

References

- [1] Lander, E. S., Linton, L. M., Birren, B., Nusbaum, C., Zody, M. C., Baldwin, J., Devon, K., Dewar, K., Doyle, M., FitzHugh, W., Funke, R., Gage, D., Harris, K., Heaford, A., Howland, J., Kann, L., Lehoczky, J., LeVine, R., McEwan, P., McKernan, K., Meldrim, J., Mesirov, J. P., Miranda, C., Morris, W., Naylor, J., Raymond, C., Rosetti, M., Santos, R., Sheridan, A., Sougnez, C., Stange-Thomann, N., Stojanovic, N., Subramanian, A., Wyman, D., Rogers, J., Sulston, J., Ainscough, R., Beck, S., Bentley, D., Burton, J., Clee, C., Carter, N., Coulson, A., Deadman, R., Deloukas, P., Dunham, A., Dunham, I., Durbin, R., French, L., Grafham, D., Gregory, S., Hubbard, T., Humphray, S., Hunt, A., Jones, M., Lloyd, C., McMurray, A., Matthews, L., Mercer, S., Milne, S., Mullikin, J. C., Mungall, A., Plumb, R., Ross, M., Shownkeen, R., Sims, S., Waterston, R. H., Wilson, R. K., Hillier, L. W., McPherson, J. D., Marra, M. A., Mardis, E. R., Fulton, L. A., Chinwalla, A. T., Pepin, K. H., Gish, W. R., Chissoe, S. L., Wendl, M. C., Delehaunty, K. D., Miner, T. L., Delehaunty, A., Kramer, J. B., Cook, L. L., Fulton, R. S., Johnson, D. L., Minx, P. J., Clifton, S. W., Hawkins, T., Branscomb, E., Predki, P., Richardson, P., Wenning, S., Slezak, T., Doggett, N., Cheng, J. F., Olsen, A., Lucas, S., Elkin, C., Uberbacher, E., Frazier, M., et al. (2001) *Nature* **409**(6822), 860–921.
- [2] Consortium, I. H. G. S. Oct 2004 *Nature* **431**(7011), 931–945.
- [3] Birney, E., Andrews, D., Caccamo, M., Chen, Y., Clarke, L., Coates, G., Cox, T., Cunningham, F., Curwen, V., Cutts, T., Down, T., Durbin, R., Fernandez-Suarez, X. M., Fliceck, P., Grf, S., Hammond, M., Herrero, J., Howe, K., Iyer, V., Jekosch, K., Khri, A., Kasprzyk, A., Keefe, D., Kokocinski, F., Kulesha, E., London, D., Longden, I., Melsopp, C., Meidl, P., Overduin, B., Parker, A., Proctor, G., Prlic, A., Rae, M., Rios, D., Redmond, S., Schuster, M., Sealy, I., Searle, S., Severin, J., Slater, G., Smedley, D., Smith, J., Stabenau, A., Stalker, J., Trevanion, S., Ureta-Vidal, A., Vogel, J., White, S., Woodward, C., and Hubbard, T. J. P. Jan 2006 *Nucleic Acids Res* **34**(Database issue), D556–D561.
- [4] Lander, E. S. Jan 1999 *Nat Genet* **21**(1 Suppl), 3–4.
- [5] Duggan, D. J., Bittner, M., Chen, Y., Meltzer, P., and Trent, J. M. Jan 1999 *Nat Genet* **21**(1 Suppl), 10–14.
- [6] Fan, J. B., Chen, X., Halushka, M. K., Berno, A., Huang, X., Ryder, T., Lipshutz, R. J., Lockhart, D. J., and Chakravarti, A. Jun 2000 *Genome Res* **10**(6), 853–860.
- [7] Gresham, D., Ruderfer, D. M., Pratt, S. C., Schacherer, J., Dunham, M. J., Botstein, D., and Kruglyak, L. Mar 2006 *Science* **311**(5769), 1932–1936.

