

DAFTAR PUSTAKA

- Agung M, G. F., Hanafie Sy, M. R., & Mardina, P. (2013). Ekstraksi Silika Dari Abu Sekam Padi Dengan Pelarut KOH. *Konversi*, 2(1), 28. <https://doi.org/10.20527/k.v2i1.125>
- Ainina Nurdin, N., & Syarif, T. (2023). Synthesis Of Silica Gel From Rice Husk Waste (*Oryza Sativa*) With Variation Of Acid Concentrations Sintesis Silika Gel Dari Limbah Sekam Padi (*Oryza Sativa*) Dengan Variasi Konsentrasi Jenis Asam. *Journal of Scientech Research and Development*, 5(1). <https://idm.or.id/JSCR/in>
- Akhtar, K., Khan, S. A., Khan, S. B., & Asiri, A. M. (2018). Scanning electron microscopy: Principle and applications in nanomaterials characterization. In *Handbook of Materials Characterization* (pp. 113–145). Springer International Publishing. https://doi.org/10.1007/978-3-319-92955-2_4
- Aminin, A. L. N., Darmawan, A., Astuti, Y., & Badrul Huda, M. (2015). *Proceedings of the 5 th International Seminar on New Paradigm and Innovation on Natural Sciences and Its Application (5th ISNPINSA)*.
- Aprida, L. F., Dermawan, D., & Bayuaji, R. (2018, December). Identifikasi potensi pemanfaatan limbah karbit dan abu sekam padi sebagai bahan alternatif pengganti semen. In *Conference Proceeding on Waste Treatment Technology* (Vol. 1, No. 1, pp. 13-16).
- Batubara, F., Turmuzi, M., Latifah Syam, Z., & Putri Yunita, T. (2023). Pengaruh Konsentrasi Pelarut NaOH dan Waktu Aging pada Pembuatan Silika Gel dari Fly Ash Batu Bara. *Jurnal Teknik Kimia USU*, 12(2), 124–131. <https://doi.org/10.32734/jtk.v12i2.13314>
- Bunaciu, A. A., Udriştioiu, E. gabriela, & Aboul-Enein, H. Y. (2015). X-Ray Diffraction: Instrumentation and Applications. In *Critical Reviews in Analytical Chemistry* (Vol. 45, Issue 4, pp. 289–299). Taylor and Francis Ltd. <https://doi.org/10.1080/10408347.2014.949616>
- Cahyadi, D., & RI, B. T. K. P. (2020). Standardisasi Cat Pemantul Panas untuk Efisiensi Energi dan Pengurangan Emisi Gas Buang pada Bangunan. *Pertemuan Dan Presentasi Ilmiah Standardisasi*, 123-132.

