

## DAFTAR PUSTAKA

- Abdulkareem AlMashhadani, H., Khadom, A. A., Khadhim, M. M., 2022, Effect of Poly Eugenol coating on surface treatment of grade 23 titanium alloy by micro arc technique for dental application. *Results in Chemistry* **4**: 100555. <https://doi.org/10.1016/j.rechem.2022.100555>
- Ait Yassine, Y., Lakhel, M., Labchir, N., Zantalla, E., Saad, E., Sannad, M., 2023, Kinetic Study of the Aging and Overaging of Alloy Pb0.058%Ca0.12%Sr1.09%Sn for Battery Grids. *Coatings* **13** DOI: 10.3390/coatings13091534.
- Arceo, L. G. D. B., González Reyes, L., Rivera Olvera, J. N., Medina Ovando, A., Garibay Febles, V., 2019, Intercalated Intermetallic Compounds AlTi<sub>3</sub> and Fe<sub>2</sub>Ti in Microrods and Microtubes Obtained by Invariant Reaction of Mechanically Milled System Al<sub>43</sub>Ti<sub>36</sub>Fe<sub>21</sub>. *Materials* **12** DOI: 10.3390/ma12233806.
- Arun Kumar, S., Jayaraj, J., Srinivasan, A., 2022, *Corrosion Behaviour of Magnesium Alloys and Chemical Conversion Coatings for their Improved Corrosion Resistance*. A Treatise on Corrosion Science, Engineering and Technology. U. Kamachi Mudali, T. Subba Rao, S. Ningshen et al. Singapore, Springer Nature Singapore: 315-330. 10.1007/978-981-16-9302-1\_18
- Birnie, D. P., 2004, *Spin Coating Technique*. Sol-Gel Technologies for Glass Producers and Users. M. A. Aegerter and M. Mennig. Boston, MA, Springer US: 49-55. 10.1007/978-0-387-88953-5\_4
- Bunaciu, A. A., Udriștioiu, E. g., Aboul-Enein, H. Y., 2015, X-Ray Diffraction: Instrumentation and Applications. *Critical Reviews in Analytical Chemistry* **45**(4): 289-299. 10.1080/10408347.2014.949616
- Catt, K., Li, H., Cui, X. T., 2017, Poly (3,4-ethylenedioxythiophene) graphene oxide composite coatings for controlling magnesium implant corrosion. *Acta Biomaterialia* **48**: 530-540. <https://doi.org/10.1016/j.actbio.2016.11.039>
- Chaudhary, V., Sharma, S., 2019, Suspension polymerization technique: parameters affecting polymer properties and application in oxidation reactions. *Journal of Polymer Research* **26**(5): 102. 10.1007/s10965-019-1767-8
- Chen, J., Yao, B., Li, C., Shi, G., 2013, An improved Hummers method for eco-friendly synthesis of graphene oxide. *Carbon* **64**: 225-229. <https://doi.org/10.1016/j.carbon.2013.07.055>
- Chen, X. W., Zhang, M., Zhang, D. F., Cai, L. P., Song, H., Zeng, D. Z., 2023, The effect of addition of K<sub>2</sub>ZrF<sub>6</sub> on the structures and properties of AZ31 magnesium alloy MAO coating. *Journal of Alloys and Compounds* **966**: 171474. <https://doi.org/10.1016/j.jallcom.2023.171474>
- Chen, Y., Zou, C., Mastalerz, M., Hu, S., Gasaway, C., Tao, X., 2015, Applications of Micro-Fourier Transform Infrared Spectroscopy (FTIR) in the Geological Sciences—A Review. *International Journal of Molecular Sciences* **16**, 30223-30250 DOI: 10.3390/ijms161226227.

