



## DAFTAR PUSTAKA

A'yun, Q., Asmarany, A., Fitriyah, D., Rini, A.I.A., Mahyarudin, Sinaga, N.B.A.J., Suryanti, E., Asril, Y.K.M., dan Hamida, F., 2022, *Mikrobiologi Dasar*, 1<sup>st</sup> ed., Yayasan Kita menulis, Medan, pp.170-176.

Anas, M., 2018, *Infeksi Spermatozoa dan Karakteristik Staphylococcus aureus*, UMSurabaya Pub., Surabaya, p.60

Anusavice, K.J., Shen, C., Rawls, H.R., 2013, *Phillips Science of Dental Materials*, 12<sup>nd</sup> ed., Elsevier, USA, pp. 406-407.

Aouame, A.E., Quars, F.E., Bentahar, Z., Zerouali, K., Sidqui, M., 2021, In Vitro Evaluation of Bacterial Adhesion to Dental and Stainless-Steel Surfaces, *Journal of Medical Microbiology*, 11: 176-197

Azmi, A.H., Adnan, S.N.A., dan Malik, N.A., 2020, The Prevalence of *Staphylococcus aureus* In The Oral Cavity of Healthy Adults in Malaysia, *Sains Malaysiana*, 49(3): 583-591.

Bagnoli, F., Rappuoli, R., Grandi, G., 2017, *Staphylococcus Aureus: Microbiology, Pathology, Immunology, Therapy and Prophylaxis*, Springer, Italy, pp.1-5.

Balaji, S.M., 2009, *Textbook of Oral and Maxillofacial Surgery*, Elsevier, New Delhi, pp.573-574.

Bellagambi, F.G., Lomonaco, T., Salvo, P., Vilvadi, F., Hangouet, M., Ghimenti, S., Biagini, D., Di Francesco, F., Fuoco, R., Errachid, A., 2020, Saliva sampling: Methods and devices. An overview, *Trends in Analytical Chemistry*, Elsevier, France, 124(115781):1-15.

Berger, D., Rakhamimova, A., Pollack, A., Loewy, Z., 2018, Oral Biofilm: development, Control and Analysis, *Hihg-Throughput*, 7(24): 1-8

Bertolini, M., Costa, R.C., Barao, V.A.R., Villar, C.C., Valdes, B.R., Feres, M., Souxa, J.G.S., 2022, Oral Microorganisms and Biofilms: New Insights to Defeat the Main Etiologic Factor of Oral Dieases, *Microorganisms*, 10(2413):1-9



Bhattarai, K.R., Kim, H.R., dan Chae, H.J., 2018, Compliance with Saliva Collection Protocol in Healthy Volunteers: Strategies for Managing Risk and Errors, *International Journal of Medical Sciences*, 15(8): 823–831.

Bohinc, K., Drazic, G., Abram, A., Jevsnik, M., Jersek, B., Nipic, D., Kurincic, M., dan Raspor, P., 2016, Metal Surface Characteristics Bacterial Adhesion Capacity, *Int. J. Adhesion and Adhesives*, 68: 39-46.

Bonanthaya, K., Panneerselvam, E., Manuel, S., Kumar, V.V., Rai, A., 2021, *Oral and Maxillofacial Surgery for The Clinician*, India, Springer.

Canongia, A.C.P., Moreno, D.S.A., Abracado, L.G., Pithon, M.M., Araujo, M.T., 2021, Effectiveness of Methods for Cleaning Arch Wire: An In Vitro Study, *Bioscience Journal*, 37(e37017):1-8.

Chawhuaveang, D.D., Yu, O.Y., Yin, I.X., Lam, W.Y., Mei, M.L., Chu, C.H., 2020, Acquired salivary pellicle and oral diseases: A literature review, *Journal of Dental Sciences*, 16, 523-529.

Chhabra, N., Chhabra, S., Thapar, D., 2015, Evaluation of Two Different Methods of Arch Bar Application : A Comparative Prospective Study, *J. Maxillofac. Oral Surg.*, 14(2): 432-440.

