

Reference

- [1] K. R. S. D. Gunawardhana, N. D. Wanasekara, and R. D. I. G. Dharmasena, “Towards Truly Wearable Systems: Optimizing and Scaling Up Wearable Triboelectric Nanogenerators,” *iScience*, vol. 23, no. 8, p. 101360, 2020.
- [2] R. D. I. G. Dharmasena and S. R. P. Silva, “Towards optimized triboelectric nanogenerators,” *Nano Energy*, vol. 62, pp. 530–549, 2019.
- [3] A. Satharasinghe, T. Hughes-Riley, and T. Dias, “A review of solar energy harvesting electronic textiles,” *Sensors (Switzerland)*, vol. 20, no. 20, pp. 1–39, 2020.
- [4] T. Huang *et al.*, “Fabric texture design for boosting the performance of a knitted washable textile triboelectric nanogenerator as wearable power,” *Nano Energy*, vol. 58, no. December 2018, pp. 375–383, Apr. 2019.
- [5] C. Chen *et al.*, “Direct Current Fabric Triboelectric Nanogenerator for Biomotion Energy Harvesting,” *ACS Nano*, vol. 14, no. 4, pp. 4585–4594, Apr. 2020.
- [6] S. S. Kwak, H. Kim, W. Seung, J. Kim, R. Hinchet, and S.-W. Kim, “Fully Stretchable Textile Triboelectric Nanogenerator with Knitted Fabric Structures,” *ACS Nano*, vol. 11, no. 11, pp. 10733–10741, Nov. 2017.
- [7] D. J. Spencer, *Knitting technology: a comprehensive handbook and practical guide*, 1st ed. CRC Press, 2001.
- [8] V. Nguyen, R. Zhu, and R. Yang, “Environmental effects on nanogenerators,” *Nano Energy*, vol. 14, pp. 49–61, 2014.
- [9] W. Paosangthong, R. Torah, and S. Beeby, “Recent progress on textile-based triboelectric nanogenerators,” *Nano Energy*, vol. 55, no. August 2018, pp. 401–423, 2019.
- [10] Z. L. Wang, J. Chen, and L. Lin, “Progress in triboelectric nanogenerators as a new energy technology and self-powered sensors,” *Energy Environ. Sci.*, vol. 8, no. 8, pp. 2250–2282, 2015.
- [11] S. Liu, W. Zheng, B. Yang, and X. Tao, “Triboelectric charge density of porous and deformable fabrics made from polymer fibers,” *Nano Energy*, vol. 53, pp. 383–390, 2018.
- [12] H. Zou *et al.*, “Quantifying the triboelectric series,” *Nat. Commun.*, vol. 10, no. 1, pp. 1–9, 2019.

