

Literatur

- Albrecht**, Christian et al.: „DNA: A Programmable Force Sensor“, *Science* Vol. 301, 18.7.2003, S. 367
- Alivisatos**, Paul: „Perspectives on the Physical Chemistry of Semiconductor Nanocrystals“, *Journal of Physical Chemistry* Vol. 100, 1996, S. 13226
- Alivisatos**, Paul: „Less Is More in Medicine“, *Scientific American*, September 2001, S. 66
- Altmann**, Jürgen & Gubrud, Mark: „Risks from military uses of nanotechnology – the need for technology assessment and preventive control“, in: Roco, M. & R. Tomellini (eds.), *Nanotechnology – Revolutionary Opportunities and Societal Implications*, 3rd JOINT EC-NSF Workshop on Nanotechnology, 31.1.-1.2.2002, S. 144
- Anderson**, Kevin & **Beason**, Doug: *Assemblers of Infinity*, Bantam Books 1993
- Bachtold**, Adrian et al., „Logical circuits with carbon nanotube transistor“, *Science* Vol. 294, 9.11.2001, S. 1317
- Baggott**, Jim: *The Meaning of Quantum Theory*, Oxford University Press 1992
- Ball**, Philip: „Through the Nanotube“, *New Scientist* Vol. 2037, 6.7.1996, S. 28
- Ball**, Philip: „Roll up for the revolution“, *Nature* Vol. 414, 8.11.2001, S. 142
- Battiston**, Felice: *Ein System mechanischer Sensoren für die chemische Analytik*, Dissertation, Universität Basel, 2000
- Bear**, Greg: *Blood Music*, Simon & Shuster 1985/iBooks 2002
- Becker**, Nathan et al.: „Molecular nanosprings in spider capture silk threads“, *Nature Materials* Vol. 2, S. 278, Online Publication 23.3.2003
- Belcher**, Angela: *Viruses put to work to make high-tech materials*, Australian Academy of Science Symposium Proceedings, 2.5.2003, www.science.org.au/sats2003/belcher.htm
- Bienlein**, Johann & **Wiesendanger**, Roland: *Einführung in die Struktur der Materie*, Teubner 2002
- Bimberg**, Dieter: „Quantum dots: paradigm changes in semiconductor physics“, *Fisika i Technika Poliprowodnikow*, Vol. 33,1999, S. 1044
- Bimberg**, Dieter et al.: „Quantum dot lasers: breakthrough in optoelectronics“, *Thin Solid Films* Vol. 367, 2000, S. 235
- Binnig**, Gerd: „Force Microscopy“, *Ultramicroscopy* Vol. 42-44, 2002, S. 7
- Binnig**, Gerd & **Rohrer**, Heinrich: „Geburt und Kindheit der Rastertunnelmikroskopie“ (Nobel-Vortrag), *Physikalische Blätter* Nr. 43, 1987, S. 280
- Binnig**, Gerd & **Rohrer**, Heinrich: „In touch with atoms“, *Reviews of Modern Physics* Vol. 71, No. 2, 1999, S. 324
- Bonabeau**, Eric & **Meyer**, Christopher: „Swarm Intelligence: A Whole New Way to Think About Business“, *Harvard Business Review*, Mai 2001, S. 108
- Bonabeau**, Eric: „Predicting the Unpredictable“, *Harvard Business Review*, März 2002, S. 5
- Borm**, Paul: „Particle Toxicology: From Coal Mining to Nanotechnology“, *Inhalation Toxicology* 2002
- Brabec**, Christoph et al.: „Plastic Solar Cells“, *Advanced Functional Materials* Vol. 11 No. 1, 2001, S. 15