- [8] Gunderson, K. L., Steemers, F. J., Lee, G., Mendoza, L. G., and Chee, M. S. May 2005 *Nat Genet* **37**(5), 549–554.
- [9] Lipshutz, R. J., Morris, D., Chee, M., Hubbell, E., Kozal, M. J., Shah, N., Shen, N., Yang, R., and Fodor, S. P. Sep 1995 *Biotechniques* **19**(3), 442–447.
- [10] Naef, F., Socci, N. D., and Magnasco, M. Jan 2003 *Bioinformatics* **19**(2), 178–184.
- [11] Kerr, M. K., Martin, M., and Churchill, G. A. (2000) *J Comput Biol* **7**(6), 819–837.
- [12] Sauer, S., Lange, B. M., Gobom, J., Nyarsik, L., Seitz, H., and Lehrach, H. (2005) *Nat Rev Genet* **6**(6), 465–76.
- [13] Bilitewski, U., Genrich, M., Kadow, S., and Mersal, G. (2003) *Anal Bioanal Chem* **377**(3), 556–69.
- [14] Lee, T. M., Carles, M. C., and Hsing, I. M. (2003) *Lab Chip* **3**(2), 100–5.
- [15] Manz, A., Graber, N., and Widmer, H. (1990) *Sens. Actuators B* **B1**, 244–248.
- [16] Kopp, M. U., Mello, A. J., and Manz, A. (1998) *Science* **280**(5366), 1046–8.
- [17] Burns, M. A., Johnson, B. N., BrahmaSandra, S. N., Handique, K., Webster, J. R., Krishnan, M., Sammarco, T. S., Man, P. M., Jones, D., Heldsinger, D., Mastrangelo, C. H., and Burke, D. T. (1998) *Science* **282**(5388), 484–7.
- [18] Woolley, A. T., Hadley, D., Landre, P., deMello, A. J., Mathies, R. A., and Northrup, M. A. (1996) *Anal Chem* **68**(23), 4081–6.
- [19] Hong, J. W., Fujii, T., Seki, M., Yamamoto, T., and Endo, I. Jan 2001 *Electrophoresis* **22**(2), 328–333.
- [20] Lagally, E. T., Medintz, I., and Mathies, R. A. (2001) *Anal Chem* **73**(3), 565–70.
- [21] Belgrader, P., Young, S., Yuan, B., Primeau, M., Christel, L. A., Pourahmadi, F., and Northrup, M. A. (2001) *Anal Chem* **73**(2), 286–9.
- [22] Khandurina, J. and Guttman, A. (2002) *J Chromatogr A* **943**(2), 159–83.
- [23] Litborn, E. and Roeraade, J. (2000) *J Chromatogr B Biomed Sci Appl* **745**(1), 137–47.
- [24] Schneegass, I., Brautigam, R., and Kohler, J. M. Sep 2001 *Lab Chip* **1**(1), 42–49.
- [25] Obeid, P. J., Christopoulos, T. K., Crabtree, H. J., and Backhouse, C. J. (2003) *Anal Chem* **75**(2), 288–95.

- [26] Gascoyne, P., Satayavivad, J., and Ruchirawat, M. Feb 2004 *Acta Trop* **89**(3), 357–369.
- [27] Hashimoto, M., Chen, P.-C., Mitchell, M. W., Nikitopoulos, D. E., Soper, S. A., and Murphy, M. C. Dec 2004 *Lab Chip* **4**(6), 638–645.
- [28] Wheeler, E. K., Benett, W., Stratton, P., Richards, J., Chen, A., Christian, A., Ness, K. D., Ortega, J., Li, L. G., Weisgraber, T. H., Goodson, K., and Milanovich, F. Jul 2004 *Anal Chem* **76**(14), 4011–4016.
- [29] West, J., Karamata, B., Lillis, B., Gleeson, J. P., Alderman, J., Collins, J. K., Lane, W., Mathewson, A., and Berney, H. Nov 2002 *Lab Chip* **2**(4), 224–230.
- [30] Liu, J., Enzelberger, M., and Quake, S. (2002) *Electrophoresis* **23**(10), 1531–6.
