ANNUAL REPORT 2006

MESA+ SCIENTIFIC PUBLICATIONS 2006

PhD-thesis

PHD-THESIS

■ Altena, G. (2006, juni 07). Evanescent field sensing in hybrid integrated optical MEMS devices. UT University of Twente (179 pag.) (Enschede, The Netherlands: G. Altena). Prom./coprom.: prof.dr. P.V. Lambeck, & dr. H.J.W.M. Hoekstra.
■ Ashima sah, A.S. (2006, maart 03). Chemically Modified Ceramic Membranes-Study of Structural and Transport Properties. UT Universiteit Twente (101 pag.) (Enschede: PrintPartners Ipskamp). Prom./coprom.: Prof.Dr.Ing. D.H.A. Blank, & Dr.ir. J.E. ten Elshof.
■ Bankras, R.G. (2006, november 01). In-situ RHEED and characterization of ALD Al2O3 gate dielectrics. UT University of Twente (172 pag.) (Enschede, The Netherlands: MESA+ Institute for Nanotechnology, University of Twente). Prom./coprom.: prof.dr. J. Schmitz, & Dr. J. Holleman.
■ Barisonzi, M. (2006, mei 31). Mass measurements of the top quark in electroweak production channels at ATLAS. UT Universiteit Twente (170 pag.). Prom./coprom.: Prof.dr.ing. B. van Eijk, & Dr.ir. J.C. Vermeulen.
■ Basabe desmonts, M.L. (2006, januari 13). Fluorescent self-assembled monolayers as new sensing materials. UT Universiteit Twente (195 pag.) (Zutphen, Nederland: Wöhrmann Print Service). Prom./coprom.: Prof.dr.ir. D.N. Reinhoudt, & Dr. M. Crego Calama.
■ Crespo biel, O. (2006, februari 10). Nanofabrication of two- and three-dimensional structures by multivalent supramolecular interactions. UT Universiteit Twente (201 pag.) (Zuthpen: Wöhrmann Print Service). Prom./coprom.: Prof.dr.ir. D.N. Reinhoudt, Prof.dr.ir. J. Huskens, & Dr. B.J. Ravoo.
■ Dekker, R. (2006, december 22). All-optical Processes in Integrated Optical Devices Using Materials with Large Third-Order Nonlinearities and Gain. UT University of Twente (227 pag.) (Amersfoort, The Netherlands: R. Dekker). Prom./coprom.: prof.dr. A. Driessen.
■ Dijk, F.R. van (2006, april 28). An electrochemical and STM study of Cu(001) in contact with aqueous chloride and cobalt solutions. UT Universiteit Twente (123 pag.) (Enschede, the Netherlands: Solid State Physics Group, University of Twente). Prom./coprom.: Prof.dr.ir. B. Poelsema.
■ Dirks, B. (2006, november 23). Study and modelling of the new generation Cd(Zn)Te X- and gamma-ray detectors for space applications. UT Universiteit Twente / University Paris 7 (164 pag.) (Paris: RICOH). Prom./coprom.: Prof.dr.ing. B. van Eijk, & F. Lebrun.
■ Dziomkina, N. (2006, april 06). Polymer Colloidal Crystals: Synthesis and Template-Assisted Fabrication with Controlled Structure and Orientation. UT Universiteit Twente (181 pag.) (Enschede: PrintPartners Ipskamp). Prom./coprom.: Prof.dr. G.J. Vancso.
■ Faber, E.J. (2006, maart 16). Toward the hybrid organic semiconductor FET (HOSFET) electrical and electrochemical characterization of functionalized and unfunctionalized, covalently bound organic monolayers on silicon surfaces. Univ. of Twente (222 pag.) (Enschede: Febodruk B.V.). Prom./coprom.: prof.dr.ir. A. van den Berg, & Dr.ir. W. Olthuis.
■ Galca, A.C. (2006, juli 12). Ellipsometric studies of anisotropic nanoscaled media. UT Universiteit Twente (134 pag.) (Enschede, the Netherlands: Solid State Physics Group, University of Twente). Prom./coprom.: Prof.dr.ir. B. Poelsema.
■ Geerken, M.J. (2006, november 09). Emulsification with micro-engineered devices. UT Universiteit Twente (193 pag.) (Zutphen: Wöhrmann Print Service). Prom./coprom.: Prof.dr.-ing. M. Wessling, & Dr.Ir. R.G.H. Lammertink.
■ Gokcan, H. (2006, juli 13). Magnetotransport of hot electrons and holes in the spin-valve transistor. Univ. of Twente (126 pag.) (Zutphen: Wohrmann Print Service). Prom./coprom.: Prof.dr. J.C. Lodder, & dr. R. Jansen.
■ Götz, S. (2006, september 01). Quantitative wavelenght-resolved fluorescence detection for microchip capillary electrophoresis. UT Universiteit Twente. Prom./coprom.: Prof.dr. U. Karst.
■ Hallbäck, A.S.V.M. (2006, september 21). On the physical properties of organic molecules on surfaces: Decanethiol self assembled monolayers on gold and oxygen radicals on silicon. UT Universiteit Twente (137 pag.) (Enschede, the Netherlands: Solid State Physics Group, University of Twente). Prom./coprom.: Prof.dr.ir. B. Poelsema, & prof.dr.ir. H.J.W. Zandvliet.

