

Daftar Pustaka

1. Levartovsky S, Zalis M, Pilo R, Harel N, Ganor Y, Brosh T. The effect of one-step vs. two-step impression techniques on long-term accuracy and dimensional stability when the finish line is within the gingival sulcular area. *J Prosthodont.* 2014; 23(2):124-133.
2. Ender A, Mehl A. Accuracy of complete-arch dental impressions: a new method of measuring trueness and precision. *J Prosthet Dent.* 2013; 109(2):121-128.
3. Samet N, Shohat M, Livny A, Weiss EI. A clinical evaluation of fixed partial denture impressions. *J Prosthet Dent.* 2005; 94(2):112-117.
4. Stober T, Johnson GH, Schmitter M. Accuracy of the newly formulated vinyl siloxanether elastomeric impression material. *J Prosthet Dent.* 2010; 103(4):228- 239.
5. Luthardt RG, Walter MH, Weber A, Koch R, Rudolph H. Clinical parameters influencing the accuracy of 1- and 2-stage impressions: a randomized controlled trial. *Int J Prosthodont.* 2008; 21(4):322-327.
6. Petrie CS, Walker MP, O'Mahony a M, Spencer P. Dimensional accuracy and surface detail reproduction of two hydrophilic vinyl polysiloxane impression materials tested under dry, moist, and wet conditions. *J Prosthet Dent.* 2003; 90(4):365-372.
7. Donovan, Terence E. Sturdevant's Art and Science of Operative Dentistry. *Dental Biomaterials.* 2019. 453–510.
8. Rupp F, Axmann D, Jacobi A, Groten M, GeisGerstorfer J. Hydrophilicity of elastomeric non-aqueous impression materials during setting. *Dent Mater.* 2005; 21(2):94-102.
9. Mondon M, Ziegler C. Changes in water contact angles during the first phase of setting of dental impression. *Int J Prosthodont.* 2003; 16(1):49-53.

10. Nawafleh NA, Mack F, Evans J, Mackay J, Hatamleh MM. Accuracy and reliability of methods to measure marginal adaptation of crowns and FDPs: A literature review. *J Prosthodont*. 2013;22(5):419–28.
11. Wassell RW, Barker D, Walls AW. Crowns and other extra-coronal restorations: impression materials and technique. *Br. Dent. J.*, 2002;192:679-690.
12. Mormann WH: The evolution of the CEREC system. *J Am Dent Assoc* 2006;137:7S-13S
13. Galhano GA', Pellizzer EP, Mazaro JV: Optical impression systems for CAD-CAM restorations. *J Craniofac Surg* 2012;23:e575-e579
14. Christensen GJ. Will digital impressions eliminate the current problems with conventional impressions? *J Am Dent Assoc.*, 2008;139(6):761–763
15. Gabor A-G, Zaharia C, Stan AT, Gavrilovici AM, Negruțiu M-L, Sinescu C. Digital Dentistry — Digital Impression and CAD/CAM System Applications. *J Interdiscip Med*. 2017;2(1):54–7.
16. Imburgia, M.; Logozzo, S.; Hauschild, U.; Veronesi, G.; Mangano, C.; Mangano, F.G. Accuracy of four intraoral scanners in oral implantology: A comparative in vitro study. *BMC Oral Health* 2017, 17, 92.
17. Stanley, M.; Paz, A.G.; Miguel, I.; Coachman, C. Fully digital workflow, integrating dental scan, smile design and CAD-CAM: Case report. *BMC Oral Health* 2018, 18, 134.
18. Vagkopoulou T, Koutayas SO, Koidis P, Strub JR. Zirconia in dentistry: Part 1. Discovering the nature of an upcoming bioceramic. *Eur J Esthet Dent*. 2009;4(2):130–51.
19. Helmer JO, Driskell TD. Research on bioceramics. Symposium on use of ceramics as surgical implants. Clemson, South Carolina: Clemson University, 1969.
20. Garvie RC, Nicholson PS. Structure and thermomechanical properties of partially stabilized