- [31] Tawfik, D. S. and Griffiths, A. D. Jul 1998 *Nat Biotechnol* **16**(7), 652–656.
- [32] Musyanovych, A., Mailnder, V., and Landfester, K. (2005) *Biomacromolecules* **6**(4), 1824–1828.
- [33] Mullis, K., Faloon, F., Scharf, S., Saiki, R., Horn, G., and Erlich, H. (1986) *Cold Spring Harb Symp Quant Biol* **51 Pt 1**, 263–73.
- [34] Wilding, P., Shoffner, M. A., and Kricka, L. J. (1994) *Clin Chem* **40**(9), 1815–8.
- [35] Northrup, M. A., Benett, B., Hadley, D., Landre, P., Lehew, S., Richards, J., and Stratton, P. (1998) *Anal Chem* **70**(5), 918–22.
- [36] Shoffner, M. A., Cheng, J., Hvichia, G. E., Kricka, L. J., and Wilding, P. (1996) *Nucleic Acids Res* **24**(2), 375–9.
- [37] Erill, I., Campoy, S., Erill, N., Barbe, J., and J., A. December 2003 *Sensors and Actuators B: Chemical* **96**(3), 685–692.
- [38] Taylor, T. B., Winn-Deen, E. S., Picozza, E., Woudenberg, T. M., and Albin, M. Aug 1997 *Nucleic Acids Res* **25**(15), 3164–3168.
- [39] Shin, Y., Cho, K., Lim, S., Chung, S. Park, S.-J., Chung, C., D-C., H., and Chang, J. (2003) *J. Micromech. Microeng.* **13**, 768–774.
- [40] Zhao, X.-M., Xia, Y., and Whitesides, G. M. (1997) *Journal of Materials Chemistry* **7**(7), 1069–1074.
- [41] Reyes, D. R., Iossifidis, D., Auroux, P.-A., and Manz, A. Jun 2002 *Anal Chem* **74**(12), 2623–2636.

- [42] Giordano, B. C., Ferrance, J., Swedberg, S., Huhmer, A. F., and Landers, J. P. (2001) *Anal Biochem* **291**(1), 124–32.
- [43] Liao, C.-S., Lee, G.-B., Liu, H.-S., Hsieh, T.-M., and Luo, C.-H. (2005) *Nucleic Acids Res* **33**(18), e156.
- [44] Xiang, Q., Xu, B., Fu, R., and Li, D. Dec 2005 *Biomed Microdevices* **7**(4), 273–279.
- [45] Yao, L., Liu, B., Chen, T., Liu, S., and Zuo, T. Sep 2005 *Biomed Microdevices* **7**(3), 253–257.
- [46] Yang, J., Liu, Y., Rauch, C. B., Stevens, R. L., Liu, R. H., Lenigk, R., and Grodzinski, P. Nov 2002 *Lab Chip* **2**(4), 179–187.
- [47] Gulliksen, A., Solli, L., Karlsen, F., Rogne, H., Hovig, E., Nordstrom, T., and Sirevag, R. (2004) *Anal Chem* **76**(1), 9–14.
- [48] Lao, A. I. K., Lee, T. M. H., Hsing, I.-M., and Ip, N. Y. August 2000 *Sensors and Actuators A: Physical* **84**(1-2), 11–17.
- [49] Chou, C. F., Changrani, R., Roberts, P., Sadler, D., Burdon, J., Zenhausern, F., Lin, S., Mulholland, A., Swami, N., and Terbrueggen, R. (2002) *Microelectron Eng* **61-62**, 921–925.
- [50] Yoon, D. S., Lee, Y.-S., Lee, Y., Cho, H. J., Sung, S. W., Oh, K. W., Cha, J., and Lim, G. (2002) *Journal of Micromechanics and Microengineering* **12**, 813–823.
- [51] Legendre, L. A., Bienvenue, J. M., Roper, M. G., Ferrance, J. P., and Landers, J. P. Mar 2006 *Anal Chem* **78**(5), 1444–1451.