Christensen, G.D., Simpson, W.A., Anglen, J.O., Gainor, B.J., 2000, Methods for Evaluating Attached Bacteria and Biofilms: An Overview. In: An, Y. H., Friedman, R. J., editor, *Handbook of bacterial adhesion : principles, methods, and applications*, Humana Press, New Jersey, pp. 213-234.

Decker, E.M., Klein, C., Schwindt, D., dan Ohle, C., 2014, Metabolic Activity of *Streptococcus mutans* Biofilm and Gene Expression During Exposure to Xylitol and Sucrose, *IJOS*, (6): 195-204.

De la Maza, L.M., Pezlo, M.T., Bittencourt, C.E., Peterson, E.M., 2020, *Colour Atlas of Medical Bacteriology*, United State of America, Wiley, pp.1-23.

Djunaidy, V.P., Putri, D.K.T., Setyawardhana., R.H.D., 2020, Pengaruh Kitosan Sisik Ikan Haruan (*Channa striata*) Terhadap Jumlah Koloni Interaksi *Streptococcus sanguinis* dan *Streptococcus mutans* secara in vitro, *Jur. Ked. Gigi*, 4(3): 100-110

Edward, Y., dan Novianti, D., 2015, Biofilm pada Otitis Media Supuratif Kroik, *JMJ*, 3(1): 68-78. 9-13



Ezhilarasi, S., dan Katrolia, R., 2022, IMF After ORIF in Maxillofacial Fractures-Case Report and Literature Review, *The traumaxilla*, 4(1-3): 32-34.

Fernandes, A., Lopes, A.B.S., Fonseca, P.G., Torres, A.S., Rodrigues, A.B., Galvao, E.L., Falci, S.G., M., 2021, Comparison Between Erich Arch Bars and Intermaxillary Screws in Maxillofacial Fractures Involving the Dental Occlusion : a Meta-Analysis, *Int. J. Oral Maxillofac. Surg.*, 50:83-95.

Fu, D., Dandan, P., Cui, H., Yinchen, L., Xinjin, D., dan Hualing, S., 2013, Effect of Desensitising Paste Containing 8% Arginine and Calcium Carbonate on Biofilm Formation of *Streptococcus mutans* In Vitro, *J. Ident.*, 41(7): 619- 27.

Goncalves, I.S., Viale, A.B., Sormani, N.N., Pizzo, K.E.D.C., Nobre, A.R., Oliveira, P.C.S., Barud, H.G.O., Antonio, S.G., Barud, H.S., 2020, Antimicrobial Orthodontic Wires Coated with Silver Nanoparticles, *Brazilian Archives of Biology and Technology*, 63: 1-10.

Granger, D.A., Taylor, M.K., 2020, *Salivary Bioscience Foundations of Interdisciplinary Saliva Research and Applications*, Springer Nature, Switzerland, pp. 35-49.

Hamid, A.U., 2018, *A Beginners' Guide to Scanning Electron Microscopy*, Springer Nature, Switzerland, pp. 1-76.

Hamzah, Z., Indriana, T., Indahyani, D.E., Barid, I., 2020, *Sistem Stomatognati (pengunnyahan, Penelitian dan Bicara)*, Deepublish Pub., Yogyakarta, pp.10, 114-125.

Hao, Y., Huang, X., Zhou, X., Li, M., Ren, B., Peng, X., Cheng, L., 2018, Influence of Dental Prosthesis and Restorative Material Interface on Oral Biofilm, *Int. J. Mol. Sci.*, 19(3157): 1-17.

Hjerpe, J., Rodas, S., Korvala, J., Pesonen, P., Kaisanlahti, A., Ozcan, M., Suojanen, J., Reunanen, J., 2021, Surface Roughness and *Streptococcus mutans* Adhesion on Metallic and Ceramic Fixed Prosthetic Materials after Scaling, *Materials*, 14: 1-16.

Jamil, S.N.A., Wijaya, A., Sendra, E., Rahman, I., W., Chairiyah, R., Ulimaz, A., Wahyuni, T.P., Abna, I.M., Ifadah, R.A., Lindawati, 2022, *Mikrobiologi*, 1<sup>st</sup> ed., Global Eksekutif Teknologi, Sumatra Barat, p.157.