- zirconia in the CaO-ZrO₂ System. *J Amer Ceram Soc* 1972;55:152–157.
21. Christel P, Meunier A, Heller M, Torre JP, Peille CN. Mechanical properties and short-term *in vivo* evaluation of yttriumoxide- partially-stabilized zirconia. *J Biomed Mater Res* 1989;23:45–61.
 22. Hayashi K, Matsuguchi N, Uenoyama K, Sugioka Y. Reevaluation of the biocompatibility of bioinert ceramics *in vivo*. *Biomaterials* 1992;13:195–200.
 23. Taira M, Nomura Y, Wakasa K, Yamaki M, Matsui A. Studies on fracture toughness of dental ceramics. *J Oral Rehabil.* 1990;17:551–563.
 24. Powers, JM. *Dental material properties and manipulation*. 9th ed. Missouri: Mosby Inc, 2008: 169-207.
 25. Punj A, Bompolaki D, Garaicoa J. *Dental Impression Materials and Techniques*. *Dent Clin North Am* [Internet]. 2017;61(4):779–96. Available from: <http://dx.doi.org/10.1016/j.cden.2017.06.004>
 26. Anusavice K. *Phillip's Science of Dental materials*. Ed 10. Alih bahasa. Johan AB, Purwoko S. Jakarta : ECG, 2003:103-14:155-75.
 27. Nandini V, Venkatesh K, Nair K. Alginate impression: a practical perspective. *J Conserv Dent.* 2008; 11(1): 37-41.
 28. Sumadhi S. *Perubahan Dimensi Hasil Cetakan Gigi dan Mulut*. Medan: USU Press, 2010: 71-84.
 29. Oderino O.H, Adegbulugbe I.C, Shaba O.P. Comparison of The dimensional stability of alginate impressions disinfected with 1% sodium hypochlorite using the spray or immersion method. *Nig. Ot J. Hosp* 2007; 17(2): 69-73.

30. Siswomihardjo W. Perubahan dimensi cetakan alginat setelah direndam dalam air sirih 25%.
Jurnal kedokteran Gigi Indonesia 1994; 43(1): 69-71.
31. Amin WM, Ali-Ali MH, Al Tarawneh SH, et al. The effect of disinfectants on dimensional accuracy and surface quality of impressions Materials and Gypsum Casts. J Clin Med Res 2009; 1(2): 81-89.
32. Mc Cabe JF. Anderson's Applied Dental Material. 6th Ed. Oxford: Blackwell Scien Public, 1985 : 166-73
33. Manappallil, JJ. Basic Dental Materials. New Delhi: Jaypee Brothers, 1998: 78-87.
34. Darvell BW. Material Science for Dentistry. 6th Ed. Pokfulam; BW Darvell, 2000: 153.
35. Logozzo S, Zanetti EM, Franceschini G, Kilpelä A, Mäkynen A. Recent advances in dental optics - Part I: 3D intraoral scanners for restorative dentistry. Opt Lasers Eng [Internet]. 2014;54(March):203–21.
36. F. Duret and B. Péliissier, "Différentes méthodes d’empreinte en CFAO dentaire," EMC (Elsevier Masson SAS, Paris), Médecine Buccale, 2010:1–16.
37. Geng J. Structured-light 3D surface imaging: a tutorial. Adv Opt Photonics. 2011;3(2):128.
38. Ireland AJ, McNamara C, Clover MJ, House K, Wenger N, Barbour ME, et al. 3D surface imaging in dentistry - What we are looking at. Br Dent J. 2008;205(7):387–92.
39. Taneva E, Kusnoto B, Evans C.A. 3D scanning, imaging, and printing in orthodontics. Chapter 9 Issues in Contemporary Orthodontics. 2015:147–188.
40. Giménez B, Özcan M, Martínez-Rus F, Pradíes G. Accuracy of a digital impression system based on active triangulation technology with blue light for implants: Effect of clinically relevant parameters. Implant Dent. 2015;24(5):498–504.

