DAFTAR PUSTAKA

Adena, A.F., Barunawati, S.B., Ruspita, I., 2022, *Pengaruh Ketebalan Pelapis Silver pada Logam Paduan Nikel Kromium terhadap Ketahanan Korosi Gigi Tiruan Cekat*, Yogyakarta: Tesis Fakultas Kedokteran Gigi.

Albina, D., 2005, *Theory and Experience on Corrotion of Waterwalland Superheater Tubes of Waste to Energy Facilities*, Thesis Departement of Earth and Environtment Engineering, Colombia University, p.18-28.

ADA (American Dental Association), 2002, Biocompatibility of dental alloys, *J Am Dent Assoc*, 133:759.

Anusavice, K.J., Shen, C., and Rawls, H.R., 2013, *Phillips' Science of Dental Materials (Anusavice Phillip's Science of Dental Materials),* Elsevier Saunders, p 367-395.

Antoci, V.Jr., Adams, C.S., Parvizi, J., Davidson, H.M., Composto, R.J., Freeman, T.A., Wickstrom, E., Ducheyne, P., Jungkind, D., Shapiro, I.M., et al., 2008, The inhibition of Staphylococcus epidermidis biofilm formation by vancomycin-modified titanium alloy and implications for the treatment of periprosthetic infection, *Biomaterials*, 29, 4684–4690.

Arash, V., Keikhaee, F., Rabiee, S. M., Rajabnia, R., Khafri, S., Tavanafar, S., 2016, Evaluation of Antibacterial Effects of *Silver*-Coated Stainless Steel Orthodontic Brackets, *Journal of Dentistry* (Tehran, Iran), 13(1), 49–54.

Baliga, S., Muglikar, S., Kale, R., 2013, Salivary pH: A diagnostic biomarker, *J Indian Soc Periodontal*, 17(4): 461

Banaszek, K., Klimek, L., 2019, Ti(C, N) as barrier coatings, Coatings, 9(7), 1–14.

Bauer, J.R.O., Loguercio A.D., Reis A., Filho L.E.R., 2006, Microhardness of Ni-Cr alloys under different casting conditions, *Braz Oral Res*,20(1):40-6.

Bardal E., 2004, *Corrosion and protection*, London: Springer-Verlag.

Bhaskar, V., Reddy, V.V., 2010, Biodegradation of nickel and chromium from space maintainers: an in vitro study, *J Indian Soc Pedod Prev Dent.*,28:6–12.

Bonifasius, P. W., 2018, Pengaruh Ketebalan Pelapis Silver Terhadap Konsentrasi Pelepasan Ion Nikel Dan Kromium Pada Logam Campur Kobalt Kromium Remanium® GM 800 Sebagai Bahan Mini Implant Perawatan Ortodontik, Thesis, Universitas Gadjah Mada, p 31-45.

Callister, T.O., 2012, Fundamental of Materials Science and Engineering: An Integrated Approach, 5th ed., New York: John Wiley & Son, Inc, p. 205-6.

Carr, A.B., Brown, D.T., 2016, *Mc Cracken's Removable Partial Prosthodontics*, Elsevier, Indianapolis, hal 5.

Caruso, A.A., Prete, S.D., Ferrara, L., Serra, R., Telesca,D.A., Ruggiero, S., Russo,T., Sivero, L., 2016, Relationship between gasteroesophageal reflux disease and pH nose and alivary: proposal of a simple method outpatient in patient adults, *Open Med (Wars)*, 11(1):381-386

Chowdhury, N.R., MacGregor-Ramiasa, M., Zilm, P., Majewski, P., Vasilev, K., 2016, 'Chocolate' *silver* nanoparticles: synthesis, antibacterial activity and cytotoxicity, *Journal of Colloid and Interface Science*, 482, 151– 158.