- Brumfiel**, Geoff „Nanotechnology: A little knowledge...“, *Nature* Vol. 424, 17.7.2003, S. 244
- Brus**, Louis: „Chemical Approaches to Semiconductor Nanocrystals and Mateterials“, in: Timp, Gregory (Ed.), *Nanotechnology*, Springer 1999, S. 266
- Chen**, Yong et al., „Nanoscale molecular-switch crossbar circuits“, *Nanotechnology* Vol. 14, 20.3.2003, S. 462
- Christen**, Hans Rudolf: *Chemie*, Diesterweg 1977
- Coghlan**, Andy: „Land of Opportunity“, *New Scientist*, 4.11.2000, S. 30
- Cohen**, Jack & **Stewart**, Ian: *Evolving the Alien: The Science of Extraterrestrial Life*, Ebury Press, London 2002
- Colvin**, Vicki „Responsible Nanotechnology: Looking Beyond the Good News“, *Eurekalert.org*, Nanotechnik-Dossier, 2002
- Crichton**, Michael: *Beute*, Blessing 2002
- Darling**, Robert: *Tutorial EE527 Microfabrication – Photolithography*, University of Washington, Dept. Electrical Engineering,
www.ee.washington.edu/research/microtech/cam/PROCESSES/photolithographypdf.html
- Dawkins**, Richard: *Das egoistische Gen*, Rowohlt, Reinbek 2002 (4. Auflage)
- DeWeerd**, Sarah: *What’s a Genome?*, Genome News Network,
www.genomeneutralnetwork.org/whats_a_genome/Chp1_1_1.shtml
- Dresselhaus**, Mildred et al.: „Nanotechnology in Carbon Materials“, in: Timp, Gregory (Ed.), *Nanotechnology*, Springer 1999, S. 285
- Drexler**, Eric: „Molecular engineering: An approach to the development of general capabilities for molecular manipulation“, *PNAS* Vol. 78, No. 9, 1981, S. 5275
- Drexler**, Eric: *Engines of Creation*, 1986 (Online-Ausgabe: www.foresight.org/EOC/)
- Drexler**, Eric: *Nanosystems*, Wiley Interscience, New York 1992
- Drexler**, Eric: „Machine-Phase Nanotechnology“, *Scientific American*, September 2001, S. 74
- Drexler**, Eric: „An Open Letter to Richard Smalley“, *KurzweilAI.net*, 16.4.2003
- Duke University Press Release**: „Unusually long and aligned 'buckytubes' grown at Duke“, *Eurekalert.org*, 22.4.2003
- Dyson**, Freeman: „The Future Needs Us“, *New York Review of Books*, 13.2.2003,
www.nybooks.com/articles/16053
- Eigler**, Don: „From The Bottom Up: Building Thins With Atoms“, in: Timp, Gregory (Ed.), *Nanotechnology*, Springer 1999, S. 425
- ETC Group**: „No Small Matter“, *ETC Group Communique*, Vol. 76, Mai/Juni 2002,
www.etcgroup.org/article.asp?newsid=356
- ETC Group**: „Size Matters“, *ETC Group Occasional Paper Series*, Vol. 7 Nr. 1, April 2003,
www.etcgroup.org/article.asp?newsid=392
- Evident Technologies**, Whitepaper „Core Shell Evidots: High Yield, Narrow Emission, Photostable Fluorescent Labels“, www.evidenttech.com/why_nano/docs.php