41. Park HS, Shah C. Development of high speed and high accuracy 3D dental intra oral scanner. *Procedia Eng.* 2015;100(January):1174–81.
42. Aubreton O, Bajard A, Verney B, Truchetet F, Aubreton O, Bajard A, et al. Infrared system for 3D scanning of metallic surfaces To cite this version : HAL Id : hal-00864695 Infrared system for 3D scanning of metallic surfaces. Springer Verlag. 2013;24:1513–24.
43. Logozzo S, Franceschini G, Kilpela A, Oy D, Governi L. A Comparative Analysis Of Intraoral 3d Digital Scanners For Restorative Dentistry. *Internet J Med Technol.* 2012;5(1).
44. Mangano F, Gandolfi A, Luongo G, Logozzo S. Intraoral scanners in dentistry : a review of the current literature. 2017;1–11.
45. Piconic Maccaur G. Zirconia as ceramic biomaterial. *Biomaterials* 1999;20(1): 1e25.
46. Chevalier J. What future for zirconia as a biomaterial? *Biomaterials* 2006;27(4):535e43.
47. Garvie RC, Hannink RH, Pascoe RT. Ceramic steel :*Nature* 1975;258:703–4.
48. Gupta TK, Bechtold JH, Kuznickie RC, Cadoff LH, Rossing BR. Stabilization of tetragonal phase in polycrystalline zirconia. *Journal of Materials Science* 1978;13:1464.
49. Chen YW, Moussi J, Drury JL, Wataha JC. Zirconia in biomedical applications. *Expert Rev Med Devices.* 2016;13(10);945-963.
50. Kelly JR, Denry I. Stabilized zirconia as a structural ceramic: an overview. *Dent Mater.* 2008;24(3):289-298.
51. Covacci V, Bruzzese N, Maccauro G, Andreassi C, Ricci GA, Piconi C, et al. In vitro evaluation of the mutagenic and carcinogenic power of high purity zirconia ceramic. *Biomaterials* 1999;20:371–376
52. Satoh Y, Niwa S. Tissue-Biomaterial Interface Characteristics of Zirconia Ceramics. *Bioceramics* 1990;3:101–108

53. Hannink RHJ, Kelly PM, Muddle BC. Transformation toughening in zirconia containing ceramics. *J Am Ceram Soc* 2000;83(3):461e
54. Van der Zel J. Zirconia ceramic in dental CAD/CAM: how CAM enables zirconia to replace metal in restorative dentistry. *J Dent Technol* 2007;2: 17e24.
55. PI Christel, Meunier A, Heller M, Torre JP. Peille CN Mechanical properties and short-term in-vivo evaluation of yttrium-oxid] Lange FF. Transformation toughening. Part 5. Effect of temperature and alloy on fracture-toughness. *J Mater Sci* 1982;17(2):255e62.
56. Guazzato M, Albakry M, Quach L, Swain MV. Influence of grinding, sandblasting, polishing and heat treatment on the flexural strength of a glassinfiltrated alumina-reinforced dental ceramic. *Biomaterials* 2004;25(11): 2153e60.
57. Guazzato M, Albakry M, Swain MV, Ringer SP. Microstructure of alumina and alumina/zirconia-glass infiltrated dental ceramics. *Bioceramics* 2003;15: 879e82.
58. Tsukuma K, Shimada M. Strength, fracture toughness and Vickers hardness of CeO₂-stabilized tetragonal ZrO₂ polycrystals (Ce-TZP). *J Mater Sci* 1985;20: 1178e84.
59. Spiridon OK, Thaleia V. Zirconia in Dentistry: Part 2. Evidence-based Clinical Breakthrough. *Eur J Esthet Dent* 2009; 4: 348-380.
60. Manicone PF, Rossi Iommetti P, Raffaelli L. An overview of zirconia ceramics: Basic properties and clinical applications. *J Dent*. 2007;35(11):819–26.
61. Özkurt Z, Işeri U, Kazazoğlu E. Zirconia ceramic post systems: A literature review and a case report. *Dent Mater J*. 2010;29(3):233–45..
62. Sjogren G. Fracture resistance of all- ceramic zirconia bridges with different phase stabilizers and quality of sintering. *Dent Mater* 2006;22: 778e84.

