



DAFTAR PUSTAKA

- Agrawal, R., 2021, Sustainable material selection for additive manufacturing technologies: A critical analysis of rank reversal approach. *Journal of Cleaner Production*, Vol.296, pp.126500.
- Ali, N., 2021, *Pembuatan Batik Cap dari Bahan Kertas Karton dan Memberikan Kombinasi Batik Tulis Sebagai Isen*. Fakultas Teknologi dan Informatika (Vol. 9).
- Alim, M. I., Mardiana, D., A, A. D., and Anggoro, D., 2017, *Uji Konduktivitas Material Non Logam. Laporan Praktikum Laboratorium Fisika Material*.
- anet3d.com, 2021, ET-4 All-Metal 3D Printer With Industrial Chipset. Retrieved January 18, 2022, from <https://shop.anet3d.com/products/official-anet-et4-3d-printer>
- anet3d.com, 2022, Anet ET4. <https://anet3d.com/pages/et4>. Retrieved January 8, 2022, from <https://anet3d.com/pages/et4>
- Anyadike, N., 2002, Copper: A material for the new millennium, pp.163.
- ASM International, 2001, *Copper and Copper Alloy*. United State of America: ASM International.
- Bekas, D. G., Hou, Y., Liu, Y., and Panesar, A., 2019, December 15, 3D printing to enable multifunctionality in polymer-based composites: A review. *Composites Part B: Engineering*. Elsevier Ltd.
- Beritasatu.com, 2011, Naiknya Harga Tembaga sebagai Bahan Baku Berdampak pada Pembuat Canting di Pekalongan. Retrieved February 25, 2019, from <https://www.beritasatu.com/fashion/12112-pabrik-canting-pekalongan-terancam-bangkrut.html>
- BSN, 1989, SNI 08-0239-1989 Istilah batik. Jakarta: Badan Standardisasi Nasional.
- BSN, 2019, *SNI 0239:2019 Batik - Pengertian dan istilah*. Jakarta.
- Budiyanto, E., Setiawan, D. A., Supriadi, H., and Ridhuan, K., 2016, Pengaruh Jarak Anoda-Katoda Pada Proses Elektroplating Tembaga Terhadap Ketebalan Lapisan Dan Efisiensi



Katoda Baja Aisi 1020. *Turbo : Jurnal Program Studi Teknik Mesin*, Vol.5, No.1, pp.21–29.

Carolo, L., 2021, Best Professional CAD Software of 2021. *all3dp.com*. Retrieved January 8, 2022, from <https://all3dp.com/1/best-cad-software/>

Carolo, L., and Mashambanhaka, F., 2021, Best Free CAD Software for 3D Printing of 2021. *all3dp.com*. Retrieved January 8, 2022, from <https://all3dp.com/2/best-free-cad-software-for-3d-printing/>

Caviggioli, F., and Ughetto, E., 2019, A bibliometric analysis of the research dealing with the impact of additive manufacturing on industry, business and society. *International Journal of Production Economics*, Vol.208, No.November 2018, pp.254–268.

Chemistry Stackexchange, 2022, Why does increasing electrolyte concentration increase the rate of electrolysis? <https://chemistry.stackexchange.com>. Retrieved July 18, 2023, from <https://chemistry.stackexchange.com/questions/162413/why-does-increasing-electrolyte-concentration-increase-the-rate-of-electrolysis>

Copper Development Association Inc., 2010, Market Data. Retrieved from https://www.copper.org/resources/market_data/images/b10func.jpg

Damisih, D., Fidyaningsih, R., Pravitasari, R. D., Agustanhakri, Aprilia, L., and Purwati, H., 2015, Pembuatan Serbuk Tembaga Berukuran Di Bawah 1 Mikron Dengan Metode Elektrolisis. *Prosiding Seminar Nasional Fisika* (Vol. IV, pp. 127–132).

dino-lite.co.id, 2024, February 9, Produk. <https://www.dino-lite.co.id/produk/page/2/>.

Dudek, P., 2013, FDM 3D Printing Technology in Manufacturing Composite Elements. *Archives of Metallurgy and Materials*, Vol.58, No.4, pp.1415–1418.

Eck, N. J. Van, and Waltman, L., 2017, Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, Vol.111, No.2, pp.1053–1070.

Engineering, S., 1995, Adhesion of advanced overlay coatings : mechanisms and quantitative assessment, Vol.71, pp.201–207.

Ghozali, I., 2016, *Aplikasi analisis multivariete dengan program IBM SPSS 23*. Univ. Diponegoro Press.



