

DAFTAR PUSTAKA

- Abd El-Baky H.H. dan G.S. El-Baroty. 2008. *Chemical and biological evaluation of the essential oil of Egyptian Moldavian balm. Int. J. Essential Oil Therap.* 2: 76-81.
- Ali, B.H., G. Blunden, M. O. Tanira dan A. Nemmar. 2008. *Some phytochemical, pharmacological and toxicological properties of ginger (Zingiber officinale Roscoe): A review of recent research.* Food and Chemical Toxicology. 46 : 409–420.
- Anwar, F., M. Ali, A.L. Hussain dan M. Shahid. 2009. *Antioxidant and antimicrobial activities of essential oil and extracts of fennel (Foeniculum vulgare Mill.) seeds from Pakistan.* Flav. Frag. J. 24 : 170-176.
- Attoe, E.E. dan V.E. Osodeke. 2009. *Effects of NPK on growth and yield of ginger (Zingiber officinale Roscoe) in soils of contrasting parent materials of Cross River State.* Electronic Journal of Environmental, Agricultural and Food Chemistry. 8: 1261-1268.
- Balachandran, S., S. E. Kentish and R. Mawson. 2006. *The effect of both preparation method and season on the supercritical extraction of ginger.* Sep. Purif. Technol. 48 (2) : 94-105.
- Bartley, J. dan A. Jacobs. 2000. *Effects of drying on flavour compounds in Australian-grown ginger (Zingiber officinale).* Journal of the Science of Food and Agriculture. 80:209–215.
- Bhattacharyya, N., Bandyopadhyay, R., Chowdhury, S, S., Tudu, B., *Portable Electronic Nose System for Aroma Classification of Black Tea*, paper, Department of Instrumentation and Electronics Engineering, Jadavpur University, Kolkata, India.
- Denyer, C.V., P. Jackson, D.M. Loakes, M.R. Ellis dan D.A.B. Yound. 1994. *Isolation of antirhinoviral sesquiterpenes from ginger (Zingiber officinale).* J Nat Products. 57 : 658-662.
- Distante, C., Leo, M., Siciliano, P. dan Persaud, K.C., 2002, *On the Study of Feature Extraction Method for an Electronic Nose, Sensors and Actuators*, B 87, 274-288.
- Doungjak, P., 2005, *Electronic Nose*, Walailak University, Nakhon Si Thammarat.
- El-Baroty, G.S., H. H. Abd El-Baky, R. S. Farag dan M. A. Saleh. 2008. *Characterization of antioxidant and antimicrobial compounds of cinnamon*

and ginger essential oils. African Journal of Biochemistry Research. 4 : 167-174.

Eze, J.I. dan K.E. Agbo. 2011. Comparative studies of sun and solar drying of peeled and unpeeled ginger. Am. J. Sci. Ind. Res. 2 : 136-143.

Faoziah, A., 2012, Penerapan Metode *Basic Linear Discriminant Analysis* Pada *Prototype E-Nose* Sebagai Instrumen Pengenal, Bahan Baku Jamu. Program Studi Teknik Informatika, Fakultas Ilmu Komputer, Universitas Dian Nuswantoro, Semarang.

Figaro, 2005, Sensor *TGS*, <http://www.figarosensor.com/products/general.pdf>, diakses tanggal 21 Januari 2014.

Gardner, J., Bartlett, P., 1999, *Electronic Noses: Principle and Applications*. Oxford University Press, New York, USA.

Gardner J.W. dan Cole, M., 2003, *Integrated Electronic Noses and Microsystems for Chemical Analysis*, Pearce, T.C., Schiffman, S.S., Nagle, H.T., dan Gardner, J.W., *Handbook of Machine Olfaction: Electronic Nose Technology*, WILEY-VCH, Weinheim.

González, G., And Aparicio, R., *Sensors: From Biosensors to the Electronic Nose Instituto de la Grasa Avda. Padre García Tejero, Sevilla Spain*

Govindarajan, V. 1982. *Ginger-chemistry, technology and quality evaluation: Part I*. CRC. Crit Reviews in Food Science and Nutrition. 19: 1-96.

Gutierrez-Osuna, R., Nagle, H.T., Kermani, B. dan Schiffman, S.S., 2003, *Signal Conditioning and Preprocessing*, Pearce, T.C., Schiffman, S.S., Nagle, H.T., dan Gardner, J.W., *Handbook of Machine Olfaction: Electronic Nose Technology*, WILEY-VCH, Weinheim.

Hardoyono, F., Triyana, K., 2012, Aplikasi *Wavelet* pada Proses Ekstraksi Ciri Sinyal keluaran *Electronic-Nose* untuk Deteksi Bahan Herbal. Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta. STAIN Purwokerto.

He, X., W.B. Matthew, L. Lian dan L. Lin. 1998. *High-performance liquid chromatography-electrospray mass spectrometric analysis of pungent constituents of ginger*. J. Chromatogra. 796 (2) :327-334.

Hernani dan E. Hayani. 2001. *Identification of chemical components on red ginger (Zingiber officinale var. Rubrum) by GC-MS. Proc. International Seminar on natural products chemistry and utilization of natural resources*. UI-Unesco, Jakarta : 501-505.

