

Publication list of Laszlo B. Kish

(Until 1999, his family name was Kiss)

October 2025.

468 items listed

(Conference posters without paper publications are omitted)

A: Patents and patent disclosures (26 items: 9 patents and 17 disclosures)

B: Books/edited journal issues/proceedings (19 items)

C: Peer reviewed journal articles (256 articles)

(C⁺: Invited review papers in peer reviewed journals: 6 articles)

(C: Regular papers in peer reviewed journals: 250 articles)

D: Invited and plenary talks at international conferences (70 articles)

E: Book chapters and regular talks at international conferences (97 articles)

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A. Patents and patent disclosures (26 items)

(6 US patents, 3 Swedish patents and 17 disclosures of other inventions)

- A-26. **L.B. Kish**, A. Antal, "Non-invasive deep-brain stimulation by spatiotemporal Fourier synthesis", TAMU patent disclosure, January 15, 2024; Disclosure # 6453TEES24; TAMU provisional patent application filed.
- A-25. J. Song, **L.B. Kish**, "Linear resistor plugin with ultra-low noise temperature without cooling", TAMU patent disclosure, submitted on May 4, 2018; TAMU provisional patent application No. 62/720,786, filed on August 21, 2018.
- A-24. G. Schmera, **L.B. Kish**, "Bacteria Identification by Phage Induced Impedance Fluctuation Analysis, BIPIF", US Patent US9645101B2 (granted May 9, 2017). <https://patents.google.com/patent/US9645101B2>
- A-23. E. Gonzalez, **L.B. Kish**, R. Balog, "Encryption Key Distribution System and Method", U.S. Patent # US9270448B2 (granted 2/2016), <https://patents.google.com/patent/US9270448B2>
- A-22. H. Wen, **L.B. Kish**, G. Schmera, "High-dimensional Noise-based logical controller", TAMU-Navy patent disclosure, TAMUS-3660, (February 2012).
- A-21. **L.B. Kish**, J.O. Jensen, G. Schmera, C. Kwan, M. King, "Utilization of shot noise to enhance mass spectrometry", Signal Processing Inc. patent disclosure, July 23, 2009.
- A-20. **L.B. Kish**, J.O. Jensen, G. Schmera, C. Kwan, M. King, "Utilization of diffusion noise to enhance ion mobility analysis", Signal Processing Inc. patent disclosure, July 23, 2009.
- A-19. H.C. Chang, **L.B. Kish**, "Vertical-compression and vertical-vibration methods for vibration-induced conductance fluctuation study of soils (VC-VICOF and VV-VICOF)". TAMU, March 19, 2008.
- A-18. Ch. Kwan, **L.B. Kish**, G. Schmera, "High Performance Chemical Agent Classification Framework", Signal processing cp. - TAMU - SPAWAR patent disclosure, May 1, 2007.
- A-17. **L.B. Kish**, "Methods of Using Existing Wire Lines (powerlines, phonelines, internet lines, etc.) for Totally Secure Classical Communication Utilizing Kirchoff's Law and Johnson-like Noise (KLJN), TAMU patent disclosure", October 2, 2006.
- A-16. **L.B. Kish**, C.L.S. Morgan, A. Kishne, "Vibration-induced conductance fluctuation (VICOF) testing of soils", TAMU patent disclosure, October, 2005.