Gibson, I., Rosen, D., and Stucker, B., 2015, *Additive manufacturing technologies*. Springer (Vol. 100). Springer.

Goestiandi, C. E., and Darmawan, M., 2020, Kaji Eksperimental Sifat Mekanik Objek Material Thermoplastic Polyurethane Menggunakan Fused Deposition Modeling Additive Manufacturing, Vol.06, No.1, pp.12–14.

Haerudin, A., and Atika, V., 2018, Komposisi Lilin Batik (Malam) Biron untuk Batik Warna Alam pada Kain Katun dan Sutera. *Dinamika Kerajinan dan Batik : MAJALAH ILMIAH*, Vol.35, No.1, pp.25–32.

Haider, F. I., Ani, M. H., and Mahmood, M. H., 2017, Evaluation of the Effects of Copper Electroplating Parameters on the Adhesion Using Response Surface Methodology Evaluation of the Effects of Copper Electroplating Parameters on the Adhesion Using Response Surface Methodology, Vol.No.April,.

Hamidah, I., and Hudha, M. N., 2020, A bibliometric analysis of Covid-19 research using VOSviewer. *Indoneisan Journal of Science & Technology*, Vol.5, No.2, pp.209–216.

Hamidi, K., Wibisono, M. A., and Dharma, I. G. B. B., 2017, Pengembangan Canting Cap Berbahan Plastik Menggunakan Teknologi Additive Manufacturing. *Prosiding Seminar Nasional Teknik Industri Universitas Gadjah Mada 2017*. Yogyakarta: Universitas Gadjah Mada.

Han, J., Kang, H. J., Kim, M., and Kwon, G. H., 2020, Mapping the intellectual structure of research on surgery with mixed reality: Bibliometric network analysis (2000–2019). *Journal of Biomedical Informatics*, Vol.109, No.July, pp.103516.

Hanif, M., Wibisono, M. A., and Dharma, I. G. B. B., 2017, Perancangan Mesin Batik Cap Otomatis Tipe Modul Cap Bergerak. *Prosiding Seminar Nasional Teknik Industri Universitas Gadjah Mada 2017*, pp.87–94.

Hariyanto, I., 2021, Batik Gedhog Kerek sebagai Produk Amenities Hotel di Kabupaten Tuban. *Corak Jurnal Kriya Seni*, Vol.10, No.1, pp.101–108.

Hastuti, L. S. S., and Pristiwati, E., 2010, Tekno Ekonomi Canting Cap Kayu DKB.pdf. *Dinamika Kerajinan dan Batik*, Vol.27, No.1, pp.9–20.



- Heersmink, R., van den Hoven, J., van Eck, N. J., and van den Berg, J., 2011, Bibliometric mapping of computer and information ethics. *Ethics and information technology*, Vol.13, No.3, pp.241–249.
- Hidayat, S. R., Affanti, T. B., Josef, A. I., and Nurcahyanti, D., 2021, Batik stamp canting made of waste paper material as a frugal innovation in batik. *IOP Conference Series: Earth and Environmental Science*, Vol.905, No.1.,
- Ikhsanto, L. N., and Zainuddin, Z., 2020, Analisa kekuatan bending filamen ABS dan PLA pada hasil 3D printer dengan variasi suhu. *Media Mesin: Jurnal Ilmiah Teknik Mesin*, Vol.21, No.1, pp.9–17.
- Iqbal, W., Qadir, J., Tyson, G., Mian, A. N., Hassan, S., and Crowcroft, J., 2019, A bibliometric analysis of publications in computer networking research. *Scientometrics* (Vol. 119). Springer International Publishing.
- Irawan, B. H., Hakim, R., Widiastuti, H., Kamsyah, D., and Sahputra, B., 2019, Pengaruh Temperatur Nozzle Dan Base Plate Pada Mesin Leapfrog Creatr 3D Printer Terhadap Density Dan Surface Roughness Material Abs. *Jurnal Teknologi dan Riset Terapan (JATRA)*, Vol.1, No.1, pp.32–37.
- Jeong, D., and Koo, Y., 2016, Analysis of trend and convergence for science and technology using the VOSviewer. *International Journal of Contents*, Vol.12, No.3, pp.54–58.
- Kemenperin, 2021, Serap 200 Ribu Tenaga Kerja, Ekspor Industri Batik Tembus USD 533 Juta. [www.kemenperin.go.id.](http://www.kemenperin.go.id/) Retrieved November 21, 2022, from <https://kemenperin.go.id/artikel/22830/Serap-200-Ribu-Tenaga-Kerja,-Ekspor-Industri-Batik-Tembus-USD-533-Juta>
- Klapka, O., and Slaby, A., 2018, Visual analysis of search results in scopus database. *International Conference on Theory and Practice of Digital Libraries* (pp. 340–343). Springer.
- Locker, A., 2021, Best 3D Printer Slicer Software of 2021. [all3dp.com](http://all3dp.com/1/best-3d-slicer-software-3d-printer/). Retrieved January 8, 2022, from <https://all3dp.com/1/best-3d-slicer-software-3d-printer/>