- Cahyadi, D., & Puspita, D. F. (2019). Pengembangan Formulasi Cat Tembok Emulsi Berbahan Acrylic untuk Meningkatkan Daya Saing IKM. *Jurnal Teknologi Bahan dan Barang Teknik*, 4(1), 1-6.
- Dwi Lestari, Y., Tri Rahayuningtyas, M., Indrati Utami, L., & Nurma Wahyusi, K. (2023). Sintesis Silika Xerogel Dari Sabut Kelapa Dengan Metode Sol-Gel. In *Jurnal Teknik Kimia* (Vol. 17, Issue 2).
- Farhan, M., Nuklirullah, M., & Bahar, F. F. (2023). Pengaruh Penggunaan Abu Sekam Padi sebagai Bahan Tambahan Terhadap Kuat Tekan Beton. *Jurnal Teknik*, 21(1), 58–67. <https://doi.org/10.37031/jt.v21i1.351>
- Faÿ, F., Gouessan, M., Linossier, I., & Réhel, K. (2019). Additives for efficient biodegradable antifouling paints. *International Journal of Molecular Sciences*, 20(2). <https://doi.org/10.3390/ijms20020361>
- Hakim, L., & Nawir, D. M. (2019). Karakterisasi Struktur Material Pasir Bongkahan Galian Golongan C Dengan Menggunakan X-Ray Diffraction (X-RD) Di Kota Palangkaraya. In *Jurnal Jejaring Matematika dan Sains* (Vol. 1, Issue 1). <http://e-journal.upr.ac.id/index.php/JMS>
- Handayani, P. A., Nurjanah, E., & Rengga, W. D. P. (2014). Pemanfaatan Limbah Sekam Padi Menjadi Silika Gel. *Jurnal Bahan Alam Terbarukan*, 3(2). <https://doi.org/10.15294/jbat.v3i2.3698>
- Hanna, S. B., Mansour, T. S., & Ajiba, N. A. (2023). Processing and Characterization of Nano Silica and Iron Oxide Coated Silica Composites Extracted from Rice Hulls. *Silicon*, 15(14), 6099–6111. <https://doi.org/10.1007/s12633-023-02491-7>
- Heidari, A. (2018). X-Ray Diffraction (XRD), Powder X-Ray Diffraction (PXRD) and Energy-Dispersive X-Ray Diffraction (EDXRD) Comparative Study on Malignant and Benign Human Cancer Cells and Tissues under Synchrotron Radiation . *Journal of Oncology Research*, 2(1): 1-14.
- Hermanto, B. M., Noor, E., Arkeman, Y., & Riani, E. (2019). Feasibility Analysis Production Silicon from Bagasse Ashes. *Jurnal Pengelolaan Sumberdaya Alam Dan Lingkungan*, 9(3), 818–825. <https://doi.org/10.29244/jpsl.9.3.818-825>

- Hossain, S. K. S., Mathur, L., & Roy, P. K. (2018). Rice husk/rice husk ash as an alternative source of silica in ceramics: A review. In *Journal of Asian Ceramic Societies* (Vol. 6, Issue 4, pp. 299–313). *Taylor and Francis Ltd.* <https://doi.org/10.1080/21870764.2018.1539210>
- Jaques, V. A. J., Zikmundová, E., Holas, J., Zikmund, T., Kaiser, J., & Holcová, K. (2022). Conductive cross-section preparation of non-conductive painting micro-samples for SEM analysis. *Scientific Reports*, 12(1), 19650.
- Jofrshal, J., Adlim, M., Yusibani, E., Akhyar, A., Rahmayani, R. F. I., & Fajri, R. (2023). Preparation and characterization of indoor heat blockage panel composites made of polyurethane-hybrid-foam-concrete and rice-husk-ash. *Heliyon*, 9(8).
- Kanthasamy, R., Algarni, M., Peng, L. C., Zakaria, N. A., & Zwawi, M. (2023). The effects of solvent on superhydrophobic polyurethane coating incorporated with hydrophilic SiO₂ nanoparticles as antifouling paint. *Polymers*, 15(6), 1328.
- Kasuma, S., & Ningsih, W. (2016). *SINTESIS ANORGANIK*.
- Khan, H., Yerramilli, A. S., D’Oliveira, A., Alford, T. L., Boffito, D. C., & Patience, G. S. (2020). Experimental methods in chemical engineering: X-ray diffraction spectroscopy—XRD. In *Canadian Journal of Chemical Engineering* (Vol. 98, Issue 6, pp. 1255–1266). Wiley-Liss Inc. <https://doi.org/10.1002/cjce.23747>
- Le, C. M., & Le, T. H. (2021). The Study’s Chemical Interaction of the Sodium Silicate Solution with Extender Pigments to Investigate High Heat Resistance Silicate Coating. *Journal of analytical methods in chemistry*, 2021(1), 5510193.
- Le, M. C., Le, T. H., Bui Thi, T. H., Nguyen, Q. D., Do Thi, T. H., & Tran Thi, M. N. (2021). Synthesizing and evaluating the photocatalytic and antibacterial ability of TiO₂/SiO₂ nanocomposite for silicate coating. *Frontiers in Chemistry*, 9, 738969.
- Lestari, A. D. (2022). Analisis Perambatan Retak Dan Hasil Sem Pada Beton Normal Dengan Substitusi Pasir Limbah Sunblasting. *Jurnal Teknik Ilmu dan Aplikasi*, 3(2), 167-173.