- A-15.** **L.B. Kish**, "Totally Secure Classical Communication Utilizing Johnson (-like) Noise and Kirchoff's Law", TAMU patent disclosure, September 15, 2005.
- A-14.** **LB. Kish**, Stealth Communication. Zero-Signal-Power Communication: Zero-Power Classical Communication, Zero-Quantum Quantum Communication and Environmental-Noise Communication, TAMU patent disclosure, August 18, 2005.
- A-13.** J. Bergou and **L.B. Kish**, A New Quantum Communicator with Enhanced Security, no Detection Noise, no Entanglement and no Classical Channel, CUNY-TAMU patent disclosure, July 5, 2005.
- A-12.** J.R. Biard and **L.B. Kish**, Enhancing the sensitivity of the SEPTIC bacterium detection method by concentrating the phage-infected bacteria via dc electrical current, TAMU patent disclosure, May 18, 2005.
- A-11.** **L.B. Kish**, M. Cheng, R. Young, M. King, S. Bezrukov, "Sensing Phage-Triggered Ion Cascade (SEPTIC)", November 24, 2004. US Patent # US7229754B2. <https://patents.google.com/patent/US7229754>
- A-10.** **L.B. Kish**, P.M. Ajayan, Magnetic Flash Memory with Carbon Nanotubes, TAMU-RPI patent disclosure, September 2004.
- A-9.** J. Smulko, **L.B. Kish**, G. Schmera, "System and Method for Gas Recognition by Analysis of Bispectrum Function", US Patent # US7680607B1 , <https://patents.google.com/patent/US7680607B1/en?q=US7680607B1>
- A-8.** G. Schmera, **L.B. Kish**, ""System and Method of Molecule Counting Using Fluctuation Enhanced Sensors", US Patent # US7524460B1 (April 28, 2009). <https://patents.google.com/patent/US7524460B1>
- A-7.** **L.B. Kish**, S. Sethuraman, Non-Breakable Data Encryption with Classical Information, TAMU patent disclosure, May 2004.
- A-6.** S. Bezrukov, M. Cheng, M.D. King, **L.B. Kish**, R.Y. Young, "MOSFET-Based Biochip for Detection of Phage Infection of Bacteria, NIH and TEES-TAMU patent disclosure, December 2003.
- A-5.** G. Schmera and **L.B. Kish**, " System and method of fluctuation enhanced gas-sensing using saw devices ", US Patent, US Patent US7286942B1 (May 2003). <https://patents.google.com/patent/US7286942B1>
- A-4.** **L.B. Kish**, "Quantum Computing by Analog Electronic Circuits", **TEES patent disclosure**, TEES 1921, (July 2002)
- A-3.** **L.B. Kish**, C.G. Granqvist and R. Vajtai (1999), "Sampling-and-Hold Chemical Sensing by Noise Measurements for Electronic Nose Applications", **Swedish patent** # SE 9904209-5 (now, public) <http://was.prv.se/spd/pdf/RdizounvzhfWS3oljenFIQ/SE515249.C2.pdf>
- A-2** **L.B. Kiss**, C.G. Granqvist, J. Söderlund (1998), "Particle size determination", **Swedish patent**, # SE 9803320-2; Publ. No.: SE 513194 (now, public). <http://was.prv.se/spd/pdf/FngdBYIMdpXWS3oljenFIQ/SE513194.C2.pdf>
- A-1.** **L.B. Kiss**, C.G. Granqvist, J. Söderlund, "Detection of chemicals based on resistance fluctuation-spectroscopy", **Swedish patent**, # SE 9803019-0; Publ. No.: 513148 (now, public) <http://was.prv.se/spd/pdf/8V-xToJGAh7WS3oljenFIQ/SE513148.C2.pdf>

B. Monograph; edited books; edited journal issues; and proceedings (19 items)

- B-19.** L.B. Kish, L. Kovacs, Proc. of the 9th International Conference on Unsolved Problems of Noise (UPoN'24), June 3-7, 2024, Budapest. World Scientific Publ. Co.
- B-18.** P.V.E. McClintock, **L.B. Kish** (eds). "The Random and Fluctuating World" (2021), World Scientific Publ. Co.
- B-17.** D.K. Ferry, **L.B. Kish**, H. Wen (eds.), "Special Issue "(Quantum) Physical Informatics"", *Applied Sciences* (2019) https://www.mdpi.com/journal/applsci/special_issues/physical_informatics
- B-16.** **L.B. Kish (ed.)**, "Special Issue "Novel Sensors Based on Metal Oxide Films and Structures"", *Sensors* **18** (2018) http://www.mdpi.com/journal/sensors/special_issues/Novel_Structures
- B-15.** **L.B. Kish**, "The Kish Cypher. The story of KLJN for unconditional security". (2017), World Scientific. ISBN: 978-981-4449-45-8 (**hardcover**); and ISBN: 978-981-4449-47-2 (**ebook**). <https://sites.google.com/site/kishcypher/>

