DAFTAR PUSTAKA

Andiwijayakusuma, D., Ahmad, S., & Setiadipura, T., 2016, DFT Study of Cs defect in SiC layer TRISO, *Proceeding of 2nd Nuclear Energy Technology Seminar:* 2355-7524.

Banhart, F., Kotakoski, J., & Krasheninnikov, A. V., 2011, Structural Defects In Graphene, *ACS Nano*, *5*(1), 26–41.

Bekaroglu, E., Topsakal, M., Cahangirov, S., & Ciraci, S.,2010, A First-Principles Study of Defects and Adatoms in Silicon Carbide Honeycomb Structures, *Physical Review B*, 1–10.

Brink, D. M., 2002, Density Functional Theory, *Nuclear Physics News*, *12*(4), 27–32.

Born,M. and Oppenheimer,R., 1927, Zur quantentheorie der molekeln, *Annalen der Physik*, 389(20):457-484.

Cahangirov, S., Topsakal, M., Akturk, E., Sahin, H., & Ciraci, S., 2008, Two and one-dimensional honeycomb structures of silicon and germanium, *Physical Review Letters* 1–5.

Casady, J. B., & Johnson, R. W.,1996, Status of silicon carbide (SiC) as a wide-bandgap semiconductor for high-temperature applications, *A review, Solid-State Electronics*, *39*(10), 1409–1422.

Colarusso, P., Guo, B., Zhang, K.-Q., & Bernath, P. F., 1996, High-Resolution Infrared Emission Spectrum of Strontium Monofluoride, *Journal of Molecular Spectroscopy*, *175*(1), 158–171.

Dia, T., 2017, Interaksi Stronsium (Sr) dengan SiC Berstruktur *Honeycomb*: Komputasi Berbasis Kuantum, *Skripsi*, Jurusan Fisika FMIPA UGM, Yogyakarta.

Dou, Y., Jin, H. B., Cao, M., Fang, X., Hou, Z., Li, D., & Agathopoulos, S., 2011, Structural stability, electronic and optical properties of Ni-doped 3C-SiC by first principles calculation, *Journal of Alloys and Compounds*, *509*(20), 6117–6122.

Dwaraknath, S. S., & Was, G. S., 2016, The diffusion of cesium, strontium, and europium in silicon carbide, *Journal of Nuclear Materials*, *476*, 155–167.

Efros, L. A., Lien, V. N., & Shklovskii, I.B., 1869, Impurity band structure in lightly doped semiconductors, *J. Phys. C: Solid State Phys*., Vol. 12**,** 1979.

Friedland, E., Van Der Berg, N. G., Malherbe, J. B., Wendler, E., & Wesch, W., 2012, Influence of radiation damage on strontium and iodine diffusion in silicon carbide, *Journal of Nuclear Materials*, *425*(1–3), 205–210.

Gao, B. L., Wang, B., Xu, Q. Q., & Xiong, S. J., 2011, Ferromagnetic and antiferromagnetic properties of the fluorinated bilayer SiC sheets, *Physica E: Low-Dimensional Systems and Nanostructures*, *43*(7), 1394–1397.

Gray, D., Mccaughan, A., & Mookerji, B., 2009, Crystal Structure of Graphite, Graphene and Silicon, *Physics for Solid State Applications*, *2*, 3–5.

Hijikata, Y., 2013, *Physics and Technology of Silicon Carbide*, Janeza Trdine 9, 51000 Rijeka, Croatia.

H.G. Junginger & W.Van Haeringen., 1970, Energy Band Structures of Four Polytypes of Silicon Carbide Calculated with the Empirical Pseudopotential Method, *physica status solidi (b)*, Vol. 37, Issue 2,709 –719.

Huda, M. N., Yan, Y., & Al-Jassim, M. M., 2009, On the existence of Si-C double bonded graphene-like layers, *Chemical Physics Letters*, *479*(4–6), 255–258.

Hobenberg, P. and Kohn, W., 1964, Inhomogeneous electron gas, *Physical Review*, 136(3):864-871.

Igumbor, E., 2017, *Hybrid functional study of point defects in germanium*, University of Pretoria.

Iwata, H., Lindefelt, U., Öberg, S., & Briddon, P. R., 2002, Theoretical study of planar defects in silicon carbide, *Journal of Physics Condensed Matter*, *14*(48), 12733–12740.

Jadaun, Priyamvada, 2013, First-principle stufy of electronic and topological properties of graphene and graphene-like materials, University of Texas at Austin.

Kirk, R. E., Othmer, D. F., 2004, *Encyclopedia of chemical technology*, Vol. 3, New York, Wiley.

Kittel, C., 2005, *Introduction to solid state physics*. New York, Wiley.

Kohn, W. and Mattson, A. E., 1998, Edge electron gas, *Physical Review Letters*, 81(16): 3487.

Kohn, W. and Sham, L. J., 1965, Self-consistent equations including exchange and correlation effects, *Physical Review*, 140(4A), p. A1133.

Katnelson, M. I., Novoselov, K. S., Geim, A. K., 2006, Chiral tunnelling and the Klein paradox in graphene, *Nature Physics, 2*, 620-625.

Lan, Y. Z., 2018, First-principles studies of effects of layer stacking, opposite atoms, and stacking order on two-photon absorption of two-dimensional layered silicon carbide, *Computational Materials Science*, *151*(January), 231–239.

Li, L., Reich, S., & Robertson, J., 2005, Defect energies of graphite: Density-functional calculations, *Physical Review B - Condensed Matter and Materials Physics*, *72*(18), 1–10.

