

BIBLIOGRAPHY

- Artiushenko, O., da Silva, R. F., & Zaitsev, V. (2023). Recent advances in functional materials for rare earth recovery: A review. *Sustainable Materials and Technologies*, 37, e00681. <https://doi.org/10.1016/j.susmat.2023.e00681>
- Badenko, V., Yadykin, V., Kamsky, V., Mohireva, A., Bezborodov, A., Melekhin, E., & Sokolov, N. (2024). Method for Developing the System Architecture of Existing Industrial Objects for Digital Representation Tasks. *Systems*, 12(9), 355. <https://doi.org/10.3390/systems12090355>
- Bauer, F., & Fuenfschilling, L. (2019). Local initiatives and global regimes – Multi-scalar transition dynamics in the chemical industry. *Journal of Cleaner Production*, 216, 172–183. <https://doi.org/10.1016/j.jclepro.2019.01.140>
- Berthon, P., Yalcin, T., Pehlivan, E., & Rabinovich, T. (2024). Trajectories of AI technologies: Insights for managers. *Business Horizons*, 67(5), 461–470. <https://doi.org/10.1016/j.bushor.2024.03.002>
- Feng, Y., Yang, S., Xia, L., Wang, Z., Suo, N., Chen, H., Long, Y., Zhou, B., & Yu, Y. (2019). In-situ ion exchange electrocatalysis biological coupling (i-IEEBC) for simultaneously enhanced degradation of organic pollutants and heavy metals in electroplating wastewater. *Journal of Hazardous Materials*, 364, 562–570. <https://doi.org/10.1016/j.jhazmat.2018.10.068>
- F.G. Reis, I., Gonçalves, I., A.R. Lopes, M., & Henggeler Antunes, C. (2021). Business models for energy communities: A review of key issues and trends. *Renewable and Sustainable Energy Reviews*, 144, 111013. <https://doi.org/10.1016/j.rser.2021.111013>

- Kar, S., Sanderson, H., Roy, K., Benfenati, E., & Leszczynski, J. (2022). Green Chemistry in the Synthesis of Pharmaceuticals. *Chemical Reviews*, 122(3), 3637–3710. <https://doi.org/10.1021/acs.chemrev.1c00631>
- Kätelhön, A., Meys, R., Deutz, S., Suh, S., & Bardow, A. (2019). Climate change mitigation potential of carbon capture and utilization in the chemical industry. *Proceedings of the National Academy of Sciences*, 116(23), 11187–11194. <https://doi.org/10.1073/pnas.1821029116>
- Khan, R. U., Salamzadeh, Y., Iqbal, Q., & Yang, S. (2022). The Impact of Customer Relationship Management and Company Reputation on Customer Loyalty: The Mediating Role of Customer Satisfaction. *Journal of Relationship Marketing*, 21(1), 1–26. <https://doi.org/10.1080/15332667.2020.1840904>
- Krä, M., Vogt, L., Härdtlein, C., Schiele, S., & Schilp, J. (2020). Production planning for collaborating resources in cyber-physical production systems. *Procedia CIRP*, 93, 192–197. <https://doi.org/10.1016/j.procir.2020.03.030>
- Pech, M., Vrchota, J., & Bednář, J. (2021). Predictive Maintenance and Intelligent Sensors in Smart Factory: Review. *Sensors*, 21(4), 1470. <https://doi.org/10.3390/s21041470>
- Rissman, J., Bataille, C., Masanet, E., Aden, N., Morrow, W. R., Zhou, N., Elliott, N., Dell, R., Heeren, N., Huckestein, B., Cresko, J., Miller, S. A., Roy, J., Fennell, P., Cremmins, B., Koch Blank, T., Hone, D., Williams, E. D., de la Rue du Can, S., ... Helseth, J. (2020). Technologies and policies to decarbonize global industry: Review and assessment of mitigation drivers through 2070. *Applied Energy*, 266, 114848. <https://doi.org/10.1016/j.apenergy.2020.114848>
- Schulz, E., Karagianni, A., Koch, M., & Fuhrmann, G. (2020). Hot EVs – How temperature affects extracellular vesicles. *European Journal of Pharmaceutics and Biopharmaceutics*, 146, 55–63. <https://doi.org/10.1016/j.ejpb.2019.11.010>

