



DAFTAR PUSTAKA

- Abdel-Wahed, A.Y., Abdel-Rahman, E. dan Essawey, A.H.I., 2016, Effects of operation at and off-electrical resonance on the performance indices of linear alternators under thermoacoustic-power-conversion conditions, *22nd International Congress on Acoustics*, Buenos Aires, Argentina.
- Abdoulla-Latiwish, K.O.A. dan Jaworski, A.J., 2019, Two-stage travelling-wave thermoacoustic electricity generator for rural areas of developing countries, *Applied Acoustics*, 151, 87–98.
- Abdoulla-Latiwish, K.O.A., Mao, X. dan Jaworski, A.J., 2017, Thermoacoustic microelectricity generator for rural dwellings in developing countries driven by waste heat from cooking activities, *Energy*, 134, 1107-1120.
- Adhitama, Y. N., 2017, Studi Eksperimental Pengaruh Jejari Hidrolik Stack dan Panjang Resonator Terhadap Kinerja *Prime Mover* Termoakustik dengan Resonator Berujung Terbuka, *Skripsi*, Program Studi Fisika, Universitas Gadjah Mada, Yogyakarta.
- Arnott, W.P., Belcher, J.R., Raspert, R. dan Bass, H.E., 1994, Stability analysis of a helium-filled thermoacoustic engine, *J. Acoust. Soc. Am.*, 96, 1, 370-375.
- Atchley, A.A., 1994, Analysis of the initial buildup of oscillations in a thermoacoustic *prime mover*, *J. Acoust. Soc. Am.*, 95, 3, 1661-1664.
- Babaei, H. dan Siddiqui, K., 2008, Design and optimization of thermoacoustic Devices, *Energy Convers Manag*, 49, 98.
- Backhaus, S., Tward, E. dan Petach, M., 2004, Traveling-wave thermoacoustic electric generator, *Appl Phys Lett*, 85, 1085.
- Belcher, J.R., Slaton, W.V., Raspert, R., Bass, H.F. dan Lightfoot, J., 1999, Working gases in thermoacoustic engines, *J. Acoust. Soc. Am.*, 105, 2677–2684.
- Blok, D.K., 2013, On the design of near atmospheric air operated thermoacoustic engines, *Aster archive*, (report of September 2013, www.asterthermoacoustics.com).
- Bruckner, S., Liu, S., Laia, Radspieler M.M., Cabeza, L.F. dan Eberhard, L., 2015, Industrial waste heat recovery technologies: an economic analysis of heat transformation technologies, *Appl. Energy*, 151, 1, 157–167.
- Bueche, J.F. dan Hecht, E., 2006, *Fisika Universitas edisi X*. Erlangga, Jakarta.
- Chen, B., Yousif, A.A., Riley, P.H. dan Hann, D.B., 2012, Development and assessment of thermoacoustic generators operating by waste heat from cooking stove, *Engineering*, 4, 894–902.
- Chen, B.M., Riley, P.H., Abakr, Y.A. Pullen, K., Hann, D.B. dan Johnson, C. M., 2013, Design and development of a low-cost, electricity-generating cooking



- Score-Stove, *Proc. Inst. Mech. Eng. Part A J. Power Energy*, 227, 7, 803–813.
- Couch dan Leon, W., 1997, *Digital and Analog Communication Systems*, Prentice-Hall International, Inc., New Jersey.
- Dewan Energi Nasional, 2019, *Outlook Energi Indonesia*, ISSN 2527-3000.
- Dong, H.L, Chen, Y.Y., Er, C.L. dan Zhang, H.W., 2014, Study of a liquid-piston traveling wave thermoacoustic heat engine with different working gases, *Energy*, 74, 158-163.
- Fusco, A.M., Ward, W.C. dan Swift, G. W., 1992, Two-Sensor Power Measurements in Lossy Ducts, *Journal of the Acoustical Society of America*, 84, 2229-2235.
- Giancoli, D.C., 2008, *Physics: Principles with Applications 4th edition*, Lexington, U.S.A.
- Halliday, D., Resnick, R. dan Walker, J., 2010, *Fundamentals of Physics*, Wiley.
- Hamood, A., Jaworski, A.J., Mao, X. dan Simpson, K., 2018, Design and construction of a two-stage thermoacoustic electricity generator with push-pull linear alternator, *Energy*, 144, 61-72.
- Hao, X.H., Ju, Y.L., Behera, U. dan Kasthuriengen, S., 2011, Influence of working fluid on the performance of a standing-wave thermoacoustic prime mover, *Cryogenics*, 51, 559–561.
- Hariharan, N.M., Sivashanmugam, P. dan Kasthuriengen, S., 2012^a, Influence of stack geometry and resonator length on the performance of thermoacoustic engine, *Applied Acoustics*, 73, 1052–1058.
- Hariharan, N.M., Sivashanmugam, P. dan Kasthuriengen, S., 2012^b, Experimental and theoretical investigation of thermoacoustic prime mover, *HVAC&R Research*, 18, 6, 1112–1121.
- Hariharan, N.M., Sivashanmugam, P. dan Kasthuriengen, S., 2013, Influence of operational and geometrical parameters on the performance of twin thermoacoustic prime mover, *International Journal of Heat and Mass Transfer*, 64, 1183–1188.
- Hariharan, N.M., Sivashanmugam, P. dan Kasthuriengen, S., 2015, Studies on Performance of Thermoacoustic Prime mover, *Experimental Heat Transfer*, 28, 267–281.
- Hariharan, N.M., Sivashanmugam, P. dan Kasthuriengen, S., 2018, CFD Simulation of Twin Thermoacoustic Prime mover for Binary Gas Mixtures, *High Temperature*, 56, 2, 309–311.
- Hartley, R.V.L., 1951, *Electric power source*, U.S. patent, United States.
- Jin, T., Yang, R., Wang, Y., Feng, Y. dan Tang, K, 2017, Low temperature difference thermoacoustic prime mover with asymmetric multi-stage loop configuration, *Scientific report*.