Jang, S.R., Suh, I.W., Heng, L., 2023, Nanoscale Polishing Technique of Biomedical Grade NiTi Wire by Advanced MAF Process: Relationship between Surface Roughness and Bacterial Adhesion, *J. Funct. Biomater*, 14(177): 1-18.



Jatmiko, S., dan Jokosisworo, S., 2012, Analisa Kekuatan Punir dan Kekuatan Lentur Putar Poros Baja ST 60 Sebagai Aplikasi Perancangan Poros Baling-Baling Kapan, *KAPAL: Jurnal Ilmu Pengetahuan dan Teknologi Kelautan*, 5(1): 42-51.

Jongsma, M.A., Pelser, F.D.H., Mei, H.C., Smit, J.A., Gritter, B.V.B., Busscher, H.J., Ren, Y., 2013, Biofilm Formation On Stainless Steel and Gold Wires For Bonded Retainers in Vitro and in Vivo and Their Susceptibility to Oral Antimicrobials, *Clin. Oral Invest*, 1-10.

Kirk, D., Whitney, J., Shafer, D., Song, L., 2016, Tight Placement of Erich Arch Bar While Avoiding Wire Fatigue Failure, *J. Oral Maxillofac. Surg.*, 1-4.

Kirmusaoglu, S, 2020, Staphylococcus and Streptococcus, intechOpen, London, p.15

Klein, M.I., Hwang, G., Santos, P.H.S., Campanella, O.H., Koo, H., 2015, Streptococcus mutans-derived extracellular matrix in cariogenic oral biofilms, *Cellular infection and microbiology*, 5(10): 1-8.

Kojima, Y., Nakano, K., Wada, K., Takahashi, H., Katayama, K., Yoneda, M., Higurashi, T., Nomura, R., Hokamura, K., Muranaka, Y., Matsuhashi, N., Umemura, K., Kamisaki, Y., Nakajima, A., Ooshima, T., 2012, Infection of Specific Strains of *Streptococcus mutans*, Oral Bacteria, Confers A Risk of Ulcerative Colitis, *Scientific Reports*, 2 : 332.

Kozak, U., Lasota, A., Chalas, R., 2021, Changes in Distribution of Dental Biofilm after Insertion of Fixed Orthodontic Appliances, *J. Clin., Med*, 10(5638): 1-10.

Lamont, R.J., Hajishengallis, G.N., Jenkinson, H.F., 2010, *Oral Microbiology and Immunology*, ASM press, Washington DC, pp.97-112.

Lemos., 2019, The Biologi of *Streptococcus mutans*, *Microbiology Spectrum American Society for Microbiology Press*, pp.1-18.

Lonescu, A.C., dan Hahnel. S., 2021, *Oral Biofilms and Modern Dental Materials*, Switzerland, Springer Nature, 9.

Lu, A., Gao, Y., Jin, T., Luo, X., Zeng, Q., Shang, Z., 2020, Effects of Surface Roughness and Texture in The Bacterial Adhesion on The Bearing Surface of Bio-Ceramic Joint Implants: An in Vitro Study, *Ceramics International*, 46(5): 6550-6559.

Luciana, L., Oggy, B.A.R., Wiargitha, I.K., Irawan, H., 2019, Management of Maxillofacial Fracture: Experience of Emergency and Trauma Acute Care Surgery



Department of Sanglah General Hospital Denpasar Bali, *Maced J. Med. Sci.*, 7(19):3245-3248.

Maikranz, E., Spengler, C., Thewe, N., Thewes, A., Nolle, F., Jung, P., Bischoff, M., Santen, L., Jacobs, K., 2020, Electronic Supplementary Information for ‘Different Binding Mechanisms of *Staphylococcus Aureus* to Hydrophobic and Hydrophilic Surfaces, *J. Royal Society Chemistry*, 1(4): 1-4.

Marsh, P.D., Lewis, M.A.O., Rogers, H., Williams, D.W., Wilson, M., 2016, *Oral Microbiology*, 6<sup>th</sup> ed., China, Elsavier, p.15.

McVey, D.S., Chengappa, M.M., Wilkes, R., 2022, *Veterinary Microbiology*, India, Wiley Blackwell, 231-250.

