

10 Literaturverzeichnis

- 3M (1998): Komposit Z100 Produkt-Profil., Herstellerinformation.
- 3M (1998): Scotchbond MP Produkt-Profil., Herstellerinformation.
- Abdalla, A.I. und Davidson, C.L. (1993): Comparison of the marginal integrity of in vivo and in vitro class II restorations., J Dent 21, Seite 158-162.
- ADA, American Dental Association (2001): Acceptance Program Guidelines. Dentin and Enamel Adhesive Materials., Council on Scientific Affairs, Chicago.
- ADA, American Dental Association (2001): Acceptance Program Guidelines. Resin Based Composites for Posterior Restorations., Council of Scientific Affairs, Chicago.
- Allen, D.N. (1969): The durability of conservative restorations., Br Dent J 126, Seite 172-177.
- Amaral, C.M.; Hara, A.T.; Pimenta, L.A. und Rodrigues Jr., A.L. (2001): Microleakage of hydrophilic adhesive systems in Class V restorations., Am J Dent 14 [1], Seite 31-33.
- Appert, C. und Marxner, M. (1999): Excite-Wissenschaftliche Dokumentation., Herstellerinformation.
- Asmussen, E.K. (1975): Composite restorative resins. Composition versus wall-to-wall polymerisation contraction., Acta Odontol Scand 33, Seite 337-344.
- Asmussen, E.K. (1982): Factors effecting the quantity of remaining double bonds in restorative resin polymers., Scand J Dent Res 90, Seite 490-496.
- Asmussen, E.K. und Hansen, E.K. (1993): Dentine bonding systems., Willems, G., State of the art on direct posterior filling materials and dentin bonding. Seite 33-47, Van der Poorten, Leuven.
- Asmussen, E.K. und Peutzfeldt, A. (1998): Influence of UEDMA, BisGMA and TEGDMA on selected mechanical properties of experimental resin composites., Dent Mater 14, Seite 51-56.
- Asmussen, E.K. und Peutzfeldt, A. (2001): The influence of relative humidity on the effect of dentin bonding systems., J Adhes Dent 3 [2], Seite 123-127.
- Baier, R.E. (1992): Principles of adhesion., Oper Dent 17, Seite 1-9.
- Baratieri, L.N. und Ritter, A.V. (2001): Four-year clinical evaluation of posterior resin-based composite restorations placed using the total-etch technique., J Esthet Dent 13 [1], Seite 50-57.
- Barghi, N.; Knight, G.T. und Berry, T.G. (1991): Comparing two methods of moisture control in bonding to enamel: a clinical study., Oper Dent 16 [4], Seite 130-135.
- Barkmeier, W.W.; Shaffer, S.E. und Gwinnett, A.J. (1986): Effect of 15 vs 60 second enamel acid conditioning on adhesion and morphology., Oper Dent 11, Seite 111-116.
- Barnes, D.M.; Blank, L.W.; Thompson, V.P.; Holston, A.M. und Gingell, J.C. (1991): A 5-and 8-year clinical evaluation of a posterior composite resin., Quintessence Int 22 [2], Seite 143-151.
- Bausch, J.R.; De Lange, K.; Davidson, C.L.; Peters, A. und De Gee, A.J. (1982): Clinical significance of polymerization shrinkage of composite resins., J Prosthet Dent 48 [1], Seite 59-67.
- Bentley, C. und Drake, C.W. (1986): The longevity of restorations in a dental school clinic., J Dent Educ 50, Seite 594-600.

- Besnault, C. und Attal, J.-P. (2002): Influence of a simulated oral environment on microleakage of two adhesive systems in Class II composite restorations., J Dent 30, Seite 1-6.
- Beznos, C. (2001): Microleakage at the cervical margin of composite Class II cavities with different restorative techniques., Oper Dent 26, Seite 60-69.
- Black, G.V. (1914): Konservierende Zahnheilkunde Bd.II, Meuser, Berlin.
- Blunck, U. (1987): Der Einfluss von Dentinhaftmitteln auf die marginale Adaptation von Komposit-Füllungen im Dentin in vitro., Zahnmed. Diss. Berlin.
- Blunck, U. (2000): Adhesives: Principles and state of the art., Degrangé, M., Adhesion: The silent revolution in dentistry. Seite 29-44, Quintessence, Chicago.
- Blunck, U. und Haller, B. (1999): Klassifikation von Bondingsystemen., Quintessenz 50, Seite 1021-1033.
- Blunck, U. und Haller, B. (2003): Übersicht und Wertung aktueller Bondingsysteme., Zahnärztl Mitt, Seite 48-58.
- Boer, W.-M. (1998): Überblick über die Möglichkeiten der ästhetischen Zahnheilkunde mit direkten Kompositfüllungen., Quintessenz 49, Seite 871-881.
- Bouillaguet, S.; Degrangé, M.; Cattani, M.; Godin, Ch. und Meyer, J.M. (2002): Bonding to dentin achieved by general practitioners., Schweiz Mschr Zahnheilk 112, Seite 1006-1011.
- Bouillaguet, S.; Wataha, J.C.; Hanks, C.T.; Ciucchi, B. und Holz, J. (1996): In vitro cytotoxicity and dentin permeability of HEMA., J Endod 22 [5], Seite 244-248.
- Bouschlicher, M.R.; Vargas, M.A. und Boyer, D.B. (1997): Effect of composite type, light intensity, configuration factor and laser polymerization on polymerization contraction forces., Am J Dent 10, Seite 88-96.
- Bowen, R.L. (1967): Adhesive bonding of various materials to hard tissues. VI. Forces developing in direct-filling materials during hardening., J Am Dent Assoc 74, Seite 439-445.
- Bowen, R.L. (1979): Compatibility of various materials with oral tissues I: The components in composite restorations., J Dent Res 58, Seite 1493-1506.
- Bowen, R.L.; Nemoto, K. und Rapson, J.E. (1983): Adhesive bonding of various materials to hard tooth tissues: Stress developing in composite during hardening., J Am Dent Assoc 106, Seite 475-477.
- Bowen, R.L.; Papson, J.E. und Dickson, G. (1982): Hardening shrinkage and hygroscopic expansion of composite resins., J Dent Res 61, Seite 654-658.
- Boyde, A. (1976): Enamel structure and cavity margins., Oper Dent 1, Seite 13-28.
- Brackett, W.W.; Brackett, M.G.; Dib, A.; Franco, G. und Estudillo, h. (2005): Eighteen-month clinical performance of a self-etching primer in unprepared class V resin restorations., Oper Dent 30 [4], Seite 424-429.
- Brackett, W.W.; Covey, D.A. und St Germain, H.A. (2002): One-year clinical performance of a self-etching adhesive in class V resin composites cured by two methods., Oper Dent 27 [3], Seite 218-222.
- Bränström, M. und Aström, A. (1972): The hydrodynamics of the dentine; its possible relationship to dentinal pain., Int Dent J 22, Seite 219-227.
- Bränström, M. und Nordenvall, K.-J. (1978): Bacterial penetration, pulpal reaction and the inner surface of concise enamel bond. Composite fillings in etched and unetched cavities., J Dent Res 57, Seite 3-10.

- Brännström, M. und Vojinovic, O. (1976): Response of the dental pulp to invasion of bacteria around three filling materials., J Dent Child 43, Seite 15-21.
- Bullard, R.H.; Leinfelder, K.F. und Russell, C.M. (1988): Effect of coefficient of thermal expansion on microleakage., J Am Dent Assoc 116, Seite 871-874.
- Buonocore, M.G. (1955): A simple method of increasing the adhesion of acrylic filling materials to enamel surfaces., J Dent Res 34, Seite 849-853.
- Buonocore, M.G.; Matusi, A. und Gwinnett, A.J. (1968): Penetration of resin dental materials into enamel surfaces with reference to bonding., Arch Oral Biol 13, Seite 61-70.
- Buonocore, M.G.; Wileman, W. und Brudevold, F. (1956): A report on a resin composition capable of bonding to human dentin surfaces., J Dent Res 35, Seite 846-851.
- Burke, F.J.; Cheung, S.W.; Mjör, I.A. und Wilson, N.H.F. (1999): Restoration longevity and analysis of reasons for the placement and replacement of restorations provided by vocational dental practitioners and their trainers in the United Kingdom., Quintessence Int 30, Seite 234-242.
- Busato, A.L.S.; Loguercio, A.D.; Reis, A. und de-Oliviera-Carrilho, M.R. (2001): Clinical evaluation of posterior composite restorations: 6-year results., Am J Dent 14, Seite 304-308.
- Byerley, T.J.; Eick, J.D.; Chen, G.P.; Chappelow, C.C. und Millich, F. (1992): Synthesis and polymerization of new expanding dental monomers., Dent Mater 8, Seite 345-350.
- Cardoso, P.E.C.; Braga, R.R. und Carrilho, M.R.O. (1999): Evaluation of micro-tensile, shear and tensile tests determining the bond strength of three adhesive systems., Dent Mater 14, Seite 394-398.
- Carvalho, R.M.; Yoshiyama, M.; Pashley, E.L. und Pashley, D.H. (1996): In vitro study on the dimensional changes of human dentine after demineralisation., Arch Oral Biol 41, Seite 369-377.
- Castelnuovo, J.; Tjan, A.H.L. und Liu, P. (1996): Microleakage of multi-step and simplified-step bonding systems., Am J Dent 9, Seite 245-248.
- Chappell, R.P.; Cobb, C.M.; Spencer, P. und Eick, J.D. (1994): Dentinal tubule anastomosis: A potential factor in adhesive bonding?, J Prosthet Dent 72, Seite 183-188.
- Choi, K.K.; Condon, J.R. und Ferracane, J.L. (2000): The effect of adhesive thickness on polymerization contraction stress of composite., J Dent Res 79 [3], Seite 812-817.
- Chow, L.C. und Brown, W.E. (1973): Phosphoric acid conditioning of teeth for pit and fissure sealants., J Dent Res 52, Seite 1158.
- Chowdhury, N.A.; Wakasa, K.; Priyawan, R. und Yamaki, M. (1997): Dental application of binary urethane monomer mixtures: strengthened resin matrix., J Mat Science 8, Seite 149-155.
- Chung, K.H. (1990): The relationship between composition and properties of posterior resin composites., J Dent Res 69, Seite 852-856.
- Cichon, P. und Kerschbaum, T. (1999): Verweildauer zahnärztlicher Restaurationen bei Behinderten., Dtsch Zahnärztl Z 54, Seite 96-102.
- Coli, P.; Alaeddin, S.; Wennerberg, A. und Karlsson, S. (1999): In vitro dentin pretreatment: surface roughness and adhesive shear bond strength., Eur J Oral Sci 107, Seite 400-413.
- Coli, P. und Karlsson, S. (1999): In vitro microleakage of Class II composite resin restorations after different dentin pretreatments., Marginal Adaptation Of