- Serradilla, O., Zugasti, E., Rodriguez, J., & Zurutuza, U. (2022). Deep learning models for predictive maintenance: a survey, comparison, challenges and prospects. *Applied Intelligence*, 52(10), 10934–10964. <https://doi.org/10.1007/s10489-021-03004-y>
- Shamayleh, A., Awad, M., & Farhat, J. (2020). IoT Based Predictive Maintenance Management of Medical Equipment. *Journal of Medical Systems*, 44(4), 72. <https://doi.org/10.1007/s10916-020-1534-8>
- Teymouri, Z., & Shekarchizadeh, H. (2022a). A colorimetric indicator based on copper nanoparticles for volatile sulfur compounds to monitor fish spoilage in intelligent packaging. *Food Packaging and Shelf Life*, 33, 100884. <https://doi.org/10.1016/j.fpsl.2022.100884>
- Wang, L., & Zhao, J. (2024a). *Execution Strategy* (pp. 159–178). https://doi.org/10.1007/978-3-031-55885-6_8
- Wang, L., & Zhao, J. (2024b). *Strategic Blueprint for Enterprise Analytics* (Vol. 150). Springer Nature Switzerland. <https://doi.org/10.1007/978-3-031-55885-6>
- Wang, N., Wang, N., Tan, L., Zhang, R., Zhao, Q., & Wang, H. (2020). Removal of aqueous As(III) Sb(III) by potassium ferrate (K₂FeO₄): The function of oxidation and flocculation. *Science of The Total Environment*, 726, 138541. <https://doi.org/10.1016/j.scitotenv.2020.138541>
- Allen, L., & Cordiner, J. (2024). Knowledge-enhanced data-driven modeling of wastewater treatment processes for energy consumption prediction. *Computers and Chemical Engineering*, 194, 108982. <https://doi.org/10.1016/j.compchemeng.2024.108982>
- Ozaybi, M. Q. B., & Madkhali, A. N. M. et al. (2024). The role of artificial intelligence in drug discovery and development. *Egyptian Journal of Chemistry*, 67(SI), 1541–1547. <https://doi.org/10.21608/ejchem.2024.337877.10835>

- Hsiao, H. H., & Wang, K. J. (2024). HotspotFusion: A generative AI approach to predicting CMP hotspot in semiconductor manufacturing. *IEEE Transactions on Semiconductor Manufacturing*. <https://doi.org/10.1109/TSM.2024.3510376>
- Lin, Y. T. (2024). H2OGAN: A deep learning approach for detecting and generating cyber-physical anomalies. Master's Thesis, Virginia Polytechnic Institute and State University. Blacksburg, VA
- Parida, P. R., Ramalingam, S., & Burila, R. K. (2024). Enterprise architecture frameworks for cloud transformation: Aligning business strategy with cloud migration goals. *Journal of Artificial Intelligence Research and Applications*, 4(1). [https://doi.org/10.46656/access.2025.6.1\(1\)](https://doi.org/10.46656/access.2025.6.1(1))
- Pingilili, A., Letsie, N., & Nzimande, G. et al. (2024). Guiding IT growth and sustaining performance in SMEs through enterprise architecture and information management: A systematic review. Preprints. <https://doi.org/10.20944/preprints202409.1795.v1>
- Nurrosyidah, A., & Rachmannullah, A. F. (2024). A TOGAF-based framework for the enterprise architecture development of smart digital port: A case of container port in Indonesia. *Journal of Manufacturing and Enterprise Information System*, 2(2), 1–7. <https://doi.org/10.52330/jmeis.v2i2.288>
- De la Iglesia, D. H., Paz Santana, J. F., & López Rivero, A. J. (2024). New trends in disruptive technologies, tech ethics, and artificial intelligence. In *Advances in Intelligent Systems and Computing* (Vol. 1459). Springer. <https://doi.org/10.1007/978-3-031-66635-3>
- Krishnaswamy, P., Krothapalli, B., & Kurkute, M. V. (2024). Implementing enterprise architecture frameworks for cloud adoption: Developing a comprehensive roadmap for successful cloud transition. *Australian Journal of Machine Learning Research & Applications*, 4(1). [https://doi.org/10.46656/access.2025.6.1\(1\)](https://doi.org/10.46656/access.2025.6.1(1))

- Alghamdi, H. (2025). Integrating emerging technologies into enterprise architecture: Challenges and opportunities. *Access to Science, Business, Innovation in Digital Economy*, 6(1), 8–24. [https://doi.org/10.46656/access.2025.6.1\(1\)](https://doi.org/10.46656/access.2025.6.1(1))
- Hakkel, K. D., Petruzzella, M., Ou, F., Van Klinken, A., Pagliano, F., Liu, T., Van Veldhoven, R. P. J., & Fiore, A. (2022). Integrated near-infrared spectral sensing. *Nature Communications*, 13(1). <https://doi.org/10.1038/s41467-021-27662-1>
- Filz, M. A., & Thiede, S. (2024). Generative AI in Manufacturing Systems: Reference Framework and Use Cases. *IFAC-PapersOnLine*, 58(27), 238–243. <https://doi.org/10.1016/j.procir.2024.10.082>
- Xu, Q., Zhou, G., Zhang, C., Chang, F., Cao, Y., & Zhao, D. (2024). Generative AI and DT integrated intelligent process planning: a conceptual framework. *International Journal of Advanced Manufacturing Technology*, 133(5–6), 2461–2485. <https://doi.org/10.1007/s00170-024-13861-9>
- Witkowski, A., & Wodecki, A. (2024). A Cross-Disciplinary Knowledge Management Framework for Generative Artificial Intelligence in Product Management: A Case Study From the Manufacturing Sector. *Proceedings of the European Conference on Knowledge Management, ECKM, 2024-Septe*, 921–929. <https://doi.org/10.34190/eckm.25.1.2605>
- Ghobakhloo, M., Fathi, M., Iranmanesh, M., Vilkas, M., Grybauskas, A., & Amran, A. (2024). Generative artificial intelligence in manufacturing: opportunities for actualizing Industry 5.0 sustainability goals. *Journal of Manufacturing Technology Management*, 35(9), 94–121. <https://doi.org/10.1108/JMTM-12-2023-0530>
- Lan, X., & Hua, C. (2023). *Simulation analysis of production scheduling algorithm for intelligent manufacturing cell based on artificial intelligence technology*. <https://doi.org/10.21203/rs.3.rs-2551439/v1>

