

Juan Ignacio Cirac Sasturin

List of Publications by Year in Descending Order

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

577
papers

64,280
citations

119
h-index

241
g-index

614
ext. papers

73,163
ext. citations

5.8
avg, IF

8.06
L-index

#	Paper	IF	Citations
577	Sequential Generation of Projected Entangled-Pair States.. <i>Physical Review Letters</i> , 2022 , 128, 010607	7.4	0
576	Spin-Holstein Models in Trapped-Ion Systems.. <i>Physical Review Letters</i> , 2022 , 128, 120404	7.4	0
575	Bose polaron and the Efimov effect: A Gaussian-state approach. <i>Physical Review A</i> , 2022 , 105,	2.6	2
574	Chemistry of a Light Impurity in a Bose-Einstein Condensate.. <i>Physical Review Letters</i> , 2022 , 128, 183401	7.4	2
573	Matrix product states and projected entangled pair states: Concepts, symmetries, theorems. <i>Reviews of Modern Physics</i> , 2021 , 93,	40.5	22
572	Quantum Circuits Assisted by Local Operations and Classical Communication: Transformations and Phases of Matter. <i>Physical Review Letters</i> , 2021 , 127, 220503	7.4	0
571	Locally Accurate Tensor Networks for Thermal States and Time Evolution. <i>PRX Quantum</i> , 2021 , 2,	6.1	1
570	Approximating the long time average of the density operator: Diagonal ensemble. <i>Physical Review B</i> , 2021 , 103,	3.3	1
569	Field tensor network states. <i>Physical Review B</i> , 2021 , 103,	3.3	1
568	Generation of photonic matrix product states with Rydberg atomic arrays. <i>Physical Review Research</i> , 2021 , 3,	3.9	3
567	Topological Lower Bound on Quantum Chaos by Entanglement Growth. <i>Physical Review Letters</i> , 2021 , 126, 160601	7.4	5
566	Free energy and variational approximations to thermal states. <i>Physical Review B</i> , 2021 , 103,	3.3	1
565	Algorithms for Quantum Simulation at Finite Energies. <i>PRX Quantum</i> , 2021 , 2,	6.1	7
564	Generalization of group-theoretic coherent states for variational calculations. <i>Physical Review Research</i> , 2021 , 3,	3.9	4
563	Simulating 2+1D Z_2 Lattice Gauge Theory with an Infinite Projected Entangled-Pair State. <i>Physical Review Letters</i> , 2021 , 126, 050401	7.4	3
562	Higgs-Mediated Optical Amplification in a Nonequilibrium Superconductor. <i>Physical Review X</i> , 2021 , 11,	9.1	4
561	Locality of temperature and correlations in the presence of non-zero-temperature phase transitions. <i>New Journal of Physics</i> , 2021 , 23, 073052	2.9	1

560	Exploiting the photonic nonlinearity of free-space subwavelength arrays of atoms. <i>Physical Review A</i> , 2021 , 104,	2.6	3
559	Fermionic quantum cellular automata and generalized matrix-product unitaries. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2021 , 2021, 013107	1.9	6
558	Atomic waveguide QED with atomic dimers. <i>Physical Review A</i> , 2021 , 104,	2.6	2
557	Convergence Guarantees for Discrete Mode Approximations to Non-Markovian Quantum Baths.. <i>Physical Review Letters</i> , 2021 , 127, 250404	7.4	0
556	Quantum East Model: Localization, Nonthermal Eigenstates, and Slow Dynamics. <i>Physical Review X</i> , 2020 , 10,	9.1	24
555	Wigner crystals in two-dimensional transition-metal dichalcogenides: Spin physics and readout. <i>Physical Review B</i> , 2020 , 101,	3.3	5
554	Exact dynamics in dual-unitary quantum circuits. <i>Physical Review B</i> , 2020 , 101,	3.3	45
553	Probing Thermalization through Spectral Analysis with Matrix Product Operators. <i>Physical Review Letters</i> , 2020 , 124, 100602	7.4	8
552	Classification of Matrix-Product Unitaries with Symmetries. <i>Physical Review Letters</i> , 2020 , 124, 100402	7.4	9
551	Multimode Fock states with large photon number: effective descriptions and applications in quantum metrology. <i>Quantum Science and Technology</i> , 2020 , 5, 025003	5.5	8
550	From Probabilistic Graphical Models to Generalized Tensor Networks for Supervised Learning. <i>IEEE Access</i> , 2020 , 8, 68169-68182	3.5	10
549	Nondestructive photon counting in waveguide QED. <i>Physical Review Research</i> , 2020 , 2,	3.9	7
548	Ultrafast molecular dynamics in terahertz-STM experiments: Theoretical analysis using the Anderson-Holstein model. <i>Physical Review Research</i> , 2020 , 2,	3.9	5
547	Quantum simulation of two-dimensional quantum chemistry in optical lattices. <i>Physical Review Research</i> , 2020 , 2,	3.9	1
546	Real-time dynamics in 2+1D compact QED using complex periodic Gaussian states. <i>Physical Review Research</i> , 2020 , 2,	3.9	10
545	Zero-temperature phases of the two-dimensional Hubbard-Holstein model: A non-Gaussian exact diagonalization study. <i>Physical Review Research</i> , 2020 , 2,	3.9	12
544	Efficient Description of Many-Body Systems with Matrix Product Density Operators. <i>PRX Quantum</i> , 2020 , 1,	6.1	10
543	Quantum computing and simulation. <i>Nanophotonics</i> , 2020 , 10, 453-456	6.3	0