- B-14.** H. Wen, D.K. Ferry, **L.B. Kish**, Proceedings of the International Workshop on Hot Topics in Physical Information (HoTPI-2013), Hunan University, Changsha, China, 10–13 November 2013, *International Journal of Modern Physics: Conference Series* **33** (2014) <http://www.worldscientific.com/toc/ijmpcs/33>
- B-13.** S.M. Bezrukov, L.K.J. Vandamme, **L.B. Kish**, (eds.), "Special issue on 1/f noise", *Fluct. Noise Lett.* **10** (2011) December.
- B-12.** C.G. Granqvist, **L.B. Kish** (eds.), "Sensing of Organic Pollution in Soil, Air, Water and Food", *Sensors* (special issue ISSN 1424-8220) 2011; http://www.mdpi.com/journal/sensors/special_issues/sopsawf/ .
- B-11.** **L.B. Kish**, G. Schmera (eds.), "Metal-oxide Based Nanosensors", *Sensors* (special issue, ISSN 1424-8220, open access journal), February 28, 2010; http://www.mdpi.com/journal/sensors/special_issues/metal_oxide_based_nanosensors/
- B-10.** **L.B. Kish**, K. Lindenberg and Z. Gingl (eds.), "Noise in Complex Systems and Stochastic Dynamics", Proceedings of SPIE International Conference on Noise in Complex Systems and Stochastic Dynamics, Austin, Texas, May 2005, **SPIE - The International Society of Optical Engineers**, SPIE Proceedings Series.
- B-9.** C.G. Granqvist, **L.B. Kish**, W.H Marlow, (eds.), "Gas Phase Nanoparticle Synthesis", Kluwers Academic (2004)
- B-8.** J. Smulko, Y. Blanter, M. Dykman and **L.B. Kish** (eds.), "Noise and Information in Nanoelectronics, Sensors and Standards", Proceedings of SPIE International Conference on Noise and Information in Nanoelectronics, Sensors and Standards, Canary Islands, May 2004, **SPIE - The International Society of Optical Engineers**, SPIE Proceedings Series vol. 5472.
- B-7.** **L.B. Kish**, F. Green, G. Iannaccone, J.R. Vig (eds.), "Noise and Information in nanoelectronics, sensors and Standards", Proceedings of SPIE International Conference on Noise and Information in nanoelectronics, sensors and Standards, Santa Fe, June 2003, **SPIE - The International Society of Optical Engineers**, SPIE Proceedings Series vol. 5115.
- B-6.** V. Varadan and **L.B. Kish** (eds.), "Smart Electronics, MEMS, BioMEMS, and Nanotechnology", Proceedings of SPIE International Conference on Smart Electronics, MEMS, BioMEMS, and Nanotechnology, San Diego, March 2003, **SPIE - The International Society of Optical Engineers**, SPIE Proceedings Series vol. 5055.
- B-5.** **L.B. Kish** (ed.), "Special Issue on BIOMEMS and Smart Nanostructures", Smart Materials and Structures, Volume **11**, Number 5, October 2002, **Institute of Physics Publishing**, Oxford.
- B-4.** **L.B. Kish** (ed.), "BioMEMs and Smart Nanostructures", Proceedings of the SPIE International Conference on BioMEMs and Smart Nanostructures, Adelaide, Australia, 17-19 December 2001, **SPIE - The International Society of Optical Engineers**, SPIE Proceedings Series 4590.
- B-3.** D. Abbott, **L.B. Kish** (eds.), "Unsolved Problems of Noise and Fluctuations", Proceeding of the 2nd international conference on Unsolved Problems of Noise (UPoN'99), Adelaide, Australia, 1999, **American Institute of Physics**, Melville, NY (2000).
- B-2.** Ch. Doering, **L.B. Kish**, M. Shlesinger (eds.), "Unsolved Problems of Noise", Proceeding of the 1st international conference on Unsolved Problems of Noise (UPoN'96), Szeged, Hungary, 1996, **World Scientific**, Singapore (1997).
- B-1.** A. Bulsara, S. Chillemi, **L.B. Kish**, P.V.E. McClintock, R. Mannella, F. Marchesoni, K. Nicolis, K. Wiesenfeld (eds.), "Fluctuations in Physics and Biology: Stochastic Resonance, Signal Processing and Related Phenomena" Proceeding of the international workshop held at Elba Island, Italy, June 1994, *Nuovo Cimento D* **17** (1995).