- Composite Resin Restorations In Vitro. 1 Seite VII, 1-17, Department of Prosthetic Dentistry and Dental Materials Science Faculty of Odontology Göteborg University, Göteborg.
- Condon, J.R. und Ferracane, J.L. (1997): In vitro wear of composite with varied cure, filler level, and filler treatment., J Dent Res 76 [7], Seite 1405-1411.
- Condon, J.R. und Ferracane, J.L. (2000): Assessing the effect of composite formulation on polymerization stress., J Am Dent Assoc 131, Seite 497-503.
- Costa, C.A.S.; Mesas, A.N. und Hebling, J. (2000): Pulp response to direct capping with an adhesive system., Am J Dent 13, Seite 81-87.
- Crabb, H.S.M. (1981): The survival of dental restorations in a teaching hospital., Br Dent J 150, Seite 315-318.
- Craig, R.G. (1981): Chemistry, composition and properties of composite resin., Dent Clin North Amer 25, Seite 219-223.
- Crawford, P.J.M.; Whittaker, D.K. und Owen, G.M. (1987): The influence of enamel prism orientation on leakage of resin-bonded restorations., J Oral Rehabil 14, Seite 283-289.
- Davidson, C.L. und De Gee, A.J. (1984): Relaxation of polymerization contraction stresses by flow in dental composites., J Dent Res 63, Seite 146-148.
- Davidson, C.L.; De Gee, A.J. und Feilzer, A.J. (1984): The competition between the composite-dentin bond strength and the polymerization contraction stress., J Dent Res 63 [12], Seite 1396-1399.
- Davidson, C.L. und Feilzer, A.J. (1997): Polymerization shrinkage and polymerization shrinkage stress in polymer-based restoratives., J Dent 25, Seite 435-440.
- De Munck, J.; Van Meerbeek, B.; Yoshida, Y.; Inoue, S.; Vargas, M.A. und Suzuki, K. (2003): Four-year water degradation of total etch adhesives bonded to dentin., J Dent Res 82, Seite 136-140.
- Demarco, F.F.; Tarquinio, S.B.C.; Jaeger, M.M.M.; de Araùjo, V.C. und Matson, E. (2001): Pulp response and cytotoxicity evaluation of 2 dentin bonding agents., Quintessence Int 32, Seite 211-220.
- Dennison, J.B. und Craig, R.G. (1978): Characterization of enamel surfaces prepared with commercial and experimental etchants., J Am Dent Assoc 97, Seite 799-805.
- Dermann, K.; Gorschboth, L. und Viohl, J. (1979): Wärmeausdehnung in Wasser gelagerter Füllungskunststoffe., Dtsch Zahnärztl Z 34, Seite 684-686.
- DeTrey, Dentsply (2003): Ceram X-Scientific Compendium., Konstanz, Dentsply DeTrey GmbH
- Dietschi, D.; De Siebenthal, G.; Neveu-Rosenstand, L. und Holz, J. (1995): Influence of the restorative technique and new adhesives on the dentin marginal seal and adaptation of resin composite Class II restorations: An in vitro evaluation., Quintessence Int 26, Seite 717-727.
- Ehrnfors, L. (1983): Dental composites reinforced with microporous sintered glassfiber networks., Swed Dent J 18, Seite 1-45.
- Eick, J.D.; Robinson, S.J.; Beyerley, T.J. und Chappelow, C.C. (1993): Adhesives and nonshrinking dental resins of the future., Quintessence Int 24, Seite 632-640.
- Eick, J.D.; Wilko, R.A.; Anderson, C.H. und Sorensen, S.E. (1970): Scanning electron microscopy of cut tooth surfaces and identification of debris by use of the electron microprobe., J Dent Res 49, Seite 1359-1368.

- El-Kalla, I.H. und Garcia-Godoy, F. (1998): Bond strength and interfacial micromorphology of four adhesive systems in primary and permanent molars., J Dent Child 65, Seite 169-176.
- Erickson, R.L. (1989): Mechanism and clinical implications of bond formation for two dentin bonding agents., Am J Dent 2, Seite 117-123.
- Erickson, R.L. (1992): Surface interactions of dentin adhesive materials., Oper Dent 5, Seite 81-94.
- Eriksen, H.M. und Buonocore, M.G. (1976): Marginal leakage with different composite restorative materials in vitro., J Oral Rehabil 3, Seite 315-322.
- Ernst, C.-P. ; Cortain, G. ; Spohn, M. ; Rippin, G. und Willershausen, B. (2002): Marginal integrity of different resin-based composites for posterior teeth: an in vitro dye-penetration study on eight resin-composite and compomer-/adhesive combinations with a particular look at the additional use of flow composites., Dent Mater 18, Seite 351-358.
- Ernst, C.-P.; Brandenbusch, M.; Canbek, K.; Meyer, G.; Gottschalk, F. und Willershausen, B. (2005): Clinical Study on a Nanofiller Resin Composite. 2 Year Results., J Dent Res 83, Seite Spec Iss A, Abstr.: 0578.
- Ernst, C.-P.; Martin, M.; Stuff, S. und Willershausen, B. (2001): Clinical performance of a packable resin composite for posterior teeth after 3 years., Clin Oral Invest 5, Seite 148-155.
- Fayyad, M.A. und Shortall, A.C.C. (1987): Microleakage of dentine-bonded posterior composite restorations., J Dent 15, Seite 67-72.
- Feilzer, A.J.; De Gee, A.J. und Davidson, C.L. (1987): Setting stress in composite resin in relation to configuration of the restoration., J Dent Res 66 [11], Seite 1636-1639.
- Feilzer, A.J.; De Gee, A.J. und Davidson, C.L. (1988): Curing contraction of composites and glass-ionomer cements., J Prosthet Dent 59, Seite 297-300.
- Feilzer, A.J.; De Gee, A.J. und Davidson, C.L. (1990): Relaxation of polymerization contraction shear stress by hygroscopic expansion., J Dent Res 69, Seite 36-39.
- Feilzer, A.J.; Dooren, L.H.; De Gee, A.J. und Davidson, C.L. (1995): Influence of light intensity on polymerization shrinkage and integrity of restoration-cavity interface., Eur J Oral Sci 103, Seite 322-326.
- Ferracane, J.L. (1999): Status of Research on New Fillers and New Resins for Dental Composites, Prati, C., Advanced Adhesive Dentistry. 3rd International Kuraray Symposium 1 Seite 3-29, Granada.
- Ferracane, J.L. und Greener, E.H. (1986): The effect on resin formulation on the degree of conversion and mechanical properties of dental restorative resins., J Biomed Mater Res 20, Seite 121-131.
- Ferrari, M. und Davidson, C.L. (1996): In vivo resin-dentin interdiffusion and tag formation with lateral branches of two adhesive systems., J Prosthet Dent 76 [3], Seite 250-253.
- Ferrari, M. und Davidson, C.L. (1996): Sealing performance of Scotchbond Multi-Purpose-Z100 in Class II restorations., Am J Dent 9, Seite 145-149.
- Ferrari, M.; Goracci, G. und Garcia-Godoy, F. (1997): Bonding mechanism of three "one-bottle" systems to conditioned and unconditioned enamel and dentin., Am J Dent 10, Seite 224-230.
- Ferrazini, G. (1996): Systematische Fissurenversiegelung der ersten bleibenden Molaren., Acta Med Dent Helvet 1, Seite 13-16.

