Authors	Title
Elies Gil-Fuster, Jens Eisert and Carlos Bravo-Prieto	Understanding quantum machine learning also requires rethinking generalization
Nicholas Rubin, Dominic Berry, Alina Kononov, Fionn Malone, Tanuj Khattar, Alec White, Joonho Lee, Hartmut Neven, Ryan Babbush and Andrew Baczewski	Quantum computation of stopping power for inertial fusion target design (merged with 14)
Dominic Berry, Nicholas Rubin, Ahmed O. Elnabawy, Gabriele Ahlers, A. Eugene DePrince III, Joonho Lee, Christian Gogolin and Ryan Babbush	Quantum Simulation of Realistic Materials in First Quantization Using Non-local Pseudopotentials (merged with 13)
Nick Blunt, György Gehér and Alexandra Moylett	Compilation of a simple chemistry application to quantum error correction primitives
Dominik Hangleiter, Ingo Roth, Jonáš Fuksa, Jens Eisert and Pedram Roushan	Robustly learning the Hamiltonian dynamics of a superconducting quantum processor
Janek Denzler, Antonio Anna Mele, Ellen Derbyshire, Tommaso Guaita and Jens Eisert	Learning Fermionic correlations by evolving with random translationally invariant Hamiltonians
György Gehér, Ophelia Crawford and Earl Campbell	Tangling schedules eases hardware connectivity requirements for quantum error correction
Daniel Miller, Lukas Postler, Antonio Anna Mele, Kyano Levi, Christian Marciniak, Ivan Pogorelov, Milena Guevara-Bertsch, Alex Steiner, Robert Freund, Rainer Blatt, Philipp Schindler, Jose Carrasco, Martin Ringbauer, Thomas Monz and Jens Eisert	Overcoming scalability bottlenecks for detecting quantum entanglement
Armanda Ottaviano Quintavalle, Michael Vasmer and Paul Webster	Partitioning qubits in hypergraph product codes to implement logical gates
Antoine Michel, Loic Henriet, Antoine Browaeys, Christophe Domain and Thomas Ayral	Hubbard physics with Rydberg atoms: using a quantum spin simulator to simulate strong fermionic correlations
David Jennings and Matteo Lostaglio	The cost of solving linear differential equations on a quantum computer: fast-forwarding to explicit resource counts
Chengkai Zhu, Yin Mo, Yu-Ao Chen and Xin Wang	Reversing Unknown Quantum Processes via Virtual Combs: for Channels with Limited Information
Marco Sciorilli, Lucas Borges, Taylor L. Patti, Giancarlo Camilo, Diego Garcia-Martin, Leandro Aolita and Anima Anandkumar	Towards large-scale quantum optimization solvers with few qubits
Luka Skoric, Ben Barber, Kenton Barnes, Tomasz Bialas, Okan Buğdaycı, Earl Campbell, Neil Gillespie, Kauser Johar, Ram Rajan, Adam Richardson, Canberk Topal, Mark Turner and Abbas Ziad	A real-time, scalable, fast and highly resource efficient decoder for a quantum computer
Timo Eckstein, Refik Mansuroglu, Piotr Czarnik, Jian-Xin Zhu, Michael J. Hartmann, Lukasz Cincio, Andrew Sornborger and Zoe Holmes	Large-scale simulations of Floquet physics on near-term quantum computers
Marco Fellous Asiani, Moein Naseri, Chandan Datta, Alexander Streltsov and Michał Oszmaniec	Scalable noisy quantum circuits for biased-noise qubits
Marco Fellous Asiani, Jing Hao Chai, Yvain Thonnart, Hui Khoon Ng, Robert Whitney and Alexia Auffèves	Minimizing the resources required by large-scale quantum computers, beyond algorithmic quantities
Gregory White, Petar Jurcevic, Charles Hill and Kavan Modi	Unifying non-Markovian characterisation with an efficient and self-consistent framework
Kou Hamada, Yasunari Suzuki and Yuuki Tokunaga	Efficient and high-performance routing of lattice-surgery paths on three-dimensional lattice
Adam Taylor, Gabriele Bressanini, Hyukjoon Kwon and Myungshik Kim	Quantum error cancellation in photonic systems - undoing photon losses
Diego Ruiz, Jérémie Guillaud, Anthony Leverrier, Mazyar Mirrahimi and Christophe Vuillot	LDPC-cat codes for low-overhead quantum computing in 2D
Ioannis Kolotouros, Ioannis Petrongonas, Milos Prokop and Petros Wallden	Adiabatic quantum computing with parameterized quantum circuits
Christoph Sünderhauf	Generalized Quantum Singular Value Transformation
Edoardo Alessandroni, Sergi Ramos-Calderer, Ingo Roth, Leandro Aolita and Emiliano Traversi	Alleviating the quantum Big-M problem
Allan Tosta, Thais Lima Silva, Giancarlo Camilo and Leandro Aolita	Randomized semi-quantum matrix processing
Friederike Butt, Sascha Heußen, Manuel Rispler and Markus Müller	Fault-Tolerant Code Switching Protocols for Near-Term Quantum Processors
Marine Demarty, James Mills and Raul Garcia-Patron Sanchez	Entropy Benchmarking of Near-Term Quantum Devices
Boniface Yogendran, Daniel Charlton, Miriam Beddig, Ioannis Kolotouros and Petros Wallden	Big data applications on small quantum computers
Elham Kashefi, Dominik Leichtle, Luka Music and Harold Ollivier	Verification of Quantum Computations without Trusted Preparations or Measurements
Brian Coyle, El Amine Cherrat, Nishant Jain, Natansh Mathur, Skander Kazdaghli, Snehal Raj and Iordanis Kerenidis	Efficiently trainable density quantum neural networks
Zhenhuan Liu, Xingjian Zhang, Yue-Yang Fei and Zhenyu Cai	Virtual Channel Purification
Shin Ho Choe and Robert König	How to fault-tolerantly realize any quantum circuit with local operations
Angus Lowe and Aram Harrow	On optimal quantum circuit cutting and clustered Hamiltonian simulation