

# Jack C Wells

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/4829311/jack-c-wells-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

67  
papers

1,337  
citations

21  
h-index

34  
g-index

92  
ext. papers

1,452  
ext. citations

2.9  
avg, IF

3.7  
L-index

#	Paper	IF	Citations
67	Enabling Data Intensive Science on Supercomputers for High Energy Physics R&D Projects in HL-LHC Era. <i>EPJ Web of Conferences</i> , <b>2020</b> , 226, 01007	0.3	
66	Pre-exascale accelerated application development: The ORNL Summit experience. <i>IBM Journal of Research and Development</i> , <b>2020</b> , 64, 11:1-11:21	2.5	5
65	Enabling real-time multi-messenger astrophysics discoveries with deep learning. <i>Nature Reviews Physics</i> , <b>2019</b> , 1, 600-608	23.6	28
64	Early experiences on Summit: Data analytics and AI applications. <i>IBM Journal of Research and Development</i> , <b>2019</b> , 63, 2:1-2:9	2.5	3
63	A Fast Scalable Implicit Solver for Nonlinear Time-Evolution Earthquake City Problem on Low-Ordered Unstructured Finite Elements with Artificial Intelligence and Transprecision Computing <b>2018</b> ,		16
62	<b>2017</b> ,		8
61	Audience Based View of Publication Impact <b>2017</b> ,		1
60	Integration of Titan supercomputer at OLCF with ATLAS Production System. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 898, 092002	0.3	3
59	Integration of Panda Workload Management System with supercomputers. <i>Physics of Particles and Nuclei Letters</i> , <b>2016</b> , 13, 647-653	0.5	1
58	Measuring Scientific Impact Beyond Citation Counts. <i>D-Lib Magazine</i> , <b>2016</b> , 22,		7
57	Integration Of PanDA Workload Management System With Supercomputers for ATLAS and Data Intensive Science. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 762, 012021	0.3	3
56	Next Generation Workload Management System For Big Data on Heterogeneous Distributed Computing. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 608, 012040	0.3	16
55	Nanotechnology for Electronics, Photonics, and Renewable Energy. <i>Nanostructure Science and Technology</i> , <b>2010</b> ,	0.9	6
54	A comparative first-principles study of the adsorption of a carbon atom on copper and nickel surfaces. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2010</b> , 374, 4563-4567	2.3	11
53	Theoretical study on the structure, stability, and electronic properties of the guanine-Zn-cytosine base pair in M-DNA. <i>Journal of Physical Chemistry B</i> , <b>2007</b> , 111, 870-9	3.4	54
52	GMG A guaranteed global optimization algorithm: Application to remote sensing. <i>Mathematical and Computer Modelling</i> , <b>2007</b> , 45, 459-472		0
51	In situ time-resolved measurements of carbon nanotube and nanohorn growth. <i>Physica Status Solidi (B): Basic Research</i> , <b>2007</b> , 244, 3944-3949	1.3	14

50	Reply to "Comment on TCharacterization of the tunneling conductance across DNA basesT". <i>Physical Review E</i> , <b>2007</b> , 76, 013902	2.4	7
49	Toward Electronic Conductance Characterization of DNA Nucleotide Bases. <i>Solid State Phenomena</i> , <b>2007</b> , 121-123, 1387-1390	0.4	5
48	Simple model of the interrelation between single- and multiwall carbon nanotube growth rates for the CVD process. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	49
47	First-principles transversal DNA conductance deconstructed. <i>Biophysical Journal</i> , <b>2006</b> , 91, L04-6	2.9	46
46	Size-expanded yDNA bases: an ab initio study. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 6379-84	3.4	46
45	Characterization of the tunneling conductance across DNA bases. <i>Physical Review E</i> , <b>2006</b> , 74, 011919	2.4	53
44	Aromaticity-induced changes in electronic properties of size-expanded DNA bases: Case of xC. <i>International Journal of Quantum Chemistry</i> , <b>2006</b> , 106, 2339-2346	2.1	17
43	Interaction between benzenedithiolate and gold: classical force field for chemical bonding. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 244721	3.9	25
42	Size-expanded DNA bases: an ab initio study of their structural and electronic properties. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 21135-9	3.4	63
41	Two growth modes of graphitic carbon nanofibers with herring-bone structure. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	5
40	Far-field modulation of fluorescence decay rates in pairs of oriented semiconducting polymer nanostructures. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	15
39	Adsorption of a carbon atom on the Ni38 magic cluster and three low-index nickel surfaces: A comparative first-principles study. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	37
38	Multiscale simulations of carbon nanotube nucleation and growth: electronic structure calculations. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2004</b> , 4, 414-22	1.3	5
37	Dependence of surface strain on island geometry in embedded quantum-dot systems. <i>Surface Science</i> , <b>2003</b> , 539, L525-L530	1.8	9
36	NWChem for materials science. <i>Computational Materials Science</i> , <b>2003</b> , 28, 209-221	3.2	20
35	Computational chemistry for molecular electronics. <i>Computational Materials Science</i> , <b>2003</b> , 28, 321-341	3.2	40
34	CAUSAL CLASSICAL THEORY OF RADIATION DAMPING. <i>Modern Physics Letters A</i> , <b>2002</b> , 17, 1635-1642	1.3	
33	Covalent attachment of gold nanoparticles to DNA templates. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2002</b> , 2, 397-404	1.3	19