- Finger, W.J. und Balkenhol, M. (1999): Practitioner variability effects on dentin bonding with an acetone-based one-bottle adhesive., J Adhes Dent 1 [4], Seite 311-314.
- Finger, W.J. und Dreyer, J.K. (1976): Polymerisationsinhibierung durch Sauerstoff bei Kompositefüllungsmaterialien und Schmelzversiegelern., Schweiz Mschr Zahnheilk 86 [8], Seite 812-824.
- Finger, W.J. und Uno, S. (1996): Bond strength of Gluma CPS using the moist dentin bonding technique., Am J Dent 9, Seite 27.
- Fortin, D. und Vargas, M.A. (2000): The spectrum of composites: New techniques and materials., J Am Dent Assoc 131, Seite 26S-30S.
- Frankenberger, R.; Krämer, N. und Petschelt, A. (2000): Long -term effect of dentin primers on enamel bond strength and marginal adaptation., Oper Dent 25, Seite 11-19.
- Frankenberger, R.; Krämer, N. und Sindel, J. (1996): Haftfestigkeit und Zuverlässigkeit der Verbindung Dentin-Komposit und Dentin-Kompomer., Dtsch Zahnärztl Z 51, Seite 556-560.
- Frankenberger, R.; Schmidt, G.; Krämer, N. und Petschelt, A. (1999): Fließfähige Komposit (Flowables). Quintessenz 50, Seite 1145-1154.
- Frankenberger, R.; Sindel, J. und Krämer, N. (1997): Beeinflussen Dentinadhäsive und ihre Applikatoren die Schmelzhaftung?, Dtsch Zahnärztl Z 52 [3], Seite 202-205.
- Freilich, M.A.; Goldberg, A.J.; Gilpatrick, R.O. und Simonsen, R.J. (1992): Direct and indirect evaluation of posterior composite restorations at three years., Dent Mater 8, Seite 60-64.
- Fritzenschaft, A. und Haller, B. (1998): Extrusion bond strength to dentin of new self-priming adhesives., J Dent Res 77 [Spec Iss], Seite 638 (Abstr.51).
- Fukushima, T. und Horibe, T. (1990): A scanning electron microscopic investigation of bonding of methacryloyloxyalkyl hydrogen maleate to etched dentin., J Dent Res 69, Seite 46-50.
- Gallo, J.R.; Burgess, J.O.; Ripps, A. H.; Walker, R.S.; Winkler, M.M.; Mercante, D.E. und Davidson, J. M. (2005): Two-year clinical evaluation of a posterior resin composite using a fourth- and fifth-generation bonding agent., Oper Dent 30 [3], Seite 290-296.
- Garberoglio, R. und Brännström, M. (1976): Scanning electron microscopic investigation of human dentinal tubules., Arch Oral Biol 21, Seite 355-362.
- Giannini, M.; Carvalho, R.M.; Martins, L.R.; Dias, C.T. und Pashley, D.H. (2001): The influence of tubule density and area of solid dentin on bond strength of two adhesive systems to dentin., J Adhes Dent 3, Seite 315-324.
- Gottlieb, E.W.; Retief, D.H. und Jamison, H.C. (1982): An optimal concentration of phosphoric acid as an etching agent., J Prosthet Dent 48, Seite 48-51.
- Guertsen, W.; Schmahl, V. und Hilgers, R. (1990): Untersuchungen über den Verbund zweier Komposittypen mit angeätztem Schmelz., Dtsch Zahnärztl Z 45, Seite 299-302.
- Guertsen, W. und Schoeler, U. (1997): A 4-year retrospective clinical study of Class I and Class II composite restorations., J Dent 25, Seite 229-232.
- Gwinnett, A.J. (1966): The ultrastructure of the "prismless" enamel of deciduous teeth., Arch Oral Biol 11, Seite 1109-1115.
- Gwinnett, A.J. (1967): The ultrastructure of the "prismless" enamel of permanent human teeth., Arch Oral Biol 12, Seite 381-387.

- Gwinnett, A.J. (1973): Human prismless enamel and its influence on sealant penetration., Arch Oral Biol 18, Seite 441-444.
- Gwinnett, A.J. (1984): Smear layer: morphological considerations., Oper Dent 3, Seite 3-12.
- Gwinnett, A.J. (1988): Bonding of restorative resins to enamel., Int Dent J 38, Seite 91-96.
- Gwinnett, A.J. (1992): Micromorphological relationship between resin and dentin in vivo and in vitro., Am J Dent 5, Seite 19-23.
- Gwinnett, A.J. (1992): Moist vs dry dentin: Its effect on shear bond strength., Am J Dent 5, Seite 127-129.
- Gwinnett, A.J. (1992): Structure and composition of enamel., Oper Dent 17, Seite 10-17.
- Gwinnett, A.J. (1993): Quantitative contribution of resin infiltration/hybridization to dentin bonding., Am J Dent 6, Seite 7-9.
- Gwinnett, A.J. (1994): Altered tissue contribution to interfacial bond strength with acid conditioned dentin., Am J Dent 7, Seite 243-246.
- Gwinnett, A.J. (1994): Chemically conditioned dentin: a comparison of conventional and environmental scanning electron microscopy findings., Dent Mater 10, Seite 150-155.
- Gwinnett, A.J. (1994): Dentin bond strengths after air-drying and re-wetting., Am J Dent 7, Seite 144-148.
- Gwinnett, A.J.; Tay, F.R.; Pang, K.M. und Wei, S.H.Y. (1996): Quantitative contribution of the collagen network in dentin hybridization., Am J Dent 9, Seite 140-144.
- Gwinnett, A.J.; Tay, F.R. und Wei, S.H.Y. (1996): Bridging the gap between the overdry and overwet bonding phenomenon - Optimization of dentin hybridization and tubular seal., Takahashi, K., Proceedings of the international conference on dentin/pulp complex 1995 and the international meeting on clinical topics of dentin/pulp complex. Seite 359-363, Quintessence Publishing Co. Inc, Osaka.
- Haller, B. (1994): Mechanismus und Wirksamkeit von Dentinhaltvermittlern., Dtsch Zahnärztl Z 49, Seite 750-759.
- Haller, B.; Klaiber, B.; Dürner, U. und Hofmann, N. (1992): Dentinpermeabilität nach Behandlung mit Cleanern und Primern., Dtsch Zahnärztl Z 47, Seite 171-175.
- Haller, B.; Windsheimer, U.; Hofmann, N. und Klaiber, B. (1995): Selektive Schmelzätzung oder Total Etching?, Dtsch Zahnärztl Z 50, Seite 824-827.
- Hannig, M. und Bott, B. (2000): Randschlussverhalten von plastischen zahnfarbenen Füllungen in dentinbegrenzten Klasse-II-Kavitäten., Dtsch Zahnärztl Z 55 [2], Seite 134-138.
- Hannig, M.; Reinhardt, K.-J. und Bott, B. (1999): Self-etching primer vs phosphoric acid: An alternative concept for composite- to- enamel bonding., Oper Dent 24, Seite 172-178.
- Hansen, E.K. (1984): Marginal porosity of light activated composites in relation to use of intermediate low-viscosous resins., Scand J Dent Res 92, Seite 148-155.
- Hansen, E.K. und Asmussen, E.K. (1989): Marginal adaptation of posterior resins: Effect of dentin-bonding agent and hygroscopic expansion., Dent Mater 5, Seite 122-126.

