

## Daftar Pustaka

- Askeland, R.Donald dkk. *The Science and Engineering of Materials Sixth Edition.* USA: Cengange Learning, 2011.
- Bagotzky, V.S, Y.B Vassiliev, dan O.A Khazova. "J. Electroanal Chem." 1977: 229-238.
- Bauer, Alex, L.Gyenge Elod, dan W.Oloman Colin. "Direct Methanol Fuel Cell with Extended Reaction Zone Anode: PtRu and PtRuMo Supported on Graphite Felt." *Journal of Power Sources*, 2007: 281-287.
- Blöch, P.E. "Projector Augmented-wave Method." *Phys. Rev. B*, 1994: 17953.
- Born, M, dan R Oppenheimer. "Zur Quantentheorie der Molekeln." *Ann. Phys.*, 1927: 457.
- Cahyanto, et al. Pt(111)-Alloy Surfaces for Non-Activated OOH Dissociation. *e-J.Surf.Nanotech*(9). 2011: 352-356.
- Cahyanto, et al. Adsorption Mechanism of Carbon Monoxide on PtRu and PtRuMo Surfaces in the Density Functional Theory Perspective. *Advances Material Research* (896). 2014: 537-540.
- Cahyanto, et al. "Interaction of Methanol and Its Dehydrogenation Species with Pt-Alloy Surfaces." *2nd Padjajaran International Physics Symposium 2015 (PIPS-2015)*. Bandung, 2015.
- Callister, dan Rethwisch. *Material Science and Enggineering An Introduction Seventh Edition*. New York: John Wiley&Sons, 2008.
- Elina, Y. *Studi Teoritik Adsorpsi H<sub>2</sub>O pada Permukaan Pt(111) dengan Metode Density Functional Theory*. Skripsi, Purwokerto: Unsoed, 2016.
- Fajin, J.L.C, M.N.D.S Corderio, dan J.R.B Gomes. "Density Functional Theory Study of the Water Dissociation on Platinum Surfaces: General Trends." *J.Phys. Chem. A*, 2014: 5832-5840.

Groß, A. *Theoretical Surface Science, A Microscopic Perspective*. Berlin: Springer Varlag, 2002.

Hamdi, R.M. *Simulasi Kuantum untuk Sistem Koadsorpsi H dan OH pada Permukaan Pt(111) dengan Metode Density Functional Theory*. Skripsi, Purwokerto: Universitas Jenderal Soedirman, 2017.

Hogarth, M.P, dan G.A Hards. "Direct Methanol Fuel Cell, Technological Advances and Further Requirements." *Platinum Metals Rev.* 40(4), 1996: 150-159.

Iijima T. *J.mol.Struct.* 1989: 137

Jacob, T., dan Goddard, W.A. "Adsorption of Atomic H and O on the (111) Surface of Pt<sub>3</sub>Ni Alloys." *J.Phys. Chem.*(108), 2004: 8311-8323.

Ladelta V. *Direct Methanol Fuel Cell (DMFC) : Baterai Laptop Tanpa Charger*. 2007. <http://www.chem-is-try.org> (diakses Mei 1, 2017).

Lew, M, et al. "The Energy of Adsorbed Hydroxyl on Pt(111) by Microcalorimetry." *J. Phys. Chem. C.*, 2011: 11586-11594.

Martell, A.E, dan R.D Hancock. *Metal Complexes in Aqueous Solution*. New York: Plenum Press, 1996.

Michaelides, A, dan P Hu. "A Density Functional Theory Study of Hydroxyl and the Intermediates In the Water Formation Reaction on Pt." *J. Chem. Phys*, 2001: 513.

Othman, M.H.D, A.F Ismail, dan A. Musafa. "Recent Development of Polymer Electrolyte Membranes for Direct Methanol Fuel Cell Application." *Malaysian Polymer Journal*, 2010: 1-36.

Pickett, W.E. "Pseudopotential Methods in Condensed Matter Applications." *Solid State Phys*, 1985: 57.

Rufiati, Etna. *Unair*. 2011. <http://www.skp.unair.ac.id> (diakses April 1, 2017).

- Saepulloh, Asep. *Simulasi Kuantum untuk Sistem Koadsorpsi H dan OH pada Permukaan PtMo(111) dengan Metode Density Functional Theory*. Skripsi, Purwokerto: Universitas Jenderal Soedirman, 2018.
- Seong, S, dan A.B Anderson. "Water Dissociation on Pt(111) and (100) Anodes: Molecular Orbital Theory." *J. Phys. Chem.* 100, 1996: 11744-11747.
- Serway, R.A, C.J Moses, dan C.A Moyer. *Modern Physics Third Edition*. Belmont: Thomson Brooks/Cole, 2005.
- Sulistiyani, E.T. "Teori Fungsional Densitas dan Penerapannya pada Struktur Atom." *Prosiding Pertemuan Ilmiah XXVI HFI Jateng dan DIY*. Purworejo, 2012.
- Sumarsono, Rizkiana. *Simulasi Kuantum untuk Sistem Koadsorpsi H dan OH pada Permukaan PtRu(111) dengan Metode Density Functional Theory*. Skripsi, Purwokerto: Universitas Jenderal Soedirman, 2018.
- Suryawan, B. *Karakteristik Zeolit Indonesia Sebagai Adsorben Uap Air*. Disertasi, Jakarta: Universitas Indonesia, 2004.
- Verheij, L.K, M.B Hugenschmidt, B Poelsema, dan G Comsa. "Hydrogen Adsorption on Clean and Oxygen Covered Pt(111)." *Catalysis Letters*, 1991: 195-204.
- Watson, G.W, R.P.K Wells, D.J Willock, dan G.J Hutchings. "Ab initio Simulation of the Interaction of Hydrogen with the {111} Surfaces of Platinum, Palladium and Nickel." *Chem. Commun*, 2000: 705-706.
- Yeh, K.Y. *Atomistic Modeling of The Cathode / Electrolyte Interface in Proton Exchange Membrane Fuel Cells*. Disertasi, USA: The Pennsylvania State University, 2012.