- Evident Technologies**, Whitepaper „Field-Deployable Biological Threat Detection System“, www.evidenttech.com/why_nano/docs.php
- Fennimore**, A. M. et al., „Rotational actuators based on carbon nanotubes“, *Nature* Vol. 424, 24.7.2003, S. 408
- Feynman**, Richard: *There's plenty of room at the bottom*, 1959, www.ist.caltech.edu/~feynman/plenty.html
- Fichtner**, Maximilian et al.: „Small Ti clusters for catalysis of hydrogen exchange in NaAlH₄“, *Nanotechnology* Vol. 14, 13.5.2003, S. 778
- Fick**, Eugen: *Einführung in die Grundlagen der Quantenmechanik*, Aula-Verlag Wiesbaden 1988 (6. Auflage)
- Firestein**, Stuart: „How the olfactory system makes sense of of scents“, *Nature* Vol. 413, 13.9.2001, S. 211
- Förster**, Wolfgang & **Wagner**, Georg: „Sol-Gel-Beschichtungen als dünne Korrosionsschutzschichten“, *Phänomen Farbe*, www.phaenomen-farbe.de/pf_812_forschung_sol-gel.htm
- Foresight Institute**, *Foresight Guidelines on Molecular Manufacturing*, Revised Draft Version 3.7, 4.7.2000, www.foresight.org/guidelines/current.html
- Freitas**, Robert: *Nanomedicine Vol. 1*, Landes Bioscience 1999 www.nanomedicine.com/NMI/
- Freitas**, Robert: *The Vasculoid Personal Appliance*, Institute for Molecular Manufacturing, 11.5.2002; www.imm.org/Reports/Rep031.html
- Freitas**, Robert: *Respirocytes. A Mechanical Artificial Red Cell: Exploratory Design in Medical Nanotechnology*, 1996-1999, www.foresight.org/Nanomedicine/Respirocytes.html
- Freitas**, Robert: *Some Limits to Global Ecophagy by Biovorous Nanoreplicators, with Public Policy Recommendations*, April 2000, www.foresight.org/NanoRev/Ecophagy.html
- Fritsche**, Wolfgang: *Mikrobiologie*, Spektrum 2002 (3. Auflage)
- Gaub**, Hermann: *Vorlesungskript Biophysik*, 2003
- Grätzel** Michael: „Photoelectrochemical cells“, *Nature* Vol. 414, 15.11.2001, S. 338
- Grimes**, Ann: „Bets Are On Again“, *The Wall Street Journal*, 28.8.2003
- Gross**, Michael: „Small is great!“, *New Scientist*, 14.7.2001, Inside Science Section
- Heath**, Jim & **Ratner**, Mark: „Molecular Electronics“, *Physics Today*, Mai 2003, S. 43
- Heinze**, S. et al.: „Real-Space Imaging of Two-Dimensional Antiferromagnetism on the Atomic Scale“, *Science* Vol. 288, 9.6.2000, S. 1805
- Hong**, Seunghun et al.: „Multiple Ink Nanolithography: Toward a Multiple-Pen Nano-Plotter“, *Science* Vol. 286, 15.10.1999, S. 523
- Howard**, Sean: „Nanotechnology and Mass Destruction“, *Disarmament Diplomacy* Nr. 65, Juli/August 2002
- Hummelen**, Kees: „The Nobel Prize in Chemistry 2000“, Rijks Universiteit Groningen, <http://www.fwn.rug.nl/solar/the%20nobel%20prize%20in%20chemistry%202000.htm>;
- Ihde**, Don: *Philosophy of Technology*, Paragon House 1993
- Iijima**, Sumio: „Helical microtubules of graphitic carbon“, *Nature* Vol. 354, 7.11.1991, S. 56
- Institut für Neue Materialien**: *Online-Informationen 5.0 Technologien*, www.inm-gmbh.de/htdocs/home/frame_de.htm

Internationale Ärzte für die Verhütung des Atomkriegs, Ärzte in sozialer Verantwortung e.V., *Die Folgen von Tschernobyl*, www.tschernobyl-folgen.de

Jamieson, Valerie „Open Secret“, *New Scientist* Vol. 2386, 15.3.2003, S. 30

Jordan, Andreas et al., „Presentation of a new magnetic field therapy system for the treatment of human solid tumors with magnetic fluid hyperthermia“, *Journal of Magnetism and Magnetic Materials* Vol. 225, 2001, S. 118

Jordan, Andreas: „Nanotechnologie – ein neues Konzept für Diagnostik und Therapie maligner Tumoren“, *Der Onkologe*, Oktober 2001, S. 1073