- Hansen, E.K.; Hansen, B.K.; Nielsen, F.; Olsen, S. und Lind, K. (1984): Clinical short term study of marginal integrity of resin restorations., Scand J Dent Res 92, Seite 374-379.
- Hansen, E.K. und Munksgaard, E.C. (1989): Saliva contamination vs. efficacy of dentin-bonding agents., Dent Mater 5, Seite 329.
- Hasegawa, T.; Itoh, K.; Yukitani, W.; Wakumoto, S. und Hisamitsu, H. (2001): Effects of soft-start irradiation on the depth of cure and marginal adaptation to dentin., Oper Dent 26, Seite 389-395.
- Hashieh, I.A.; Cosset, A.; Franquin, J.C. und Camps, J. (1999): In vitro cytotoxicity of one-step dentin bonding system., J Endod 25 [2], Seite 89-92.
- Hebling, J.; Giro, E.M.A. und de Souza Costa, C.A. (1999): Biocompatibility of an adhesive system applied to exposed human dental pulp., J Endod 25 [10], Seite 676-682.
- Helbig, E.B.; Klimm, W.; Haufe, E. und Richter, G. (1998): Klinische Fünfjahresstudie zum Feinpartikelhybrid P-50 in Kombination mit Scotchbond 2., Acta Med Dent Helvet 3 [10], Seite 171-177.
- Hickel, R. (1997): Moderne Füllungswerkstoffe., Dtsch Zahnärztl Z 52, Seite 572-585.
- Hickel, R. und Staehle, H.J. (1998): Komposite im Seitenzahnbereich. Stellungnahme der deutschen Hochschullehrer für Zahnerhaltung., Zahnärztl Mitt 9, Seite 48.
- Hilton, T.J.; und Ferracane, J.L. (1999): Cavity preparation factors and microleakage of Class II composite restorations filled at intraoral temperatures., Am J Dent 12, Seite 123-130.
- Holderegger, C.; Paul, S.J.; Lüthy, H. und Schärer, P. (1997): Bond strength of one-bottle dentin bonding agents to human dentin., Am J Dent 10, Seite 71-76.
- Holtan, J.R.; Nystrom, G.P.; Phelps, R.A.; Anderson, C.H. und Becker, W.S. (1995): Influence of different etchants and etching times on shear bond strength., Oper Dent 20, Seite 94-99.
- Inokoshi, S.; Hosoda, H.; Harnirattisai, C. und Shimada, Y. (1993): Interfacial structure between dentin and seven dentin bonding systems revealed using argon ion beam etching., Oper Dent 18, Seite 8-16.
- Inoue, M.; Finger, W.J. und Mueller, M. (1994): Effect of filler content of restorative resins on retentive strength to acid-conditioned enamel., Am J Dent 7, Seite 161-166.
- Jacobsen, T.; Ma, R. und Söderholm, K.-J.M. (1994): Dentin bonding through interpenetrating network formation., Trans Acad Dent Mater 7, Seite 45-52.
- Jacobsen, T. und Söderholm, K.-J.M. (1995): Some effects of water on dentin bonding., Dent Mater 11, Seite 132-136.
- Jacobsen, T. und Söderholm, K.-J.M. (1998): Effect of primer solvent, primer agitation and dentin dryness on shear bond strength to dentin., Am J Dent 11, Seite 225-228.
- Janda, R. (1988): Der Stand der Entwicklung auf dem Gebiet der Zahnfüllungskunststoffe(I). Quintessenz 39, Seite 1067-1073.
- Jendresen, M.D. und Glantz, P.-O. (1981): Clinical adhesiveness of selected dental materials. An in-vivo study., Acta Odontol Scand 39, Seite 39-45.
- Jokstad, A. und Mjör, I.A. (1991): Analyses of long-term clinical behavior of Class-II amalgam restorations., Acta Odontol Scand 49, Seite 47-63.

- Joynt, R.B.; Davis, E.L.; Wieczkowski, G. und Yu, X.Y. (1991): Dentin bonding agents and the smear layer., Oper Dent 16, Seite 186-191.
- Kamann, W.K. und Gängler, P. (1999): Zur Funktionszeit von Amalgam-, Komposite- und Goldhämmerfüllungen., ZWR 108, Seite 270-273.
- Kanca, J.A. (1992): Effect of resin primer solvent and surface wetness on resin composite bond strength to dentin., Am J Dent 5, Seite 213-215.
- Kanca, J.A. (1992): Improving bond strength through acid etching of dentin and bonding to wet dentin surfaces., J Am Dent Assoc 123, Seite 35-43.
- Kanca, J.A. (1992): Resin bonding to wet substrate I. Bonding to dentin., Quintessence Int 23 [1], Seite 39-41.
- Kato, G. und Nakabayashi, N. (1998): The durability of adhesion to phosphoric acid etched wet dentin substrates., Dent Mater 14, Seite 347-352.
- Kaufmann, G.M. ; Eick, J.D. und Chappelow, C.C. (1999): Determination of polymerization and darkcure in epoxy/polyols by FTIR., J Dent Res 78 [Spec Iss], Seite 371 Abstr.#2126.
- Kemp-Scholte, C.M. und Davidson, C.L. (1990): Complete marginal seal of class V resin composite restorations effected by increased flexibility., J Dent Res 69 [514], Seite 1240-1243.
- Khan, A.M.; Suzuki, H.; Nomura, Y.; Taira, M.; Wakasa, K.; Shintani, H. und Yamaki, M. (1992): Characterization of inorganic fillers in visible- light-cured dental composite resins., J Oral Rehabil 19, Seite 361-370.
- Klimm, W. und Graehn, G. (1993): Der keilförmige Defekt., Quintessenz-Verlag, Berlin.
- Köhler, B.; Rasmusson, C.-G. und Ödman, P. (2000): A five-year clinical evaluation of Class II composite resin restorations., J Dent 28, Seite 111-116.
- Koike, T; Hasegawa, T.; Manabe, A.; Itoh, K. und Wakumoto, S. (1990): Effect of water sorption and thermal stress on cavity adaptation of dental composites., Dent Mater 6, Seite 178-180.
- Koliniotou-Koubia, E.; Dionysopoulos, P.; Koulaouzidou, E.A.; Kortsaris, A.H. und Papadogiannis, Y. (2001): In vitro cytotoxicity of six dentin bonding agents., J Oral Rehabil 28, Seite 971-975.
- Krämer, N.; Kunzelmann, K.-H.; Pollety, T.; Pelka, M. und Hickel, R. (1994): Langzeiterfahrungen mit Cermet-Zementfüllungen in Klasse-I/II-Kavitäten., Dtsch Zahnärztl Z 49, Seite 905-909.
- Krejci, I. und Lutz, F. (1986): Seitenzahn-Composite. Warum(noch)nicht?, Phillip J 3, Seite 5-12.
- Krejci, I.; Lutz, F. und Perisic, U. (1992): Auswirkungen der Verarbeitungstechnik auf die Dentinhaftung., Schweiz Mschr Zahnheilk 102, Seite 924-929.
- Krenkel, D.C.; Eick, J.D.; Kaufmann, G. und Bowles, C.Q. (1999): Determination of polymerization shrinkage stress in low shrinkage epoxy resins., J Dent Res 78, Seite 315 Abstr.#1678.
- Kreulen, C.M.; Tobi, H.; Gruythuysen, R.J.M.; van Amerongen, W.E. und Borgmeijer, P.J. (1998): Replacement risk of amalgam treatment modalities: 15-year results., J Dent 26, Seite 627-632.
- Kuijs, R.H.; Fennis, W.M.M.; Kreulen, C.M.; Barink, M. und Verdonschot, N. (2003): Does Layering Minimize Shrinkage Stresses in Composite Restorations?, J Dent Res 82 [12], Seite 967-971.

- Kullmann, W. und Pötters, G. (1984): Vergleichende Untersuchungen zum thermischen Expansionskoeffizienten an 50 verschiedenen Kunststofffüllungsmaterialien., Dtsch Zahnärztl Z 39, Seite 96-100.
- Lambrechts, P. und Vanherle, G. (1983): Structural evidences of the microfilled composites., J Biomed Mater Res 17, Seite 249-260.
- Lavelle, C.L.B. (1976): A cross-sectional survey into the durability of amalgam restorations., J Dent 4, Seite 139-143.
- Legler, L.R.; Retief, D.H und Bradley, E.L. (1990): Effects of phosphoric acid concentration and etch duration on enamel depth of etch: an in vitro study., Am J Orthod Dentofac Orthop 98, Seite 154-160.
- Lehner, C.; Studer, S.; Brodbeck, U. und Schärer, P. (1998): Six-year clinical results of leucite-reinforced glass ceramic inlays and onlays., Acta Med Dent Helvet 5, Seite 137-146.
- Letzel, H. (1989): Survival rates and reasons for failure of posterior composite restorations in multicentre clinical trial., J Dent 17, Seite 10-17.
- Letzel, H.; Hof, M.A. van't; Marshall, G.W. und Marshall, S.J. (1997): The influence of the amalgam alloy on the survival of amalgam restorations: a secondary analysis of multiple controlled clinical trials., J Dent Res 76, Seite 1787-1798.
- Letzel, H.; van't Hof, M.A.; Vrijhoef, M.M.A.; Marshall, G.W. und Marshall, S.J. (1989): A controlled clinical study of amalgam restorations: survival, failures, and causes of failure., Dent Mater 5, Seite 115-121.
- Lim, B.-S.; Ferracane, J.L.; Condon, J.R. und Adey, J.D. (2002): Effect of filler fraction and filler surface treatment on wear of microfilled composite., Dent Mater 18, Seite 1-11.
- Linde, A. und Goldberg, M. (1993): Dentinogenesis, Critical reviews: Oral Biology and Medicine 4, Seite 679-728.
- Lopes, G.C.; Baratieri, L.N.; Monteiro, S. und Vieira, L.C.C. (2004): Effect of posterior resin composite placement technique on the resin-dentin interface formed in vivo., Quintessence Int 35 [2], Seite 156-161.
- Lopes, G.C.; Franke, M. und Maia, H.P. (2002): Effect of finishing time and techniques on marginal sealing ability of two composite restorative materials., J Prosthet Dent 88, Seite 32-36.
- Lösche, A.C.; Lösche, G.M. und Roulet, J.-F. (1993): Die Auswirkung erhöher Lichtintensität auf das Randverhalten von Klasse II-Kompositfüllungen., Dtsch Zahnärztl Z 49, Seite 590-594.
- Lösche, G.M. (1996): Klasse-II-Kompositfüllungen mit und ohne konfektionierte Glaskeramik-Inserts. Eine In-vivo-Studie., Dtsch Zahnärztl Z 51, Seite 389-394.
- Lösche, G.M. (1999): Marginal adaptation of Class II composite fillings: Guided polymerization vs reduced light intensity., J Adhes Dent 1 [3356], Seite 31-39.
- Lu, H.; Roeder, L.B.; Lei, L. und Powers, J.M. (2005): Effect of surface roughness on stain resistance of dental resin composites., J Esthet Restor Dent 17, Seite 102-109.
- Lundin, S.A. und Koch, G. (1989): Class I and II composite restorations: a 4-year clinical follow up., Swed Dent J 13, Seite 217-227.
- Lundin, S.A. und Rasmusson, C.-G. (2004): Clinical evaluation of a resin composite and bonding agent in Class I and II restorations: 2-year results., Quintessence Int 35 [9], Seite 758-762.