Mediratta, A., 2016, Effects of Interdental/Intermaxillary Wiring on Teeth and Periodontal Tissues in The Management of Dentoalveolar and Jaw Fractures, *J Dent Specialities*, 4(1): 10-13.

Mhaske, A.R., Shetty, P.C., Bhat, N.S., Laxmikanth, S.M., Nagarahalli, K., Tekale, D., 2015, Antiadherent and Antibacterial Properties of Stainless Steel and NiTi Orthodontic Wires Coated with Silver Against *Lactobacillus Acidophilus*-an InVitro Study, *Prog. Orthod.*, 16(40): 1-6.

Mona, M., Walker, C., Shaddox, L.M., Pileggi, R., 2021, Bacterial Biofilm Growth on Various Dental Stabilization System for Avulsed and Luxated Teeth, *Appl. Sci.*, 11 (8982), 1-7.

Morita, A., Yulianto, D.K., Kusdina, S.D., Purwanti, N., 2016, Differences of *Streptococcus Mutans* Adhesion Between Artificial Mouth Systems: a Dinamic and Static Methods, *Dent. J. (Majalah Kedokteran Gigi)*, 49(2): 67–70.

Muharnif, M., dan Septiawan, R., 2018, Analisa Pengujian Lelah Material Stainless Steel 304 dengan Menggunakan Rotary Bending Fatigue Machine, *Jurnal Rekayasa Material, Manufaktur dan energi*, 1(1): 64-73.

Najafi, S., Mardani, M., Motamedifar, M., Nazarinia, M.A., dan Hadadi, M., 2022, Salivary *Streptococcus Mutans* and *Lactobacilli* Levels as Indicators of Dental Caries Development in Iranian Patients with Systemic Sclerosis, *Irian Journal of Medical Microbiology*, 16(4):350-356.

Noort, R.V., 2013, *Introduction to Dental Material*, 4<sup>th</sup> ed., Elsevier Mosby, British, pp.231-234.



Ogawa, F., Shimizu, Y., Bressan, S., Morisita, T., Itoh, T., 2019, Bending and Torsion Fatigue-Testing Machine Developed for Multiaxial Non-Proportional Loading, *Metals article*, 9(1115):1-13.

Pahadiya, N., Sharma, D., Guru, K., Malviya, K., Rashmiguru, Borle, R., Pahariya, Y., 2019, A Novel Approach Towards Maxillo-Mandibular Fixation Going Past Erich Arch Bar Technique, *J. Dental and Medical Sciences*, 18(3): 43-46.

Ping, M.F., Sianturi, S., Anasis, A.M., 2022, *Ilmu Biomedik Dasar untuk Mahasiswa Kesehatan*, Nasyan Expanding Management, Pekalongan, pp.380-381

Praptomo, A.J., Anam K., Raudah, S., 2017, *Metodologi Riset Kesehatan Teknologi Laboratorium Medik dan Bidang Kesehatan Lainnya*, 1<sup>st</sup> ed., Deepublish, Yogyakarta, pp.113-114.

Pratiwi, A.R., dan Putri, D.K.T., 2022, *Biofilm Oral dan Implikasi Klinis pada Rongga Mulut*, Malang, UB Press. pp.1-14.

Priya, K.Y., Prathibha, K.M., 2017, Methods of collection of saliva- A review, *International Journal of Oral Health Dentistry*, 3(3):149-153.

Putri, M.H., 2021, *Mikrobiologi Keperawatan Gigi*, Nasya Expanding Management, Pekalongan, pp.89-96

Radovic, R., Begic, G., Blagojevic, S., L., Karleusa, L., Spalj, S., Gobin, I., 2023, Temporal dynamics of adhesion of oral bacteria to orthodontic appliance, *Dental material journal*, 1-9.

Rahim, Z.H.A., Fathilah, A.R., Irwan, S., dan Hasnor, W.I.W.N., 2008, An Artificial Mouth System (NAM Model) for Oral Biofilm Research, *Res.J.Microbiol.*, 3 (6): 466-73.

