

Atomistic simulation of crack propagation in silica glass. [Swati Gupta *et al.*, Phys. Rev. Lett. **137**, 206101 (2026)]

NEWSPAPER

PHYSICAL REVIEW LETTERS

Contents

Articles published 7 November–13 November 2026

VOLUME 137, NUMBER 20 13 November 2026

Quantum Information, Science, and Technology

Page Curve for Local-Operator Entanglement from Free Probability 200401
Neil Dowling and Silvia Pappalardi
Hilbert Space Fragmentation from Generalized Symmetries 200402
Thea Budde, Marina Kristć Marinković, and Joao C. Pinto Barros
Local Characterization of Global Tensor Network Eigenstates 200403
José Garre Rubio, András Molnár, Norbert Schuch, and Frank Verstraete
Interpreting Liouvillian Eigenmodes: Quantized Orbits in Dissipative Systems 200404
Ashlin V. Thomas, Felix Fritzsch, Masudul Haque, and Shovan Dutta
Qubit Noise Sensing via Induced Photon Loss in a Superconducting Cavity 200801
Nitzan Kahn, Dror Garti, Uri Goldblatt, Lalit M. Joshi, Fabien Lafont, and Serge Rosenblum

Cosmology, Astrophysics, and Gravitation

All-Order Structure of Static Gravitational Interactions and the Seventh Post-Newtonian Potential 201401
Giacomo Brunello, Manoj K. Mandal, Pierpaolo Mastrolia, Raj Patil, Matteo Pegorin, Sid Smith, and Jan Steinhoff
Polarized Anisotropic Stochastic Gravitational Wave Background Search with Ground-Based Detector Networks 201402
Töre Boybeyi and Vuk Mandic
Kerr-Newman and Genuine Kerr Black Holes in the Bertotti-Robinson Magnetic Field 201403
Hryhorii Ovcharenko and Jiří Podolský

Particles and Fields

Dark-Matter-Induced Nuclear Deexcitation at the Short-Baseline Near Detector with *Ab Initio* Nuclear Theory 201801
Bhaskar Dutta, Debopam Goswami, Baishan Hu, Wei-Chih Huang, and Vishvas Pandey
Is the Large Uncertainty of δ_{CP} Fundamentally Encoded in the Neutrino Quantum State? 201802
Michela Ignoti, Claudia Frugiuele, Matteo G. A. Paris, and Marco G. Genoni

Nuclear Physics

Long-Range and Short-Range Longitudinal Flow Decorrelations in the Quark-Gluon Plasma 202301
Jiangyong Jia (贾江涌), Shengli Huang (黄胜利), Chunjian Zhang (张春健), and Somadutta Bhatta
Lower Limit on the Double-Alpha Decay of ^{224}Ra 202501
P. Belli, R. Bernabei, F. Cappella, V. Caracciolo, R. Cerulli, F. A. Danevich, V. Yu. Denisov, A. Incicchitti, D. V. Kasperovych, V. R. Klavdiienko, A. Leoncini, and V. I. Tretyak

(Continued Inside)

This paper was highlighted in the APS publication *Physics* (physics.aps.org).
By suggesting a few manuscripts each week, we hope to promote reading across fields. Please see our Announcement Phys. Rev. Lett. 98, 010001 (2007).

Copyright 2026 American Physical Society

0031-9007(20261113)137:20;1-D

Atomic, Molecular, and Optical Physics

Nonequilibrium Equation of State for a Turbulent 2D Bose Gas 203401
Yi Jiang, Nikolai Maslov, Andrey Karailiev, Christoph Eigen, Martin Gazo, and Zoran Hadzibabic

Rapid Cavity-Based Midcircuit Measurement and Feedforward in a Neutral Atom Array 203601
Tsai-Chen Lee, Jacquelyn Ho, Yue-Hui Lu, Tai Xiang, Nathaniel B. Vilas, Zhenjie Yan, and Dan M. Stamper-Kurn

Landscape of Scattering Universality with General Dispersion Relations 203602
Yidan Wang (王艺丹), Xuesen Na, Michael J. Gullans, Susanne F. Yelin, and Alexey V. Gorshkov

Optomechanical Limit on Intracavity Intensities from Bulk Mirror Vibrations 203603
L. Maisenbacher, A. Singh, I. M. Pope, and H. Müller

Plasma and Solar Physics, Accelerators and Beams

Theory for the Power Threshold of the *L-H* Transition in Tokamaks 205101
B. De Lucca, P. Ricci, B. Labit, D. Mancini, L. N. Stenger, and Z. Tecchiolli

Nonthermal Particle Acceleration by Magnetic Pumping in Pulsating Plasmas 205201
Giuseppe Arrò, Vladimir Zhdankin, and Fabio Bacchini

Condensed Matter and Materials

Excitonic-Superconducting Coexistence and Emergent Nematic Superconductivity Driven by Spontaneous Symmetry Breaking 206001
Fei Yang, Ruigang Li, Junwei Liu, and Binghai Yan

Atomistic Simulation of Subcritical Crack Growth in Glass in Vacuum 206101
Swati Gupta, Mark A. Wilson, Scott J. Grutzik, and Derek H. Warner

Hydrodynamics of the Viscous Electron Fluid in Cadmium 206301
Xiaodong Guo, Xiaokang Li, Benoît Fauqué, Alaska Subedi, Lingxiao Zhao, Zengwei Zhu, and Kamran Behnia