Danaei, S.M., Safavi, A., Roeinpeikar, S.M., Oshagh, M., Iranpour, S., Omidkhoda, M., 2011, Ion release from orthodontic brackets in 3 mouth-washes: an in-vitro study. *Am J Orthod Den-tofacial Orthop*,139:730-734.

Devasconcellos, P., Bose, S., Beyenal, H., Bandyopadhyay, A., Zirkle, L.G., 2012, Antimicrobial particulate *silver* coatings on stainless steel implants for fracture management, *Materials Science and Engineering C*., 32(5), 1112–1120.

Denizoglu, S., Yesil, D.Z., Akyalçin S., 2004, Evaluation of ion release from two base-metal allois at various pH levels, *The Journal of International Medical Research*, 32: 33 – 38

Dwivedi, A., Tikku, T., Khanna, R., Maurya, R., Verma, G., dan Murthy, R., 2015, Release of nickel and chromium ions in the saliva of patients with fixed orthodontic appliance: An in-vivo study, *Natl J. Maxillofac Surg*., 6(1), p. 62–66

Elshahawy, W., Watanabe, I., 2014, Biocompatibility of dental alloys used in dental fixed prosthodontics, *Tanta Dental Journal*, 11(2), 150–159.

Eliades T., Athanasiou A.E., 2002, In vivo aging of orthodontic alloys: implication for corrosion potential, nickel release and biocompatibility, *Angle Orthod*,72(3): 222-37.

Ershov, B.; Ershov, V., 2023, Electrochemical mechanism of oxidative dissolution of *silver* nanoparticles in water: effect of size on electrode potential and solubility, *Journal Nanomaterials*, 13, 1907.

Fahmi, M.H., Zamrudy, W., 2021, Studi literatur pengaruh kuat arus, tegangan, suhu dan waktu terhadap pelapisan logam dengan metode *electroplating*, Distilat Jurnal Teknologi Separasi, (7)2.

Fatimah, S., Soekarsono, Iman, P., 2013, Perbandingan pelepasan ion nikel antara empat merek braket stainless steel baru dan daur ulang dalam saliva buatan dengan pH 5, 6 dan 7, Karya Tulis Ilmiah, Yogyakarta: PPDGS Fakultas Kedokteran Gigi Universitas Gadjah Mada; p36-55

Gulsen, C., Akpinar, G., Aydin, A., 2007, The release of elements of dental casting alloy into cell culture medium and artifisial saliva, *Euro J Dent*, 1, p. 86–9.

Godley, R., Starosvetsky, D., Gotman I., 2006, Corrosion behavior of a low modulus β-Ti-45%Nb alloy for use in medical implants, *Journal of Materials Science: Materials in Medicine* 1, 7;63 – 67

Hammond, C.R., 2004, The elements in handbook of chemistry and physics, 81st edition, *CRC press*.

Hanawa, T., 2004, Metal ion release from metal implans, *Materials Science and Engineering*, C24:745-752

Handajani, J., Rini, M.P., 2010, Pemakaian kontrasepsi pil dan suntik menaikkan pH dan volume saliva, *DENTIKA*,15(1), 1

Hardes J., Streitburger A., Ahrens H., Nusselt T., Gebert C., Winkelmann W., 2007, The influence of elementary *silver* versus titanium on osteoblasts behaviour in vitro using human osteosarcoma cell lines. *Sarcoma.* :26539

Houb-Dine, A., Bahije, L., Oualalou, Y., Benyahia, H., Zaoui, F., 2017, Topographic and chemical surface modifications to metal brackets after a period in the mouth, *International Orthodontics*,

Huang, H.H., 2002, Effect of chemical composition on the corrosion behavior of Ni-Cr-Mo dental casting alloys, *J. Biomed. Mater. Res*., 60(3), 458-465.

Iacoban, S., Bolat, G., Munteanu, C., Cailean, D., Trinca, L., Mareci, D., 2015, A comparative study on the corrosion behaviour of CoCr and NiCr dental alloys in saline medium, *Revue Roumaine de Chimie*, 60(10), 949–955.