- Lusianti, L. P., and Rani, F., 2012, Model diplomasi Indonesia terhadap UNESCO dalam mematenkan batik sebagai warisan budaya Indonesia tahun 2009. *Jurnal Transnasional*, Vol.3, No.2.,
- Mirjat, N. H., Uqaili, M. A., Harijan, K., Mustafa, M. W., Rahman, M. M., and Khan, M. W. A., 2018, Multi-criteria analysis of electricity generation scenarios for sustainable energy planning in Pakistan. *Energies*, Vol.11, No.4, pp.1–33.
- Muyasda, I., and Wibisono, M. A., 2014, *Pengembangan Tool Canting Cap Berbahan Aluminium dengan Proses Subtracting*. Universitas Gadjah Mada.
- Noeraida, N., 2020, Perkembangan publikasi internasional bidang pemantauan radiasi tahun 2011-2019 melalui basisdata Scopus. *Berkala Ilmu Perpustakaan dan Informasi*, Vol.16, No.1, pp.68–82.
- Nurohmad, N., and Eskak, E., 2019, Limbah Kertas Duplex Untuk Bahan Canting Cap Batik. *Dinamika Kerajinan dan Batik : MAJALAH ILMIAH*, Vol.36, No.2, pp.125–134.
- Olivera, S., Muralidhara, H. B., Venkatesh, K., and Gopalakrishna, K., 2016, Evaluation of surface integrity and strength characteristics of electroplated ABS plastics developed using FDM process. *The 17th Asian Pacific Corrosion Control Conference* (pp. 1–6). Mumbai, India.
- Ostertagova, E., Ostertag, O., and Kovac, J., 2014, Methodology and Application of the Kruskal-Wallis Test Eva Ostertagová. *Applied Mechanics and Materials*, Vol.611, pp.115–120.
- Park, G.-J., 2007, *Analytic methods for design practice*. Springer Science & Business Media.
- Phull, G. S., Kumar, S., Walia, R. S., and Singh, H., 2020, Copper Electroforming Optimization for Fused Deposition Modeling Produced ABS Components for Indirect Tooling Applications. *Journal of Advanced Manufacturing Systems*, Vol.19, No.1, pp.15–29.
- Prasetya, V., and Permana T, R. A., 2019, Analisa Penggunaan Silicon Controlled Rectifier Pada Elektroplating Tembaga/Baja Karbon Rendah. *Infotekmesin*, Vol.10, No.1, pp.6–11.



- Prasetyo, R., and Wibisono, M. A., 2018, Pengembangan Canting Cap Berbahan Multiplex untuk Study Case Make to Order pada Produksi Batik Cap. *Prosiding Seminar Nasional Aplikasi Sains & Teknologi* (Vol. 000, pp. 147–155).
- Prasetyowati, E., 2018, Aplikasi Penentuan Harga Pokok Produksi Batik Madura Dengan Metode Activity Based Costing Dan Analisis Regresi Linier. *JUTI: Jurnal Ilmiah Teknologi Informasi*, Vol.16, No.1, pp.48.
- Pujilestari, E., and Basir, M. A., 2017, *Strategi Peningkatan Daya Saing Industri Canting Cap di Pekalongan. Kewirausahaan dalam Multi Perspektif*. Universitas Terbuka.
- Rayna, T., and Striukova, L., 2016, From rapid prototyping to home fabrication: How 3D printing is changing business model innovation. *Technological Forecasting and Social Change*, Vol.102, pp.214–224.
- Roy, R. K., 2010, *A Primer on The Taguchi Method. The Journal of the Operational Research Society* (2nd ed., Vol. 2). Dearborn: Society of Manufacturing Engineers.
- Saleh, A. R., and Sumarni, E., 2016, Studi bibliometrik pada Jurnal Standardisasi pasca terakreditasi (2011 – 2015). *Visi Pustaka*, Vol.18, No.Desember, pp.231–240.
- Saxena, P., Pagone, E., Salonitis, K., and Jolly, M. R., 2021, Sustainability metrics for rapid manufacturing of the sand casting moulds: A Multi-criteria decision-making algorithm-based approach. *Journal of Cleaner Production*, Vol.311, No.January, pp.127506.
- Sthle, L., and Wold, S., 1989, Analysis of variance (ANOVA). *Chemometrics and Intelligent Laboratory Systems*, Vol.6, No.4, pp.259–272.
- Su, C. W., Wang, X. Q., Zhu, H., Tao, R., Moldovan, N. C., and Lobont, O. R., 2020, Testing for multiple bubbles in the copper price: Periodically collapsing behavior. *Resources Policy*, Vol.65, No.November 2019,.
- Suarsana, I. K., 2008, Pengaruh waktu pelapisan nikel pada tembaga dalam pelapisan khrom dekoratif terhadap tingkat kecerahan dan ketebalan lapisan, Vol.2, No.1,.
- Sudarto, S., 2017, *Strategi Pembuatan Canting Cap dari Tembaga untuk Meningkatkan Hasil Kualitas Batik*. Surakarta.