C. Peer reviewed journal articles (256 articles)

C⁺. Invited review papers in peer reviewed journals (6 articles)

- C⁺-6. **L.B. Kish**, F. Peper, Information Networks Secured by the Laws of Physics, Invited paper, *IEICE Transactions on the Fundamentals of Communications, Electronics, Information & Systems*, Vol. **E95-B**, No.05 (May 2012) pp. 1501-1507.
- C⁺-5. **L.B. Kish**, S.P. Khatri, S.M. Bezrukov, F. Peper, Z. Gingl, T. Horvath, "Noise-based deterministic logic and computing: a brief survey", *International Journal of Unconventional Computing* **7** (2011 February) 101-113.
- C⁺-4. **L.B. Kish**, "Absolutely Secure Communications by Johnson-like Noise and Kirchhoff's Laws", *Journal of the Society of Instrument and Control Engineers* (SICE, Japan) **49** (2010) 212-216.
- C⁺-3. **L.B. Kiss**, P. Svedlindh, "Noise in high T_c superconductors", *IEEE Trans. on Electron Devices* **41** (1994) 2112
- C⁺-2. **L.B. Kiss** and P. Svedlindh, M. Bjornander, P. Nordblad, F. Masszi and J. Magnusson, "Noise in high T_c superconductors", *Journal on Communications* **46** (1995) 20.
- C⁺-1. **L.B. Kiss**, "On fluctuations with a 1/f spectrum and the non-existence of the quantum 1/f noise effect", *Reviews of Solid State Science* **2** (1988) 659.

C. Regular papers in peer reviewed journals (250 articles)

- C-250. Zs. Pákozdi, A. Búzás, I. Szendi, **L.B. Kish**, A. Dér, "Linking Activity Patterns and Mood States in Bipolar Disorder: A Longitudinal Case Study based on Actigraphy Signals", *Sensors*, submitted for publication (2025).
- C-249. N. Kenarangui, A. Powalka, **L.B. Kish**, "Exploration of the non-zero universe in instantaneous noise-based logic", *Royal Soc. Open Sci.*, submitted for publication (2025).
- C-248. A. Tönköly, R. Mingesz, **L.B. Kish**, "On the physical informatics aspects of chemical sensing electronics", *Chemosensors*, submitted for publication (2025)
- C-247. A. Dér, **L.B. Kish**, "The Trouble with Disorder: On the Subjectivity of Entropy Interpretations", accepted for publication in *Fluct. Noise Lett.* (2025); preprint: DOI: 10.36227/techrxiv.175624643.37881346/v1
- C-246. N. Kenarangui, W.C. Daugherty, A. Powalka, **L.B. Kish**, "'Quantum supremacy' challenged. Instantaneous noise-based logic with benchmark demonstrations", *Fluct. Noise Lett.* **24** (2025) 2540010 (12 pages); DOI: 10.1142/S0219477525400103
- C-245. R. Balog, C. Singh, **L.B. Kish**, K. Davis, "Leveraging Noise-Based Watermarking for Power Source Identification in Smart Grids", *Fluct. Noise Lett.* **24** (2025) 2540009 (7 pages); DOI: 10.1142/S0219477525400097
- C-244. L. Truax, S. Roy, **L.B. Kish**, "Unconditionally Secure, Wireless-Wired Ground–Satellite–Ground Communication Networks Utilizing Classical & Quantum Noise", *Fluct. Noise Lett.* **24** (2025) 2550032. Open Access: DOI: [10.1142/S0219477525500324](https://doi.org/10.1142/S0219477525500324)
- C-243. M. Yildirim, N. Kenarangui, R. Balog, **L.B. Kish**, C. Singh, "Simple Cracking of (Noise-Based) Dynamic Watermarking in Smart Grids", *Fluct. Noise Lett.* **23** (2024) 2450059 (10 pages); DOI: 10.1142/S0219477524500597 ; <https://arxiv.org/abs/2406.15494>
- C-242. **L.B. Kish**, A. Antal, "Non-Invasive Deep-Brain Stimulations by Spatio-Temporal Fourier Synthesis", *Fluct. Noise Lett.* **23** (2024) 2450049 (10 pages); <https://arxiv.org/abs/2404.02186> ; <https://doi.org/10.1142/S0219477524500494>
- C-241. A. Buzas, A. Makai, G.I. Groma, Z. Dancshazy, **L.B. Kish**, A. Der, "Hierarchical Organization of Human Physical Activity", (*Nature*) *Science Reports* **14** (2024) 5981; <https://doi.org/10.1038/s41598-024-56185-0>
- C-240. K. Davis, **L.B. Kish**, C. Singh, "Smart Grids Secured By Dynamic Watermarking: How Secure?", *Fluct. Noise Lett.* **23** (2024) 2450043 (10 pages); <https://arxiv.org/abs/2404.16849> ; <https://doi.org/10.1142/S0219477524500433>
- C-239. **L.B. Kish**, "Crypto analysis of the key distribution scheme using noise-free resistances", *Fluct. Noise Lett.* **23** (2024) 2450028 (9 pages); arXiv:2312.00031 .
- C-238. **L.B. Kish**, "Ternary noise-based logic", *Fluct. Noise Lett.* **23** (2024) 2450020 (8 pages); arXiv:2305.00984

