

DAFTAR PUSTAKA

- Allen, T. Cullis, Pieter. 2004. "Drug Delivery Systems : Entering the Mainstream." *American Association for the Advancement of Science* 303(5665): 1818–22.
- Andrade, A. L. et al. 2009. "Synthesis and Characterization of Magnetic Nanoparticles Coated with Silica through a Sol-Gel Approach." *Cerâmica* 55(336): 420–24.
- Andrade, A L. 2009. "Synthesis and Characterization of Magnetic Nanoparticles Coated with Silica through a Sol-Gel Approach (Síntese e Caracterização de Nanopartículas Magnéticas Revestidas Com Sílica Através de Um Processo Sol-Gel)." 55: 420–24.
- Beck, J. S. et al. 1992. "A New Family of Mesoporous Molecular Sieves Prepared with Liquid Crystal Templates." *Journal of the American Chemical Society* 114(27): 10834–43.
- Bharti, Charu, Neha Gulati, Upendra Nagaich, and AshokKumar Pal. 2015. "Mesoporous Silica Nanoparticles in Target Drug Delivery System: A Review." *International Journal of Pharmaceutical Investigation* 5(3): 124.
- Dai, Liangliang et al. 2016. "Tumor Therapy: Targeted Drug Delivery Systems." *Journal of Materials Chemistry B* 4(42): 6758–72. <http://dx.doi.org/10.1039/C6TB01743F>.
- Deng, Yong-hui et al. 2005. "Investigation of Formation of Silica-Coated Magnetite Nanoparticles via Sol – Gel Approach." 262: 87–93.
- Deng, Yonghui et al. 2008. "Superparamagnetic High-Magnetization Microspheres with an Fe₃O₄@SiO₂ Core and Perpendicularly Aligned Mesoporous SiO₂ Shell for Removal of Microcystins." *Journal of the American Chemical Society* 130(1): 28–29.
- Drmota, Ana, and Andrej Žnidaršič. 2011. "Synthesis and Characterization of Silica Coated Magnetic Nanoparticles." *Informacije MIDE M* 41(3): 202–4.
- El-dib, Fawzia I, Dalia E Mohamed, Omnia A A El-shamy, and Marwa R Mishrif. 2020. "Study the Adsorption Properties of Magnetite Nanoparticles in the Presence of Different Synthesized Surfactants for Heavy Metal Ions Removal." *Egyptian Journal of Petroleum* 29(1): 1–7. <https://doi.org/10.1016/j.ejpe.2019.08.004>.
- Fahlepy, M. R., V. A. Tiwow, and Subaer. 2018. "Characterization of Magnetite (Fe₃O₄) Minerals from Natural Iron Sand of Bonto Kanang Village Takalar for Ink Powder

(Toner) Application.” *Journal of Physics: Conference Series* 997(1).

- Feczko, T., J. Tóth, Gy Dósa, and J. Gyenis. 2011. “Influence of Process Conditions on the Mean Size of PLGA Nanoparticles.” *Chemical Engineering and Processing: Process Intensification* 50(8): 846–53.
- Gao, Fei et al. 2009. “Monodispersed Mesoporous Silica Nanoparticles with Very Large Pores for Enhanced Adsorption and Release of DNA.” *Journal of Physical Chemistry B* 113(6): 1796–1804.
- Ghozali, Agus Imam, and Warlan Sugiyo. 2012. “Fotodegradasi Zat Warna Remazol Red Menggunakan Katalis γ -Fe₂O₃/Fe₃O₄ Core Shell Nanostruktur.” *Indonesian Journal of Chemical Science* 1(1): 1–6.
- Han, Yu, and Jackie Y. Ying. 2004. “Generalized Fluorocarbon-Surfactant-Mediated Synthesis of Nanoparticles with Various Mesoporous Structures.” *Angewandte Chemie - International Edition* 44(2): 288–92.
- Ito, Akira, Masashige Shinkai, Hiroyuki Honda, and Takeshi Kobayashi. 2005. “Medical Application of Functionalized Magnetic Nanoparticles.” *Journal of Bioscience and Bioengineering* 100(1): 1–11.
- Johansson, Emma M. 2010. *Controlling the Pore Size and Morphology of Mesoporous Silica [Elektronisk Resurs]*.
- Karimi, Mahdi et al. 2016. “Smart Mesoporous Silica Nanoparticles for Controlled-Release Drug Delivery.” *Nanotechnology Reviews* 5(2): 195–207.
- Karimi, Z., L. Karimi, and H. Shokrollahi. 2013. “Nano-Magnetic Particles Used in Biomedicine: Core and Coating Materials.” *Materials Science and Engineering: C* 33(5): 2465–75.
- Kulkarni, Et.al. 2014. “Synthesis and Characterization of Superparamagnetic Fe₃O₄@SiO₂ Nanoparticles.” *World Journal of Condensed Matter Physics* 1(1): 49–54.
- Kumar, Challa S.S.R., and Faruq Mohammad. 2011. “Magnetic Nanomaterials for Hyperthermia-Based Therapy and Controlled Drug Delivery.” *Advanced Drug Delivery Reviews* 63(9): 789–808. <http://dx.doi.org/10.1016/j.addr.2011.03.008>.
- Li, Linlin et al. 2011. “Erratum: In Vivo Delivery of Silica Nanorattle Encapsulated Docetaxel for Liver Cancer Therapy with Low Toxicity and High Efficacy (ACS Nano (2010) 4 (6874-6882).” *ACS Nano* 5(1): 679.