- [13] Z. L. Wang, "Triboelectric nanogenerators as new energy technology and self-powered sensors - Principles, problems and perspectives," *Faraday Discuss.*, vol. 176, no. 0, pp. 447–458, 2014.
- [14] T. T. Nanogenerator *et al.*, "Topographically-Designed Triboelectric Nanogenerator via Block Copolymer Self-Assembly," *Nano Lett.*, vol. 14, no. 12, pp. 7031–7038, 2014.
- [15] L. Lin *et al.*, "Segmentally structured disk triboelectric nanogenerator for harvesting rotational mechanical energy," *Nano Lett.*, vol. 13, no. 6, pp. 2916–2923, 2013.
- [16] S. Wang, L. Lin, Y. Xie, Q. Jing, S. Niu, and Z. L. Wang, "Sliding-triboelectric nanogenerators based on in-plane charge-separation mechanism," *Nano Lett.*, vol. 13, no. 5, pp. 2226–2233, 2013.
- [17] P. Bai *et al.*, "Cylindrical Rotating Triboelectric," *ACS Nano*, vol. 7, no. 7, pp. 6361–6366, 2013.
- [18] R. D. I. G. Dharmasena, J. H. B. Deane, and S. R. P. Silva, "Nature of Power Generation and Output Optimization Criteria for Triboelectric Nanogenerators," *Adv. Energy Mater.*, vol. 8, no. 31, pp. 1–11, 2018.
- [19] J. Chen, H. Guo, X. Pu, X. Wang, Y. Xi, and C. Hu, "Traditional weaving craft for one-piece self-charging power textile for wearable electronics," *Nano Energy*, vol. 50, pp. 536–543, 2018.
- [20] C. Ning *et al.*, "Washable textile-structured single-electrode triboelectric nanogenerator for self-powered wearable electronics," *J. Mater. Chem. A*, vol. 6, no. 39, pp. 19143–19150, 2018.
- [21] W. Gong *et al.*, "A wearable, fibroid, self-powered active kinematic sensor based on stretchable sheath-core structural triboelectric fibers," *Nano Energy*, vol. 39, pp. 673–683, 2017.
- [22] F. He *et al.*, "Stretchable, Biocompatible, and Multifunctional Silk Fibroin-Based Hydrogels toward Wearable Strain/Pressure Sensors and Triboelectric Nanogenerators," *ACS Appl. Mater. Interfaces*, vol. 12, no. 5, pp. 6442–6450, 2020.
- [23] K. Dong *et al.*, "3D Orthogonal Woven Triboelectric Nanogenerator for Effective Biomechanical Energy Harvesting and as Self-Powered Active Motion Sensors,"

- Adv. Mater.*, vol. 29, no. 38, pp. 1–11, 2017.
- [24] J. Xiong *et al.*, “Skin-touch-actuated textile-based triboelectric nanogenerator with black phosphorus for durable biomechanical energy harvesting,” *Nat. Commun.*, vol. 9, no. 1, pp. 1–9, 2018.
- [25] L. Zhang *et al.*, “All-Textile Triboelectric Generator Compatible with Traditional Textile Process,” *Adv. Mater. Technol.*, vol. 1, no. 9, p. 1600147, Dec. 2016.
- [26] Y. T. Jao *et al.*, “A textile-based triboelectric nanogenerator with humidity-resistant output characteristic and its applications in self-powered healthcare sensors,” *Nano Energy*, vol. 50, pp. 513–520, 2018.
- [27] R. Pan *et al.*, “Fully biodegradable triboelectric nanogenerators based on electrospun polylactic acid and nanostructured gelatin films,” *Nano Energy*, vol. 45, no. December 2017, pp. 193–202, 2018.
- [28] K. Dong *et al.*, “A Highly Stretchable and Washable All-Yarn-Based Self-Charging Knitting Power Textile Composed of Fiber Triboelectric Nanogenerators and Supercapacitors,” *ACS Nano*, vol. 11, no. 9, pp. 9490–9499, 2017.
- [29] J. Lee *et al.*, “Conductive fiber-based ultrasensitive textile pressure sensor for wearable electronics,” *Adv. Mater.*, vol. 27, no. 15, pp. 2433–2439, 2015.
- [30] Y.-C. Lai, J. Deng, S. L. Zhang, S. Niu, H. Guo, and Z. L. Wang, “Single-Thread-Based Wearable and Highly Stretchable Triboelectric Nanogenerators and Their Applications in Cloth-Based Self-Powered Human-Interactive and Biomedical Sensing,” *Adv. Funct. Mater.*, vol. 27, no. 1, p. 1604462, Jan. 2017.
- [31] Y. Cheng *et al.*, “A stretchable fiber nanogenerator for versatile mechanical energy harvesting and self-powered full-range personal healthcare monitoring,” *Nano Energy*, vol. 41, pp. 511–518, 2017.
- [32] Y. Guo *et al.*, “All-fiber hybrid piezoelectric-enhanced triboelectric nanogenerator for wearable gesture monitoring,” *Nano Energy*, vol. 48, pp. 152–160, 2018.
- [33] X. S. Zhang, M. Han, B. Kim, J. F. Bao, J. Brugger, and H. Zhang, “All-in-one self-powered flexible microsystems based on triboelectric nanogenerators,” *Nano Energy*, vol. 47. Elsevier Ltd, pp. 410–426, 01-May-2018.
- [34] X. He *et al.*, “A Highly Stretchable Fiber-Based Triboelectric Nanogenerator for Self-Powered Wearable Electronics,” *Adv. Funct. Mater.*, vol. 27, no. 4, pp. 1–8, 2017.