- Castañé, G., Dolgui, A., Kousi, N., Meyers, B., Thevenin, S., Vyhmeister, E., & Östberg, P. O. (2023). The ASSISTANT project: AI for high level decisions in manufacturing. *International Journal of Production Research*, 61(7), 2288–2306. <https://doi.org/10.1080/00207543.2022.2069525>
- Allen, L., Lu, H., & Cordiner, J. (2024). Knowledge-Enhanced Spatiotemporal Analysis for Anomaly Detection in Process Manufacturing. *Computers in Industry*, 161. <https://doi.org/10.1016/j.compind.2024.104111>
- Amalia, E., & Supriadi, H. (2017). *Development of enterprise architecture in university using TOGAF as framework*. 060004. <https://doi.org/10.1063/1.4985527>
- Dhumale, Y., Bamnote, G., Kale, R., Sawale, G., Chaudhari, A., & Karwa, R. (2024). Generative Modeling Techniques for Simulating Rare Agricultural Events on Prediction of Wheat Yield Production. *2024 2nd DMIHER International Conference on Artificial Intelligence in Healthcare, Education and Industry, IDICAIEI 2024*. <https://doi.org/10.1109/IDICAIEI61867.2024.10842716>
- Garcia-Perez, A., Gomez-Silva, M. J., & de la Escalera-Hueso, A. (2024). A Generative AI approach to improve in-situ vision tool wear monitoring with scarce data. *Journal of Intelligent Manufacturing*. <https://doi.org/10.1007/s10845-024-02379-2>
- Jamwal, A., Agrawal, R., Sharma, M., & Giallanza, A. (2021). Industry 4.0 technologies for manufacturing sustainability: A systematic review and future research directions. In *Applied Sciences (Switzerland)* (Vol. 11, Issue 12). MDPI AG. <https://doi.org/10.3390/app11125725>
- Khan, S., Mehmood, S., & Khan, S. U. (2024). Navigating innovation in the age of AI: how generative AI and innovation influence organizational performance in the manufacturing sector. *Journal of Manufacturing Technology Management*. <https://doi.org/10.1108/JMTM-06-2024-0302>

- Konrad, A., & Professor, V. (2024). Commentary How artificial intelligence can be used in the chemical industry. *Provadis School of International Management and Technology*, 21(2). <https://doi.org/10.17879/96948485076>
- Kotusev, S. (2018). TOGAF-based Enterprise Architecture Practice: An Exploratory Case Study. *Communications of the Association for Information Systems*, 321–359. <https://doi.org/10.17705/1CAIS.04320>
- Li, Z., Fei, F., & Zhang, G. (2022). Edge-to-Cloud IIoT for Condition Monitoring in Manufacturing Systems with Ubiquitous Smart Sensors. *Sensors*, 22(15). <https://doi.org/10.3390/s22155901>
- Riesener, M., Keuper, A., Behnen, L., Schuh, G., Scott, R., Chertov, A., & Maev, R. G. (2024). Synthetic Data-Enhanced Deep Learning For Quality Control Of Automated Welding Processes. *Proceedings of the Conference on Production Systems and Logistics*, 637–646. <https://doi.org/10.15488/17752>
- Rojek, I., Jasiulewicz-Kaczmarek, M., Piechowski, M., & Mikołajewski, D. (2023). An Artificial Intelligence Approach for Improving Maintenance to Supervise Machine Failures and Support Their Repair. *Applied Sciences (Switzerland)*, 13(8). <https://doi.org/10.3390/app13084971>
- Sandu, A. K. (2023). The Role of Artificial Intelligence in Optimizing Rubber Manufacturing Processes. *Asia Pacific Journal of Energy and Environment*, 10(1), 9–18. <https://doi.org/10.18034/apjee.v10i1.747>
- Sundaram, S., & Zeid, A. (2023). Artificial Intelligence-Based Smart Quality Inspection for Manufacturing. *Micromachines*, 14(3). <https://doi.org/10.3390/mi14030570>
- Surovi, N. A., Witherell, P., Mathew, V. S., & Kumara, S. (2024). CURRENT STATE AND BENCHMARKING OF GENERATIVE ARTIFICIAL INTELLIGENCE FOR ADDITIVE MANUFACTURING. *Proceedings of the ASME Design*

Engineering Technical Conference, 2A-2024.
<https://doi.org/10.1115/DETC2024-144076>

The Open Group. (2022). ArchiMate 3.2 Specification.
https://pubs.opengroup.org/architecture/archimate3doc/_archimate_3_2_specification.html