542	Evaluation of time-dependent correlators after a local quench in iPEPS: hole motion in the t-J model. <i>SciPost Physics</i> , 2020 , 8,	6.1	11
541	Realizing a deterministic source of multipartite-entangled photonic qubits. <i>Nature Communications</i> , 2020 , 11, 4877	17.4	6
540	Entanglement and its relation to energy variance for local one-dimensional Hamiltonians. <i>Physical Review B</i> , 2020 , 101,	3.3	3
539	Simulating lattice gauge theories within quantum technologies. <i>European Physical Journal D</i> , 2020 , 74, 1	1.3	84
538	Quantum Cellular Automata, Tensor Networks, and Area Laws. <i>Physical Review Letters</i> , 2020 , 125, 190402	7.4	15
537	Variational Approach for Many-Body Systems at Finite Temperature. <i>Physical Review Letters</i> , 2020 , 125, 180602	7.4	9
536	Markovianity of an emitter coupled to a structured spin-chain bath. <i>Physical Review A</i> , 2020 , 101,	2.6	2
535	Gaussian time-dependent variational principle for the Bose-Hubbard model. <i>Physical Review B</i> , 2019 , 100,	3.3	14
534	Matrix Product States: Entanglement, Symmetries, and State Transformations. <i>Physical Review Letters</i> , 2019 , 123, 170504	7.4	2
533	Mathematical open problems in projected entangled pair states. <i>Revista Matemática Complutense</i> , 2019 , 32, 579-599	0.8	2
532	Engineering and Harnessing Giant Atoms in High-Dimensional Baths: A Proposal for Implementation with Cold Atoms. <i>Physical Review Letters</i> , 2019 , 122, 203603	7.4	18
531	Restricted Boltzmann machines in quantum physics. <i>Nature Physics</i> , 2019 , 15, 887-892	16.2	55
530	Continuous Tensor Network States for Quantum Fields. <i>Physical Review X</i> , 2019 , 9,	9.1	10
529	Quantum metrology with one-dimensional superradiant photonic states. <i>Physical Review A</i> , 2019 , 99,	2.6	15
528	Faster ground state preparation and high-precision ground energy estimation with fewer qubits. <i>Journal of Mathematical Physics</i> , 2019 , 60, 022202	1.2	20
527	Removing staggered fermionic matter in U(N) and SU(N) lattice gauge theories. <i>Physical Review D</i> , 2019 , 99,	4.9	21
526	Quantum simulation and optimization in hot quantum networks. <i>Physical Review B</i> , 2019 , 99,	3.3	2
525	Unconventional quantum optics in topological waveguide QED. <i>Science Advances</i> , 2019 , 5, eaaw0297	14.3	61