- Haneveld, J. (2006, januari 20). Nanochannel fabrication and characterization using bond micromachining. UT Universiteit Twente (151 pag.) (Enschede). Prom./coprom.: Prof.dr. M.C. Elwenspoek, Dr.ir. H.V. Jansen, & dr.ir. N.R. Tas.
- Henneken, H.. Sampling strategies for the analysis of reactive low-molecular weight compounds in air. UT Universiteit Twente. Prom./coprom.: Prof.dr. U. Karst.
- Huijben, M. (2006, april 28). Interface Engineering for Oxide Electronics. Tuning electronic properties by atomically controlled growth. UT Universiteit Twente (184 pag.) (Zutphen: Wöhrmann Print Service). Prom./coprom.: prof. H. Hilgenkamp, Prof.Dr.Ing. D.H.A. Blank, & Dr ing. A.J.H.M. Rijnders.
- Huisstede, J.H.G. (2006, april 20). Scanning Probe Optical Tweezers: a new tool to study DNA-protein interactions. UT Universiteit Twente (132 pag.) (Enschede: Febodruk BV). Prom./coprom.: prof. dr. V. Subramaniam, & Dr. ir. M.L. Bennink.
- Jong, B.R. de (2006, november 03). A six degrees of freedom mems manipulator. UT University of Twente (201 pag.) (Enschede: Twente University Press). Prom./coprom.: Prof.dr. M.C. Elwenspoek, Prof.ir. H.M.J.R. Soemers, & Dr.ir. G.J.M. Krijnen.
- Joseph, A.A. (2006, mei 10). Defect-based testing of LTS digital circuits. UT University of Twente (181 pag.) (Enschede, The Netherlands: Royal Society of Chemistry). Prom./coprom.: prof.dr.ir. Th. Krol, & Dr.ir. H.G. Kerkhoff.
- Karakaya, K. (2006, april 20). CeO2 and HfO2 High-K Gate Dielectrics by Pulsed Laser Deposition from binary oxides to nanolaminates. UT Universiteit Twente (139 pag.) (Zutphen: Wöhrmann Print Service). Prom./coprom.: Prof.Dr.Ing. D.H.A. Blank, & Dr ing. A.J.H.M. Rijnders.
- Khomyakov, P.A. (2006, mei 11). Electronic transport through nanowires: a real-space finite-difference approach. UT Universiteit Twente (135 pag.) (Enschede: Febodruk BV). Prom./coprom.: Prof.dr. P.J. Kelly, & Dr. G. Brocks.
- Koopman, M. (2006, april 21). Nanoscale cell membrane organization : a near-field optical view. UT Universiteit Twente (142 pag.) (Enschede: Printpartners Ipskamp). Prom./coprom.: Prof.dr. N.F. van Hulst.
- Murillo Vallejo, R. (2006, april 12). Magnetic media patterned by laser interference lithography. UT Universiteit Twente (142 pag.) (Zuthpen: Wöhrmann Print Service). Prom./coprom.: Prof.dr. J.C. Lodder, & Dr.ir. L. Abelmann.
- Nijhuis, C.A. (2006, november 03). Redox-active dendrimers at molecular printboards. UT Universiteit Twente (160 pag.) (Zutphen: Wöhrmann Printservice). Prom./coprom.: Prof.dr.ir. D.N. Reinhoudt, & Prof.dr.ir. J. Huskens.
- Nikolaev, I. (2006, november 02). Spontaneous-emission rates of quantum dots and dyes controlled with photonic crystals. UT Universiteit Twente (137 pag.) (Enschede, The Netherlands). Prom./coprom.: Prof.dr. W.L. Vos.
- Oshovsky, G. (2006, maart 23). Cavitand-based anion receptors and self-assembled (hemi)capsules in polar competitive media. UT Universiteit Twente (166 pag.). Prom./coprom.: Prof.dr.ir. D.N. Reinhoudt, & Dr. W. Verboom.
- Ovsyanko, M.M. (2006, februari 23). Ion sculpting of Cu(001). UT Universiteit Twente (142 pag.) (Enschede, the Netherlands: Solid State Physics Group, University of Twente). Prom./coprom.: Prof.dr.ir. B. Poelsema.
- Ran, S. (2006, juni 16). Ceramic Composites of 3Y-TZP Doped with CuO: Processing, Microstructure and Tribology. UT Universiteit Twente (123 pag.) (Enschede: Ipskamp). Prom./coprom.: Prof.Dr.Ing. D.H.A. Blank, & Dr. A.J.A. Winnubst.
- Sharpe, R.B.A. (2006, januari 12). Controlling mass transport in microcontact printing. UT Universiteit Twente (129 pag.) (Zutphen: Wöhrmann Print Service). Prom./coprom.: Prof.dr.ir. D.N. Reinhoudt, & Prof.dr.ir. B. Poelsema.
- Shunmugavel, K. Ir. (2006, oktober 13). Rapid Single Flux Quantum Logic in High Temperature Superconductor Technology. UT Universiteit Twente (99 pag.) (Enschede: Ipskamp Printpartners). Prom./coprom.: Prof. H. Rogalla, & Dr. ir. A. Brinkman.