Kaban, H., Niar, S., Jorena, D., 2010, Menguji kekuatan bahan *electroplating* pelapisan nikel pada substrat besi dengan uji impak (impact test), *Jurnal Penelitian Sains*,3(B), Vol 13

Kanani, N., 2005, *Electroplating: Basic Principles, Processes and Practice*, Elsevier, p 219-223.

Karimihaghighi, R., dan Naghizadeh, M., 2023, Effect of alloying elements on aqueous corrosion ofnickel-based alloys at high temperatures: A review, *Materials and Corrosion Journal*, 74:1246–1255

Kitagawa, M., Murakami, S., Akashi, Y., Oka, H., Shintani, T., Ogawa, I., Inoue, T., Kurihara, H., 2019, Current status of dental metal allergy in Japan, *Journal of Prosthodontic Research*, 63(3), 309–312.

Kodaira, H., Ohno, K., Fukase, N., Kuroda, M., Adachi, S., Kikuchi, M., 2013, Release and systemic accumulation of heavy metals from preformed crowns used in restoration of primary teeth, *J. Oral Sci* ,55:161–165.

Kruger, J., Begum, S., 2016, *Corrosion of Metals: Overview, Reference Module in Materials Science and Materials Engineering*, 1–10.

Lepora, N., 2006, *The Elements Chromium,* New York: Marshall Cavendish Benchmark.

Liang, R., Xu, Y., Zhao, M., Han, G., Li, J., Wu, W., Dong, M., Yang, J., Liu, Y., 2020, Properties of *silver* contained coatings on CoCr alloys prepared by vacuum plasma spraying, *Materials Science & Engineering C*, 106:110156.

Liliana, P., Elena, S.C., Virgil, C.L., Laurențiu, Daniel, P.S., 2018, Corrosion behavior of Ni-Cr dental casting alloys, *Int. J. Electrochem. Sci.*, (13):410 – 423

Lin, H.Y., Bowers, B., Wolan, J.T., Cai Z., Bumgardner, J.D., 2008, Metallurgical, surface, and corrosion analysis of Ni-Cr dental casting alloys before and after porcelain firing, *Dental Material*, Mar;24(3):378-85

Liu, J., Hurt, R.H., 2010, Ion release kinetics and particle persistence in aqueous nano-*silver* colloids, *Environ. Sci. Technol*, 44, 2169–2175.

Lopez, A.J.F., Martinez, G.J., Anglada, J.M., Peraire, M., 2006, Ion release from dental casting alloys as assessed by a continuous flow system: nutritional and toxicological implications, *J Dent Mater*, 6:836e41.

Lucchetti, M.C., Fratto, G., Valeriani, F., Vittori, E. D., Giampaoli, S., Papetti, P., Spica, V.R., Manzon, L., 2015, Cobalt-chromium alloys in dentistry: an evaluation of metal ion release, *The Journal of Prosthetic Dentistry*, 114(4): 602-608.

Ma, R., Levard, C., Marinakos, S.M., Cheng, Y., Liu, J., Michel, F.M., Brown, G.E., Lowry, G.V., 2012, Size-controlled dissolution of organic-coated *silver* nanoparticles, *Environ. Sci. Technol*, 46, 752–759

Malikurrahman, M., 2015, Pengaruh penambahan konsentrasi ZnSO4 pada baja ASTM A 213 T11 terhadap ketebalan, kelekatan dan laju korosi. Surabaya: Tesis Fakultas Teknologi Industri ITS

Mary, J., dan Rajendran, S., 2014, Corrosion Behavior of Cu-Ni-Ti In Artificial Blood Plasma In Presence Of Cholesterol, Zastita materijala, 55(3), p. 244 – 250.

Matkovic, T., Matkovic P., Malina J., 2004, Effects of Ni and Mo on the microstructure and some other properties of Co-Cr dental alloys, *J. Alloys Compd*., Mar 10;366(1-2):293-297.