Emergent-Gravity Hall Effect from Quantum Geometry 206302
Hiroki Yoshida and Takehito Yokoyama

Many-Body-Driven Ultrafast Exciton Relaxation Enabled by Phonon-Activated Coulomb Coupling 206401
Xiang Jiang and Jin Zhao

First-Principles Effective Mass in the Three-Dimensional Uniform Electron Gas 206501
Pengcheng Hou, Daniel Cerkoney, Zhiyi Li, Tao Wang, Xiansheng Cai, Lei Wang, Gabriel Kotliar, Youjin Deng, and Kun Chen

Interferometric Readout of Momentum-Space Topology in a Programmable Dissipative Photonic Circuit 206601
Andrea Cataldo, Emil J. Bergholtz, Daniel Leykam, Jun Gao, and Ali W. Elshaari

Emergence of a Symmetry-Broken Chern Insulator near a Moiré Kondo Breakdown 206602
Wanghao Tian, Bowen Shen, Lizhong Li, Mingjie Zhang, Feng Liu, Chushan Li, Yaotian Liu, Fan Xu, Kenji Watanabe, Takashi Taniguchi, Peiling Li, Li Lu, Yang Xu, Shengwei Jiang, Tingxin Li, Jie Shan, and Kin Fai Mak

Open-Boundary-Condition-Persistent Point-Gap Bound States in the Non-Hermitian Continuum 206603
Xingyu Lu, Zeliang Song, Kun Ding, and Degang Zhao

Superparamagnetism in an Interacting Nanomagnet Array: A Tale of Three Temperatures 206701
Anthony Hurben, Ioan-Augustin Chioar, Cristiano Nisoli, and Peter Schiffer

Terahertz Switching of Two-dimensional Antiferromagnetic Order 206702
Chenyu Wang, En Wang, Yaxian Wang, and Sheng Meng

Deconfined Quantum Critical Point in a Dissipative Spin-1/2 Chain 206703
Longye Lu, Shifeng Cui, and Wenan Guo

Phonon-Bottlenecked Spin Relaxation of $Er^{3+}:CaWO_4$ at MilliKelvin Temperatures 206704
S. Rajendran, B. Mistri, P. K. Sharma, S. E. Kubatkin, A. V. Danilov, S. Dhomkar, S. E. de Graaf, and V. Ranjan

Intracycle Interference in Strong-Field Photoemission from a Tungsten Needle Tip 206901
Timo Wirth, Jonas Heimerl, Stefan Meier, and Peter Hommelhoff

(Continued on Preceding Page)

This paper was highlighted in the APS publication *Physics* (physics.aps.org).

By suggesting a few manuscripts each week, we hope to promote reading across fields. Please see our Announcement Phys. Rev. Lett. 98, 010001 (2007)

Unveiling High-Energy Ultrafast Responses Driven by Fermi-Level Gap Opening in Charge-Density Waves 206902
Qiong Wu, Tianchen Hu, Junhan Huang, Yongjie Liu, Fei Sun, Shuxiang Xu, Li Yue, Zijian Lin, Xinyu Zhou, Tao Dong, and Nan-Lin Wang

Quantum Theory of Exciton Magnetic Moment: Interaction and Quantum Geometric Effects 206903
Gurjyot Sethi, Jiawei Ruan, Fang Zhang, Weichen Tang, Chen Hu, Mit Naik, and Steven G. Louie

Statistical Physics; Classical, Nonlinear, and Complex Systems

Universal Criticality of Entropy Production in Chemical Reaction Networks 207101
Kyota Tamano and Keiji Saito

Walk-on-Spheres Solution to Heterogeneous Transport Phenomena 207102
Henrique B. N. Monteiro and Daniel M. Tartakovsky

Polymers, Chemical Physics, Soft Matter, and Biological Physics

Kovacs Memory Effect in a Thin Granular Layer: Experimental Evidence and Its Physical Origin 208201
Francisco Vega Reyes, Álvaro Rodríguez-Rivas, Pablo Maynar, and M. Isabel García de Soria

Grain-Scale Origin of Stick-Slip Waves in Silo Discharge: Influence of Cohesion 208202
David Luce, Adrien Gans, Nicolas Vandewalle, and Sébastien Kiesgen de Richter

Spontaneous Oscillations and Geometric Cutoff in Confined Bacterial Swarms 208301
Bing Miao and Lei-Han Tang

Errata

Erratum: Expanding the Quantum-Limited Gravitational-Wave Detection Horizon [Phys. Rev. Lett. **134**, 051401 (2025)] 209901
Liu Tao, Mohak Bhattacharya, Peter Carney, Luis Martin Gutierrez, Luke Johnson, Shane Levin, Cynthia Liang, Xuesi Ma, Michael Padilla, Tyler Rosauer, Aiden Wilkin, and Jonathan W. Richardson

This paper was highlighted in the APS publication *Physics* (physics.aps.org).
By suggesting a few manuscripts each week, we hope to promote reading across fields. Please see our Announcement Phys. Rev. Lett. 98, 010001 (2007).

Physics
spotlighting exceptional research

The American Physical Society's free online publication, *Physics* (physics.aps.org), provides thought-provoking analysis and spotlights exceptional research.