- Luo, J.; Lannutti, J.J. und Seghi, R.R. (1998): Effect of filler porosity on the abrasion resistance of nanoporous silica gel/polymer composites., Dent Mater 14, Seite 29-36.
- Lutz, F.; Cochran, M.A. und Mörmann, W. (1984): Adhäsive Restauration-Flop oder Hit?, Schweiz Mschr Zahnheilk 94, Seite 1124-1131.
- Lutz, F.; Krejci, I. und Oldenburg, T.R. (1986): Elimination of polymerization stresses at the margins of posterior composite resin restorations: a new restorative technique., Quintessence Int 17 [12], Seite 777-784.
- Lutz, F.; Krejci, I. und Schüpbach, P. (1993): Adhäsivsysteme für zahnfarbene Restaurationen., Schweiz Mschr Zahnheilk 103, Seite 537-549.
- Lutz, F. und Phillips, R. W. (1983): A classification and evaluation of composite resin systems., J Prosthet Dent 50, Seite 480-488.
- Lutz, F.; Phillips, R. W.; Roulet, J.-F. und Imfeld, t. (1983): Komposit - Klassifikation und Wertung., Schweiz Mschr Zahnheilk 93, Seite 914-929.
- Mair, L.H. (1998): Ten-year clinical assessment of three posterior resin composites and two amalgams., Quintessence Int 29, Seite 483-490.
- Manson-Rahemtulla, B.; Retief, D.H und Jamison, H.C. (1984): Effect of concentrations of phosphoric acid on enamel dissolution., J Prosthet Dent 51, Seite 495-498.
- Marthaler, T.M.; Brunelle, J.; Downer, M.C.; König, K.G.; Truin, G.J.; Künzel, W.; O'Mullane, D.M.; Moller, I.J.; von der Fehr, F.R. und Vrbic, V. (1996): The prevalence of dental caries in Europe 1990-1995., Caries Res 30 [4], Seite 237-255.
- Mayhall, C.W. (1970): Concerning the composition and source of the acquired enamel pellicle of human teeth., Arch Oral Biol 15, Seite 1327-1341.
- Meckel, A.H. (1965): The formation and properties of organic films on teeth., Arch Oral Biol 10, Seite 585-597.
- Mehl, A.; Hickel, R. und Kunzelmann, K.-H. (1997): Physical properties and gap formation of light-cured composites with and without " soft-start-polymerization". J Dent 25, Seite 321-330.
- Mitra, S.B.; Wu, D. und Holmes, B.N. (2003): An application of nanotechnology in advanced dental materials., J Am Dent Assoc 134 [10], Seite 1382-1390.
- Mixson, J.M.; Spencer, P.; Moore, D.L.; Chappell, R.P. und Adams, S. (1995): Surface morphology and chemical characterization of abrasion/erosion lesions., Am J Dent 8, Seite 5-9.
- Miyazaki, M.; Onose, H. und Moore, B.K. (2000): Effect of operator variability on dentin bond strength of two-step bonding system., Am J Dent 13 [2], Seite 101-104.
- Miyazaki, M.; Platt, J.A.; Onose, H. und Moore, B.K. (1996): Influence of dentin primer application methods on dentin bond strength., Oper Dent 21, Seite 167-172.
- Mjör, I.A. (1989): Amalgam and composite resin restorations: Longevity and reasons for replacement., Anusavice, K., Quality Evaluation of Dental Restorations Seite 61-80, Quintessence Publishing, Chicago.
- Mjör, I.A. und Jokstad, A. (1993): Five-year study of Class-II restorations in permanent teeth using amalgam, glass polyalkenoate (ionomer) cermet and resin-based composite materials., J Dent 21, Seite 338-343.
- Moffa, J.P. (1989): Comparative performance of amalgam and composite resin restorations and criteria for their use., Anusavice, K., Quality evaluation of dental restorations. Seite 125-133, Quintessence, Chicago.

- Momoi, Y.; Iwase, H.; Nakano, Y.; Kohno, A.; Asanuma, A. und Yagagisawa, K. (1990): Gradual increase in marginal leakage of resin composite restorations with thermal stress., J Dent Res 69, Seite 1659-1663.
- Müllejans, R.; Badawi, M.O.F.; Raab, W.H.M. und Lang, H. (2003): An in vitro comparison of metal and transparent matrices used for bonded Class II resin composite restorations., Oper Dent 28 [2], Seite 122-126.
- Munksgaard, E.C. und Asmussen, E.K. (1984): Bond strength between dentin and restorative resins mediated by mixture of HEMA and glutaraldehyde., J Dent Res 63, Seite 1087-1089.
- Nakabayashi, N.; Ashizawa, M. und Nakamura, M. (1992): Identification of a resin-dentin hybrid layer in vital human dentin created in vivo: durable bonding to vital dentin., Quintessence Int 23, Seite 135-141.
- Nakabayashi, N.; Kojima, K. und Masuhara, E. (1982): The promotion of adhesion by the infiltration of monomers into tooth substrates., J Biomed Mater Res 16, Seite 265-273.
- Nakabayashi, N. und Takarada, K. (1992): Effect of HEMA on bonding to dentin., Dent Mater 8, Seite 125-130.
- Nakajima, M.; Sano, H. und Burrow, M.F. (1995): Tensile bond strength and SEM evaluation of caries-affected dentin using dentin adhesives., J Dent Res 74, Seite 1679-1688.
- Nakajima, M.; Sano, H.; Zheng, L.; Tagami, J. und Pashley, D.H. (1999): Effect of moist vs dry bonding to normal vs caries affected dentin with *Scotchbond Multi-Purpose Plus.*, J Dent Res 78 [7], Seite 1298-1303.
- Nakajima, M.; Tagami, J. und Pashley, D.H. (1998): Bonding to caries-affected dentin, Inoue, S., Modern Trends in Adhesive Dentistry Proceedings of the Adhesive Dentistry Forum '98 in Sapporo. 1, first. Auflage, Seite 51-58, Kararay, Osaka.
- Nalbandian, J.; Gonzales, F. und Sognnaes, R. (1960): Sclerotic age changes in root dentin of human teeth as observed by optical, electron and X-ray microscopy., J Dent Res 39, Seite 598-607.
- Nisiyama, N.; Asakura, T.; Suzuki, K.; Horie, K. und Nemoto, K. (1995): Effects of a structural change in collagen upon binding to conditioned dentin studied by ¹³C NMR., J Biomed Mater Res 29, Seite 107-111.
- Noack, M.J. und Roulet, J.-F. (1987): Rasterelektronenmikroskopische Beurteilung der Ätzwirkung verschiedener Ätzgele auf Schmelz., Dtsch Zahnärztl Z 42, Seite 953-959.
- Nordenvall, K.-J. und Bränström, M. (1980): In vivo resin impregnation of dentinal tubules., J Prosthet Dent 44 [6], Seite 630-637.
- Nordenvall, K.-J.; Bränström, M. und Malmgren, O. (1980): Etching of deciduous teeth and young and old permanent teeth., Am J Orthod 78, Seite 99-108.
- Oberländer, H.; Friedl, K.-H.; Schmalz, G.; Hiller, K.-A. und Kopp, A. (1999): Clinical performance of polyacid-modified resin restorations using "softstart-polymerization". Clin Oral Invest 3, Seite 55-61.
- Oberländer, H.; Hiller, K.-A.; Thonemann, B. und Schmalz, G. (2001): Clinical evaluation of packable comosite resins in Class-II restorations., Clin Oral Invest 5, Seite 102-107.
- Opdam, N.J.M.; Feilzer, A.J.; Roeters, F.J.M. und Smale, I. (1998): Class I occlusal composite resin restorations: In vivo post-operative sensitivity, wall adaptation, and microleakage., Am J Dent 11, Seite 229-234.