- [35] F. Invernizzi, S. Dulio, M. Patrini, G. Guizzetti, and P. Mustarelli, “Energy harvesting from human motion: Materials and techniques,” *Chemical Society Reviews*, vol. 45, no. 20. Royal Society of Chemistry, pp. 5455–5473, 21-Oct-2016.
- [36] W. Seung *et al.*, “Nanopatterned textile-based wearable triboelectric nanogenerator,” *ACS Nano*, vol. 9, no. 4, pp. 3501–3509, 2015.
- [37] B. Dudem, A. R. Mule, H. R. Patnam, and J. S. Yu, “Wearable and durable triboelectric nanogenerators via polyaniline coated cotton textiles as a movement sensor and self-powered system,” *Nano Energy*, vol. 55, pp. 305–315, 2019.
- [38] J. Zhou *et al.*, “Fiber-Based Generator for Wearable Electronics and Mobile Medication,” *ACS Nano*, vol. 8, no. 6, pp. 6273–6280, 2014.
- [39] T. Zhou, C. Zhang, C. B. Han, F. R. Fan, W. Tang, and Z. L. Wang, “Woven Structured Triboelectric Nanogenerator for Wearable Devices,” *ACS Appl. Mater. Interfaces*, vol. 6, no. 16, pp. 14695–14701, Aug. 2014.
- [40] M. Lou *et al.*, “Highly Wearable, Breathable, and Washable Sensing Textile for Human Motion and Pulse Monitoring,” *ACS Appl. Mater. Interfaces*, vol. 12, no. 17, pp. 19965–19973, Apr. 2020.
- [41] C. Ye, S. Dong, J. Ren, and S. Ling, “Ultrastable and High-Performance Silk Energy Harvesting Textiles,” *Nano-Micro Lett.*, vol. 12, no. 1, pp. 1–15, 2020.
- [42] Z. Li, M. Zhu, J. Shen, Q. Qiu, J. Yu, and B. Ding, “All-Fiber Structured Electronic Skin with High Elasticity and Breathability,” *Adv. Funct. Mater.*, vol. 30, no. 6, p. 1908411, Feb. 2020.
- [43] D. Liu *et al.*, “A constant current triboelectric nanogenerator arising from electrostatic breakdown,” *Sci. Adv.*, vol. 5, no. 4, p. eaav6437, Apr. 2019.
- [44] J. Chen *et al.*, “Micro-cable structured textile for simultaneously harvesting solar and mechanical energy,” *Nat. Energy*, vol. 1, no. 10, p. 16138, Oct. 2016.
- [45] Q. He *et al.*, “An all-textile triboelectric sensor for wearable teleoperated human–machine interaction,” *J. Mater. Chem. A*, vol. 7, no. 47, pp. 26804–26811, 2019.
- [46] M. Sala de Medeiros, D. Chanci, C. Moreno, D. Goswami, and R. V. Martinez, “Waterproof, Breathable, and Antibacterial Self-Powered e-Textiles Based on Omniphobic Triboelectric Nanogenerators,” *Adv. Funct. Mater.*, vol. 29, no. 42, p. 1904350, Oct. 2019.