- Lin, Y. W., Lee, W. H., & Lin, K. L. (2022). A novel approach for preparing ecological zeolite material from solar panel waste lass and sandblasting waste: microscopic characteristics and humidity control performance. *Journal of Materials Research and Technology*, 19, 4128-4140.
- Lubis, I. H., & Koerniawan, M. D. (2018). Reducing Heat Gains and Cooling Loads Through Roof Structure Configurations of A House in Medan. *IOP Conference Series: Earth and Environmental Science*, 152(1). <https://doi.org/10.1088/1755-1315/152/1/012008>
- Lusiana, U., & Cahyanto, H. A. (2014). Penggunaan kaolin Kalimantan Barat sebagai pigmen extender dalam pembuatan cat tembok emulsi. *BIOPROPAL INDUSTRI*, 5(2), 45-51.
- Mahović Poljaček, S., Tomašegović, T., Leskovšek, M., & Stanković Elesini, U. (2021). Effect of SiO₂ and TiO₂ nanoparticles on the performance of UV visible fluorescent coatings. *Coatings*, 11(8), 928.
- Malewska, E., Prociak, A., Vevere, L., Vanags, E., Zemla, M., Uram, K., ... & Bryk, M. (2022). New thermo-reflective coatings for applications as a layer of Heat Insulating Materials. *Materials*, 15(16), 5642.
- Manurung, P., & Karo-Karo, P. (2017). Analisis dan Karakterisasi Kandungan Silika (SiO₂) sebagai Hasil Ekstraksi Batu Apung (Pumice). In *JURNAL Teori dan Aplikasi Fisika* (Vol. 05, Issue 02).
- Millah, S. F., & Dwandaru, W. S. B. (2024). Preparasi Dan Karakterisasi Carbon Nanodots Berbahan Dasar Limbah Kulit Jagung Sebagai Zat Aditif Pembuatan Edible Film. *Jurnal Ilmu Fisika dan Terapannya (JIFTA)*, 11(1), 72-84.
- Paramitha, T., Saputra, T. R., Aliah, A. N., Tarigan, A. V., & Ghozali, M. (2019). Karakterisasi Silika Dari Abu Ampas Tebu [Characterization of Silica from Sugarcane Bagasse Ash]. *KOVALEN*, 5(3), 290–298.
- Parcianello, G., Bernardo, E., & Colombo, P. (2013). Cordierite ceramics from silicone resins containing nano-sized oxide particle fillers. *Ceramics International*, 39(8), 8893-8899.
- P., Tio, S., Hardiyanto, S., Aji, M. P., & Yulianto, A. (2017). *Unnes Physics Journal*. In UPJ (Vol. 6, Issue 1). <http://journal.unnes.ac.id/sju/index.php/upj>