Joy, Bill: „Why the future doesn't us“, *Wired* issue 8.04, April 2000, www.wired.com/wired/archive/8.04/joy.html

Kalaugher, Liz: „Nanomechanic devices sniff out whisky“, *nanotechweg.org*, Oktober 2002, nanotechweb.org/articles/feature/1/10/4/1

Kanellos, Michael: „Intel sets to overhaul Pentium by 2005“, *ZDNet UK*, 9.10.2002, news.zdnet.co.uk/hardware/chips/0,39020354,2123581,00.htm

Kelly, Matt: „U.S. Army has 'big plans' for nanotechnology“, *Small Times online*, 28.5.2003, www.smalltimes.com/document_display.cfm?document_id=6068

Kingsland, James: „Border Control“, *New Scientist*, 15.7.2000, Inside Science Section

Kopitzki, Konrad & **Herzog**, Peter: *Einführung in die Festkörperphysik*, Teubner 2002 (4. Auflage)

Kouwenhoven, Leo & **McEuen**, Paul: „Single Electron Transport Through a Quantum Dot“, in: Timp, Gregory (Ed.), *Nanotechnology*, Springer 1999, S. 471

Kroto, Harold: *Symmetry, Space, Stars and C*, Nobel Lecture, 7.12.1996, www.nobel.se/chemistry/laureates/1996/kroto-lecture.html

Kroto, Harold et al.: „C₆₀: Buckminsterfullerene“, *Nature* Vol. 318, 14.11.1985, S. 162

Kurzweil, Ray: *The Singularity is Near. A Book Précis*, November 2000 (Buchentwurf, liegt dem Autor vor)

Kurzweil, Ray: *Testimony on the Societal Implications of Nanotechnology*, 9.4.2003, www.house.gov/science/hearings/full03/apr09/kurzweil.pdf

Kyle, James, „Nanoparticles prove irresistible for cleanup of industrial waste“, *Small Times online*, 23.7.2003; www.smalltimes.com/document_display.cfm?document_id=6399

Lawton, Graham: „Forging a Legend“, *New Scientist*, 21.7.2001, S. 42;

Lewin, Roger: *Die Komplexitätstheorie*, Hoffmann und Campe 1993

Lieber, Charles: „The Incredible Shrinking Circuit“, *Scientific American*, September 2001, S. 58

Mejias, Jordan & **Rademacher**, Horst: „Manche Experimente sollten wir nur auf dem Mond wagen“, Interview mit Bill Joy, *Frankfurter Allgemeine Zeitung*, 13.6.2003

Melosh, Nicholas et al., „Ultrahigh-Density Nanowire Lattices and Circuits“, *Science* Vol. 300, 4.4.2003, S. 112

Merkle, Ralph: *That's impossible. How good scientists reach bad conclusions*, 2001; www.foresight.org/impact/impossible.html