- [47] F. Peng *et al.*, “Facile fabrication of triboelectric nanogenerator based on low-cost thermoplastic polymeric fabrics for large-area energy harvesting and self-powered sensing,” *Nano Energy*, vol. 65, no. July, p. 104068, Nov. 2019.
- [48] L. Ma *et al.*, “Continuous and Scalable Manufacture of Hybridized Nano-Micro Triboelectric Yarns for Energy Harvesting and Signal Sensing,” *ACS Nano*, vol. 14, no. 4, pp. 4716–4726, Apr. 2020.
- [49] C. Ye, Q. Xu, J. Ren, and S. Ling, “Violin String Inspired Core-Sheath Silk/Steel Yarns for Wearable Triboelectric Nanogenerator Applications,” *Adv. Fiber Mater.*, vol. 2, no. 1, pp. 24–33, Feb. 2020.
- [50] L. Zhang *et al.*, “Enhancing the Performance of Textile Triboelectric Nanogenerators with Oblique Microrod Arrays for Wearable Energy Harvesting,” *ACS Appl. Mater. Interfaces*, vol. 11, no. 30, pp. 26824–26829, Jul. 2019.
- [51] J. Gong, B. Xu, X. Guan, Y. Chen, S. Li, and J. Feng, “Towards truly wearable energy harvesters with full structural integrity of fiber materials,” *Nano Energy*, vol. 58, no. January, pp. 365–374, Apr. 2019.
- [52] W. Fan *et al.*, “Machine-knitted washable sensor array textile for precise epidermal physiological signal monitoring,” *Sci. Adv.*, vol. 6, no. 11, p. eaay2840, Mar. 2020.
- [53] X. Pu *et al.*, “A self-charging power unit by integration of a textile triboelectric nanogenerator and a flexible lithium-ion battery for wearable electronics,” *Adv. Mater.*, vol. 27, no. 15, pp. 2472–2478, 2015.
- [54] S. Lee *et al.*, “Triboelectric energy harvester based on wearable textile platforms employing various surface morphologies,” *Nano Energy*, vol. 12, pp. 410–418, 2015.
- [55] R. D. I. G. Dharmasena *et al.*, “Triboelectric nanogenerators: Providing a fundamental framework,” *Energy Environ. Sci.*, vol. 10, no. 8, pp. 1801–1811, 2017.
- [56] R. D. I. G. Dharmasena, K. D. G. I. Jayawardena, C. A. Mills, R. A. Dorey, and S. R. P. Silva, “A unified theoretical model for Triboelectric Nanogenerators,” *Nano Energy*, vol. 48, no. March, pp. 391–400, 2018.
- [57] A. Demir, M. Acar, and G. R. Wray, “Air-Jet Textured Yarns: The Effects of Process and Supply Yarn Parameters on the Properties of Textured Yarns,” *Text. Res. J.*, vol. 58, no. 6, pp. 318–328, 1988.

- [58] R. D. I. G. Dharmasena, “Inherent asymmetry of the current output in a triboelectric nanogenerator,” *Nano Energy*, vol. 76, p. 105045, Oct. 2020.
- [59] V. Kumar, C. Prakash, G. Manigandan, and V. R. Sampath, “Investigation of the influence of stretch on the air permeability of knitted fabric: Effect of loop length,” *Fibres Text. East. Eur.*, vol. 29, no. 1, pp. 53–56, 2021.
- [60] F. Selli and Y. Turhan, “Investigation of Air Permeability and Moisture Management Properties of the Commercial Single Jersey and Rib Knitted Fabric Ticari Süprem Ve Ribana Örme Kumaşların Ha Geçirgenliği Ve Ne Yönetim Özelliklerinin Araştırılması,” *TEKSTİL ve KONFEKSİYON*, vol. 27, no. 1, p. 2017, 2017.
- [61] W. Gong *et al.*, “Continuous and scalable manufacture of amphibious energy yarns and textiles,” *Nat. Commun.*, vol. 10, no. 1, p. 868, Dec. 2019.