- C-237. S. Ferdous, **L.B. Kish**, "Transient attack against the VMG-KLJN secure key exchanger", *Fluct. Noise Lett.* **23** (2024) 2450008 (14 pages). DOI: 10.1142/S0219477524500081 ; arXiv:2309.04899 .
- C-236. S. Ferdous, **L.B. Kish**, "Transient attacks against the Kirchhoff–Law–Johnson–Noise (KLJN) secure key exchanger", *Appl. Phys. Lett.* **122**, 143503 (2023); doi: 10.1063/5.0146190; arXiv:2302.05607 .
- C-235. M.B. Khreishah, W.C. Daugherty, **L.B. Kish**, "XOR and XNOR gates in instantaneous noise-based logic", *Fluct. Noise Lett.* **22** (2023) 2350041. DOI: 10.1142/S0219477523500414 . arXiv:2302.06449.
- C-234. **L.B. Kish**, ""Quantum supremacy" revisited: Low-complexity, deterministic solutions of the original Deutsch-Jozsa problem in classical physical systems", *R. Soc. Open Sci.* **10** (2023) 221327. <https://doi.org/10.1098/rsos.221327> ; arXiv:2210.07088 .
- C-233. W. Potok, O. van der Groen, S. Sivachelvam, M. Bächinger, F. Fröhlich, **L.B. Kish**, N. Wenderoth, "Contrast detection is enhanced by deterministic, high-frequency transcranial alternating current stimulation with triangle and sine waveform", *Journal of Neurophysiology* **130** (2023) 458–473. <https://doi.org/10.1152/jn.00465.2022> ; arXiv:2310.03763 .
- C-232. S. Ferdous, C. Chamon, **L.B. Kish**, "Current Injection and Voltage Insertion Attacks Against the VMG-KLJN Secure Key Exchanger", *Fluct. Noise Lett.* **22** (2023) 2350009; DOI: 10.1142/S0219477523500098
- C-231. **L.B. Kish**, "Time Synchronization Protocol for the KLJN Secure Key Exchange Scheme", *Fluct. Noise Lett.* **21** (2022) 2250046; DOI: 10.1142/S0219477522500468
- C-230. C. Chamon, S. Ferdous, **L.B. Kish**, "Statistical Random Number Generator Attack against the Kirchhoff-Law-Johnson-Noise Secure Key Exchange Protocol", *Fluct. Noise Lett.* **21** (2022) 2250027; DOI: 10.1142/S0219477522500274
- C-229. W. Daugherty, **L.B. Kish**, "More on the Reference-Grounding-Based Search in Noise-Based Logic", *Fluct. Noise Lett.* **21** (2022) 2250023; DOI: 10.1142/S0219477522500237
- C-228. C. Chamon, **L.B. Kish**, "Nonlinearity Attack Against the Kirchhoff–Law–Johnson–Noise (KLJN) Secure Key Exchange Protocol", *Fluct. Noise Lett.* **20** (2022) 2250020; <https://doi.org/10.1142/S0219477522500201>
- C-227. J. Song, **Laszlo Kish**, "From Cold Resistor to Secure Key Exchanger", *Fluct. Noise Lett.* **21** (2022) 2250022; <https://doi.org/10.1142/S0219477522500225>
- C-226. C. Chamon, **L.B. Kish**, "Perspective - On the thermodynamics of perfect unconditional security", *Appl. Phys. Lett.* **119**, (2021) 010501; <https://doi.org/10.1063/5.0057764>
- C-225. M. Melhem, C. Chamon, S. Ferdous, **L.B. Kish**, "AC loop current attacks against the KLJN secure key exchange scheme", *Fluct. Noise Lett.* **20** (2021) 2150050, <https://doi.org/10.1142/S0219477521500504> .
- C-224. C. Chamon, S. Ferdous, **L.B. Kish**, "Deterministic Random Number Generator Attack against the Kirchhoff-Law-Johnson-Noise Secure Key Exchange Protocol", *Fluct. Noise Lett.* **20** (2021) 2150046; <https://doi.org/10.1142/S0219477521500462>
- C-223. S. Ferdous, C. Chamon, **L.B. Kish**, "Comments on the "Generalized" KLJN Key Exchanger with Arbitrary Resistors: Power, Impedance, Security", *Fluct. Noise Lett.* **20** (2021) 2130002; open access: <https://doi.org/10.1142/S0219477521300020>
- C-222. J. Song, **L.B. Kish**, "On the Theory and Design of Cold Resistors", *Fluct. Noise Lett.* **20** (2021) 2150001. DOI: 10.1142/S0219477521500012
- C-221. M. Melhem, **L.B. Kish**, "Man in the middle and current injection attacks against the KLJN key exchanger compromised by DC sources", *Fluct. Noise Lett.* **20** (2021) 2150011.
- C-220. G. Scandurra, J. Smulko, **L.B. Kish**, "Fluctuation-Enhanced Sensing", *Journal of Sensors* **2020** (2020) 6108347.
- C-219. **L. B. Kish**, C. Singh, T. Erdelyi, "An Information Theoretic Approach to Originality and Bias in Science", *Fluct. Noise Lett.*, **19** (2020) 2050034; open access: <https://doi.org/10.1142/S0219477520500340>
- C-218. X. Yu, **L.B. Kish**, J.L. Seguin, M.D. King, "Ternary Fingerprints with Reference Odor for Fluctuation-Enhanced Sensing", *Biosensors* **10** (2020) 93; open access: <https://doi.org/10.3390/bios1008093>
- C-217. G. Scandurra, J. Smulko, **L.B. Kish**, "Fluctuation-Enhanced Sensing (FES): A Promising Sensing Technique", *Appl. Sci.* **10** (2020) 5818; open access: <https://www.mdpi.com/2076-3417/10/17/5818>
- C-216. M. Trawka, J. Smulko, L. Hasse, R. Ionescu, F.E. Annanouch, E. Llobet, C.G. Granqvist, **L.B. Kish**,