- Li, Ying Sing, Jeffrey S. Church, Andrea L. Woodhead, and Filsun Moussa. 2010. "Preparation and Characterization of Silica Coated Iron Oxide Magnetic Nano-Particles." *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy* 76(5): 484–89. <http://dx.doi.org/10.1016/j.saa.2010.04.004>.
- Liong, Monty et al. 2008. "Multifunctional Inorganic Nanoparticles for Imaging, Targeting, and Drug Delivery." 2(5): 889–96.
- Lodha, A. et al. 2012. "Synthesis of Mesoporous Silica Nanoparticles and Drug Loading of Poorly Water Soluble Drug Cyclosporin A." *Journal of Pharmacy and Bioallied Sciences* 4(SUPPL.): 92–94.
- Lu, An Hui, E. L. Salabas, and Ferdi Schüth. 2007. "Magnetic Nanoparticles: Synthesis, Protection, Functionalization, and Application." *Angewandte Chemie - International Edition* 46(8): 1222–44.
- Mascolo, Maria Cristina, Yongbing Pei, and Terry A. Ring. 2013. "Room Temperature Co-Precipitation Synthesis of Magnetite Nanoparticles in a Large Ph Window with Different Bases." *Materials* 6(12): 5549–67.
- Merdekani, S. 2013. *Sintesis Partikel Nanokomposit Fe₃O₄/SiO₂ Dengan Metode Kopresipitasi*.
- Mira, Prilly Virgina, Lufsyi Mahmudin, and Iqbal Iqbal. 2019. "Sintesis Dan Analisis Sifat Magnetik Nanopartikel Magnetit (Fe₃O₄) Berbasis Pasir Besi." *Gravitasi* 17(2): 0–4.
- Moratal, Sheila, Ruiz Tutor, and Santiago Ferr. "Preparation and Characterization of Magnetic Nanoparticles."
- Muflikhah, Muflikhah, Bambang Rusdiarso, Edy Giri Rachman Putra, and Nuryono Nuryono. 2017. "Modification of Silica Coated on Iron Sand Magnetic Material with Chitosan for Adsorption of Au(III)." *Indonesian Journal of Chemistry* 17(2): 264–73.
- Mujiyanti*, Nuryono, Eko Sri Kunarti. 2010. "Sintesis Dan Karakterisasi Silika Gel Dari Abu Sekam Padi Yang Diimobilisasi Dengan 3-(Trimetoksisilil)-1-Propaniol." 4(2): 150–67.
- Nandiyanto, Asep Bayu Dani et al. 2017. "Porous Activated Carbon Particles from Rice Straw Waste and Their Adsorption Properties." *Journal of Engineering Science and Technology* 12(Special Issue 10): 1–11.

- Nandiyanto, Asep Bayu Dani, Rena Zaen, and Rosi Oktiani. 2017. "Correlation between Crystallite Size and Photocatalytic Performance of Micrometer-Sized Monoclinic WO₃ Particles." *Arabian Journal of Chemistry* 13(1): 1283–96.
<https://doi.org/10.1016/j.arabjc.2017.10.010>.
- Nurjanah, Siti. 2018. "Sintesis Dan Karakterisasi Nanopartikel Magnetik Fe₃O₄ Pasir Besi Glagah Kulon Progo Dengan Metode Kopresipitasi." (45): 39.
- O'Donnell, Patrick W., J. Carlos Manivel, Edward Y. Cheng, and Denis R. Clohisy. 2014. "Chemotherapy Influences the Pseudocapsule Composition in Soft Tissue Sarcomas." *Clinical Orthopaedics and Related Research* 472(3): 849–55.
- Pang, J et al. 2012. "Functionalized Mesoporous Silica Particles for Application in Drug Delivery System." (5): 775–88.
- Panigrahi, Ranjana. 2011. "Synthesis And Characterisation Of Silica Coated Magnetite Nanoparticle." *Desertation National Institute of Technology, Rourkela.*: 1–16.
- Paolino, Donatela, Massimo Fresta, Piyush Sinha, and Mauro Ferrari. 2006. "Principles of Controlled Drug Delivery." *Encyclopedia of Medical Devices and Instrumentation*: 437–95.
- Popat, Amirali, Jian Liu, Gao Qing Lu, and Shi Zhang Qiao. 2012. "A PH-Responsive Drug Delivery System Based on Chitosan Coated Mesoporous Silica Nanoparticles." *Journal of Materials Chemistry* 22(22): 11173–78.
- Putri, Nur Rofiqoh Eviana et al. 2020. "Effect of Sonication Time and Particle Size for Synthesis of Magnetic Nanoparticle from Local Iron Sand." *Journal of Engineering Science and Technology* 15(2): 894–904.
- Rahmawati, Retno et al. 2017. "Optimization of Frequency and Stirring Rate for Synthesis of Magnetite (Fe₃O₄) Nanoparticles by Using Coprecipitation- Ultrasonic Irradiation Methods." *Procedia Engineering* 170: 55–59.
<http://dx.doi.org/10.1016/j.proeng.2017.03.010>.
- Rahmawaty, F. Hery, T.S. 2011. "Penerapan Metode Permukaan Respon Untuk Optimalisasi Proses Sealing Pada Pengemasan Produk Makanan Jelly." : 1–6.
- Ren, Yanyan et al. 2012. "Multifunctional Magnetic Fe₃O₄ Nanoparticles Combined with Chemotherapy and Hyperthermia to Overcome Multidrug Resistance." *International Journal of Nanomedicine* 7: 2261–69.