524	The 2019 surface acoustic waves roadmap. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 353001	3	112
523	Analogue quantum chemistry simulation. <i>Nature</i> , 2019 , 574, 215-218	50.4	40
522	Cold atoms in twisted-bilayer optical potentials. <i>Physical Review A</i> , 2019 , 100,	2.6	13
521	Efficient variational approach to dynamics of a spatially extended bosonic Kondo model. <i>Physical Review A</i> , 2019 , 100,	2.6	7
520	Quantum Rydberg Central Spin Model. <i>Physical Review Letters</i> , 2019 , 123, 183001	7.4	17
519	Time-dependent study of disordered models with infinite projected entangled pair states. <i>SciPost Physics</i> , 2019 , 6,	6.1	18
518	Tensor Networks and their use for Lattice Gauge Theories 2019 ,		7
517	Quantum chaos in the Brownian SYK model with large finite N : OTOCs and tripartite information. <i>Journal of High Energy Physics</i> , 2019 , 2019, 1	5.4	26
516	Machine learning and the physical sciences*. <i>Reviews of Modern Physics</i> , 2019 , 91,	40.5	520
515	Combining tensor networks with Monte Carlo methods for lattice gauge theories. <i>Physical Review D</i> , 2018 , 97,	4.9	13
514	Exotic quantum dynamics and purely long-range coherent interactions in Dirac conelike baths. <i>Physical Review A</i> , 2018 , 97,	2.6	25
513	Unitary n-designs via random quenches in atomic Hubbard and spin models: Application to the measurement of Rényi entropies. <i>Physical Review A</i> , 2018 , 97,	2.6	38
512	Rényi Entropies from Random Quenches in Atomic Hubbard and Spin Models. <i>Physical Review Letters</i> , 2018 , 120, 050406	7.4	89
511	Variational study of fermionic and bosonic systems with non-Gaussian states: Theory and applications. <i>Annals of Physics</i> , 2018 , 390, 245-302	2.5	48
510	Neural-Network Quantum States, String-Bond States, and Chiral Topological States. <i>Physical Review X</i> , 2018 , 8,	9.1	104
509	Exploring the anisotropic Kondo model in and out of equilibrium with alkaline-earth atoms. <i>Physical Review B</i> , 2018 , 97,	3.3	22
508	Almost conserved operators in nearly many-body localized systems. <i>Physical Review B</i> , 2018 , 97,	3.3	9
507	Variational principle for quantum impurity systems in and out of equilibrium: Application to Kondo problems. <i>Physical Review B</i> , 2018 , 98,	3.3	19

506	Solving Quantum Impurity Problems in and out of Equilibrium with the Variational Approach. <i>Physical Review Letters</i> , 2018 , 121, 026805	7.4	22
505	Eliminating fermionic matter fields in lattice gauge theories. <i>Physical Review B</i> , 2018 , 98,	3.3	26
504	Continuum limits of matrix product states. <i>Physical Review B</i> , 2018 , 98,	3.3	4
503	Effective many-body Hamiltonians of qubit-photon bound states. <i>New Journal of Physics</i> , 2018 , 20, 105005	2.9	13
502	Computational Speedups Using Small Quantum Devices. <i>Physical Review Letters</i> , 2018 , 121, 250501	7.4	13
501	Normal projected entangled pair states generating the same state. <i>New Journal of Physics</i> , 2018 , 20, 113017	2.9	9
500	Digital quantum simulation of lattice gauge theories in three spatial dimensions. <i>New Journal of Physics</i> , 2018 , 20, 093001	2.9	42
499	Bosonic Gaussian states from conformal field theory. <i>Physical Review B</i> , 2018 , 98,	3.3	4
498	Localization with random time-periodic quantum circuits. <i>Physical Review B</i> , 2018 , 98,	3.3	24
497	Variational study of U(1) and SU(2) lattice gauge theories with Gaussian states in 1+1 dimensions. <i>Physical Review D</i> , 2018 , 98,	4.9	26
496	Projected entangled pair states with continuous virtual symmetries. <i>Physical Review B</i> , 2018 , 98,	3.3	2
495	A generalization of the injectivity condition for projected entangled pair states. <i>Journal of Mathematical Physics</i> , 2018 , 59, 021902	1.2	7
494	Generation of single- and two-mode multiphoton states in waveguide QED. <i>Physical Review A</i> , 2018 , 97,	2.6	7
493	Solid-state magnetic traps and lattices. <i>Physical Review B</i> , 2018 , 97,	3.3	1
492	Towards overcoming the Monte Carlo sign problem with tensor networks. <i>EPJ Web of Conferences</i> , 2017 , 137, 04001	0.3	16
491	Quantum simulation of the Abelian-Higgs lattice gauge theory with ultracold atoms. <i>New Journal of Physics</i> , 2017 , 19, 063038	2.9	29
490	Heralded multiphoton states with coherent spin interactions in waveguide QED. <i>New Journal of Physics</i> , 2017 , 19, 043004	2.9	5
489	Density Induced Phase Transitions in the Schwinger Model: A Study with Matrix Product States. <i>Physical Review Letters</i> , 2017 , 118, 071601	7.4	41