McGregor, D., Baan, R., Partensky, C., Rice, J., Wilbourn, J., 2000, Evaluation of the carcinogenic risks to humans associated with surgical implants and other foreign bodies—A report of an IARC monographs programme meeting, *Eur. J. Cancer*, 36:307–313.

Menek, N., Basaran, S., Karaman, Y., Ceylan, G., Sen Tunk, E., 2012, Investigation of nickel Ion release from stainless steel crowns by square wave voltammetry, *Int J Electrochem*, 7:6465–6471.

Meran, Z., Besinis, A., De Peralta, T., Handy, R. D., 2018, Antifungal properties and biocompatibility of *silver* nanoparticle coatings on silicone 42 maxillofacial prostheses in vitro, *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, 106(3), 1038–1051.

Mikulewicz, M., Chojnacka, K., Wozniak, B., Downarowicz, P., 2012, Release of Metal Ions from Orthodontic Appliances : An In Vitro Study, *Biol Trace Elem Res*, 146: 272-280.

Molleman, B., Hiemstra, T., 2015, *Surface Structure Of Silver Nanoparticles As A Model For Understanding The Oxidative Dissolution Of Silver Ions*, Langmuir.

Moslehifard, E., Moslehifard, M., Ghasemzadeh, S., Ghaiour, M., Nasirpouri, F., 2019, Corrosion behavior of a nickel-base dental casting alloy in artificial saliva studied by weight loss and polarization techniques, *Front Dent.*, 16(1):13-20.

Mystkowska, J., Niemirowicz-Laskowska, K., Łysik, D., Tokajuk, G., Dąbrowski, J.R., Bucki, R., 2018, The role of oral cavity biofilm on metallic biomaterial surface destruction–corrosion and friction aspects, *International Journal of Molecular Sciences*, 19(3), 743-761.

Okazakia, Y., Gotoh, E., 2005, Comparison of metal release from various metallic biomaterials in vitro, *Biomaterials J.*,26:11-21.

Özkaya, E., Babuna, G., 2011, Two cases with nickel-induced oral mucosal hyperplasia: a rare clinical form of allergic contact stomatitis? *Dermatol Online J*.,17(12)

Patel, R.M., Varna, S., Suragimath, G., Zope, S., 2016, Estimation and comparison of salivary alcium, phosphorous, alkaline phosphatase and pH levels in periodontal health and disease: A cross – sectional biochemichal study, J Clin Diagb Res, 10(7):58-61

Petoumeno, E., Kislyuk, M., Hoederath, H., Keilig, L., Bourauel, C., Jäger, A., 2008, Corrosion susceptibility and nickel release of nickel titanium wires during clinical application. *J Orofac Orthop*, 69:411–23.

Peretyazhko, T.S., Zhang, Q., Colvin, V.L., 2014, Size-controlled dissolution of *silver* nanoparticles at neutral and acidic ph conditions: kinetics and size changes, *Environ. Sci. Technol*, 48, 11954–11961.

Phillips, R.W., 2003, *Skinner's science of dental materials*, 11th ed., Philadelphia, London, Toronto: WB Saunders Company,p. 56-9.

Popov, B.N., 2015, *Corrosion Engineering: Principles and Solved Problems*, Elsevier, p 290-308.

Powers, J.M., Wataha, J.C., 2013, *Dental Materials: Properties and Manipulation*, Mosby, p. 133-149.

Puskar, T., Jevremovic, D., Williams, R.J., Eggbeer, D., Vukelic, D., Budak, I., 2019, A Comparative analysis of the corrosive effect of artificial saliva of variabel pH JMKG 8 (2):34-39 39 on *DMLS and Cast Co-Cr-Mo Dental Alloy Materials Journal*, 7: 6486.