Raji, S.H., Shojaei, H., Ghorani, P.S., Rafiei, E., 2014, Bacterial colonization on coated and uncoated orthodontic wires: A prospective clinical trial, *Dent Res J*, 11(6): 680–683.

Ramachandran, B., dan Muthuvijayan, V., 2019, Surface Engineering Approaches for Controlling Biofilm and Wound Infections, *American Chemical Society*, 5: 101- 123.

Ramadhani, I., dan Wahyuni, 2020, *Dasar Dasar Praktikum Mikrobiologi*, Pena Persada, Jawa Tengah, p.1.



Reise, M., Kranz, S., Heyder, M., Beck, J., Roth, C., Guellmar, A., Eggeling, F., Schubert, U., Loffler, B., Singusch, B., 2023, Salivary Pellicle Formed on Dental Composites Evaluated by Mass Spectrometry—An In Situ Study, *Molecules*, 28(6804): 1-17.

Reynold, J., 2005, Serial dilution protocol, *American society for microbiology*, 1-7.

Rothe, T.M., Kumar, P., Shah, N., Shah, R., Kumar, A., dan Das, D., 2018, Evaluation of Efficacy of Intermaxillary Fixation Screws Versus Modified Arch Bar for Intermaxillary Fixation, *Natl. J. Maxillofac. Surg.*, 9(2):134-139.

Sahli, I.T., 2023, *Protein Biofilm Bakteri Staphylococcus aureus dan Produksi Antibodi Poliklonal*, 1<sup>st</sup> ed., Feniks Muda Sejahtera, Sulawesi Tengah, pp.20-25

Samaranayake, L., 2018, *Essential Microbiology for Dentistry*, 5<sup>th</sup> ed., Churchill Livingstone Elsevier, Poland.

Santander, S.A., Serna, L., Garzon, J.S., Frasco, J., 2021, Evaluation of Streptococcus mutans Adhesion to Stainless Steel Surfaces Modified Using Different Topographies Following a Biomimetic Approach, *Coating*, 11(7): 829-840

Sarker, A., Tran, N., Rifai, A., Brandt, M., Tran, P.A., Leary, M., Fox, K., Williams, R., 2019, Rational design of additively manufactured Ti6Al4V implants to control *Staphylococcus aureus* biofilm formation, *Materialia*, 5:1-13.

Sawitri, H., dan Maulina, N., 2021, Derajat PH Saliva Pada Mahasiswa Program Studi Kedokteran Fakultas Kedokteran Universitas Malikussaleh Yang Mengkonsumsi Kopi Tahun 2020, *Jurnal Kedokteran dan Kesehatan Malikussaleh*, 7(1):84-94.

Scharnow, A.M., Solinskim S.E., dan Wuest, W., 2019, Targeting *S. mutans* biofilms: a Perspective On Preventing Dental Caries, *Royal Society of Chemistry*, 1-11.

Schilcher, K., dan Horswill, A.R., 2020, Staphylococcal Biofilm Development: Structure, Regulation and Treatment Strategies, *Microbiology and Molecular Biology Review*, 84(3): 1-36.

Schleifer, K.H., dan Bell J.A., 2015, Staphylococcus, *Bergery's Manual of Systematics of Archaea and Bacteria*, 1-43.

Schnurr, E., Paque, P.N., Attin, T., Nanni, P., Grossmann, J., Holtfreter, Broker, B., M., Kohler, C., Diep, B.A., Ribeiro, A.A., dan Thurnheer, 2021, *Staphylococcus*



*aureus* Interferes with Streptococci Spatial Distribution and with Protein Expression of Species within a Ploymicrobial Oral Biofilm, *Antibiotics*, 10(116):1-19.

Shukla, A.D., Srikanth, G., Chakravarthy, K., Ayusha, K., Udeshi, H.M., 2023, Epidemiology of maxillofacial injuries during monsoon and non-monsoon season in India: a data-based retrospective study from a tertiary care dental teaching hospital, *F1000Research*, 12(1377): 1-7.

Singh, A.K., dan Sharma, N.K., 2021, *Maxillofacial Trauma A Clinical Guide*, Springer, Singapore, pp.518-532.