488	Digital Quantum Simulation of Z_2 Lattice Gauge Theories with Dynamical Fermionic Matter. <i>Physical Review Letters</i> , 2017 , 118, 070501	7.4	46
487	Matrix product density operators: Renormalization fixed points and boundary theories. <i>Annals of Physics</i> , 2017 , 378, 100-149	2.5	37
486	Quantum optics, what next?. <i>Nature Photonics</i> , 2017 , 11, 18-20	33.9	12
485	Efficient quantum computation in a network with probabilistic gates and logical encoding. <i>Physical Review A</i> , 2017 , 95,	2.6	5
484	Effective description of correlations for states obtained from conformal field theory. <i>Physical Review B</i> , 2017 , 96,	3.3	2
483	Quantum Spin Stabilized Magnetic Levitation. <i>Physical Review Letters</i> , 2017 , 119, 167202	7.4	29
482	Quantum Emitters in Two-Dimensional Structured Reservoirs in the Nonperturbative Regime. <i>Physical Review Letters</i> , 2017 , 119, 143602	7.4	52
481	Markovian and non-Markovian dynamics of quantum emitters coupled to two-dimensional structured reservoirs. <i>Physical Review A</i> , 2017 , 96,	2.6	53
480	Topological phenomena in classical optical networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E8967-E8976	11.5	15
479	Acoustic Traps and Lattices for Electrons in Semiconductors. <i>Physical Review X</i> , 2017 , 7,	9.1	12
478	Matrix product unitaries: structure, symmetries, and topological invariants. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2017 , 2017, 083105	1.9	81
477	Correlation Decay in Fermionic Lattice Systems with Power-Law Interactions at Nonzero Temperature. <i>Physical Review Letters</i> , 2017 , 119, 110601	7.4	10
476	Classification of matrix product states with a local (gauge) symmetry. <i>Annals of Physics</i> , 2017 , 386, 199-245	2.5	13
475	Energy as a Detector of Nonlocality of Many-Body Spin Systems. <i>Physical Review X</i> , 2017 , 7,	9.1	19
474	High-fidelity hot gates for generic spin-resonator systems. <i>Physical Review A</i> , 2017 , 95,	2.6	21
473	Ultrafocused Electromagnetic Field Pulses with a Hollow Cylindrical Waveguide. <i>Physical Review Letters</i> , 2017 , 119, 043904	7.4	1
472	Linear stability analysis of a levitated nanomagnet in a static magnetic field: Quantum spin stabilized magnetic levitation. <i>Physical Review B</i> , 2017 , 96,	3.3	10
471	Digital lattice gauge theories. <i>Physical Review A</i> , 2017 , 95,	2.6	44