- Merkle**, Ralph: „A proposed „metabolism“ for a hydrocarbon assembler“, *Nanotechnology* Vol. 8, S. 149, 1997, www.zyvex.com/nanotech/hydroCarbonMetabolism.html
- Michel**, Bruno et al.: „Printing meets lithography: Soft approaches to high-resolution patterning“, *IBM Journal Research & Development* Vol. 45 No. 5, September 2001, S. 697
- Mutschler**, Hans-Dieter: *Physik – Religion – New Age*, Echter 1992
- National Science Foundation (Ed.)**, *Societal Implications of Nanoscience and Nanotechnology*, März 2001
- Newton**, Isaac, *Optik oder Abhandlung über Spiegelungen, Brechungen, Beugungen und Farben des Lichts*, Braunschweig 1983
- Nicolis**, Grégoire & **Prigogine**, Ilya: *Die Erforschung des Komplexen*, Piper, München 1987
- Oberdörster**, Günter & **Utell**, Mark: „Ultrafine Particles in the Urban Air“, *Environmental Health Perspectives*, August 2002, S. 440
- Packan**, Paul: „Pushing the Limits“, *Science* Vol. 285, 24.9.1999, S. 2079
- Pendick**, Daniel: „The smallest builders in the world“, *New Scientist*, 6.9.1997, S. 34
- Ratner**, Mark & **Ratner**, Daniel: *Nanotechnology – a gentle introduction to the next big idea*, Prentice Hall 2003
- Resnick**, Doug et al.: „Making an Imprint“, *spie's oe magazine*, August 2003, S. 18
- Richey**, Kevin: *The ENIAC*, ei.cs.vt.edu/~history/ENIAC.Richey.HTML
- Royal Swedish Academy of Sciences**, The: *The Nobel Prize in Chemistry, 2000: Conductive Polymers (Advanced Information)*, Dezember 2000, www.nobel.se/chemistry/laureates/2000/adv.html
- Roukes**, Michael: „Plenty of Room, Indeed“, *Scientific American*, September 2001, S. 48
- Rubahn**, Horst-Günter: *Nanophysik und Nanotechnologie*, Teubner 2002
- Rubner**, Michael: „Synthetic Sea Shell“, *Nature* Vol. 423, 26.6.2003, S. 925
- Ruska**, Ernst: „The Development of the Electron Microscope And of Electron Microscopy“, Nobel lecture, 8.12.1986, www.nobel.se/physics/laureates/1986/ruska-lecture.html
- Rybczynski**, Witold: *One Good Turn. A Natural History of the Srewdriver and the Screw*, Scribner, New York 2000
- Schirmacher**, Frank (Hg.), *Die Darwin AG*, Kiepenheuer und Witsch 2001, S. 166
- Schlapbach**, Louis & **Züttel**, Andreas: „Hydrogen-storage materials for mobile applications“, *Nature* Vol. 414, 15.9.2001, S. 353
- Schliwa**, Manfred & **Woehlke**, Günther: „Molecular Motors“, *Nature* Vol. 422, 17.4.2003, S. 759
- Schöll**, Eckehard: *Nonlinear Dynamics and Pattern Formation in Semiconductor Systems*, Institut für Theoretische Physik, TU Berlin, 2003
- Schoepe**, Klaus & **Wiesendanger**, Roland: „Nanokosmos“, aus: *Jahrbuch der Physik*, 2002
- Schreiber**, Frank: „Structure and growth of self-assembling monolayers“, *Progress in Surface Science* Vol. 65, 2000, S. 161
- Shachtman**, Noah: „Uber-Soldier Needs Much Debugging“, *Wired News*, 26.5.2003, www.wired.com/news/technology/0,1282,58970,00.html