Suharto, Suryanto, Priyo, V. T., Sarana, Hermawan, I., and Suwondo, A., 2014, Bahan Alternatif Pembuatan Canting Batik Cap (CBC). *Prosiding SNST*, Vol.5, pp.25–31.

Susanto, S. S. K., 1980, *Seni Kerajinan Batik Indonesia*. Yogyakarta: Balai Penelitian Batik dan Kerajinan.

Triantaphyllou, E., 2000, *Multi-Criteria Decision Making Methodes:A Comparative Study*. (P. M. Pardalos & D. Hearn, Eds.). Springer-Science+Business Media, B.V.

Tupan, and Rachmawati, R., 2018, Analisis bibliometrik ilmu dan teknologi pangan: Publikasi ilmiah di negara-negara ASEAN. *Khizanah al-Hikmah : Jurnal Ilmu Perpustakaan, Informasi, dan Kearsipan*, Vol.6, No.1, pp.26–40.

Ultimaker, 2024, February 9, Ultimaker Cura. <https://ultimaker.com/software/ultimaker-cura/>.

UNESCO, 2009, *Decision of the Intergovernmental Committee: 4.COM 13.44*. Geneva.

Van Eck, N., and Waltman, L., 2010, Software survey: VOSviewer, a computer program for bibliometric mapping. *scientometrics*, Vol.84, No.2, pp.523–538.

Velasques, M., and Hester, P. T., 2013, A Analysis of Multi-Criteria Decision Making Methods. *International Journal of Operation Research*, Vol.10, No.2, pp.56–66.

Weng, Z., Wang, J., Senthil, T., and Wu, L., 2016, Mechanical and thermal properties of ABS / montmorillonite nanocomposites for fused deposition modeling 3D printing. *JMADE*, Vol.102, pp.276–283.

Wijaya, D. K., Suprijono, H., and Nugroho, D. S., 2020, Optimasi Proses Cutting Mesin CNC Router G-Weike WK1212 dengan Metode Full Factorial Design dan Optimasi Plot Multi Respon. *Jurnal PASTI*, Vol.14, No.1, pp.1–14.

Wijayanti, L., 2019, Pemanfaatan Teknologi Dalam Proses Kreatif Pembuatan Batik : Cap Akrilik. *Seminar Nasional Industri Kerajinan dan Batiak* (pp. 1–10). Yogyakarta: Balai Besar Kerajinan dan Batik.

Xu, W., Jambhulkar, S., Zhu, Y., Ravichandran, D., Kakarla, M., Vernon, B., Lott, D. G., Cornella, J. L., Shefi, O., Miquelard-Garnier, G., Yang, Y., and Song, K., 2021, 3D



UNIVERSITAS
GADJAH MADA

PENGEMBANGAN CANTING CAP BATIK MENGGUNAKAN TEKNOLOGI FUSED DEPOSITION
MODELING DAN ELECTROPLATING
JONI SETIAWAN, Ir. M.K. Herliansyah, ST., MT., Ph.D., IPU. ASEAN Eng.;Ir. Andi Sudiarso, ST.,MT., M.Sc., Ph.D., |
Universitas Gadjah Mada, 2024 | Diunduh dari <http://etd.repository.ugm.ac.id/>

printing for polymer/particle-based processing: A review. *Composites Part B: Engineering*, Vol.223, pp.109102.

Zindani, D., and Kumar, K., 2018, Material selection for turbine seal strips using PROMETHEE-GAIA method. *Materials Today: Proceedings*, Vol.5, No.9, pp.17533–17539.