- [52] Schabmueller, C. G. J., Evans, A. G. R., Brunnschweiler, A., Ensell, G. J., Leslie, D. L., and Lee, M. A. (2000) volume **4019**, : SPIE pp. 362–369.
- [53] Daniel, J., Iqbal, S., Millington, R., Moore, D., Lowe, C., Leslie, D., Lee, M., and Pearce, M. November 1998 *Sensors and Actuators A: Physical* **71**(1-2), 81–88.
- [54] Auroux, P.-A., Iossifidis, D., Reyes, D. R., and Manz, A. Jun 2002 *Anal Chem* **74**(12), 2637–2652.
- [55] Lagally, E. T., Scherer, J. R., Blazej, R. G., Toriello, N. M., Diep, B. A., Ramchandani, M., Sensabaugh, G. F., Riley, L. W., and Mathies, R. A. Jun 2004 *Anal Chem* **76**(11), 3162–3170.
- [56] Marcus, J., Anderson, W., and Quake, S. May 2006 *Anal Chem* **78**(9), 3084–3089.
- [57] Liu, J., Hansen, C., and Quake, S. R. Sep 2003 *Anal Chem* **75**(18), 4718–4723.

- [58] Sasaki, N., Izawa, M., Shimojo, M., Shibata, K., Akiyama, J., Itoh, M., Nagaoka, S., Carninci, P., Okazaki, Y., Moriuchi, T., Muramatsu, M., Watanabe, S., and Hayashizaki, Y. (1997) *DNA Res* **4(6)**, 387–91.
- [59] Nagai, H., Murakami, Y., Morita, Y., Yokoyama, K., and Tamiya, E. (2001) *Anal Chem* **73(5)**, 1043–7.
- [60] Leamon, J. H., Lee, W. L., Tartaro, K. R., Lanza, J. R., Sarkis, G. J., deWinter, A. D., Berka, J., and Lohman, K. L. (2003) *Electrophoresis* **24(21)**, 3769–77.
- [61] Matsubara, Y., Kerman, K., Kobayashi, M., Yamamura, S., Morita, Y., and Tamiya, E. Feb 2005 *Biosens Bioelectron* **20(8)**, 1482–1490.
- [62] Canales, R. D., Luo, Y., Willey, J. C., Austermiller, B., Barbacioru, C. C., Boysen, C., Hunkapiller, K., Jensen, R. V., Knight, C. R., Lee, K. Y., Ma, Y., Maqsodi, B., Papallo, A., Peters, E. H., Poulter, K., Ruppel, P. L., Samaha, R. R., Shi, L., Yang, W., Zhang, L., and Goodsaid, F. M. Sep 2006 *Nat Biotechnol* **24(9)**, 1115–1122.
- [63] Qin, L.-X., Beyer, R. P., Hudson, F. N., Linford, N. J., Morris, D. E., and Kerr, K. F. (2006) *BMC Bioinformatics* **7**, 23.
- [64] Saiki, R. K., Scharf, S., Faloona, F., Mullis, K. B., Horn, G. T., Erlich, H. A., and Arnheim, N. (1985) *Science* **230(4732)**, 1350–4.
- [65] McCarrey, J. R., Dilworth, D. D., and Sharp, R. M. Aug 1992 *Genet Anal Tech Appl* **9(4)**, 117–123.
- [66] Higuchi, R., Fockler, C., Dollinger, G., and Watson, R. (1993) *Biotechnology (N Y)* **11(9)**, 1026–30.
- [67] Tichopad, A., Dilger, M., Schwarz, G., and Pfaffl, M. W. (2003) *Nucleic Acids Res* **31(20)**, e122.
- [68] Kubista, M., Andrade, J. M., Bengtsson, M., Forootan, A., Jonk, J., Lind, K., Sindelka, R., Sjback, R., Sjgreen, B., Strmbom, L., Sthlberg, A., and Zoric, N. (2006) *Mol Aspects Med* **27(2-3)**, 95–125.
