0.8	48
144	Coupled channel effects in the scattering of $^{6,7}\text{Li}$ BY ^{58}Ni . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 161, 39-42.	4.1	15

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145	Coupled-channel calculations for the elastic scattering of ^7Li by $^{40,48}\text{Ca}$ at 89 MeV. Nuclear Physics A, 1985, 440, 543-556.	1.5	8
146	Effect of dipole polarisation in the quadrupole Coulomb excitation. Journal of Physics G: Nuclear Physics, 1985, 11, L239-L243.	0.8	3
147	Configuration localised states from orthogonal polynomials for effective potentials in 3D systems vs. algebraic DVR approaches. Molecular Physics, 0, , .	1.7	0