Radtke, A., Grodzicka, M., Ehlert, M., Tadeusz, M.M., Szkodo, M., Bartmanski, M., Piszczek, P., 2018, Studies on *silver* ions releasing processes and mechanical properties of surface-modified titanium alloy implants, *Int. J. Mol. Sci*., 19, 3962

Rasyad, A. dan Budiarto, 2011, *Pengaruh waktu electroplating dan powdercoating NiCr terhadap sifat mekanis dan struktur mikro pada baja karbon spccsd*, Prosiding Seminar Nasional Pengembangan Energi Nuklir IV, 424– 434.

Rao, S. B., Chowdhary R., 2011, Evaluation on the corrosion of the three Ni-Cr alloys with different composition, *International Journal of Dentistry*.

Rincic, M.M., Karlovic, S., Ciganj Z., Zlatko C., Acev D.P., Pavlic A., Spalj S., 2018, Oral antiseptics and nickel–titanium alloys: mechanical and chemical effects of interaction, *J. Odontology.*

Renita, D., Rajendran, S., Chattree, A., 2016, Influence of artificial saliva on the corrosion behavior of dental alloys: A review, *Indian J Adv Chem Sci*., 4(4): 478–483.

Rodrigues, D.C., Valderrama, P., Wilson, T.G.Jr., Palmer, K., Thomas, A., Sridhar, S., Adapalli, A., Burbano, M., Wadhwani, C., 2013, Titanium corrosion mechanisms in the oral environment: A retrieval study. *J. Materials*, 6, 5258–5274.

Roach, M.D., Wolan, J.T., Parsell, D.E., Bumgardner, J.D., 2000, Use of X-ray photoelectron spectroscopy and cyclic polarization to evaluate the corrosion behavior of six nickel-chromium allois before and after porcelain-fused-to-metal firing, *J. Prosthet Dent*, 84:623-34.

Rosenstiel, S.F., Land, M.F., Fujimoto, J., 2016, *Contemporary Fixed Prosthodontics*, Fifth Edition, Elsevier, p 3-34

Salaie, R.N., Besinis, A., Le, H., Tredwin, C., Handy, R.D., 2020, The biocompatibility of *silver* and nanohydroxyapatite coatings on titanium dental implants with human primary osteoblast cells, *Materials Science and Engineering C*, 107, 110210.

Saefuloh, I., Haryadi, Winisuda, M.H., 2017, Studi analisa kuat arus proses *electroplating* dengan pelapis nikel cobalt terhadap kekerasan, ketahanan korosi, dan penambahan tebal baja karbon rendah st 41, *Jurnal Teknik Mesin Untirta*, III(2):42-47

Saito, M., Arakaki, R., Yamada, A., Tsunematsu, T., Kudo, Y., Ishimaru, N., 2016, Molecular mechanisms of nickel allergy, *International Journal of Molecular Sciences*, 17(2), p. 1–8.

Saputri, D., Nasution, A.I., Surbakti, M.R.W., Gani, B.A., 2017, The correlation between pH and flow rate of alivary smokers related to nicotine levels labelled on cigarettes, Dental journal (Majalah Kedokteran Gigi), 50(2):61-65

Sarantopoulos, D.M., Beck, K.A., Holsen, R., Berzins, D.W., 2011, Corrosion of CoCr and NiCr dental allois alloied with palladium, *J Prosthet Dent*, 105:35-43

Schlesinger, M., Paunovic, M., 2011, *Modern Electroplating*: Fifth Edition, A John Wiley & Sons, Inc, p 1-32, 131-138.

Setia, R., Handajani, J., 2010, Mengkonsumsi minuman beralkohol dapat menurunkan derajat keasaman dan volume saliva, *DENTIKA*; 15(1), 16, 18.

Shilingburg, H., Sather, D., Wilson, E., Cain, J., Mitchel, D., Blanco, L., Kessler, J., 2012, *Fundamentals of Fixed Prosthodontics.* 4th ed. Chicago: Quintessence Publishing Co, Inc, p. 75, 447

Smith, G.N. dan Howe, L.C., 2007, *Planning and Making Crowns and Bridges*, London: Informa, p. 47

Srimaneepong, V., Rokaya, D., Thunyakitpisal, P., Qin, J., & Saengkiettiyut, K., 2020, Corrosion Resistance of Graphene oxide/*Silver* Coatings on Ni–Ti alloy and Expression of IL-6 and IL-8 in Human Oral Fibroblasts, Scientific Reports, 10(1), 1–12.