Sopaheluwakan, A. (2006, december 14). Characterization and Simulation of localized stated in Optical Structures. Universiteit Twente (128 pag.) (Enschede: Wohrmann Print Service). Prom./coprom.: prof.dr.ir. E. van Groesen.

Spijksma, G.I. (2006, januari 20). Modification of zirconium and hafnium alkoxides; the effect of molecular structure on derived materials. UT Universiteit Twente (251 pag.) (Enschede: Febodruk BV). Prom./coprom.: Prof.Dr.Ing. D.H.A. Blank, V.G. Kessler, & Dr. H.J.M. Bouwmeester.

Sturm, J.M. (2006, juli 13). Oxide growth on silicon: interface formation and nanoscale electrical properties. UT Universiteit Twente (161 pag.) (Enschede, the Netherlands: Solid State Physics Group, University of Twente). Prom./coprom.: Prof.dr.ir. B. Poelsema.

Susanto, H. (2006, januari 19). Josephson Junctions with Pase Shifts, Stability Analysis of Fractional Fluxons. UT Universiteit Twente (130 pag.) (Zuthpen: Wohrmann Print Service). Prom./coprom.: prof.dr. S.A. van Gils.

Talanana, M. (2006, juli 12). Spin transport from first-principles: metallic multilayers and a model spin-valve transistor. UT Universiteit Twente (161 pag.) (Enschede: Febodruk BV). Prom./coprom.: Prof.dr. P.J. Kelly.

Tocha, E. (2006, april 27). Bridging Lenght and Time Scales by AFM-Based Nanotribology: Applications to Nanostructured Ceramics and Polymer Surfaces. UT Universiteit Twente (195 pag.) (Enschede: PrintPartners Ipskamp). Prom./coprom.: Prof.dr. G.J. Vancso.

Valero, A. (2006, oktober 12). Single cell electroporation on chip. Univ. of Twente (209 pag.) (Zutphen: Wohrmann Print Service). Prom./coprom.: prof.dr.ir. A. van den Berg, & S.M.H. Andersson.