- [69] Kalinina, O., Lebedeva, I., Brown, J., and Silver, J. (1997) *Nucleic Acids Res* **25(10)**, 1999–2004.
- [70] Freeman, W. M., Walker, S. J., and Vrana, K. E. (1999) *Biotechniques* **26(1)**, 112–22, 124–5.
- [71] Bustin, S. A. (2000) *J Mol Endocrinol* **25(2)**, 169–93.

- [72] Schmittgen, T. D. (2001) *Methods* **25**(4), 383–5.
- [73] Whitcombe, D., Theaker, J., Guy, S. P., Brown, T., and Little, S. Aug 1999 *Nat Biotechnol* **17**(8), 804–807.
- [74] McKelvey-Martin, V. J., Ho, E. T., McKeown, S. R., Johnston, S. R., McCarthy, P. J., Rajab, N. F., and Downes, C. S. Jan 1998 *Mutagenesis* **13**(1), 1–8.
- [75] Singh, N. P., McCoy, M. T., Tice, R. R., and Schneider, E. L. Mar 1988 *Exp Cell Res* **175**(1), 184–191.
- [76] Hughes, C. M., Lewis, S. E., McKelvey-Martin, V. J., and Thompson, W. Aug 1996 *Mol Hum Reprod* **2**(8), 613–619.
- [77] Wittwer, C. T., Ririe, K. M., Andrew, R. V., David, D. A., Gundry, R. A., and Balis, U. J. (1997) *Biotechniques* **22**(1), 176–81.
- [78] Ririe, K. M., Rasmussen, R. P., and Wittwer, C. T. (1997) *Anal Biochem* **245**(2), 154–60.
- [79] Holland, P. M., Abramson, R. D., Watson, R., and Gelfand, D. H. (1991) *Proc Natl Acad Sci U S A* **88**(16), 7276–80.
- [80] Lee, L. G., Connell, C. R., and Bloch, W. Aug 1993 *Nucleic Acids Res* **21**(16), 3761–3766.
- [81] Livak, K. J., Flood, S. J., Marmaro, J., Giusti, W., and Deetz, K. Jun 1995 *PCR Methods Appl* **4**(6), 357–362.
- [82] Stryer, L. (1978) *Annu Rev Biochem* **47**, 819–846.
- [83] Tyagi, S. and Kramer, F. R. Mar 1996 *Nat Biotechnol* **14**(3), 303–308.
- [84] Bustin, S. A. (2002) *J Mol Endocrinol* **29**(1), 23–39.
- [85] Hein, I., Lehner, A., Rieck, P., Klein, K., Brandl, E., and Wagner, M. Jul 2001 *Appl Environ Microbiol* **67**(7), 3122–3126.
- [86] Wang, D. G., Fan, J. B., Siao, C. J., Berno, A., Young, P., Sapolsky, R., Ghandour, G., Perkins, N., Winchester, E., Spencer, J., Kruglyak, L., Stein, L., Hsie, L., Topaloglou, T., Hubbell, E., Robinson, E., Mittmann, M., Morris, M. S., Shen, N., Kilburn, D., Rioux, J., Nusbaum, C., Rozen, S., Hudson, T. J., Lander, E. S., and et al. (1998) *Science* **280**(5366), 1077–82.
- [87] Syvnen, A. C. Dec 2001 *Nat Rev Genet* **2**(12), 930–942.

- [88] Cooper, D. N., Smith, B. A., Cooke, H. J., Niemann, S., and Schmidtke, J. (1985) *Hum Genet* **69**(3), 201–205.