- Opdam, N.J.M.; Roeters, J.J.M.; Kuijs, R.H. und Burgersdijk, R.C.W. (1998): Necessity of bevels for box only Class II composite restorations., J Prosthet Dent 80, Seite 274-279.
- Osborne, J.W.; Normann, R.D. und Gale, E.N. (1991): A 14-year clinical assessment of 12 amalgam alloys., Quintessence Int 22, Seite 857-864.
- Osborne, J.W. und Summitt, J.B. (1998): Extension for prevention: Is it relevant today?, Am J Dent 11, Seite 189-196.
- Owens, B.M.; Halter, T.K. und Brown, D.M. (1998): Microleakage of tooth-colored restorations with a beveled gingival margin., Quintessence Int 29 [6], Seite 356-361.
- Pallesen, U. (2005): Clinical evaluation of three posterior composite resins: 20-year report., J Dent Res 84, Seite Spec Iss B, Abstr.: 0145.
- Pallesen, U. und Qvist, V. (2003): Composite resin fillings and inlays. An 11-year evaluation., Clin Oral Invest 7, Seite 71-79.
- Pameijer, C.H. und Stanley, H.R. (1995): Pulp reaction to a dentin bonding agent., Am J Dent 8, Seite 140-144.
- Pashley, D.H. (1984): Smear layer: physiological considerations., Oper Dent 3, Seite 13-29.
- Pashley, D.H. (1991): Clinical correlations of dentin structure and function., J Prosthet Dent 66, Seite 777-781.
- Pashley, D.H. (1992): The effects of acid etching on the pulpodentin complex., Oper Dent 17, Seite 229-242.
- Pashley, D.H. und Carvalho, R.M. (1997): Dentine permeability and dentine adhesion., J Dent 25 [5], Seite 355-372.
- Pashley, D.H.; Ciucchi, B.; Sano, H.; Carvalho, R.M. und Russell, C.M. (1995): Bond strength versus dentine structure: a modelling approach., Arch Oral Biol 12, Seite 1109-1118.
- Pashley, D.H.; Ciucchi, B.; Sano, H. und Horner, J.A. (1993): Permeability of dentin to adhesive agents., Quintessence Int 24, Seite 618-631.
- Pashley, D.H.; Horner, J.A. und Brewer, P.D. (1992): Interactions of conditioners on the dentin surface., Oper Dent 5, Seite 137-150.
- Pashley, D.H.; Michelich, V. und Kehl, T. (1981): Dentin permeability: Effects of smear layer removal., J Prosthet Dent 46, Seite 531-537.
- Pashley, D.H.; Nelson, R. und Pashley, E.L. (1981): In vivo fluid movement across dentin in the dog., Arch Oral Biol 26, Seite 707-710.
- Pashley, D.H. und Pashley, E.L. (1991): Dentin permeability and restorative dentistry: A status report for the American Journal of Dentistry., Am J Dent 4, Seite 4-9.
- Pashley, D.H. und Prati, C. (1992): Dentin wetness, permeability and thickness and bond strength of adhesive systems., Am J Dent 5, Seite 33-38.
- Pashley, D.H.; Tao, L.; Matthews, W.G. und Pashley, E.L. (1993): Bond strengths to superficial, intermediate and deep dentin in vivo with four dentin bonding systems., Dent Mater 9, Seite 19-22.
- Pashley, E.L.; Talman, R. und Horner, J.A. (1991): Permeability of normal vs carious dentin., Endod Dent Traumatol 7, Seite 207-211.
- Pashley, E.L.; Tao, L.; Mackert, J.R. und Pashley, D.H. (1988): Comparison of in vivo vs. in vitro bonding of composite resin to the dentin of canine teeth., J Dent Res 67 [2], Seite 467-470.

- Perdigao, J.; Carmo, A.; Geraldeli, S.; Dutra, H.R. und Masuda, M.S. (2001): Six-month clinical evaluation of two dentin adhesives applied on dry vs. moist dentin., *J Adhes Dent* 3 [4], Seite 343-352.
- Perdigao, J. und Frankenberger, R. (2001): Effect of solvent and re-wetting time on dentin adhesion., *Quintessence Int* 32, Seite 385-390.
- Perdigao, J.; Frankenberger, R.; Rosa, B.T. und Breschi, L. (2000): New trends in dentin/enamel adhesion., *Am J Dent* 13 [Special Issue], Seite 25D-30D.
- Perdigao, J.; Lambrechts, P.; Meerbeek, B. Van; Tomè, A.R.; Vanherle, G. und Lopes, A.B. (1996): Morphological field emission-SEM study of the effect of six phosphoric acid etching agents on human dentin., *Dent Mater* 12, Seite 262-271.
- Perdigao, J.; Swift, E.J. und Cloe, B.C. (1993): Effects of etchants, surface moisture, and resin composite on dentin bond strength., *Am J Dent* 6, Seite 61-64.
- Perdigao, J.; Van Meerbeek, B.; Lopes, M. und Ambrose, W.W. (1999): The effect of re-wetting agent to dentin bonding., *Dent Mater* 15, Seite 282-295.
- Peris, A.R.; Duarte, S. und de Andrade, M.F. (2003): Evaluation of marginal microleakage in Class II cavities: Effect of microhybrid, flowable, and compactable resins., *Quintessence Int* 34, Seite 93-98.
- Peschke, A.; Blunck, U. und Roulet, J.-F. (2000): Influence of incorrect application of a water-based adhesive system on the marginal adaptation of Class V restorations., *Am J Dent* 13, Seite 239-244.
- Peutzfeldt, A. (1997): Resin composites in dentistry: the monomer systems., *Eur J Oral Sci* 105, Seite 97-116.
- Peutzfeldt, A. (1997): Retention of propanal and diacetyl in experimental resins., *Acta Odontol Scand* 55 [2], Seite 94-100.
- Phillips, R. W. (1981): Past, present and future composite resin systems., *Dent Clin North Amer* 25, Seite 209-213.
- Pieper, K.; Meyer, G.; Marienhagen, B. und Motsch, A. (1991): Eine Langzeitstudie an Amalgam- und Kunststoff-Füllungen., *Dtsch Zahnärztl Z* 46, Seite 222-225.
- Prati, C.; Pashley, D.H. und Montanari, G. (1991): Hydrostatic intrapulpal pressure and bond strength of bonding systems., *Dent Mater* 7, Seite 54-58.
- Prati, C.; Vanherle, G.; Degrange, M. und Willems, G. (1993): Mechanisms of dentine bonding. Reaction paper., Willems, G., State of the art on direct posterior filling materials and dentin bonding Seite 171-191, Van der Poorten, Leuvren.
- Price, R.B.T. und Hall, G.C. (1999): In vitro comparison of 10-minute vs 24-hour shear bond strengths of six dentin bonding systems., *Quintessence Int* 30, Seite 122-134.
- Radlanski, R.J.; Jäger, A.; Seidl, W. und Steding, G. (1988): Durchmesser und Anordnung der Prismen im Zahnschmelz - Eine morphologische Untersuchung., *Dtsch Zahnärztl Z* 43, Seite 1182-1192.
- Raskin, A.; Michotte-Theall, B.; Vreven, J. und Wilson, N.H.F. (1999): Clinical evaluation of a posterior composite 10-year report., *J Dent* 27, Seite 13-19.
- Reed, B.B.; Choi, K.; Dickens, S.H. und Stansbury, J.W. (1997): Effect of resin composition on kinetics of dimethacrylate photopolymerization., *Polymer Preprints* 38, Seite 108-109.
- Retief, D.H; Austin, J.C. und Fatti, L.P. (1974): Pulpal response to phosphoric acid., *J Oral Path* 3, Seite 114-122.

- Retief, D.H und Denys, F.R. (1989): Adhesion to enamel and dentin., Am J Dent 2, Seite 133-144.
- Retief, D.H und Woods, E. (1981): Is a low viscosity bonding resin necessary?, J Oral Rehabil 8, Seite 255-266.
- Reusens, B.; D`hoore, W. und Vreven, J. (1999): In vivo comparison of a microfilled and a hybrid minifilled composite resin in class III restorations: 2-year follow-up., Clin Oral Invest 3, Seite 62-69.
- Ritter, A.V.; Heymann, H.O.; Swift, E.J.; Perdigao, J. und Rosa, B.T. (2000): Effects of different re-wetting techniques on dentin shear bond strengths., J Esthet Dent 12, Seite 85-96.
- Roberts, M.W.; Folio, J.; Moffa, J.P. und Guckes, A.D. (1992): Clinical evaluation of a composite resin system with a dentin bonding agent for restoration of permanent posterior teeth: A 3-year study., J Prosthet Dent 67 [3], Seite 301-306.
- Robinson, P.B.; Moore, B.K. und Swartz, M.L. (1988): The effect on microleakage of interchanging dentine adhesives in two composite resin systems in vitro., Br Dent J 164 [3], Seite 77-79.
- Roulet, J.-F. (1986): Degradation of dental polymers., Karger, Basel.
- Roulet, J.-F. (1988): Werkstoffkundliche Parameter und ihre Auswirkungen auf die Klinik., Dtsch Zahnärztl Z 43, Seite 887-892.
- Roulet, J.-F. (1994): Marginal integrity: clinical significance., J Dent 22 [Supplement 1], Seite S9-S12.
- Roulet, J.-F.; Jäger, U.; Ameye, C. und Mörmann, W. (1984): Quantitative SEM-analysis of composite inlay margins after fatigue stress., J Dent Res 63 (Abstr.37) [Spec Iss], Seite 175.
- Rueggeberg, F.A. und Margeson, D.H. (1990): The effect of oxygen inhibition on an unfilled/ filled composite system., J Dent Res 69, Seite 1652-1658.
- Ruyter, I.E. (1995): Die chemischen Grundlagen dentaler Adhäsivsysteme., Phillip J 12, Seite 481-488.
- Ryge, G. (1981): Clinical criteria., Int Dent J 30, Seite 347-358.
- Sakaguchi, R.L. (2005): Review of the current status and challenges for dental posterior restorative composites: clinical, chemistry, and physical behavior considerations. Summary of discussion from the Portland composites Symposium (POCOS) June 17-19, 2004, Oregon Health & Science University, Portland, Oregon., Dent Mater 21, Seite 3-6.
- Sano, H.; Shono, T.; Takatsu, T. und Hosoda, H. (1994): Microporous dentin zone beneath resin-impregnated layer., Oper Dent 19, Seite 59-64.
- Sano, H.; Takatsu, T. und Ciucchi, B. (1995): Nanoleakage: Leakage within the hybrid layer., Oper Dent 20, Seite 18-25.
- Schedle, A.; Franz, A.; Rausch-Fan, X.; Spittler, A.; Lucas, T.; Samorapoompichit, P.; Sperr, W. und Boltz-Nitulescu, G. (1998): Cytotoxic effects of dental composites, adhesive substances, compomers and cements., Dent Mater 14, Seite 429-440.
- Scheibenbogen-Fuchsbrunner, A.; Manhart, J.; Kremers, L.; Kunzelmann, K.-H. und Hickel, R. (1999): Two-year clinical evaluation of direct and indirect composite restorations in posterior teeth., J Prosthet Dent 82 [4], Seite 391-397.
- Schmeiser, R. und Hannig, M. (1999): Randqualität approximaler Kompositfüllungen in sonoabrasiv bearbeiteten "Mikro"-Kavitäten., Dtsch Zahnärztl Z 54 [2], Seite 127-132.