- "Fluctuation enhanced gas sensing using UV irradiated Au-nanoparticle-decorated WO₃-nanowire films", *Internat. J. Smart Sensing and Intelligent Systems*. **7** (2020 February 15) 1-5; doi: 10.21307/ijssis-2019-030
- C-215. M. Melhem, **L.B. Kish**, "Generalized DC loop current attack against the KLJN secure key exchange scheme", *Metrology and Measurement Systems*, **26** (2019) 607-616; open access: <http://journals.pan.pl/dlibra/publication/130571/edition/114024/content>
- C-214. **L.B. Kish**, W.C. Daugherty, "Entanglement, and Unsorted Database Search in Noise-Based Logic", *Applied Sciences* **9** (2019) 3029; open access: <https://www.mdpi.com/2076-3417/9/15/3029/htm>
- C-213. M. Melhem, **L.B. Kish**, "Static-loop-current attack against the KLJN secure key exchange system", *Applied Sciences* **9** (2019) 666; open access: <https://www.mdpi.com/2076-3417/9/4/666> .
- C-212. **L.B. Kish**, W. Daugherty, "Noise-based logic gates by operations on the reference system", *Fluct. Noise Lett.* **17** (2018) 1850033.
- C-211. J. Song, **L.B. Kish**, "Does a standalone, "cold" (low-thermal-noise), linear resistor exist without cooling?", accepted for publication in *Fluct. Noise Lett.* **17** (2018) 1850030.
- C-210. **L.B. Kish**, D.K. Ferry, "Information entropy and thermal entropy: apples and oranges", *J. Comp. Electr.* **17** (March 2018) 43–50; <https://arxiv.org/abs/1706.01459>
- C-209. K.M. Sundqvist, D.K. Ferry, **L.B. Kish**, "Second Law based definition of passivity/activity of devices", *Physics Letters A* **381** (2017) 3364–3368; <https://arxiv.org/abs/1705.08750>
- C-208. K.M. Sundqvist, **L.B. Kish**, "Memristor equations: incomplete physics and undefined passivity/activity", *Fluct. Noise Lett.* **16**, (2017) 1771001; <https://arxiv.org/abs/1703.09064>
- C-207. D. Grigoriev, **L.B. Kish**, V. Shpilrain, "Yao's millionaires' problem and public-key encryption without computational assumptions", *Int. J. Foundations Comp. Sci.* **28** (2017), 379-389.
- C-206. B. Zhang, **L.B. Kish**, C.G. Granqvist, "Drawing from hats by noise-based logic", *International Journal of Parallel, Emergent and Distributed Systems* **32** (2017), 244-251; <http://dx.doi.org/10.1080/17445760.2016.1140168> ; <http://arxiv.org/abs/1511.03552>.
- C-205. **L.B. Kish**, K. Entesari, C.G. Granqvist, C. Kwan, "Unconditionally secure credit/debit card chip scheme and physical unclonable function", *Fluct. Noise Lett.* **16** (2017) 1750002; <http://arxiv.org/abs/1605.02355>
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- C-203. J. Lee, F. Peper, S.D. Cotofana, M. Naruse, M. Ohtsu, T. Kawazoe, Y. Takahashi, T. Shimokawa, **L.B. Kish**, T. Kubota, "Brownian circuits: Design", *International Journal of Unconventional Computing* **12** (2016) 341–362.
- C-202. **L.B. Kish**, G.A. Niklasson, C.G. Granqvist, "Zero-point term and quantum effects in the Johnson noise of resistors: A critical appraisal", *J. Stat. Mech.* (2016) 054006. doi:10.1088/1742-5468/2016/05/054006 . <http://arxiv.org/abs/1504.08229> .
- C-201. **L.B. Kish**, "Comments on "Sub-k_BT Micro-Electromechanical Irreversible Logic Gate" ", *Fluct. Noise Lett.* **15** (2016) 1620001. <https://arxiv.org/abs/1606.09493>
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Presented by L.B. Kish.