63. Krüger S, Deubener J, Ritzberger C, Höland W. Nucleation Kinetics of Lithium Metasilicate in ZrO₂-Bearing Lithium Disilicate Glasses for Dental Application. *Int J Appl Glas Sci.* 2013;4(1):9–19.
64. Moher D, Liberati A, Tetzlaff J, Altman DG, Group TP. Preferred reporting items for systematic reviews and meta-analyses : the PRISMA statement. 2009;6(7).
65. Tawfik GM, Dila KAS, Mohamed MYF, Tam DNH, Kien ND, Ahmed AM, et al. A step by step guide for conducting a systematic review and meta-analysis with simulation data. *Trop Med Health.* 2019;47(1):1–9
66. Khan KS, Kunz R, Kleijnen J, Antes G. Five steps to conducting a systematic review. 2003.
67. The Joana Briggs Institute (JBI) Critical Appraisal. Checklist for randomized controlled trials. [diunduh 14 Desember 2020]. Available from: <http://joannabriggs.org/research/critical-appraisal-tools.htm>
68. Holmes JR, Bayne SC, Holland GA, Sulik WD. Considerations in measurement of marginal fit. *The Journal of Prosthetic Dentistry* 1989;62:405–8.
69. Benic GI, Sailer I, Zeltner M, Gütermann JN, Özcan M, Mühlemann S. Randomized controlled clinical trial of digital and conventional workflows for the fabrication of zirconia-ceramic fixed partial dentures. Part III: Marginal and internal fit. *J Prosthet Dent.* 2019;121(3):426–31.
70. Tinschert J, Natt G, Mautsch W, Spiekermann H, Anusavice KJ. Marginal fit of alumina-and zirconia-based fixed partial dentures produced by a CAD/CAM system. *Operative Dentistry* 2001;26:367–74.
71. McLean JW, von Fraunhofer JA. The estimation of cement film thickness by an in vivo technique. *British Dental Journal* 1971;131:107–11.

72. Beschmidt SM, Strub JR. Evaluation of the marginal accuracy of different all-ceramic crown systems after simulation in the artificial mouth. *Journal of Oral Rehabilitation* 1999;26: 582–93.
73. Schaefer, O.; Decker, M.; Wittstock, F.; Kuepper, H.; Guentsch, A. Impact of digital impression techniques on the adaption of ceramic partial crowns in vitro. *J. Dent.* 2014, 4, 677–683. [CrossRef]
74. Nedelcu, R.; Olsson, P.; Nyström, I.; Rydén, J.; Thor, A. Accuracy and precision of 3 intraoral scanners and accuracy of conventional impressions: A novel in vivo analysis method. *J. Dent.* 2018, 69, 110–118. [CrossRef] [PubMed]
75. McLean JW. Polycarboxylate cements. Five years' experience in general practice. *Br Dent J* 1972;132:9-15. 14.
76. Bedoya MM, Park JH. Updated information and services including high-resolution figures, can be found in the online version of this article at: 2014;140(12):1485–93.
77. Chee WWL, Donovan TE. Polyvinyl siloxane impression materials: A review of properties and techniques. *J Prosthet Dent.* 1992;68(5):728–32.
78. Surapaneni H, Y PS, Y RS, Attili S. Polyvinylsiloxanes in Dentistry: An Overview. 2016;27(August):115–23.
79. Syahir A, Zu A, Kamaruddin F, Mariam S, Ghani A. The quality of working impressions for the fabrication of fixed prosthodontics prostheses (crown and bridgework). 2021;3(2):100–4.
80. Rubel BS. Impression Materials: A Comparative Review of Impression Materials Most Commonly Used in Restorative Dentistry. *Dent Clin North Am.* 2007;51(3):629–42.