Lin, X., Lin, S., Xu, Y., Hakro, A. A., Hasan, T., Zhang, B., Chen, H., 2013, Ab initio study of electronic and optical behavior of two-dimensional silicon carbide, *Journal of Materials Chemistry C*, *1*(11), 2131.

Matsui, F., Eguchi, R., Nishiyama, S., Izumi, M., Uesugi, E., Goto, H., Kubozono, Y., 2016, Photoelectron Holographic Atomic Arrangement Imaging of Cleaved Bimetal-intercalated Graphite Superconductor Surface, *Scientific Reports*, 1–10.

McCann, E., 2012, Electronic Properties of Monolayer and Bilayer Graphene, di Raza, H., Graphene nanoelectronics: metrology, synthesis, properties and ap applications, *Springer*, 237-275.

Mélinon, P., Masenelli, B., Tournus, F., & Perez, A., 2007, Playing with carbon and silicon at the nanoscale, *Nature Materials*, *6*(7), 479–490.

Morris, J. W.,2007, Defects in Crystals, *Materials Science*, 76–107.

Nabielek, H., Brown, P. E., & Offermann, P., 1977, Silver Release from Coated Particle Fuel, *Nuclear Technology*, *35*(2), 483–493.

Novoselov, K.S., Geim, A.K., Morozov, S., Jiang, D., Katsnelson, M., Grigorieva, I., Dubonos, S. & Firsov, A., 2005, Two-dimensional gas of massless Dirac fermions in graphene, *nature*, 438(7065), pp.197-200.

Novoselov, K. S., Morozov, S. V., Mohinddin, T. M. G., Ponomarenko, L. A., Elias, D. C., Yang, R., Geim, A. K., 2007, Electronic properties of graphene, *Physica Status Solidi (B) Basic Research*, *244*(11), 4106–4111.

Pan, L., Liu, H. J., Wen, Y. W., Tan, X. J., Lv, H. Y., Shi, J., & Tang, X. F., 2011, First-principles study of monolayer and bilayer honeycomb structures of

group-IV elements and their binary compounds, *Physics Letters, Section A: General, Atomic and Solid State Physics*, 375(3), 614–619.

Pizzagalli, L., 2014, Stability and mobility of screw dislocations in 4H, 2H and 3C silicon carbide, *Acta Materialia*, *78*, 236–244.

Roy, J., Chandra, S., Das, S., & Maitra, S., 2014, Oxidation behaviour of silicon carbide, *A review*: *Reviews on Advanced Materials Science*, *38*(1), 29–39.

Ruihuan, Li., 2015, *First-principles study of the multiple He trapping in defects in vanadium and SiC*. Sweden: Material vetenskap KTH SE-100 44 Stockholm.

Sahin, H., Cahangirov, S., Topsakal, M., Bekaroglu, E., Akturk, E., Senger, R. T., & Ciraci, S., 2009, Monolayer honeycomb structures of group-IV elements and III-V binary compounds: First-principles calculations, *Physical Review B - Condensed Matter and Materials Physics*, 80(15), 1–12.

Saito, M., Yamashita, K., & Oda, T., 2007, Magic numbers of graphene multivacancie, *Japanese Journal of Applied Physics*, Part 2: Letters, 46(45–49).

Shi, Z., Zhang, Z., Kutana, A., & Yakobson, B. I. , 2015, Predicting Two-Dimensional Silicon Carbide Monolayers, *ACS Nano*, *9*(10), 9802–9809.

Sholihun, 2015, *Dissertation*: First-Principles Calculations of Vacancies in Semi-conductors, University of Kanazawa, Japan, hal.1- 6 dan 7 - 30.

Snead, L. L., Nozawa, T., Katoh, Y., Byun, T. S., Kondo, S. & Petti, D. A., 2007, Handbook of SiC properties for fuel performance modeling, *Journal of nuclear materials*, 371(1), pp. 329-377.

Starke, U., Schardt, J., Bernhardt, J., Franke, M., Reuter, K., Wedler, H., & Heinz, K., 1998, Novel Reconstruction Mechanism for Dangling -Bond Minimization : Combined Method Surface Structure Determination of SiC‘ 111˚ - ‘3 3 3˚, (111), *Physical Review B*, Vol. 62, No. 15.

Sucihati, B.H., 2017, Energi Formasi *Silicon Carbide* (3C-SiC) dengan Pengotor Perak (Ag): Komputasi Berbasis DFT (*Density Functional Theory*), *Skripsi*, Jurusan Fisika FMIPA UGM, Yogyakarta.

Susi, T., Skákalová, V., Mittelberger, A., Kotrusz, P., Hulman, M., Pennycook, T. J., Meyer, J. C., 2017, Computational insights and the observation of SiC nanograin assembly: Towards 2D silicon carbide, *Scientific Reports*, *7*(1), 1–13.

Tsutaoka, T., Tokunaga, T., Umeda, T., & Maehara, T., 2014, Observation of the two-dimensional reciprocal lattice by use of lattice grating sheets and a laser pointer. *European Journal of Physics*, *35*(5).

Wang, P., Ge, P., Gao, Y., & Bi, W., 2017, Prediction of sawing force for single-crystal silicon carbide with fixed abrasive diamond wire saw, *Materials Science in Semiconductor Processing*, *63*(January), 25–32.

Wesch, W., 1996, Silicon carbide: synthesis and processing, *Nuclear Instruments and Methods in Physics Research*, *116*, 305–321.

Yin, M. T., and Cohen, M. L., 1982, Theory of ab initio pseudopotential calculations, *Physical Review B*, 25(12):7403.

Zhang, S. B., & Northrup, J. E., 1991, Chemical potential dependence of defect formation energies in GaAs: Application to Ga self-diffusion, *Physical Review Letters*, *67*(17), 2339–2342.