- Schroeder, H.E. (2000): Orale Strukturbioologie 5.Auflage, Thieme. Auflage, Georg Thieme Verlag, Stuttgart, ISBN: 3135409058.
- Schumacher, G.E.; Eichmiller, F.C. und Antonucci, J.M. (1992): Effects of surface-active resins on dentin/composite bonds., Dent Mater 8, Seite 278-282.
- Seghi, R.R.; Sang, J.; Hayes, D. und Culbertson, B.M. (1993): Relative abrasion rates of sol-gel derived dual matrix composites., J Dent Res 72 [spec.iss.], Seite 113 (Abstr.-Nr:80).
- Silverstone, L.M.; Saxton, C.A.; Dogon, I.L. und Fejerskov, O. (1975): Variation in the pattern of acid etching of human dental enamel examined by scanning electron microscopy., Caries Res 9, Seite 373-387.
- Smales, R.J. (1991): Longevity of cusp-covered amalgams: survivals after 15 years., Oper Dent 16, Seite 17-20.
- Smales, R.J.; Gerke, D.C. und White, I.L. (1990): Clinical evaluation of occlusal glass ionomer, resin, and amalgam restorations., J Dent 18, Seite 243-249.
- Söderholm, K.-J.M. (1988): Die hydrolytische Degeneration von Composites. Teil I: Physikalische Grundlagen., Phillip J 5, Seite 323-328.
- Söderholm, K.-J.M. (1990): Correlation of in vivo and in vitro performance of adhesive restorative materials: A report of the ASC MD 156 Task Group on test methods for the adhesion of restorative materials., Dent Mater 7, Seite 74-83.
- Söderholm, K.-J.M. (1995): Does resin based dentine bonding work ?, Int Dent J 45 [2272Uwe], Seite 371-381.
- Söderholm, K.-J.M.; Lambrechts, P.; Sarrett, D.; Abe, Y.; Yang, M.C.K.; Labella, R.; Yildiz, E. und Willems, G. (2001): Clinical wear performance of eight experimental dental composites over three years determined by two measuring methods., Eur J Oral Sci 109, Seite 273-281.
- Spreafico, R.; Krejci, I. und Dietschi, D. (2005): Clinical performance and marginal adaptation of class II direct and semidirect composite restorations over 3.5 years in vivo., J Dent 33, Seite 499-507.
- Stanford, J.W. (1985): Bonding of restorative materials to dentin., Int Dent J 35, Seite 133-138.
- Stanley, H.R.; Going, R.E. und Chauncey, H.H. (1975): Human pulp response to acid pretreatment of dentin and to composite restoration., J Am Dent Assoc 91, Seite 817-825.
- Stansbury, J.W. (1992): Synthesis and evaluation of new oxaspiro monomers for double-ring opening polymerization., J Dent Res 71, Seite 1408-1412.
- Stettmaier, K.; Kinder, J.; Vahl, J. und Reinhardt, K.-J. (1978): Untersuchungen des thermischen Verhaltens von Schmelz, Dentin und ausgewählten Dentalwerkstoffen., Dtsch Zahnärztl Z 33, Seite 474-476.
- Summitt, J.B.; Chan, D.C.N.; Burgess, J.O. und Dutton, F.B. (1992): Effect of air/water rinse versus water only and five rinse times on resin-to-etched enamel shear bond strength., Oper Dent 17, Seite 142-151.
- Summitt, J.B.; Chan, D.C.N.; Burgess, J.O. und Dutton, F.B. (1993): Effect of rinse time on microleakage between composite and etched enamel., Oper Dent 18, Seite 37-40.
- Swift, E.J.; Perdigao, J. und Heymann, H.O. (1995): Bonding to enamel and dentin: A brief history and state of the art, 1995., Quintessence Int 26 [2], Seite 95-110.

- Tam, L.E. und Pilliar, R.M. (1994): Effects of dentin surface treatments on the fracture toughness and tensile bond strength of a dentin-composite adhesive interface., J Dent Res 73, Seite 1530-1538.
- Tay, F.R.; Gwinnett, A.J.; Pang, K.M. und Wei, S.H.Y. (1995): Variability in microleakage observed in a total-etch wet-bonding technique under different handling conditions., J Dent Res 74, Seite 1168-1178.
- Tay, F.R.; Gwinnett, A.J.; Pang, K.M. und Wei, S.H.Y. (1996): Resin permeation into acid-conditioned, moist and dry dentin: a paradigm using water-free adhesive primers., J Dent Res 75, Seite 1034-1044.
- Tay, F.R.; Gwinnett, A.J. und Wei, S.H. (1996): The overwet phenomenon: A scanning electron microscopic study of surface moisture in the acid-conditioned, resin-dentin interface., Am J Dent 9, Seite 109-114.
- Tay, F.R.; Gwinnett, A.J. und Wei, S.H. (1998): Micromorphological spectrum of acid-conditioned dentin following the application of a water-based adhesive., Dent Mater 14, Seite 329-338.
- Tay, F.R.; Gwinnett, J.A. und Wei, S.H.Y. (1996): Micromorphological spectrum from overdrying to overwetting acid-conditioned dentin in water-free, acetone-based, single-bottle primer-adhesives., Dent Mater 12, Seite 236-244.
- Tay, F.R. und Pashley, D.H. (2001): Aggressiveness of contemporary self-etching systems. I: Depth of penetration beyond dentin smear layer., Dent Mater 17, Seite 296-308.
- Tay, F.R. und Pashley, D.H. (2002): Dental Adhesives of the future., J Adhes Dent 4, Seite 91-103.
- Thomas, H.F. und Payne, R.C. (1983): The ultrastructure of dentinal tubules from erupted human premolar teeth., J Dent Res 62, Seite 532-536.
- Thompson, V.P.; Williams, E.F. und Bailey, W.J. (1979): Dental resins with reduced shrinkage during hardening., J Dent Res 58, Seite 1522-1532.
- Tjan, A.H.L.; Castelnuovo, J. und Liu, P. (1996): Bond strength of multi-step and simplified-step systems., Am J Dent 9, Seite 269-272.
- Toledano, M.; Osorio, R.; Ceballos, L.; Fuentes, M.V.; Fernandes, C.A.O.; Tay, F.R. und Carvalho, R.M. (2003): Microtensile bond strength of several adhesive systems at different dentin depths., Am J Dent 16, Seite 292-298.
- Torstenson, B. und Bränström, M. (1988): Contraction gap under composite resin restorations: Effect of hygroscopic expansion and thermal stress., Oper Dent 13, Seite 24-31.
- Triolo, P.T.; Swift, E.J. und Barkmeier, W.W. (1995): Shear bond strength of composite to dentin using six dental adhesive systems., Oper Dent 20, Seite 46-50.
- Triolo, P.T.; Swift, E.J.; Mudgil, A. und Levine, A. (1993): Effects of etching time on enamel bond strengths., Am J Dent 6, Seite 302-304.
- Türkün, S. und Aktener, O. (2001): Twenty-four-month clinical evaluation of different posterior composite resin materials., J Am Dent Assoc 132 [2], Seite 196-203.
- Tyas, M. J. (1991): Three-year clinical evaluation of dentine bonding agents., Aust Dent J 36, Seite 298-301.
- Uno, S. und Finger, W.J. (1995): Function of the hybrid zone as a stress-absorbing layer in resin-dentin bonding., Quintessence Int 26 [10], Seite 733-738.
- Uno, S. und Finger, W.J. (1996): Effect of acidic conditioners on dentine demineralization and dimension of hybrid layers., J Dent 24, Seite 211-216.