81. Lawson NC, Burgess JO. Clinician reaping benefits of the new concepts in impressing. *Compend Contin Educ Dent*. 2015.
82. Gan N, Xiong Y, Jiao T. Accuracy of intraoral digital impression for whole upper jaws, including full dentitions and palatal soft tissues. *PLoS One* 2016
83. Reesh, J.C.; Liacouras, P.C.; Taft, R.M.; Brooks, D.L.; Raiciulescu, S.; Ellert, D.O.; Grant, G.T.; Ye, L. Complete-arch accuracy of intraoral scanners. *J. Prosthet. Dent*. 2018, 120, 382–388. [CrossRef]
84. Swapna B V, Kamath V. Digital Impressions in Prosthodontics – an Overview. *J Crit Rev*. 2020;7(14).
85. Leão MP, Pinto CP, Sponchiado AP, Ornaghi BP. Dimensional stability of a novel polyvinyl siloxane impression technique. *Brazilian J Oral Sci*. 2014;13(2):118–23.
86. Ali AO. Accuracy of Digital Impressions Achieved from Five Different Digital Impression Systems. *Dentistry*. 2015;05(05).
87. Phillips RW. *Skinner’s science of dental materials*. 9th edn. Philadelphia: Saunders, 1991.
88. DeWald JP, Nakajima H, Bell JL. Bond strengths between elastomeric impression materials and disinfected preliminary impressions. *J Prosthet Dent* 1994;71:394-9.
89. Kim JH, Kim KB, Kim SH, Kim WC, Kim HY, Kim JH. Quantitative evaluation of common errors in digital impression obtained by using an led blue light in-office cad/cam system. *Quintessence Int (Berl)*. 2015;46(5):401–7.
90. Ahrberg D, Lauer HC, Ahrberg M, Weigl P. Evaluation of fit and efficiency of CAD/CAM fabricated all-ceramic restorations based on direct and indirect digitalization: a double-blinded, randomized clinical trial. *Clin Oral Investig*. 2016;20(2):291–300.

91. Al Hamad KQ, Al Quran FA, AlJalam SA, Baba NZ. Comparison of the Accuracy of Fit of Metal, Zirconia, and Lithium Disilicate Crowns Made from Different Manufacturing Techniques. *J Prosthodont*. 2019;28(5):497–503.
92. Berrendero S, Salido MP, Valverde A, Ferreiroa A, Pradíes G. Influence of conventional and digital intraoral impressions on the fit of CAD/CAM-fabricated all-ceramic crowns. *Clin Oral Investig* [Internet]. 2016;20(9):2403–10. Available from: <http://dx.doi.org/10.1007/s00784-016-1714-6>
93. Pradíes G, Zarauz C, Valverde A, Ferreiroa A, Martínez-Rus F. Clinical evaluation comparing the fit of all-ceramic crowns obtained from silicone and digital intraoral impressions based on wavefront sampling technology. *J Dent*. 2015;43(2):201–8.
94. Zarauz C, Valverde A, Martinez-Rus F, Hassan B, Pradies G. Clinical evaluation comparing the fit of all-ceramic crowns obtained from silicone and digital intraoral impressions. *Clin Oral Investig*. 2016;20(4):799–806.
95. Rödiger M, Heinitz A, Bürgers R, Rinke S. Fitting accuracy of zirconia single crowns produced via digital and conventional impressions—a clinical comparative study. *Clin Oral Investig*. 2017;21(2):579–87.
96. Kocaağaoğlu H, Kılınç HI, Albayrak H. Effect of digital impressions and production protocols on the adaptation of zirconia copings. *J Prosthet Dent*. 2017;117(1):102–8.
97. Ueda K, Beuer F, Stimmelmayer M, Erdelt K, Keul C, Güth J. Fit of 4-unit FDPs from CoCr and zirconia after conventional and digital impressions. 2015;
98. Pedroche LO, Bernardes SR, Leao MP, Kintopp CCDA, Correr GM, Ornaghi BP, et al. Marginal And Internal Fit Of Zirconia Copings Obtained Using Different Digital Scanning Methods. *Braz Oral Res*. 2016;30(1):1–7.

99. Vennerström M, Fakhary M, Von Steyern P. The fit of crowns produced using digital impression systems. *Swed Dent J*. 2014;38(3):101–10.
100. Milleding P. Microleakage of indirect composite inlays. An in vitro comparison with the direct technique. *Acta Odontol Scand* 1992;50(5):295-301.)
101. Korkut, L.; Cotert, H. S.; Kurtulmus, H. Marginal, Internal Fit and Microleakage of Zirconia Infrastructures: An “In-Vitro” Study. 2011. 36(1), 72–79.
102. Chopra S, Gupta NK, Tandan A, Dwivedi R, Gupta S, Agarwal G. Comparative evaluation of pressure generated on a simulated maxillary oral analog by impression materials in custom trays of different spacer designs: An in vitro study. *Contemp Clin Dent*. 2016;7(1):55–60.