- Pisello, A. L. (2017). State of the art on the development of cool coatings for buildings and cities. In *Solar Energy* (Vol. 144, pp. 660–680). Elsevier Ltd. <https://doi.org/10.1016/j.solener.2017.01.068>
- Prameswara, G., Sariwahyuni, S., Buwardah, S., Prasetya, F., Azwar, M., & Syafri, R. (2023). Penerapan Teknologi Tepat Guna Pembuatan Silika Nano Partikel (SNP) dari Abu Sekam Padi (ASP) pada UKM Penggilingan Padi Gowa. *Journal of Community Services in Sustainability*, 1(2), 69–76. <https://doi.org/10.52330/jocss.v1i2.187>
- Rahman, A., & Mulana, F. (2014). Studi Pembuatan Cat Tembok Emulsi dengan Menggunakan Kapur sebagai Bahan Pengisi. *Jurnal Rekayasa Kimia & Lingkungan*, 10(2). <https://doi.org/10.23955/rkl.v10i2.2421>
- Ratanachotinun, J., & Pairojn, P. (2021). Pengembangan Cat dengan Silica Aerogel untuk Isolasi Termal dan Penghematan Energi. In *Jurnal Energi Internasional* (Vol. 21). www.onlinedoctranslator.com
- Ruiz-Cañas, M. C., Quintero, H. I., Corredor, L. M., Manrique, E., & Romero Bohorquez, A. R. (2020). New nanohybrid based on hydrolyzed polyacrylamide and silica nanoparticles: Morphological, structural and thermal properties. *Polymers*, 12(5), 1152.
- Riveros, H., & Garza, C. (1986). Rice husks as a source of high purity silica. *Journal of Crystal Growth*, 75(1), 126–131. [https://doi.org/10.1016/0022-0248\(86\)90233-2](https://doi.org/10.1016/0022-0248(86)90233-2)
- Safitri, O., Alrasyid, H., & Udyani, K. (2020). Pembuatan Silika Termodifikasi Dari Sekam Padi Sebagai Adsorben Logam Berat Pada Limbah Cair [REVIEW]. In *JURNAL ENVIROTEK* (Vol. 12).
- Sawitri, D., Adiati, R. F., Febiola, C. C., Taufan, I., & Fadhilah, N. (2014). Studi Komparasi Sifat Fotokatalis Dan Aglomeritas Nanopartikel TiO₂ Sebagai Pengaruh Dispersant Etilen Glikol Dan Triton X 100 Dalam Dirt-free Paint. *Jurnal Fisika*, 4(1).
- Simatupang, L., & Devi, D. (2016). The preparation and characterization of Sinabung volcanic ash as silica based adsorbent. In *Jurnal Pendidikan Kimia* (Vol. 8, Issue 3). <http://jurnal.unimed.ac.id/2012/index.php/jpk>

- Simpson, A., Fitton, R., Rattigan, I. G., Marshall, A., Parr, G., & Swan, W. (2019). Thermal performance of thermal paint and surface coatings in buildings in heating dominated climates. *Energy and Buildings*, 197, 196–213. <https://doi.org/10.1016/j.enbuild.2019.04.027>
- Solano, R., Patiño-Ruiz, D., & Herrera, A. (2020). Preparation of modified paints with nano-structured additives and its potential applications. *Nanomaterials and Nanotechnology*, 10. <https://doi.org/10.1177/1847980420909188>
- Tryba, B., Wrobel, R. J., Homa, P., & Morawski, A. W. (2015). Improvement of photocatalytic activity of silicate paints by removal of K₂SO₄. *Atmospheric environment*, 115, 47-52.
- Utary, C. M., Nurlaila, R., Ishak, I., Sylvia, N., & Meriatna, M. (2023). Pengaruh Waktu Dan Suhu Pembakaran Abu Sekam Padi Pada Proses Ekstraksi Silika Dengan Pelarut NaOH. *Chemical Engineering Journal Storage (CEJS)*, 3(4), 469. <https://doi.org/10.29103/cejs.v3i4.9795>
- Wulan Sari, N., & Fajri, M. (2018). Analisis Fitokimia Dan Gugus Fungsi Dari Ekstrak Etanol Pisang Goroho Merah (*Musa Acuminata* (L)) (Vol. 2, Issue 1).
- Zhang, L., Xing, Z., Zhang, H., Li, Z., Wu, X., Zhang, X., ... & Zhou, W. (2016). High thermostable ordered mesoporous SiO₂–TiO₂ coated circulating-bed biofilm reactor for unpredictable photocatalytic and biocatalytic performance. *Applied Catalysis B: Environmental*, 180, 521-529.
- Zhu, Y., Zhu, W., Li, Z., Feng, Y., Qi, W., Li, S., ... & Chen, M. (2023). Enhancement of wood coating properties by adding silica sol to UV-curable waterborne acrylics. *Forests*, 14(2), 335.
- Zou, Y., & Yang, T. (2019). Rice husk, rice husk ash and their applications. In *Rice Bran and Rice Bran Oil: Chemistry, Processing and Utilization* (pp. 207–246). Elsevier. <https://doi.org/10.1016/B978-0-12-812828-2.00009-3>