- Urabe, I.; Nakajima, M.; Sano, H. und Tagami, J. (2000): Physical properties of the dentin-enamel junction region., Am J Dent 13, Seite 129-135.
- Van Meerbeek, B.; Dhem, A.; Goret-Nicaise, M.; Bream, M.; Lambrechts, P. und Vanherle, G. (1993): Comparative SEM and TEM examination of the ultrastructure of the resin-dentin interdiffusion zone., J Dent Res 72 [2], Seite 495-501.
- Van Meerbeek, B.; Inokoshi, S.; Braem, M.; Lambrechts, P. und Vanherle, G. (1992): Morphological aspects of the resin-dentin interdiffusion zone with different dentin adhesive systems., J Dent Res 71, Seite 1530-1540.
- Van Meerbeek, B.; Perdigao, J.; Lambrechts, P. und Vanherle, G. (1998): The clinical performance of dental adhesives., J Dent 26 [1], Seite 1-20.
- Van Meerbeek, B.; Peumans, M. und Verschueren, M. (1994): Clinical status of ten dentin adhesive systems., J Dent Res 73, Seite 1690-1702.
- Van Meerbeek, B.; Willems, G.; Celis, J.P.; Roos, J.R.; Bream, M.; Lambrechts, P. und Vanherle, G. (1993): Assessment by nano-indentation of the hardness and elasticity of the resin-dentin bonding area., J Dent Res 72, Seite 1434-1442.
- Van Meerbeek, B.; Yoshida, Y. ; Lambrechts, P.; Vanherle, G.; Duke, E.S.; Eick, J.D. und Robinson, S.J. (1998): A TEM study of two water-based adhesive systems bonded to dry and wet dentin., J Dent Res 77, Seite 50-59.
- Vasiliadis, L.; Darling, A.I. und Levers, B.G.H. (1983): The histology of sclerotic human root dentine., Arch Oral Biol 28, Seite 693-700.
- Velazquez, E.; Vaidyanathan, J.; Vaidyanathan, T.K.; Houpt, M.; Shey, Z. und von Hagen, S. (2003): Effect of primer solvent and curing mode on dentin shear bond strength and interface morphology., Quintessence Int 34 [7], Seite 548-555.
- Versluis, A.; Douglas, W.H.; Cross, M. und Sakaguchi, R.L. (1996): Does an incremental filling technique reduce polymerization shrinkage stresses?, J Dent Res 75 [3], Seite 871-878.
- Versluis, A.; Tantbirojn, D. und Douglas, W.H. (1998): Do dental composites always shrink toward the light?, J Dent Res 77 [6], Seite 1435-1445.
- Viohl, J. (1985): Kunststoff-Füllungswerkstoffe., Eichner, K., Zahnärztliche Werkstoffe und ihre Verarbeitung; Bd.2: Werkstoffe unter klinischen Aspekten., Hüthig, Heidelberg.
- Vivadent (1998): Tetric Ceram-Gebrauchsinformation., Schaan, Ivoclar Vivadent AG
- Waerhaug, J. (1975): Presence or absence of plaque on subgingival restorations., Scand J Dent Res 83, Seite 193-201.
- Wakabayashi, Y.; Kondou, Y.; Suzuki, K.; Yatani, H. und Yamashita, A. (1994): Effect of dissolution of collagen on adhesion to dentin., Int J Prosthodont 7, Seite 302-306.
- Wakefield, C.W.; Draughn, R.A.; Sneed, W.D. und Davis, T.N. (1998): Shear bond strengths of six bonding systems using the pushout method of in vitro testing., Oper Dent 23, Seite 69-76.
- Wanatabe, I.; Nakabayashi, N. und Pashley, D.H. (1994): Bonding to ground dentin by a phenyl-P self-etching primer., J Dent Res 73, Seite 1212-1220.
- Wang, J.D. und Hume, W.R. (1988): Studies on diffusion interactions between acids and alkalis and dentin., Int J Endodont 21, Seite 17-26.

- Wei, S.H.Y.; Gwinnett, A.J. und Tay, F.R. (1996): Relation between water content in acetone/alcohol based primer and interfacial ultrastructure., J Dent Res 75, Seite 126 (Abstr.869).
- Weitmann, R.T. und Eames, W.B. (1975): Plaque accumulation on composite surfaces after various finishing procedures., J Am Dent Assoc 91, Seite 101-106.
- Welbury, R.R.; Walls, A.W.; Murray, J.J. und McCabe, J.F. (1990): The management of occlusal caries in permanent molars. A 5-year clinical trial comparing a minimal composite with an amalgam restoration., Br Dent J 169, Seite 361-366.
- Wilder, A.D.; May, K.N.; Bayne, S.C.; Taylor, D.F. und Leinfelder, K.F. (1999): Seventeen-year clinical study of ultraviolet-cured posterior composite Class I and II restorations., J Esthet Dent 11, Seite 135-142.
- Wilder, A.D.; Swift, E.J.; May, K.N. und Waddell, S.L. (1998): Bond strengths of conventional and simplified bonding systems., Am J Dent 11, Seite 114-117.
- Willem, G.; Lambrechts, P.; Bream, M.; Celis, J.P. und Vanherle, G. (1992): A classification of dental composites according to their morphological and mechanical characteristics., Dent Mater 8, Seite 310-319.
- Willem, G.; Lambrechts, P.; Bream, M. und Vanherle, G. (1993): Composite resins in the 21st century., Quintessence Int 24 [9], Seite 641-658.
- Willem, G.; Lambrechts, P.; Bream, M. und Vanherle, G. (1993): Three-year follow-up of five posterior composites: in vivo wear., J Dent 21, Seite 74-78.
- Willem, G.; Lambrechts, P.; Lesaffre, E.; Bream, M. und Vanherle, G. (1993): Three-year follow-up of five posterior composites: SEM study of differential wear., J Dent 21, Seite 79-86.
- Willem, G.; Noack, M.J.; Inokoshi, S.; Lambrechts, P.; Van Meerbeek, B.; Braem, M.; Roulet, J.-F. und Vanherle, G. (1991): Radioopacity of composites compared with human enamel and dentin., J Dent 19, Seite 362-365.
- Wilson, N.H.F. ; Wastell, D.G. und Norman, R.D. (1996): Five-year performance of high-copper content amalgam restorations in a multiclinical trial of a posterior composite., J Dent 24, Seite 203-210.
- Wilson, N.H.F.; Wilson, M.A.; Wastell, D.G. und Smith, G.A. (1991): Performance of Occlusin in butt- joint and bevel- edged preparations: Five- year results., Dent Mater 7 [2], Seite 92-98.
- Xie, J.; Powers, J.M. und McGuckin, R.S. (1993): In vitro bond strength of two adhesives to enamel and dentin under normal and contaminated conditions., Dent Mater 9, Seite 295.
- Xu, J.; Stangl, I.; Butler, I.S. und Gilson, D.F.R. (1997): An FT-Raman spectroscopic investigation of dentin and collagen surfaces modified by 2-hydroxyethylmethacrylate., J Dent Res 76, Seite 596-601.
- Yamaguchi, R.; Powers, J.M. und Dennison, J.B. (1989): Thermal expansion of visible-light-cured composit resin., Oper Dent 14, Seite 64-67.
- Yap, A.U.J.; Ho, K.S. und Wong, K.M. (1998): Comparison of marginal sealing ability of new generation bonding systems., J Oral Rehabil 25, Seite 666-671.
- Yap, A.U.J.; Sau, C.W. und K.W., Lye; (1998): Effects of finishing/ polishing time on surface characteristics of tooth-coloured restoratives., J Oral Rehabil 25 [6], Seite 456-461.

- Yoshikawa, T.; Burrow, M.F. und Tagami, J. (2001): The effects of bonding system and light curing method on reducing stress of different C-factor cavities., J Adhes Dent 3 [2], Seite 177-183.
- Yoshikawa, T.; Sano, H.; Burrow, M.F.; Tagami, J. und Pashley, D.H. (1999): Effects of Dentin Depth and Cavity Configuration on Bond Strength., J Dent Res 78 [4], Seite 898-905.
- Yoshiyama, M.; Sano, H. und Ebisu, S. (1996): Regional strengths of bonding agents to cervical sclerotic root dentin., J Dent Res 75, Seite 1404-1413.
- Yoshiyama, M.; Urayama, A.; Kimochi, T.; Matsuo, T. und Pashley, D.H. (2000): Comparison of conventional vs self-etching adhesive bonds to caries-affected dentin., Oper Dent 25, Seite 163-169.
- Zheng, L.; Pereira, P.N.R.; Nakajima, M.; Sano, H. und Tagami, J. (2001): Relationship between adhesive thickness and microtensile bond strength., Oper Dent 26, Seite 97-104.