- Dreyer, D. R., Park, S., Bielawski, C. W., Ruoff, R. S., 2010, The chemistry of graphene oxide. *Chemical Society Reviews* **39**(1): 228-240. [10.1039/B917103G](https://doi.org/10.1039/B917103G)
- Girão, A. V., Caputo, G., Ferro, M. C., 2017, *Chapter 6 - Application of Scanning Electron Microscopy–Energy Dispersive X-Ray Spectroscopy (SEM-EDS)*. Comprehensive Analytical Chemistry. T. A. P. Rocha-Santos and A. C. Duarte, Elsevier. **75**: 153-168. <https://doi.org/10.1016/bs.coac.2016.10.002>
- Gokmen, M. T., Du Prez, F. E., 2012, Porous polymer particles—A comprehensive guide to synthesis, characterization, functionalization and applications. *Progress in Polymer Science* **37**(3): 365-405. <https://doi.org/10.1016/j.progpolymsci.2011.07.006>
- Gupta, R. K., Mensah-Darkwa, K., Kumar, D., 2014, Corrosion Protective Conversion Coatings on Magnesium Disks Using a Hydrothermal Technique. *Journal of Materials Science & Technology* **30**(1): 47-53. <https://doi.org/10.1016/j.jmst.2013.07.012>
- Hashmi, A. W., Mali, H., Meena, A., Saxena, K., Valerga, A., Buddhi, D., 2022, A newly developed coal-ash-based AFM media characterization for abrasive flow finishing of FDM printed hemispherical ball shape. *International Journal on Interactive Design and Manufacturing (IJIDeM)* **17**: 1-16. [10.1007/s12008-022-00982-2](https://doi.org/10.1007/s12008-022-00982-2)
- Honarvar, M., Zhang, Y., Mahmoodi, A., Xu, G., Yu, J., Wu, J., Shi, X., 2022, Nanocomposite organic coatings for corrosion protection of metals: A review of recent advances. *Progress in Organic Coatings* **162**: 106573. <https://doi.org/10.1016/j.porgcoat.2021.106573>
- Hou, Y., Lv, S., Liu, L., Liu, X., 2020, High-quality preparation of graphene oxide via the Hummers' method: Understanding the roles of the intercalator, oxidant, and graphite particle size. *Ceramics International* **46**(2): 2392-2402. <https://doi.org/10.1016/j.ceramint.2019.09.231>
- Kangishwar, S., Radhika, N., Sheik, A. A., Chavali, A., Hariharan, S., 2023, A comprehensive review on polymer matrix composites: material selection, fabrication, and application. *Polymer Bulletin* **80**(1): 47-87. [10.1007/s00289-022-04087-4](https://doi.org/10.1007/s00289-022-04087-4)
- Kumar B, N., Kumar S, S., 2022, Magnesium role in additive manufacturing of biomedical implants – Challenges and opportunities. *Additive Manufacturing* **55**: 102802. <https://doi.org/10.1016/j.addma.2022.102802>
- Limbani, T., Mahesh, A., 2023, Study of brush coating and spin coating on stannic oxide thin film for the electron transport layer in a perovskite solar cell. *Nano-Structures & Nano-Objects* **35**: 101010. <https://doi.org/10.1016/j.nanoso.2023.101010>
- Mahajan, M. S., Mahulikar, P. P., Gite, V. V., 2020, Eugenol based renewable polyols for development of 2K anticorrosive polyurethane coatings. *Progress in Organic Coatings* **148**: 105826. <https://doi.org/10.1016/j.porgcoat.2020.105826>
- Marks, T. J., 2006, Introduction: Polymerization. *Proceedings of the National Academy of Sciences* **103**(42): 15288-15288. doi:10.1073/pnas.0606076103

- Moharana, S., Kar, S. K., Mishra, M. K., Mahaling, R. N., 2019, *Synthesis and Properties of Graphene and Graphene Oxide-Based Polymer Composites*. Surface Engineering of Graphene. S. Sahoo, S. K. Tiwari and G. C. Nayak. Cham, Springer International Publishing: 175-201. 10.1007/978-3-030-30207-8\_7
- Nayak, S. R., Mohana, K. N. S., Rajitha, K., Madhusudhana, A. M., Naik, S. R., 2023, Silver-Decorated Reduced Graphene Oxide–Sulfonated Polyaniline Ternary Nanocomposite: A Highly Reliable Anti-Corrosion Coating Material for Mild Steel. *Journal of Materials Engineering and Performance*. 10.1007/s11665-023-08796-3
- Necolau, M.-I., Pandeale, A.-M., 2020, Recent Advances in Graphene Oxide-Based Anticorrosive Coatings: An Overview. *Coatings* **10** DOI: 10.3390/coatings10121149.
- Norrman, K., Ghanbari-Siahkali, A., Larsen, N. B., 2005, 6 Studies of spin-coated polymer films. *Annual Reports Section "C" (Physical Chemistry)* **101**(0): 174-201. 10.1039/B408857N
- Parisi, O. I., Curcio, M., Puoci, F., 2015, *Polymer Chemistry and Synthetic Polymers*. Advanced Polymers in Medicine. F. Puoci. Cham, Springer International Publishing: 1-31. 10.1007/978-3-319-12478-0\_1
- Pathak, A. K., Borah, M., Gupta, A., Yokozeki, T., Dhakate, S. R., 2016, Improved mechanical properties of carbon fiber/graphene oxide-epoxy hybrid composites. *Composites Science and Technology* **135**: 28-38. <https://doi.org/10.1016/j.compscitech.2016.09.007>
- Prasetya, N., Ngadiwiyana, N., Ismiyanto, I., Sarjono, P., 2019a, Synthesis of copolymer eugenol crosslinked with divinyl benzene and preliminary study on its antibacterial activity. *IOP Conference Series: Materials Science and Engineering* **509**: 012102. 10.1088/1757-899X/509/1/012102
- Prasetya, N. B. A., Ajizan, A. I., Widodo, D. S., Ngadiwiyana, N., Gunawan, G., 2023, A polyeugenol/graphene composite with excellent anti-corrosion coating properties. *Materials Advances* **4**(1): 248-255. 10.1039/D2MA00875K
- Prasetya, N. B. A., Ngadiwiyana, Ismiyanto, Sarjono, P. R., 2019b, Synthesis of copolymer eugenol crosslinked with divinyl benzene and preliminary study on its antibacterial activity. *IOP Conference Series: Materials Science and Engineering* **509**(1): 012102. 10.1088/1757-899X/509/1/012102
- Prasetya, N. B. A., Ngadiwiyana, N., Ismiyanto, I., Sarjono, P. R., 2020, Effects of percent weight of divinylbenzene as crosslinking agent on the properties of eugenol–divinylbenzene copolymers. *Journal of Physics: Conference Series* **1524**(1): 012089. 10.1088/1742-6596/1524/1/012089
- Prasetya, N. B. A., Putri, M. R., Ngadiwiyana, Gunawan, 2024, Polyeugenol-gum arabic/graphene oxide composite coating for high performance anticorrosion material. *Case Studies in Chemical and Environmental Engineering* **9**: 100658. <https://doi.org/10.1016/j.cscee.2024.100658>
- Rabha, S., Saikia, B. K., 2020, 18 - *Advanced micro- and nanoscale characterization techniques for carbonaceous aerosols*. Handbook of