470	Efficient Multiphoton Generation in Waveguide Quantum Electrodynamics. <i>Physical Review Letters</i> , 2017 , 118, 213601	7.4	43
469	Quantum computing with neutral atoms. <i>Physics Today</i> , 2017 , 70, 44-50	0.9	58
468	Efficient Basis Formulation for (1+1)-Dimensional SU(2) Lattice Gauge Theory: Spectral Calculations with Matrix Product States. <i>Physical Review X</i> , 2017 , 7,	9.1	30
467	Irreducible forms of matrix product states: Theory and applications. <i>Journal of Mathematical Physics</i> , 2017 , 58, 121901	1.2	8
466	Dynamics of quantum information in many-body localized systems. <i>Physical Review B</i> , 2017 , 96,	3.3	12
465	Quantum Gross-Pitaevskii Equation. <i>SciPost Physics</i> , 2017 , 3,	6.1	6
464	Ultrashort Pulses for Far-Field Nanoscopy. <i>Physical Review Letters</i> , 2016 , 117, 103602	7.4	1
463	Rapid Adiabatic Preparation of Injective Projected Entangled Pair States and Gibbs States. <i>Physical Review Letters</i> , 2016 , 116, 080503	7.4	24
462	Bound States in Boson Impurity Models. <i>Physical Review X</i> , 2016 , 6,	9.1	57
461	Dissipative long-range entanglement generation between electronic spins. <i>Physical Review B</i> , 2016 , 94,	3.3	8
460	Systematic construction of density functionals based on matrix product state computations. <i>New Journal of Physics</i> , 2016 , 18, 083039	2.9	10
459	Lattice effects on Laughlin wave functions and parent Hamiltonians. <i>Physical Review B</i> , 2016 , 94,	3.3	14
458	Quantum simulations of lattice gauge theories using ultracold atoms in optical lattices. <i>Reports on Progress in Physics</i> , 2016 , 79, 014401	14.4	172
457	Quantum Computing with Cold Ions and Atoms: Theory 2016 , 483-517		
456	Quasi-Many-Body Localization in Translation-Invariant Systems. <i>Physical Review Letters</i> , 2016 , 117, 240601	9.1	84
455	Fundamental limitations in the purifications of tensor networks. <i>Journal of Mathematical Physics</i> , 2016 , 57, 071902	1.2	15
454	Projected Entangled Pair States with non-Abelian gauge symmetries: An SU(2) study. <i>Annals of Physics</i> , 2016 , 374, 84-137	2.5	30
453	Quantum spin dynamics with pairwise-tunable, long-range interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E4946-55	11.5	67

452	Efficient variational diagonalization of fully many-body localized Hamiltonians. <i>Physical Review B</i> , 2016 , 94,	3.3	48
451	Approximating Gibbs states of local Hamiltonians efficiently with projected entangled pair states. <i>Physical Review B</i> , 2015 , 91,	3.3	65
450	Chiral projected entangled-pair state with topological order. <i>Physical Review Letters</i> , 2015 , 114, 106803	7.4	25
449	Subwavelength vacuum lattices and atom-atom interactions in two-dimensional photonic crystals. <i>Nature Photonics</i> , 2015 , 9, 320-325	33.9	169
448	Exact parent Hamiltonians of bosonic and fermionic Moore-Read states on lattices and local models. <i>New Journal of Physics</i> , 2015 , 17, 082001	2.9	27
447	Frustration Free Gapless Hamiltonians for Matrix Product States. <i>Communications in Mathematical Physics</i> , 2015 , 333, 299-333	2	16
446	Multiphoton-scattering theory and generalized master equations. <i>Physical Review A</i> , 2015 , 92,	2.6	104
445	Chiral topological spin liquids with projected entangled pair states. <i>Physical Review B</i> , 2015 , 91,	3.3	30
444	Edge states for the Kalmeyer-Laughlin wave function. <i>Physical Review B</i> , 2015 , 92,	3.3	6
443	Thermal evolution of the Schwinger model with matrix product operators. <i>Physical Review D</i> , 2015 , 92,	4.9	39
442	Deterministic Generation of Arbitrary Photonic States Assisted by Dissipation. <i>Physical Review Letters</i> , 2015 , 115, 163603	7.4	56
441	Gauging Quantum States: From Global to Local Symmetries in Many-Body Systems. <i>Physical Review X</i> , 2015 , 5,	9.1	61
440	Slowest local operators in quantum spin chains. <i>Physical Review E</i> , 2015 , 92, 012128	2.4	32
439	Universal Quantum Transducers Based on Surface Acoustic Waves. <i>Physical Review X</i> , 2015 , 5,	9.1	102
438	Non-Abelian string breaking phenomena with matrix product states. <i>Journal of High Energy Physics</i> , 2015 , 2015, 1	5.4	51
437	Quantum dynamics of propagating photons with strong interactions: a generalized input-output formalism. <i>New Journal of Physics</i> , 2015 , 17, 113001	2.9	94
436	Variational Matrix Product Operators for the Steady State of Dissipative Quantum Systems. <i>Physical Review Letters</i> , 2015 , 114, 220601	7.4	99
435	Fermionic projected entangled pair states and local U(1) gauge theories. <i>Annals of Physics</i> , 2015 , 363, 385-439	2.5	38