- Riyanto, Agus. 2019. "Preparasi Dan Karakteristik Fisis Nanopartikel Magnetit (Fe_3O_4)."
Jurnal Fisika Flux: Jurnal Ilmiah Fisika FMIPA Universitas Lambung Mangkurat
16(1): 35.
- Rosenholm, Jessica M., Cecilia Sahlgren, and Mika Lindén. 2010. "Towards
Multifunctional, Targeted Drug Delivery Systems Using Mesoporous Silica
Nanoparticles - Opportunities & Challenges." *Nanoscale* 2(10): 1870–83.
- Rozi, Tika Yulian, and Astuti Astuti. 2016. "Pengaruh Temperatur Kalsinasi Pada Sintesis
Nanopartikel Silika Pantai Purus Kota Padang." *Jurnal Fisika Unand* 5(4): 351–56.
- Ruiz-Hernández, Et.al. 2011. "Smart Drug Delivery through DNA/Magnetic Nanoparticle
Gates." *ACS Nano* 5(2): 1259–66.
- Santha Moorthy, Madhappan et al. 2017a. "Crown Ether Triad Modified Core-Shell
Magnetic Mesoporous Silica Nanocarrier for PH-Responsive Drug Delivery and
Magnetic Hyperthermia Applications." *New Journal of Chemistry*.
- Serban, Bogdan A., Emma Barrett-Catton, and Monica A. Serban. 2020. "Tetraethyl
Orthosilicate-Based Hydrogels for Drug Delivery—Effects of Their Nanoparticulate
Structure on Release Properties." *Gels* 6(4): 1–10.
- Shaban, Samy M, Jooheon Kang, and Dong-hwan Kim. 2020. "Surfactants : Recent
Advances and Their Applications." *Composites Communications* 22(August): 100537.
<https://doi.org/10.1016/j.coco.2020.100537>.
- Sholihah, Lia Kurnia. 2010. "Sintesis Dan Karakteristik Partikel Nano Fe_3O_4 Yang
Berasal Dari Pasir Besi Dan Fe_3O_4 Bahan Komersial (Aldrich)."
- Slowing, Igor I., Juan L. Vivero-Escoto, Chia Wen Wu, and Victor S.Y. Lin. 2008.
"Mesoporous Silica Nanoparticles as Controlled Release Drug Delivery and Gene
Transfection Carriers." *Advanced Drug Delivery Reviews* 60(11): 1278–88.
- Sudaryanto et al. 2007. "Pembuatan Nanopartikel Magnetik Berlapis Polimer
Biodegradable Dengan Metode Sonokimia." *Jurnal Sains Materi Indonesia* 8(2): 134–
38.
- Taib, Suryani, and Edi Suharyadi. 2015. "Sintesis Nanopartikel Magnetite (Fe_3O_4) Dengan
Template Silika (SiO_2) Dan Karakterisasi Sifat Kemagnetannya." *Indonesian Journal
of Applied Physics* 5(01): 23.

- Thommes, Matthias et al. 2015. "Physisorption of Gases, with Special Reference to the Evaluation of Surface Area and Pore Size Distribution (IUPAC Technical Report)." *Pure and Applied Chemistry* 87(9–10): 1051–69.
- Tsang, Shik Chi, Chih Hao Yu, Xin Gao, and Kin Tam. 2006. "Silica-Encapsulated Nanomagnetic Particle as a New Recoverable Biocatalyst Carrier." *Journal of Physical Chemistry B* 110(34): 16914–22.
- Vallet-Regi, M., A. Rámila, R. P. Del Real, and J. Pérez-Pariente. 2001. "A New Property of MCM-41: Drug Delivery System." *Chemistry of Materials* 13(2): 308–11.
- Yu, Xia, and Yufang Zhu. 2016a. "Preparation of Magnetic Mesoporous Silica Nanoparticles as a Multifunctional Platform for Potential Drug Delivery and Hyperthermia." *Science and Technology of Advanced Materials* 17(1): 229–38.
- Zhang, Jiangjiang et al. 2017. "Ordered Mesoporous NiCo₂O₄ Nanospheres as a Novel Electrocatalyst Platform for 1-Naphthol and 2-Naphthol Individual Sensing Application." *ACS Applied Materials and Interfaces* 9(35): 29771–81.