

**Selected
Publications**

Popular Science and Scientific Computing

- Feb. 2024. Gnuplot v6 comes with pie. In: *LWN*. URL: <https://lwn.net/Articles/961003/>.
- Dec. 2015. General relativity: 100 years of the most beautiful theory ever created. In: *Ars Technica*. URL: <http://arstechnica.com/science/2015/12/general-relativity-100-years-of-the-most-beautiful-theory-ever-created/>.
- Jan. 2024. Julia v1.10: Performance, a new parser, and more. In: *LWN*. URL: <https://lwn.net/Articles/958337/>.
- Oct. 2021. Digging into Julia's package system. In: *LWN*. URL: <https://lwn.net/Articles/871490/>.
- Oct. 2021. What's coming in Julia 1.7. In: *LWN*. URL: <https://lwn.net/Articles/871486/>.
- Nov. 2021. Concurrency in Julia. In: *LWN*. URL: <https://lwn.net/Articles/875367/>.
- July 2017. A brief history of quantum alternatives. In: *Ars Technica*. URL: <https://arstechnica.com/science/2017/07/a-brief-history-of-quantum-alternatives/>.
- Mar. 2018. Let's Cut Our Losses on Fusion Energy. In: *The Progressive*. Syndicated op-ed carried in multiple newspapers. URL: <http://progressive.org/op-eds/let-cut-our-losses-on-fusion-energy-180313/>.
- Nov. 2020. The Scientist's Linux Toolbox. In: *Linux Pro Magazine*. URL: <https://www.linuxpromagazine.com/Issues/2020/241/Scientist-s-Toolbox>.
- Mar. 2016. Mathematics Meets Music. In: *Ars Technica*. URL: <http://arstechnica.com/science/2016/03/mathematics-meets-music/>.
- Aug. 2014. The never-ending conundrums of classical physics. In: *Ars Technica*. URL: <http://arstechnica.com/science/2014/08/the-never-ending-conundrums-of-classical-physics/>.
- 2018j. Fast as Fortran, Easy as Python. In: *Linux Pro Magazine*. URL: <https://www.admin-magazine.com/Archive/2019/50/Julia-Fast-as-Fortran-easy-as-Python>.
- May 2014. Scientific computing's future. In: *Ars Technica*. URL: <http://arstechnica.com/science/2014/05/scientific-computings-future-can-any-coding-language-top-a-1950s-behemoth/> (visited on 10/10/2018).
- Dec. 2020. A new release for GNU Octave. In: *LWN*. URL: <https://lwn.net/Articles/840050/>.
- May 2015. The female mathematician who changed the course of physics — but couldn't get a job. In: *Ars Technica*. URL: <http://arstechnica.com/science/2015/05/the-female-mathematician-who-changed-the-course-of-physics-but-couldnt-get-a-job/>.
- Mar. 2015. A Dozen Science Destinations. In: *Northern Virginia Magazine* 10, pp. 50–53. URL: <http://www.northernvirginiamag.com>.
- Jan. 2015. Have a scientific problem? Steal an answer from nature. In: *Ars Technica*. URL: <http://arstechnica.com/science/2015/01/have-a-scientific-problem-steal-an-answer-from-nature/>.

Books

- 2023f. *Practical Julia*. No Starch Press. ISBN: 9781718502765. URL: <https://nostarch.com/practical-julia>.
- Sept. 2024. *Einstein's Tutor*. PublicAffairs. ISBN: 1541702956. URL: <https://www.amazon.com/Einsteins-Tutor-Noether-Invention-Physics-ebook/dp/B0CR935W12/>.
- Feb. 2012. *gnuplot Cookbook*. Packt Publishing. ISBN: 184951724X. URL: <http://www.amazon.com/gp/product/184951724X>.
- 2020x. *Gnuplot 5*. Alogus Publishing. ISBN: 978-0-692-92716-8.

Book Chapters

Nov. 2018. Solar Energy. In: *Managing Global Warming*. Ed. by Trevor Letcher. Ch. 9. Elsevier. ISBN: 9780128141045. URL: <https://www.elsevier.com/books/managing-global-warming/letcher/978-0-12-814104-5>.

Refereed Scientific Papers

1999e (with et al.). New Target Designs for Direct-Drive ICF. In: *Laser and Particle Beams* 17, p. 225.

1988 (with David Montgomery). Minimum Dissipation Rates in Magnetohydrodynamics. In: *Phys. Rev. A* 38, pp. 2953–2963. DOI: 10.1103/PhysRevA.38.2953.

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1996c. States of Minimum Dissipation in Magnetohydrodynamics: A Review. In: *J. Plasma Phys.* 56, pp. 531–551. DOI: 10.1017/S0022377800019450.

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1996d (with A. Velikovich). Instability of a Plane Centered Rarefaction Wave. In: *Phys. Fluids* 8, pp. 1107–1118. DOI: 10.1063/1.868889.

May 2001 (with A. N. Mostovych et al.). Reflected shock experiments on the equation-of-state properties of liquid deuterium at 100-600 GPa (1-6 Mbar). In: *Phys. Plasmas* 8.5, pp. 2281–2286. DOI: 10.1063/1.1359444.