434	Temperature dependence of the chiral condensate in the Schwinger model with Matrix Product States 2015 ,		4
433	Nuclear spin dynamics in double quantum dots: Multistability, dynamical polarization, criticality, and entanglement. <i>Physical Review B</i> , 2014 , 89,	3.3	10
432	Construction of spin models displaying quantum criticality from quantum field theory. <i>Nuclear Physics B</i> , 2014 , 886, 63-74	2.8	4
431	Algorithms for finite projected entangled pair states. <i>Physical Review B</i> , 2014 , 90,	3.3	77
430	Resonating-valence-bond superconductors with fermionic projected entangled pair states. <i>Physical Review B</i> , 2014 , 89,	3.3	20
429	Long-distance transfer and routing of static magnetic fields. <i>Physical Review Letters</i> , 2014 , 112, 253901	7.4	47
428	Unifying projected entangled pair state contractions. <i>New Journal of Physics</i> , 2014 , 16, 033014	2.9	56
427	Lattice Laughlin states of bosons and fermions at filling fractions $1/q$. <i>New Journal of Physics</i> , 2014 , 16, 033025	2.9	31
426	Edge theories in projected entangled pair state models. <i>Physical Review Letters</i> , 2014 , 112, 036402	7.4	29
425	Optical-lattice implementation scheme of a bosonic topological model with fermionic atoms. <i>Physical Review A</i> , 2014 , 90,	2.6	7
424	Symmetries and boundary theories for chiral projected entangled pair states. <i>Physical Review B</i> , 2014 , 90,	3.3	21
423	Quantum simulation of the Schwinger model: A study of feasibility. <i>Physical Review A</i> , 2014 , 90,	2.6	52
422	Quantum teleportation of dynamics and effective interactions between remote systems. <i>Physical Review Letters</i> , 2013 , 111, 020501	7.4	7
421	Quantum simulations of gauge theories with ultracold atoms: Local gauge invariance from angular-momentum conservation. <i>Physical Review A</i> , 2013 , 88,	2.6	109
420	Optomechanics assisted by a qubit: From dissipative state preparation to many-partite systems. <i>Physical Review A</i> , 2013 , 88,	2.6	24
419	Superconducting vortex lattices for ultracold atoms. <i>Physical Review Letters</i> , 2013 , 111, 145304	7.4	63
418	Local models of fractional quantum Hall states in lattices and physical implementation. <i>Nature Communications</i> , 2013 , 4, 2864	17.4	58
417	Steady-state entanglement in the nuclear spin dynamics of a double quantum dot. <i>Physical Review Letters</i> , 2013 , 111, 246802	7.4	14