- [89] Sachidanandam, R., Weissman, D., Schmidt, S. C., Kakol, J. M., Stein, L. D., Marth, G., Sherry, S., Mullikin, J. C., Mortimore, B. J., Willey, D. L., Hunt, S. E., Cole, C. G., Coggill, P. C., Rice, C. M., Ning, Z., Rogers, J., Bentley, D. R., Kwok, P. Y., Mardis, E. R., Yeh, R. T., Schultz, B., Cook, L., Davenport, R., Dante, M., Fulton, L., Hillier, L., Waterston, R. H., McPherson, J. D., Gilman, B., Schaffner, S., Etten, W. J. V., Reich, D., Higgins, J., Daly, M. J., Blumenstiel, B., Baldwin, J., Stange-Thomann, N., Zody, M. C., Linton, L., Lander, E. S., Altshuler, D., and Group, I. S. M. W. Feb 2001 *Nature* **409**(6822), 928–933.
- [90] Venter, J. C., Adams, M. D., Myers, E. W., Li, P. W., Mural, R. J., Sutton, G. G., Smith, H. O., Yandell, M., Evans, C. A., Holt, R. A., Gocayne, J. D., Amanatides, P., Ballew, R. M., Huson, D. H., Wortman, J. R., Zhang, Q., Kodira, C. D., Zheng, X. H., Chen, L., Skupski, M., Subramanian, G., Thomas, P. D., Zhang, J., Gabor Miklos, G. L., Nelson, C., Broder, S., Clark, A. G., Nadeau, J., McKusick, V. A., Zinder, N., Levine, A. J., Roberts, R. J., Simon, M., Slayman, C., Hunkapiller, M., Bolanos, R., Delcher, A., Dew, I., Fasulo, D., Flanigan, M., Florea, L., Halpern, A., Hannenhalli, S., Kravitz, S., Levy, S., Mobarry, C., Reinert, K., Remington, K., Abu-Threideh, J., Beasley, E., Biddick, K., Bonazzi, V., Brandon, R., Cargill, M., Chandramouliswaran, I., Charlab, R., Chaturvedi, K., Deng, Z., Di Francesco, V., Dunn, P., Eilbeck, K., Evangelista, C., Gabrielian, A. E., Gan, W., Ge, W., Gong, F., Gu, Z., Guan, P., Heiman, T. J., Higgins, M. E., Ji, R. R., Ke, Z., Ketchum, K. A., Lai, Z., Lei, Y., Li, Z., Li, J., Liang, Y., Lin, X., Lu, F., Merkulov, G. V., Milshina, N., Moore, H. M., Naik, A. K., Narayan, V. A., Neelam, B., Nusskern, D., Rusch, D. B., Salzberg, S., Shao, W., Shue, B., Sun, J., Wang, Z., Wang, A., Wang, X., Wang, J., Wei, M., Wides, R., Xiao, C., Yan, C., et al. (2001) *Science* **291**(5507), 1304–51.
- [91] Kruglyak, L. and Nickerson, D. A. Mar 2001 *Nat Genet* **27**(3), 234–236.
- [92] Wheeler, D. L., Barrett, T., Benson, D. A., Bryant, S. H., Canese, K., Chetvernin, V., Church, D. M., DiCuccio, M., Edgar, R., Federhen, S., Geer, L. Y., Helmburg, W., Kapustin, Y., Kenton, D. L., Khovayko, O., Lipman, D. J., Madden, T. L., Maglott, D. R., Ostell, J., Pruitt, K. D., Schuler, G. D., Schriml, L. M., Sequeira, E., Sherry, S. T., Sirokin, K., Souvorov, A., Starchenko, G., Suzek, T. O., Tatusov, R., Tatusova, T. A., Wagner, L., and Yaschenko, E. Jan 2006 *Nucleic Acids Res* **34**(Database issue), D173–D180.
- [93] Evans, W. E. and Relling, M. V. Oct 1999 *Science* **286**(5439), 487–491.

- [94] Jorde, L. B., Watkins, W. S., Bamshad, M. J., Dixon, M. E., Ricker, C. E., Siegelstad, M. T., and Batzer, M. A. Mar 2000 *Am J Hum Genet* **66**(3), 979–988.
