

## DAFTAR PUSTAKA

- Abdullah, M., 2009, *Pengantar Nanosains*, Institut Teknologi Bandung, Bandung.
- Ansori, C., 2010, Model Mineralisasi Pembentukan Opal Banten, *Jurnal Geologi Indonesia*, Vol. 5, Hal. 151-170.
- Ashcroft, N.W., and N. D. Mermin, 1976, *Solid State Physics* (Harcourt College Publisher), Orlando.
- Anwar, S., 2016, Pengaruh Proses Pencampuran Dan Perlakuan Kalsinasi Dalam Sintesis Sol-Gel CdS Menggunakan Amilum Sebagai Agen Pengompleks, *Skripsi*, Universitas Indonesia (UI), Depok.
- Bai, L., 2006, *Fabrikasi Kristal Inverse Opal Semikonduktor Foton*, University of Alabama. Tuscalooca, Amerika.
- Cai Z.Y, Teng J.H, Yan Q.F, Zhao X.S. 2012. Solvent effect on the self-assembly of colloidal microspheres via a horizontal deposition method. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* Vol. 402 Hal. 37-44.
- Ganaphati, K.R., Ashok, CH., Venkateswara, K.R. dan Shilpa, C.CH., 2013, Structural properties of MgO<sub>2</sub> Nanoparticle : Synthesized by Co-Precipitation Technique, *International Journal of Science and Reseach (IJSR)*, India. Vol : 9, Hal 43-46
- Hara, 1986, *Utilization of Aggrowastes for Bulding Materials*. International Reseach and Development Cooperation Division, Tokyo. Japan.
- Hidayat, S., Safriani, L., dan Nurhilal, O.,2013. Fabrikasi dan karakterisasi kristal fotonik satu dimensi untuk aplikasi biosensor optik. *Bionatura-Jurnal Ilmu-ilmu Hayati dan Fisik*. Vol. 15, No.1, Hal 24 – 28
- Hoffman, M. R., Martin, S. T, Choi, W., dan Bahneman, D. W., 1995, Environmental Application of Semiconductor Photocatalysis, *Chemical Reviews*, Vol. 95, No.1, Hal. 69-96.

- Iler, R.K., 1979, *Silica gels and powders*, In : *The Chemistry of silica* . John Wiley and Sons, New York.
- Lubis, R.A., 2012, Sintesis dan Karakterisasi Pertumbuhan Nanopartikel ZnO Dengan Metode Sol-Gel, *Skripsi*, Universitas Negeri Medan, Medan.
- P. Jiang, J. F. Bertone, K. S. Hwang, and V. L. Colvin., 1999 "Single-crystal colloidal multilayers of controlled thickness", *Chem. Mater.* 11 (8), 2132-2140.
- Johnson, S.G. dan Joannopoulos, J.D., 2002, *Photonic Crystals: The Road from Theory to Practice*, Kluwer Academic Publisher, Boston.
- Lopez, J.F.G., 2005, *An optical study of opal based photonic crystal*, Tesis, Departamento de Fisica de Materials, Facultad de Ciencias, Universidad Autonoma de Madrid, Spain.
- Mills, S., dan Hunte, S. L., 1997, *An overview of semiconductor photocatalysis*, *Journal of Photochemistry and Photobiology A : Chemistry*, Vol. 108, No.1, Hal. 1-35.
- Marlow F, Muldarisnur, Sharifi P, Brinkmann R, Mendive C. 2009. *Opale: Status und Perspektiven. Angew Chem.* 121: 6328 – 6351.
- Muldarisnur, 2016, Optimasi celah pita optik opal dan *core-shell* opal, *Jurnal Ilmu Fisika (JIF)*, Vol.8 (1), Hal. 1979-4657.
- Muldarisnur, 2012, *Opal Photonic Crystals: Structure, Formation, and Optical Properties*, *Disertasi*, Ruhr-Universität Bochum, Bochum, Jerman.
- Muldarisnur, M., 2010, *Band Structure Calculation : The MIT Photonic Bands (MPB)*, Max-Planck- Institut fur Kohlenforschung, Mulheim an der Ruhr, Jerman.
- Muldarisnur, 2015. Nanofotonik: Mengontrol Interaksi Antara Cahaya Bahan Pada Skala Nano, Prosiding Seminar Nasional Fisika Universitas Andalas. 8 Oktober 2015, Padang, Indonesia. Hal . 978-979.
- Notomi, M., Suzuki, H., & Tamamura, T.. 2001. Dimensional organic photonic crystal lasers at several photonic *band gap*. *Applied Physics Letters*, Vol. 78, No. 10, Hal.1325-1327.

- Nugroho, D . A. 2009. Rancangan software untuk desain kristal fotonik satu dimensi berbasis graphical user interface. *skripsi*. Bogor: Institut Pertanian Bogor, Bogor.
- Phumying, S., Labuayai, S., Thomas, C., Amornkit bamrung, V., Swatsitang, E., Maensiri, S., 2013, Aloe vera plant-extracted solution hydrothermal synthesis and magnetic properties of magnetite (Fe<sub>3</sub>O<sub>4</sub>) nanoparticles, *Applied Physics A*, Vol. 111, No.4, hal. 1187–1193.
- Sharifi, P., R, 2013, *Structural Characterization of Opal- based Photonic Crystal*, *disertasi*, Ruhr-Universität Bochum, Bochum, Jerman.
- Stein, VL., Colvin, J , RC Schroden, M, Al-Daous., 2002, *Chem.Mater* 14: 3305.
- Stein, A and J. C. Lytle, 2006, "*Recent Progress in Syntheses and Applications of Inverse Opals and Related Macroporous Materials Prepared by Colloidal Crystal Templating*", in *Annual Review of Nano Research*, edited by C. J. Brinker and G. Cao. Vol. 1, Hal. 1-79.
- Suslick, K. S. dan Price, G. J., 1999, Applications of Ultrasound To Materials Chemistry, *Annu. Rev. Mater. Sci.*, Vol.29, Hal. 295-326.
- Tjahjanto, R.T., Gunlazuardi J,2001, Preparasi Lapisan Tipis TiO<sub>2</sub> sebagai Fotokatalis Keterkaitan antara Ketebalan dan Aktivitas Fotokatalis, *Jurnal Penelitian Universitas Indonesia*, Vol. 5, Hal.81-91.
- Vlasov, Y.A. Bo. X.Z. Sturm, J.C. Norris, D. J., 2001,*On-chip natural assembly of silicon photonic bandgap crystals*,*Nature*, Vol. 414, Hal. 289.
- Wang, L., 2008, Fabrication of 3D photonic crystals withself-assembled colloidal spheres as the template, *Disertasi*, National university of singapore. Singapore.
- Waterhouse, GIN., Mark R, Waterland, 2006, *Opal and Inverse Opal of Photonic Crystal : Fabrication and Characterization*. *Chemistry Dept.*, University of Auckland, Selandia Baru, Vol. 26, Hal 356-368.
- Woodley, S. M., dan Catlow, C. R. A., 2009, Structure prediction of titania phases: Implementation of Darwinian versus Lamarckian concepts in an Evolutionary Algorithm, *Computational Material Science*, Vol. 45, No.1, Hal. 84-95.

Khair, 2016, Penjelasan lengkap mengenai mikroskop cahaya,  
<http://berkahkhair.com>, diakses April 2018.