Sugiarkha, I.G.E., 2016, Perbandingan Hasil Identifikasi Metode Analytical Profile Index (API) dan Tes Kepkaan Antibiotika Konvensional dengan Metode Technical Dedicated Reasonable.

Sujatno, A., Salam, R., Bandriyana, Dimyati, A., 2015, Studi Scanning Electron Microscopy (SEM) untuk Karakterisasi Progres Oxidasi Paduan Zirkonium, *Jurnal Forum Nuklir*, 9(2), 44-50.

Suprayitna, M., dan Fatmawati, B.R., 2019, *Ilmu Biomedik Dasar*, Deepublish, Yogyakarta, pp.30-31.

Suyatno, 2010, *Menghitung Besar Sampel Penelitian Kesehatan Masyarakat*, UNDIP, Semarang, pp.1- 4.

Taha, M., Fallal, A.E., Degla, H., 2016, In Vitro and In Vivo Biofilm Adhesion to Esthetic Coated Arch Wires and Its Correlation With Surface Roughness, *Angle Orthodontist*, 86(2): 285-291.

Talaat, D.M., Sharaf, A.A.E., Ghoneim, M.A.E., El-Shazly, S.A., El meligy, O.A.E., 2018, Efficacy of two mouth rinse sprays in inhibiting *Streptococcus mutans* growth on toothbrush bristles, *Saudi Dental Journal*, 30: 365–372.

Tauran, P.M., Handayani, I., Sennang, N., 2013, Identifikasi bakteri aerob gram negatif dan gram positif menggunakan metode konvensional dan otomatik, *Indonesian Journal of Clinical Pathology and Medical Laboratory*, 19(2): 105–111.

Vos, P.D., Garrity, G.M., Jones, D., Krieg, N.R., Ludwig, W., Rainey, F.A., Schleifer, K., H., Whitman, W., B., 2009, *Bergey's Manual od Systematic Bacteriology*, 3<sup>rd</sup> ed., Springer, USA.

Wang, H., Ren, D., 2017, Controlling *Streptococcus mutans* and *Staphylococcus aureus* biofilms with direct current and chlorhexidine, *AMB Expr*, 7(204):1-9.



Wardani, K.A., Kurniawan., Anita., Sakati, S.N., Rafika,, Sulami, N., Nurdin., Syahrir, M., Mursalim., Kanan, M., 2021, *Teori Mikrobiologi*, Yayasan Penerbit Muhammad Zaini, Aceh, pp.55-59.

Whiley, R.A., dan Hardie, J.M., 2015, *Streptococcus*, *Bergey's Manual of Systematic of Archaea and Bacteria*, 1-86.

Wijayanto, S.O., dan Bayuseno, A.P., 2014, Analisis Kegagalan Material Pipa Ferrule Nickel Alloy N06025 Pada Waste Heat Boiler Akibat Suhu Tinggi Berdasarkan Pengujian : Mikrografi dan Kekerasan, *Jurnal Teknik Mesin*, 2(1): 33-39.

Wu, S., Altenried, S., Zogg, A., Zuber, F., Weber, K.M., Ren, Q., 2018, Role of the surface Nanoscale Roughness of Stainless Steel on Bacterial Adhesion and Microcolony Formation, *ACS Omega*, 3, 6456-6464.

Yang, Yi., Masoumeh, M., Zhou, E., Liu, D., Song, Y., Xu, D., Wang, F., Smith, J., A., 2021, *Streptococcus mutans* biofilms induce metabolite-mediated corrosion of 316 L stainless steel in a simulated oral environment, *Corrosion science*, 182: 1-10.

Zhang, Z., Dong, Q., Song, B., He, H., Chai, L., Guo, N., Wang, B., Yao, Z., 2019, Effect of Shear Strain Rate on Microstructure and Properties of Austenitic Steel Processed by Cyclic Forward/Reverse Torsion, *Materials*, 506(12):1-11.

Zheng, J., Chen, D., Chunli, L.V., Qin, K., Zhou, Q., Pu, N., Song, S., Wang, X., 2022, Antimicrobial and anti- biofilm activity of *Polygonum chinense* L.aqueous extract against *Staphylococcus aureus*, *Scientific reports*, 12(21988): 1-11.