- Nanomaterials in Analytical Chemistry. C. Mustansar Hussain, Elsevier: 449-472. <https://doi.org/10.1016/B978-0-12-816699-4.00018-9>
- Razaq, A., Bibi, F., Zheng, X., Papadakis, R., Jafri, S. H., Li, H., 2022, Review on Graphene-, Graphene Oxide-, Reduced Graphene Oxide-Based Flexible Composites: From Fabrication to Applications. *Materials* **15** DOI: 10.3390/ma15031012.
- Samudrala, C. S. K., Radhi, P. K. S., Soppari Murthy, B., 2022, Metal, ceramics and polymer nano-composites for various applications: A review. *Materials Today: Proceedings* **56**: 1120-1128. <https://doi.org/10.1016/j.matpr.2021.10.316>
- Shamaila, S., Sajjad, A. K. L., Iqbal, A., 2016, Modifications in development of graphene oxide synthetic routes. *Chemical Engineering Journal* **294**: 458-477. <https://doi.org/10.1016/j.cej.2016.02.109>
- Siddiqua, A., Ranjha, N. M., Rehman, S., Shoukat, H., Ramzan, N., Sultana, H., 2022, Preparation and characterization of methylene bisacrylamide crosslinked pectin/acrylamide hydrogels. *Polymer Bulletin* **79**(9): 7655-7677. 10.1007/s00289-021-03870-z
- Singh, J., Wahab Hashmi, A., Ahmad, S., Tian, Y., 2024, Critical review on biodegradable and biocompatibility magnesium alloys: Progress and prospects in bio-implant applications. *Inorganic Chemistry Communications*: 113111. <https://doi.org/10.1016/j.inoche.2024.113111>
- Singh, P. P., Dixit, K., Sinha, N., 2022, A sol-gel based bioactive glass coating on laser textured 316L stainless steel substrate for enhanced biocompatibility and anti-corrosion properties. *Ceramics International* **48**(13): 18704-18715. <https://doi.org/10.1016/j.ceramint.2022.03.144>
- Sivashanmugam, N., Harikrishna, K. L., 2024, A Review on the Corrosion Performance of Magnesium Alloys in Biomedical Applications. *Engineering Proceedings* **61** DOI: 10.3390/engproc2024061019.
- Titus, D., James Jebaseelan Samuel, E., Roopan, S. M., 2019, *Chapter 12 - Nanoparticle characterization techniques*. Green Synthesis, Characterization and Applications of Nanoparticles. A. K. Shukla and S. Iravani, Elsevier: 303-319. <https://doi.org/10.1016/B978-0-08-102579-6.00012-5>
- Ulwali, R., Abbas, N., Alaubydi, M., 2024, *Green Synthesis and Study Physical Properties of Copper Iodide Nanoparticles and its Applications in Vivo and in Vitro*. 10.13140/RG.2.2.13193.21600
- Vinoth Kumar, C., Rajyalakshmi, G., Kartha, J., 2022, Insights on Anti-corrosion Coating of Magnesium Alloy: A Review. *Journal of Bio- and Tribo-Corrosion* **9**(1): 13. 10.1007/s40735-022-00732-7
- Wan, C., Chen, B., 2012, Reinforcement and interphase of polymer/graphene oxide nanocomposites. *Journal of Materials Chemistry* **22**(8): 3637-3646. 10.1039/C2JM15062J
- Weill, A., 1986, *The Spin Coating Process Mechanism*. The Physics and Fabrication of Microstructures and Microdevices, Berlin, Heidelberg, Springer Berlin Heidelberg.