- Jin, T., Zhang, B.S., Tang, K., Bao, R. dan Chen, G.B., 2007, Experimental observation on a smallscale thermoacoustic primemover, *J. Zhejiang Univ. Sci*, A8, 205–209.
- Johnson, W.T. dan Choate, A.D, 2008 *Waste Heat Recovery: Technology Opportunities in U.S. Industry*, BCS Inc., Washington, D.C., 2008.
- Kang, H., Cheng, P., Yu, Z. dan Zheng, H., 2015, A two-stage traveling-wave thermoacoustic electric generator with loudspeakers as alternators, *Appl. Energy*, 137, 9–17.
- Ke, H., He, Y., Liu, Y. dan Cui, F., 2012, Mixture Working Gases in Thermoacoustic Engines for Different Applications, *Int J Thermophys*, 33, 1143–1163.
- Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia, 2019, *Statistik Lingkungan Hidup dan Kehutanan tahun 2018*, ISBN 978-602-8358-83-5.
- Kim, S., Choi, K., Lee, K. dan Kim, K., 2016, Evaluation of automotive waste heat recovery for various driving modes, *Energy*, 106, 5, 79-89.
- Kitadani, Y., Sakamoto, S., Sahashi, K. dan Watanabe, Y., 2010, Basic study for practical use of thermoacoustic electric generation system, *Proceedings of 20th International Congress on Acoustics*, Sydney, Australia.
- Kreyszig, E., 2006, *Advanced Engineering Mathematics (9th Edition)*, John Wiley & Sons, United States: Inc.
- Lemmon, E.W., 2015, “Thermophysical Properties of Fluid Systems” In NIST Chemistry Webbook, *NIST Standard Reference Database Number 69*, National Institute Of Standards And Technology, Gaithersburg MD, 20899, <http://webbook.nist.gov>, (diakses 2 Januari 2021)
- Mathews, J.H. dan Fink, K.D., 1999, *Numerical Methods Using Matlab Third Edition*. Prentice Hall, Upper Saddle River, New York.
- Michael, A.G.T., Blok, K. dan Theo H.V.D.M., 2018, Review on the conversion of thermoacoustic power into electricity, *Acoustical Society of America*, 143, 2.
- Morrison, W.A., 1958, *Heat-controlled acoustic wave system*, U.S. patent, United States.
- Murti, P., 2015, Studi Eksperimental Pengaruh Jejari Hidrolik dan Panjang Stack Terhadap Kinerja Prime Mover Termoakustik Gelombang Berdiri, *Tesis*, Teknik Mesin, Universitas Gadjah Mada, Yogyakarta
- Murti, P., Setiawan, I., Widayaparaga, A., Utomo, A.B.S. dan Nohtomi, M., 2016, Influence of parameter on the performance of a standing-wave thermoacoustic prime mover, *AIP Conference Proceedings*
- Nader, W.B., Chamoun, J. dan Dumand, C., 2020, Thermoacoustic engine as waste heat recovery system on extended range hybrid electric vehicles, *Energy Conversion and Management*.