- [95] Hacia, J. G., Fan, J. B., Ryder, O., Jin, L., Edgemon, K., Ghandour, G., Mayer, R. A., Sun, B., Hsie, L., Robbins, C. M., Brody, L. C., Wang, D., Lander, E. S., Lipshutz, R., Fodor, S. P., and Collins, F. S. Jun 1999 *Nat Genet* **22**(2), 164–167.
- [96] Mattick, J. S. and Gagen, M. J. Sep 2001 *Mol Biol Evol* **18**(9), 1611–1630.
- [97] Moore, M. J. Feb 1996 *Nature* **379**(6564), 402–403.
- [98] Wallace, R. B., Shaffer, J., Murphy, R. F., Bonner, J., Hirose, T., and Itakura, K. Aug 1979 *Nucleic Acids Res* **6**(11), 3543–3557.
- [99] Sambrook, J., Fritsch, E., and Maniatis, T. (1989) Molecular Cloning: A Laboratory Manual, New York: Cold Spring Harbor Laboratory Press, 2nd edition.
- [100] Dean, F. B., Nelson, J. R., Giesler, T. L., and Lasken, R. S. Jun 2001 *Genome Res* **11**(6), 1095–1099.
- [101] R Development Core Team The r project for statistical computing [www.r-project.org].
- [102] Vandesompele, J., De Preter, K., Pattyn, F., Poppe, B., Van Roy, N., De Paepe, A., and Speleman, F. Jun 2002 *Genome Biol* **3**(7), 34.
- [103] Livak, K. J. and Schmittgen, T. D. (2001) *Methods* **25**(4), 402–8.
- [104] Rutledge, R. G. and Cote, C. Aug 2003 *Nucleic Acids Res* **31**(16), e93.
- [105] Hartung, J., Elpelt, B., and Kloesener, K.-H. September 2005 Statistik. Lehr- und Handbuch der angewandten Statistik, Oldenbourg, 14 edition.
- [106] Liu, Y., Rauch, C. B., Stevens, R. L., Lenigk, R., Yang, J., Rhine, D. B., and Grodzinski, P. Jul 2002 *Anal Chem* **74**(13), 3063–3070.
- [107] Gulliksen, A., Anders Solli, L., Stefan Drese, K., Sorensen, O., Karlsen, F., Rogne, H., Hovig, E., and Sirevag, R. (2005) *Lab Chip* **5**(4), 416–20.
- [108] Irawan, R., Tjin, S. C., Yager, P., and Zhang, D. Sep 2005 *Biomed Microdevices* **7**(3), 205–211.
- [109] Crdenas, M., Schilln, K., Pebalk, D., Nylander, T., and Lindman, B. (2005) *Biomacromolecules* **6**(2), 832–837.
- [110] Kricka, L. J., Fortina, P., Panaro, N. J., Wilding, P., Alonso-Amigo, G., and Becker, H. (2002) *Lab Chip* **2**(1), 1–4.

- [111] Situma, C., Hashimoto, M., and Soper, S. A. Jul 2006 *Biomol Eng.*
- [112] Fredrickson, C. K. and Fan, Z. H. (2004) *Lab Chip* **4(6)**, 526–33.
- [113] Barker, Tarlov, Canavan, Hickman, and Locascio Oct 2000 *Anal Chem* **72(20)**, 4899–4903.
- [114] Beyer Hietpas, P. and Ewing, A. (1995) *Journal of Liquid Chromatography* **18**, 3557–76.
- [115] Jackman, R., Duffy, D., Ostuni, E., Willmore, N., and Whitesides, G. (1998) *Analytical Chemistry* **70(11)**, 2280–2287.
- [116] Swillens, S., Goffard, J. C., Marechal, Y., deKerchove d'Exaerde, A., and El Housni, H. (2004) *Nucleic Acids Res* **32(6)**, e56.
- [117] Burns, M. A., Mastrangelo, C. H., Sammarco, T. S., Man, F. P., Webster, J. R., Johnsons, B. N., Foerster, B., Jones, D., Fields, Y., Kaiser, A. R., and Burke, D. T. May 1996 *Proc Natl Acad Sci U S A* **93(11)**, 5556–5561.