- D-62.** **L.B. Kish**, C.G. Granqvist, S. Khatri, H. Wen, "Demons: Maxwell demon Szilard engine and Landauer's erasure-dissipation", *International Journal of Modern Physics: Conference Series* **33** (2014) 1460364. invited talk, Hot Topic of Physical Informatics (HoTPI-2014), November 10-13, 2013, Changsha, China. <http://www.worldscientific.com/doi/pdfplus/10.1142/S2010194514603640>
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- D-61.** H. Wen, **L.B. Kish**, "Noise Based Logic: Why Noise?", Invited talk at **ICCAD 2012 in the Special Session: Computing in the Random Noise: The Bad, the Good, and the Amazing Grace**, November 5, 2012, San Jose, California.
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- D-60.** R. Mingesz, **L.B. Kish**, Z. Gingl, C.G. Granqvist, H. Wen, F. Peper, T. Eubanks, G. Schmera, "Information theoretic security by the laws of classical physics", Plenary talk at the 5th IEEE Workshop on Soft Computing Applications, (SOFA 2012) August 2012, Szeged, Hungary. In: Balas VE et al. (Eds.), *Soft Computing Applications*, AISC 195, pp. 11–25 (Springer). <http://arxiv.org/abs/1206.2534>
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- D-59.** **Kish LB**, Granqvist CG (2011) Energy requirement of control: Comments on Maxwell's demon and Szilard's engine. In: Alfinito E, Leuzzi M, Millithaler J-F (editors), *All the Colors of Noise: Essays in Honor of Lino Reggiani*. Cormigliano del Brenta: Munari Edizione. pp. 43–50.
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- D-58.** **L.B. Kish**, S.P. Khatri, S.M. Bezrukov, F. Peper, Z. Gingl, T. Horvath "Noise-based Information Processing", Invited Talk, **Proc. 21st International Conference on Noise and Fluctuations (ICNF 2011)**, June 12-16, 2011, Toronto, Canada.
Paper presented by L.B. Kish.
- D-57.** **L.B. Kish**, "Johnson engines and demons", Invited Talk, **9th International Conference on Nanomolecular Electronics (ICNME 2010)**, December 14-16, 2010, Kobe, Japan.
Paper presented by L.B. Kish.
- D-56.** **L.B. Kish**, H.C. Chang, M.D. King, C. Kwan, J.O. Jensen, "Fluctuation-enhanced sensing for biological agent detection and identification", Plenary Talk, **Nanoelectronic Devices for Defense and Security**, September 28 - October 2, 2009, Fort Lauderdale, Florida. (published in C-153).
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- D-55.** **L.B. Kish**, S. Khatri, S.M. Bezrukov, Z. Gingl, S. Sethuraman, "Noise-based logic", Invited Talk, **Fourth International Workshop on Natural Computing**, September 23-25, 2009, Himeji, Japan. Published by Springer, Eds. F. Peper et al, IWNC 2009, PICT 2, pp. 13–22, 2010.
Paper presented by L.B. Kish.
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- D-53.** F. Peper, **L.B. Kish**, K. Leibnitz, J.-Q. Liu, "Methods to Exploit Noise in the Design of Complex Systems" **Proc. SICE Symp. on Systems and Information (SSI 2008)**, Catalog number 08SY0014, pp. 231-236, Nov. 26-28, Himeji, Japan, 2008.
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- D-51.** **L.B. Kish**, R. Mingesz, Z. Gingl, G. Schmera, J. Smulko, Ch. Kwan, P. Heszler, C.G. Granqvist, "Novel applications of noise in sensing and communications", Invited Talk, **19th International Conference on Noise and Fluctuations**, Tokyo, September 9-14, 2007. Proc. AIP.