- Hernani., Dan Winarti, C., 2012 Kandungan Bahan Aktif Jahe Dan Pemanfaatannya Dalam Bidang Kesehatan, Balai Besar Penelitian Dan Pengembangan Pascapanen Pertanian, Jln. Tentara Pelajar 12, Bogor 16111.
- Hines, E.L., Boilot, P., Gardner, J.W. dan Gongora, M.A., 2003, *Pattern Analysis for Electronic Noses*, Pearce, T.C., Schiffman, S.S., Nagle, H.T., dan Gardner, J.W., *Handbook of Machine Olfaction: Electronic Nose Technology*, WILEY-VCH, Weinheim.
- Hussain, J., A. Bahader, F. Ullah, N. Rehman, A. Khan, W. Ullah dan Z. Shinwari. 2009. Proximate and nutrient analysis of the locally manufactured herbal medicines and its raw material. *J. Am. Sci.* 5: 1-5.
- Iswanto, W., 2014, Implementasi Rancang Bangun Elektronik Nose untuk Mengklasifikasikan Pola Bau Tahu Murni dan Tahu Berformalin, Skripsi Fakultas Matematika dan Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.
- Mamat, M. dan Samad, S.A., 2011, The Repeatability and Discrimination Study of Electronic Nose Features, *TENCON IEEE* , 978-1-4577-0255-6.
- Mustafa, T. dan K.C. Srivastava. 1990. *Ginger (Zingiber officinale) in migraine headache. J. Ethnopharmacol.* 29 : 267-273.
- Nagle, H.T., Schiffman, S.S. dan Gutierrez-Osuna, R., 1998, The How and Why of Electronic Nose, *IEEE Spectrum*, 35, 22-34.
- Nanto, H. dan Stetter, J.R, 2003, *Introduction to Chemosensors*, Pearce, T.C., Schiffman, S.S., Nagle, H.T., dan Gardner, J.W., *Handbook of Machine Olfaction: Electronic Nose Technology*, WILEY-VCH, Weinheim.
- Nwinuka, N., G. Ibeh dan G. Ekeke. 2005. *Proximate composition and levels of some toxicants in four commonly consumed spices. J. Appl. Sci. Environ. Mgt.* 9: 150-155.
- Odebunmi, E., O. Oluwaniyi dan M. Bashiru. 2010. *Comparative proximate analysis of some food condiments. J. App. Sci. Res.* 6: 272-274.
- Pearce, T. C., Schiffman, S.S., Nagle, H. T., Gardner, J. W., 2014, *Handbook of Machine Olfaction: Electronic Nose Technology*, WILEY-VCH, UK.
- Rosyad, F., 2015, Klasifikasi Kemurnian Daging Sapi Berbasis *Electronic Nose* dengan Metode *Principal Component Analysis*. Skripsi Fakultas Matematika dan Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.

- Rouse, M., 2011, electronic nose (*enose*), <http://whatis.techtarget.com/definition/electronic-nose-enose>, diakses tanggal 18 Januari 2014.
- Singh, G., I.S. Kapoor, P. Singh, C.S. Heluani, M.P Lampasona dan C.A.N Catalan. 2008. *Chemistry, antioxidant and antimicrobial investigation on essential oil and oleoresin of Zingiber officinale*. *Food Chem. Toxicol.* 46: 3295-3302.
- Smith, L., 2002, A Tutorial on *Principal Component Analysis*, http://www.cs.otago.ac.nz/cosc453/student_tutorials/principal_component_s.pdf, diakses 30 November 2014.
- Stewart, J., 2008, *Calculus Early Transcendentals*, 6th Edition, Thomson Brooks/Cole, Belmont.
- Surh, Y.J., E. Loe dan J.M. Lee.1998. *Chemopreventive properties of some pungent ingredients present in red pepper and ginger*. *Mutat Res.* 402:259-267
- Taylor, B.N. dan Kuyatt C.E., 2011, Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results, *National Institute of Standards and Technology of United States Department of Commerce Technology Administration*.
- Teggia, G., 2003, *a cup of Java Equinox Publishing (Asia)Pte.Ltd, First Equinox*
- Triyana, K., Agustika, D. K., Hardoyono, F., Chotimah, 2012, Penerapan Metode Ekstraksi Ciri Berbasis Transformasi *Wavelet* Diskrit untuk Meningkatkan Unjuk Kerja *Electronic Nose*, *Prosiding Pertemuan Ilmiah XXVI HFI Jateng & DIY, Purworejo 14 April 2012*, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta
- Wijayanto, N., dan Nurunnajah., 2012, Intensitas Cahaya, Suhu, Kelembaban dan Perakaran Lateral Mahoni (*Swietenia macrophylla* King.) di RPH Babakan Madang, BKPH Bogor, KPH Bogor Departemen Silvikultur, Fakultas Kehutanan *IPB*, Bogor.
- Yan, J., Tian, F., He, Q., Shen, Y., Xu, S., Feng, J. dan Chaibou, K., 2012, Feature Extraction from Sensor Data for Detection of Wound Pathogen Based on Electronic Nose, *Sensors and Materials*, Vol. 24, No. 2, 57-73.
- Yulyani., 2012, Penanganan Dan Pengolahan Rimpang Jahe Status Teknologi Hasil Penelitian Jahe Dan Sri Yuliani Balai Penelitian Tanaman Obat Dan Aromatik Jln. Tentara Pelajar 3, Bogor Balai Besar Penelitian Dan Pengembangan Pascapanen Pertanian, Bogor.