- [118] Morrison, T., Hurley, J., Garcia, J., Yoder, K., Katz, A., Roberts, D., Cho, J., Kanigan, T., Ilyin, S. E., Horowitz, D., Dixon, J. M., and Brenan, C. J. H. Sep 2006 *Nucleic Acids Res*.
- [119] Chou, Q., Russell, M., Birch, D. E., Raymond, J., and Bloch, W. Apr 1992 *Nucleic Acids Res* **20(7)**, 1717–1723.
- [120] Brownie, J., Shawcross, S., Theaker, J., Whitcombe, D., Ferrie, R., Newton, C., and Little, S. (1997) *Nucleic Acids Res* **25(16)**, 3235–41.
- [121] Somack, R., Hodges, S., and Pandey, V. Simple qualitative and quantitative methods for measuring residual activity of hot-start enzyme preparations 2nd International qPCR Symposium, Munich (2005).
- [122] Ding, C. and Cantor, C. R. (2003) *Proc Natl Acad Sci U S A* **100(13)**, 7449–53.
- [123] Ekstrom, S., Onnerfjord, P., Nilsson, J., Bengtsson, M., Laurell, T., and Marko-Varga, G. (2000) *Anal Chem* **72(2)**, 286–93.
- [124] Su, A. I., Cooke, M. P., Ching, K. A., Hakak, Y., Walker, J. R., Wiltshire, T., Orth, A. P., Vega, R. G., Sapinoso, L. M., Moqrich, A., Patapoutian, A., Hampton, G. M., Schultz, P. G., and Hogenesch, J. B. Apr 2002 *Proc Natl Acad Sci U S A* **99(7)**, 4465–4470.

- [125] Gitton, Y., Dahmane, N., Baik, S., iAltaba, A. R., Neidhardt, L., Scholze, M., Herrmann, B. G., Kahlem, P., Benkahla, A., Schrinner, S., Yildirimman, R., Herwig, R., Lehrach, H., Yaspo, M.-L., and expression mapinitiative, H. S. A. Dec 2002 *Nature* **420**(6915), 586–590.
- [126] Martin, E. R., Lai, E. H., Gilbert, J. R., Rogala, A. R., Afshari, A. J., Riley, J., Finch, K. L., Stevens, J. F., Livak, K. J., Slotterbeck, B. D., Slifer, S. H., Warren, L. L., Conneally, P. M., Schmechel, D. E., Purvis, I., Pericak-Vance, M. A., Roses, A. D., and Vance, J. M. Aug 2000 *Am J Hum Genet* **67**(2), 383–394.
- [127] Ranade, K., Chang, M. S., Ting, C. T., Pei, D., Hsiao, C. F., Olivier, M., Pesich, R., Hebert, J., Chen, Y. D., Dzau, V. J., Curb, D., Olshen, R., Risch, N., Cox, D. R., and Botstein, D. Jul 2001 *Genome Res* **11**(7), 1262–1268.
- [128] Bergen, A. W., Haque, K. A., Qi, Y., Beerman, M. B., Garcia-Closas, M., Rothman, N., and Chanock, S. J. Sep 2005 *Hum Mutat* **26**(3), 262–270.
- [129] Holbrook, J. F., Stabley, D., and Sol-Church, K. Jun 2005 *J Biomol Tech* **16**(2), 125–133.
- [130] Silander, K., Komulainen, K., Ellonen, P., Jussila, M., Alanne, M., Levander, M., Tainola, P., Kuulasmaa, K., Salomaa, V., Perola, M., Peltonen, L., and Saarela, J. Aug 2005 *Twin Res Hum Genet* **8**(4), 368–375.
- [131] Taberlet, P., Griffin, S., Goossens, B., Questiau, S., Manceau, V., Escaravage, N., Waits, L. P., and Bouvet, J. Aug 1996 *Nucleic Acids Res* **24**(16), 3189–3194.
- [132] Kwok, S. and Higuchi, R. (1989) *Nature* **339**(6221), 237–8.