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Paper presented by G. Schmera.
- D-47.** **L.B. Kish**, "On the fundamental limits of digital computing", Semiconductor Research Corporation's **Emerging Research Device Architectures Workshop: Facing the Challenge of Post-CMOS Architectures**, July 9, 2006, San Francisco, USA.
Paper presented by L.B. Kish.
- D-46.** **L.B. Kish**, G. Schmera, M.D. King, M. Cheng, R. Young, C.G. Granqvist, A. Berger, "Fluctuation-Enhanced Chemical/Biological Sensing and Prompt Identification of Bacteria by Sensing of Phage-Triggered Ion Cascade (SEPTIC)", Invited Talk, **2006 Symposium of Spectral Sensing Research (ISSSR'2006)**, May 29- June 2, 2006, Bar Harbor, Maine, USA.
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- D-45.** M.D. King, S. Seo, J. Kim, M. Cheng, Sh. Higgins, R. Young, B. Thien, A.R. McFarland and **L.B. Kish**, Noise for health: Phage-based rapid bacterial identification method", Invited Talk, **Conference on Device Application of Nonlinear Dynamics, DANOLD 2005**. October 2-6, 2005, Catania, Italy; Springer Verlag, , Editors: S. Baglio and A. Bulsara, (2006) pp. 171-179.
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- D-44.** **L.B. Kish**, Y. Li, "Heat, Speed and Error Limits of Moore's Law at the Nano Scale", Invited Talk, **Second Conference on Nanoscale Devices and System Integration**, April 4-6, 2005, Houston, TX, USA.
Paper presented by Y. Li.
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Paper presented by Peter Heszler.
- D-36.** **L.B. Kish**, "Noise in Nanoscale Electronic Devices and Sensors", invited talk at the **DARPA – Defense Science Research Council (DSRC) workshop "Noise and Interference in High Performance Electronics"**, Arlington, May 6, 2003.
Paper presented by L.B. Kish.
- D-35.** **L.B. Kish**, "Noise, speed and dissipation: end of Moore's law of miniaturization", invited talk, conference **Noise in Electronic Devices and Circuits, SPIE's First Symposium on Fluctuations and Noise (FaN'03)**, Santa Fe, NM, June 1-4, 2003.
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- D-34.** **L.B. Kish**, "Quantum Computing with Analog Circuits: Hilbert Space Computing", keynote address talk, conference on **Smart Electronics, MEMS, BioMEMS, and Nanotechnology; SPIE's Symposium on Smart Materials and Structures**, San Diego, March 2003.
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- D-33.** **L.B. Kish**, "Thermal (Noise) Death of Moore's Law ?", invited talk, Conference on the Physics of Quantum Electronics, January 5-10, 2003, Snowbird, UT.
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Paper presented by L.B. Kish on September 3, 2002.
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- D-30.** **L.B. Kish**, "Electronic Noise in Nanoelectronic Building elements for NanoMEMS and BioMEMS", keynote talk, at **SPIE's International Symposium on Smart Structures and Materials**, San Diego, 17-21 March 2002
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- D-15.** L.B. Kiss, "On Nano-Object Formation in Gas: Nanoparticles, Nanotubes and Nanotoroids"
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