- Nouh, M.A., Arafa, N.M. dan Abdel-Rahman, E., 2014, Stack parameters effect on the performance of anharmonic resonator thermoacoustic heat engine, *Arch. Mech. Eng.*, 61, 115–127.
- Olivier, C., Penelet, G., Poignand, G. dan Lotton, P., 2014, Active control of thermoacoustic amplification in a thermo-acousto-electric engine, *J Appl Phys*, 115, 1–6.
- Orr, B., Akbarzadeh, A., Mochizuki, M. dan Singh, R., 2016, A review of car waste heat recovery systems utilising thermoelectric generators and heat pipes, *Appl Therm Eng*, 101, 49, 1-5.
- Piccolo, A., 2018, Design issues and performance analysis of a two-stage standing wave thermoacoustic electricity generator, *Sustainable Energy Technologies and Assessments*, 26, 17–27.
- Poling, B.E., Prausnitz, J.M. dan O'Connell, J.P., 2000, *The Properties of Gases and Liquids*, McGraw-Hill, New York.
- Setiawan, I., Katsuta, M. dan Nohtomi, M., 2013, Numerical Study on the Effect of Working Gases on the Critical Temperature Difference of a Standing Wave Thermoacoustic Prime mover, *FTEC2013-The 8th International Conference on Fluid and Thermal Energy Conversion*, Semarang, Indonesia.
- Setiawan, I., Murti, P., Utomo, A.B.S., Achmadin, W.N. dan Nohtomi, M., 2015^a, Pembuatan dan Pengujian Prime mover Termoakustik Tipe Gelombang Tegak, *Proceeding Seminar Nasional Tahunan Teknik Mesin XIV (SNTTM XIV) Banjarmasin*.
- Setiawan, I., Nohtomi, M. dan Katsuta, M., 2015^b, Critical Temperature Differences of a Standing Wave Thermoacoustic Prime mover with Various Helium-Based Binary Mixture Working Gases, *Journal of Physics: Conference Series*.
- Setiawan, I., Achmadin, W.N., Murti, P. dan Nohtomi, M., 2016, Experimental Study on a Standing Wave Thermoacoustic Prime mover with Air Working Gas at Various Pressures, *Journal of Physics: Conference Series*.
- Swift, G.W., 1985, Thermoacoustic engines, *J. Acoust. Soc. Am.*, 84, 1145–1180.
- Swift, G.W., 2002, Thermoacoustic: A Unifying Perspective for Some Engines and Refrigerators, *Acoustical Society of America Publications*, Los Alamos National Laboratory.
- Swift, G.W., 2003, Thermoacoustics: A Unifying Perspective for Some Engines and Refrigerators, *J. Acou. Soc. Am.*
- Tang, K., Chen, G.B., Jin, T., Bao, R., Kong, B. dan Qiu, L.M., 2005, Influence of resonance tube length on performance thermoacoustically driven pulse tube refrigerator. *Cryogenics*, 45, 91.
- Wang, B., Qiu, L.M. dan Sun, D.M., 2009, Study on the travelling-wave thermoacoustic engine with working gas CO₂, *J Eng Thermophys*, 30, 9.



- Wang, K., Zhang, J., Zhang, N., Sun, D., Luo, K., Zou, J. dan Qiu, L., 2016, Acoustic matching of a traveling-wave thermoacoustic electric generator, *Appl. Therm. Eng.*, 102, 272–282.
- Ward, B., Clark, J. dan Swift, G., 2012, *Design environment for low-amplitude thermoacoustic energy conversion DeltaEC version 6.3 b11 users guide*, Los Alamos National Laboratory.
- Wilke, C.R., 1950, A Viscosity Equation for Gas Mixtures, *J. Chem. Phys.*, 18, 517.
- Wu, Z., Dai, W., Man, M. dan Luo, E., 2012, A solar-powered traveling-wave thermoacoustic electricity generator, *Solar Energy*, 86, 2376–2382.
- Xing, L.L. dan Kang, H.F., 2011, Study on the performance of working gas in the highfrequency Stirling engine, *Cryog Eng*, 5, 1-5.
- Yang, R., Wang, Y., Jin, T., Feng, Y. dan Tang, K., 2018, Development of a three-stage looped thermoacoustic electric generator capable of utilizing heat source below 120 °C, *Energy Conversion and Management*, 155, 161–168.
- Yazaki, T., Iwata, A., Maekawa, T. dan Tominaga, A., 1998, Traveling wave thermoacoustic engine in a looped tube, *Phys. Rev. Lett.* 81, 3128-3131.
- Yu, Z., Jaworski, A.J. dan Backhaus, S., 2010, A low-cost electricity generator for rural areas using a travelling-wave looped-tube thermoacoustic engine. *Proc Inst Mech Eng, Part A: J Power Energy*, 224, 6, 787–95.
- Yu, Z., Saechan, P. dan Jaworski, A.J., 2011, A method of characterising performance of audio loudspeakers for linear alternator applications in lowcost thermoacoustic electricity generators, *Appl. Acoust*, 72, 5, 260–267.
- Zhang, D., Jiang, E., Shen, C., Zhou, J., Yang, W. dan He, Y., 2019^a, Numerical analysis on thermoacoustic prime mover, *Journal of Sound and Vibration*, 463.
- Zhang, Y., Shi, X., Li, Y., Zhang, Y. dan Liu, Y., 2019^b, Characteristics of thermoacoustic conversion and coupling effect at different temperature gradients, *Energy*, 197.