416	The mass spectrum of the Schwinger model with matrix product states. <i>Journal of High Energy Physics</i> , 2013 , 2013, 1	5.4	93
415	Topological order in the projected entangled-pair states formalism: transfer operator and boundary Hamiltonians. <i>Physical Review Letters</i> , 2013 , 111, 090501	7.4	71
414	Cold-atom quantum simulator for SU(2) Yang-Mills lattice gauge theory. <i>Physical Review Letters</i> , 2013 , 110, 125304	7.4	126
413	Simulating (2+1)-dimensional lattice QED with dynamical matter using ultracold atoms. <i>Physical Review Letters</i> , 2013 , 110, 055302	7.4	75
412	Noise-driven dynamics and phase transitions in fermionic systems. <i>Physical Review A</i> , 2013 , 87,	2.6	73
411	Topological phenomena in trapped-ion systems. <i>Physical Review A</i> , 2013 , 87,	2.6	13
410	Self-organization of atoms along a nanophotonic waveguide. <i>Physical Review Letters</i> , 2013 , 110, 113606	7.4	97
409	Dissipative spin chains: Implementation with cold atoms and steady-state properties. <i>Physical Review A</i> , 2013 , 87,	2.6	22
408	Topologically protected quantum state transfer in a chiral spin liquid. <i>Nature Communications</i> , 2013 , 4, 1585	17.4	38
407	Calculus of continuous matrix product states. <i>Physical Review B</i> , 2013 , 88,	3.3	41
406	Purifications of multipartite states: limitations and constructive methods. <i>New Journal of Physics</i> , 2013 , 15, 123021	2.9	38
405	ROCK inhibitor Y-27632 increases the cloning efficiency of limbal stem/progenitor cells by improving their adherence and ROS-scavenging capacity. <i>Tissue Engineering - Part C: Methods</i> , 2013 , 19, 531-7	2.9	17
404	Field-induced superfluids and Bose liquids in projected entangled pair states. <i>Physical Review B</i> , 2013 , 88,	3.3	7
403	Entanglement, fractional magnetization, and long-range interactions. <i>Physical Review B</i> , 2013 , 87,	3.3	12
402	Projected entangled-pair states can describe chiral topological states. <i>Physical Review Letters</i> , 2013 , 111, 236805	7.4	52
401	Robustness in projected entangled pair states. <i>Physical Review B</i> , 2013 , 88,	3.3	17
400	Robustness of quantum memories based on Majorana zero modes. <i>Physical Review B</i> , 2013 , 88,	3.3	35
399	Ground states of fermionic lattice Hamiltonians with permutation symmetry. <i>Physical Review A</i> , 2013 , 88,	2.6	7

398	Resonating valence bond states in the PEPS formalism. <i>Physical Review B</i> , 2012 , 86,	3.3	85
397	Dissipative phase transition in a central spin system. <i>Physical Review A</i> , 2012 , 86,	2.6	159
396	Nanoplasmonic lattices for ultracold atoms. <i>Physical Review Letters</i> , 2012 , 109, 235309	7.4	96
395	Simulating compact quantum electrodynamics with ultracold atoms: probing confinement and nonperturbative effects. <i>Physical Review Letters</i> , 2012 , 109, 125302	7.4	137
394	Scalable architecture for a room temperature solid-state quantum information processor. <i>Nature Communications</i> , 2012 , 3, 800	17.4	157
393	Robust entanglement generation by reservoir engineering. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012 , 45, 124021	1.3	17
392	Room-temperature quantum bit memory exceeding one second. <i>Science</i> , 2012 , 336, 1283-6	33.3	580
391	Order parameter for symmetry-protected phases in one dimension. <i>Physical Review Letters</i> , 2012 , 109, 050402	7.4	55
390	Master-equation approach to optomechanics with arbitrary dielectrics. <i>Physical Review A</i> , 2012 , 86,	2.6	36
389	Tensor network techniques for the computation of dynamical observables in one-dimensional quantum spin systems. <i>New Journal of Physics</i> , 2012 , 14, 075003	2.9	23
388	Non-local Correlations in the Haldane Phase for an XXZ Spin-1 Chain: A Perspective from Infinite Matrix Product State Representation. <i>Journal of the Physical Society of Japan</i> , 2012 , 81, 074003	1.5	26
387	Quantum simulation of small-polaron formation with trapped ions. <i>Physical Review Letters</i> , 2012 , 109, 250501	7.4	35
386	Quantum magnetomechanics with levitating superconducting microspheres. <i>Physical Review Letters</i> , 2012 , 109, 147205	7.4	69
385	Variational matrix product ansatz for dispersion relations. <i>Physical Review B</i> , 2012 , 85,	3.3	77
384	Topological and entanglement properties of resonating valence bond wave functions. <i>Physical Review B</i> , 2012 , 86,	3.3	92
383	Matrix product states with long-range localizable entanglement. <i>Physical Review A</i> , 2012 , 86,	2.6	6
382	Gapless Hamiltonians for the toric code using the projected entangled pair state formalism. <i>Physical Review Letters</i> , 2012 , 109, 260401	7.4	12
381	Laughlin spin-liquid states on lattices obtained from conformal field theory. <i>Physical Review Letters</i> , 2012 , 108, 257206	7.4	63

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