- Shchukin, Vitaliy & Bimberg, Dieter:** „Spontaneous ordering of nanostructures on crystal surfaces“, *Review of Modern Physics* Vol. 71, No. 4, Juli 1999, S. 1125
- Seeman, Nadrian:** „DNA in a material world“, *Nature* Vol. 421, 23.1.2003, S. 427
- Service, Robert:** „Tricks for Beating the Heat Help Panels See the Light“, *Science* Vol. 300, 23.5.2002, S. 1219
- Service, Robert:** „Sorting Technique May Boost Nanotube Research“, *Science* Vol. 300, 27.6.2003, S. 2018
- Smalley, Richard:** „Of Chemistry, Love and Nanobots“, *Scientific American*, September 2001, S. 76
- Smalley, Richard:** *Discovering the Fullerenes*, Nobel Lecture, 7.12.1996,
www.nobel.se/chemistry/laureates/1996/smalley-lecture.html
- Stephenson, Neil:** *The Diamond Age. Die Grenzwelt*, Goldmann 1996
- Story, Derrick:** „Swarm Intelligence: An Interview with Eric Bonabeau“, *openP2P.com*, 21.2.2003,
<http://www.oreillynet.com/pub/a/p2p/2003/02/21/bonabeau.html>
- Strasser, Bruno:** „Who cares for the double helix?“, *Nature* Vol 422, 24.4.2003, S. 803, s.a.
www.nature.com/nature/DNA50
- Svensson, Mattias et al.:** „High-Performance Polymer Solar Cells of an Alternating Polyfluorene Copolymer and a Fullerene Derivative“, *Advanced Materials* Vol. 15, No. 12, 17.6.2003, S. 988
- Talbot, David:** „Super Soldiers“, *MIT Technology Review*, Oktober 2002, S. 44
- Tans, Sander et al.:** „Room-temperature transistor based on a single carbon nanotube“, *Nature* Vol. 393, 7.5.1998, S. 49
- Timp, Gregory (ed.):** *Nanotechnology*, Springer 1999
- Vaihinger, Dorothea et al.:** „Molecularly Imprinted Polymer Nanospheres as Synthetic Affinity Receptors Obtained by Miniemulsion Polymerisation“, *Macromolecular Chemistry and Physics* Vol. 203, 2002, S. 1965
- Vettiger, Peter & Binnig, Gerd:** „The Nanodrive Project“, *Scientific American*, Januar 2003, S. 47
- Vukusic, Pete & Sambles, Roy:** „Photonic Structures in Biology“, *Nature* Vol. 424, S. 852, 14.8.2003
- Wang, Peng et al.:** „A stable quasi-solid-state dye-sensitized solar cell with an amphiphilic ruthenium sensitizer and polymer gel electrolyte“, *Nature Materials* Vol. 2, 1.6.2003, S. 402
- Wagner, Georg:** „Unendliche Möglichkeiten“, *mo Nanotechnologie*, 11/12 2002
- Waloschek, Pedro:** *Wörterbuch Physik*, dtv 1998
- Weik, Martin:** *The ENIAC Story*, 1961, ftp.arl.mil/~mike/comphist/eniac-story.html
- Wetzel, Hubert:** „Analyse: Auszüge aus der Rede von US-Präsident Bush“, *Financial Times Deutschland*, 30.1.2003
- Whitesides, George:** „The Once and Future Nanomachine“, *Scientific American*, September 2001, S. 78
- Whitesides, George & Boncheva, Mila:** „Beyond Molecules: Self-assembly of mesoscopic and macroscopic components“, *PNAS* Vol. 99, No. 8, 16.4.2002, S. 4769
- Whitesides, George & Love, Christopher:** „The Art of Building Small“, *Scientific American*, September 2001, S. 39
- Williams, Stanley et al.:** *Chemically synthesized and assembled electronics devices*, US-Patent Nr. 6 459 095, 1.10.2003; patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=/netahtml/srchnum.htm&r=1&f=G&l=50&s1=6,459,095.WKU.&OS=PN/6,459,095&RS=PN/6,459,095

Winner, Langdon: *The Whale and the Reactor*, The University of Chicago Press 1986

Winner, Langdon: *Testimony to the Committee on Science of the U.S. House of Representatives on The Societal Implications of Nanotechnology*, 9.4.2003, www.house.gov/science/hearings/full03/apr09/winner.htm

Yao, Zhen et al., „Carbon nanotube intramolecular junctions“, *Nature* Vol. 402, 18.11.1999, S. 273

Zhang, Shuguang et al.: „Design of nanostructured biological materials through self-assembly of peptides and proteins“, *Current Opinion in Chemical Biology* Vol. 6, 2002, S. 865

Zhang, Shuguang et al.: „Spontaneous assembly of a self-complementary oligopeptide to form a stable macroscopic membrane“, *PNAS* Vol. 90, No. 8, 15.4.1993, S. 3334

Zandonella, Catherine: „The tiny toolkit“, *Nature* Vol. 423, 1.5.2003, S. 10