Subayu, R.D., Mahendra, A.S., 2018, Pengaruh variasi kuat arus dan tegangan pada proses *electroplating* nikel terhadap ketebalan permukaan dan mampu bending knalpot sepeda motor, *JTM*, Vol.6 01:121-128

Sudana, M.I., Arsani, I.A., Waisnawa, S., 2014, Alat Simulasi pelapisan logam dengan metode *electroplating*, *Jurnal Logic*. Vol. 14(3), 190-198.

Sudarsana, E., Setiany, O., Suhartono, 2013, Hubungan riwayat pajanan kromium dengan gangguan fungsi ginjal pada pekerja pelapisan logam di kabupaten tegal, *Jurnal Kesehatan Lingkungan Indonesia*, 2(1), 34-41.

Velasco-Ibáñez, R., Lara-Carrillo, E., Morales-Luckie, R. A., Romero-Guzmán, E. T., Toral-Rizo, V. H., Ramírez-Cardona, M., García-Hernández, V., & Medina-Solís, C. E., 2020, Evaluation of the release of nickel and titanium under orthodontic treatment, *Scientific Reports*, 10(1), 1–10.

Vincent, J., 2007, *The Nutritional Biochemistry of Chrome*, 1st ed., Elsevier.

Wani, I.A., Khatoon, S., Ganguly, A., Ahmed, J., Ahmad, T., 2013, Structural characterization and antimicrobial properties of *silver* nanoparticles prepared by inverse microemulsion method, *Colloids and Surfaces Biointerfaces*, 101:243–250.

Wataha, J.C., 2000, Biocompatibility of dental casting allois: a review. *The Journal of Prosthetic Dentistry, 83(2), 223–234.*

Wataha, J. C., Drury, J. L., Chung, W. O., 2013, Nickel alloys in the oral environment, *Expert Review of Medical Devices*, 10(4), p. 519–539.

William, M.H., 2012, *Handbook of Chemistry and Physics*, 93rd Edition, CRC Press.

Wylie, C.M, Shelton, R.M., Fleming, G.J.P., Davenport, A.J., 2007, Corrosion of nickel based dental casting allois, *Dental Materials J.,* 23:714–23

Yli-Pentti, A, 2014, *Electroplating and Electroless Plating, In Comprehensive Materials Processing*, Elsevier, p 277-305.

Zaho, C., Feng, B., Li, Y., Tan, J., Lu, X., Weng, J., 2013, Preparation and antibacterial activity of titanium nanotubes loaded with Ag Nanoparticles in the dark and under the UV light, *Appl. Surf. Sci.*, 280, 8–14

Zamulaeva, E.I., Sheveyko, A.N., Potanin, A.Y., Zhitnyak, I.Y., Gloushankova, N.A., Sukhorukova, I.V., Shvindina, N.V., Ignatov, S.G., Levashov, E.A., Shtansky, D.V., 2018, Comparative investigation of antibacterial yet biocompatible Ag-doped multicomponent coatings obtained by pulsed electrospark deposition and its combination with ion implantation, *Ceramics Int*., 44:3765–3774.

Zhang, W., Yao, Y., Sullivan, N., Chen, Y.,2011, Modeling the primary size effects of citrate-coated *silver* nanoparticles on their ion release kinetics. Environ, *Sci. Technol*, 45, 4422–4428.

Zuelkevin, Wahyuningtyas, E., Kusuma, H.A., 2022, The effect of saliva pH and protective *silver* coatings on denture base materials (cobalt chromium alloys) ion release, *Teikyo Medical Jurnal*, 45:6009-6