32	Surface diffusion and size evolution of nanostructures in laser-focused atomic deposition. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2002</b> , 20, 2758		3
31	A Light-Fronts Approach to a Two-Center Time-Dependent Dirac Equation. <i>Foundations of Physics</i> , <b>2001</b> , 31, 993-1015	1.2	
30	Quantum dots in magnetic fields: Thermal response of broken-symmetry phases. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	5
29	Site-Specific Attachment of Gold Nanoparticles to DNA Templates. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 635, C4.2.1		1
28	Asymptotic channels and gauge transformations of the time-dependent Dirac equation for extremely relativistic heavy-ion collisions. <i>Physical Review A</i> , <b>1999</b> , 59, 346-357	2.6	12
27	Wells, Simbotin, and Gavrilu Reply:. <i>Physical Review Letters</i> , <b>1999</b> , 82, 665-665	7.4	7
26	Exact Z <sup>2</sup> scaling of pair production in the high-energy limit of heavy-ion collisions. <i>Physical Review C</i> , <b>1999</b> , 59, 2753-2756	2.7	24
25	Lattice, Time-Dependent Schrödinger Equation Solution for Ion-Atom Collisions. <i>Physical Review Letters</i> , <b>1999</b> , 82, 3976-3979	7.4	57
24	Correlated Magnetoexcitons in Semiconductor Quantum Dots at Finite Temperature. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 579, 117		
23	Light-fronts approach to electron-positron pair production in ultrarelativistic heavy-ion collisions. <i>Physical Review A</i> , <b>1998</b> , 57, 1849-1861	2.6	39
22	Physical Reality of Light-Induced Atomic States. <i>Physical Review Letters</i> , <b>1998</b> , 80, 3479-3482	7.4	23
21	Excitation and charge transfer in proton-hydrogen collisions. <i>Physical Review A</i> , <b>1998</b> , 58, 2872-2880	2.6	61
20	High-frequency Floquet-theory content of wave-packet dynamics. <i>Physical Review A</i> , <b>1997</b> , 56, 3961-3973	3.6	17
19	Lattice Schrödinger-equation approach for excitation and ionization of He <sup>+</sup> by antiproton impact. <i>Physical Review A</i> , <b>1997</b> , 56, 3710-3713	2.6	23
18	Basis Spline Collocation Method for Solving the Schrödinger Equation in Axillary Symmetric Systems. <i>Journal of Computational Physics</i> , <b>1996</b> , 128, 197-208	4.1	15
17	Convergence of a lattice calculation for bound-free muon-pair production in peripheral relativistic heavy-ion collisions. <i>Physical Review A</i> , <b>1996</b> , 53, 1498-1504	2.6	13
16	Numerical solution of the time-dependent Schrödinger equation for intermediate-energy collisions of antiprotons with hydrogen. <i>Physical Review A</i> , <b>1996</b> , 54, 593-604	2.6	81
15	Ionization of hydrogen and hydrogenic ions by antiprotons. <i>Physical Review Letters</i> , <b>1996</b> , 76, 2882-2885	7.4	79

14	Lattice calculation for lepton capture from vacuum-pair production in relativistic heavy-ion collisions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1995</b> , 99, 293-296	1.2	9
13	Direct solution of the time-dependent Schrödinger equation for proton-hydrogen collisions in two-dimensional Cartesian space. <i>Physical Review A</i> , <b>1995</b> , 52, 3868-3876	2.6	8
12	Impact-parameter dependence of multiple lepton-pair production from electromagnetic fields. <i>Physical Review A</i> , <b>1995</b> , 51, 1836-1844	2.6	33
11	SPECTRAL PROPERTIES OF DERIVATIVE OPERATORS IN THE BASIS-SPLINE COLLOCATION METHOD. <i>International Journal of Modern Physics C</i> , <b>1995</b> , 06, 143-167	1.1	13
10	Comparison of flux-correcting and spline algorithms for solving (3+1)-dimensional relativistic hydrodynamics. <i>Physical Review E</i> , <b>1994</b> , 49, 1726-1733	2.4	5
9	Recent Progress in Nonperturbative Electromagnetic Lepton-Pair Production with Capture in Relativistic Heavy-Ion Collisions. <i>NATO ASI Series Series B: Physics</i> , <b>1994</b> , 777-785		
8	Perturbative and Nonperturbative Em Lepton Pair Production in Relativistic Heavy-Ion Collisions. <i>NATO ASI Series Series B: Physics</i> , <b>1994</b> , 569-578		
7	A NUMERICAL IMPLEMENTATION OF THE DIRAC EQUATION ON A HYPERCUBE MULTICOMPUTER. <i>International Journal of Modern Physics C</i> , <b>1993</b> , 04, 459-492	1.1	18
6	PARALLEL IMPLEMENTATION OF 3 + 1-DIMENSIONAL RELATIVISTIC HYDRODYNAMICS. <i>International Journal of Modern Physics C</i> , <b>1993</b> , 04, 1023-1040	1.1	2
5	Muon-induced fission: A probe for nuclear dissipation and fission dynamics. <i>Physical Review C</i> , <b>1993</b> , 48, 1297-1306	2.7	5
4	Nonperturbative electromagnetic lepton-pair production in peripheral relativistic heavy-ion collisions. <i>Physical Review A</i> , <b>1992</b> , 45, 6296-6312	2.6	47
3	Study of nuclear dissipation via muon-induced fission. A relativistic lattice calculation. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , <b>1992</b> , 293, 270-274	4.2	7
2	High Performance Computing Facility Operational Assessment 2015: Oak Ridge Leadership Computing Facility		3
1	Crosscut report: Exascale Requirements Reviews, March 9 <sup>th</sup> , 2017 [Tysons Corner, Virginia. An Office of Science review sponsored by: Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, Nuclear Physics		6