Vonk, V. (2006, juni 07). Growth and Structure of Complex Oxide Thin Films. UT Universiteit Twente (159 pag.) (Zutphen: Wöhrmann Print Service). Prom./coprom.: Prof. H. Rogalla, Dr. ir. H. Graafsma, & Dr. S. Harkema.

Wouden, E.J. van der (2006, december 15). Field effect control of electro-osmotic flow in microfluidic networks. Univ. of Twente (204 pag.) (Zutphen: Wohrmann Print Service). Prom./coprom.: prof.dr.ir. A. van den Berg, & Dr. J.G.E. Gardeniers.

ACADEMIC JOURNAL REFEREED

Ortlepp, T; Ariando; Mielke, O; Verwijs, CJM; Foo, KFK; Rogalla, H; Uhlmann, FH; Hilgenkamp, H, Flip-flopping fractional flux quanta, SCIENCE **312** (2006) 1495 – 1497

Boukamp, BA, Anodes sliced with ions, NATURE MATERIALS **5(7)** (2006) 517 – 518

Huijben, M; Rijnders, G; Blank, DHA; Bals, S; Van Aert, S; Verbeeck, J; Van Tendeloo, G; Brinkman, A; Hilgenkamp, H, Electronically coupled complementary interfaces between perovskite band insulators, NATURE MATERIALS **5** (2006) 556 - 560

Kirtley, JR; Tsuei, CC; Ariando, A; Verwijs, CJM; Harkema, S; Hilgenkamp, H, Angle-resolved phase-sensitive determination of the in-plane gap symmetry in YBa2Cu3O7-delta, NATURE PHYSICS **2** (2006) 190 - 194

Ma, YJ; Dong, WF; Hempenius, MA; Mohwald, H; Vancso, GJ, Redox-controlled molecular permeability of composite-wall microcapsules, NATURE MATERIALS **5** (2006) 724 - 729

Min, BC; Motohashi, K; Lodder, C; Jansen, R, Tunable spin-tunnel contacts to silicon using low-work-function ferromagnets, NATURE MATERIALS **5** (2006) 817 - 822

Ludden, MJW; Reinhoudt, DN; Huskens, J, Molecular printboards: versatile platforms for the creation and positioning of supramolecular assemblies and materials, CHEMICAL SOCIETY REVIEWS **35** (2006) 1122 - 1134

Nibbering, NMM, Four decades of joy in mass spectrometry, MASS SPECTROMETRY REVIEWS **25** (2006) 962 - 1017

Brataas, A; Bauer, GEW; Kelly, PJ, Non-collinear magnetoelectronics, PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS **427** (2006) 157 - 255

Freitag, M; Tsang, JC; Kirtley, J; Carlsen, A; Chen, J; Troeman, A; Hilgenkamp, H; Avouris, P, Electrically excited, localized infrared emission from single carbon nanotubes, NANO LETTERS **6** (2006) 1425 - 1433

■ Le Gac, S; Vermes, I; van den Berg, A, Quantum dots based probes conjugated to annexin V for photostable apoptosis detection and imaging, NANO LETTERS **6** (2006) 1863 - 1869

■ Sharpe, RBA; Titulaer, BJF; Peeters, E; Burdinski, D; Huskens, J; Zandvliet, HJW; Reinhoudt, DN; Poelsema, B, Edge transfer lithography using alkanethiol inks, NANO LETTERS **6** (2006) 1235 - 1239

■ van Houselt, A; Oncel, N; Poelsema, B; Zandvliet, HJW, Spatial mapping of the electronic states of a one-dimensional system, NANO LETTERS **6** (2006) 1439 - 1442

■ Piermattei, A; Giesbers, M; Marcelis, ATM; Mendes, E; Picken, SJ; Crego-Calama, M; Reinhoudt, DN, Induction of liquid crystallinity by self-assembled molecular boxes, ANGEWANDTE CHEMIE-INTERNATIONAL EDITION **45** (2006) 7543 - 7546

■ Rozkiewicz, DI; Janczewski, D; Verboom, W; Ravoo, BJ; Reinhoudt, DN, Click chemistry by microcontact printing, ANGEWANDTE CHEMIE-INTERNATIONAL EDITION **45** (2006) 5292 - 5296

■ Schmuhl, R; van den Berg, A; Blank, DHA; ten Elshof, JE, Surfactant-modulated switching of molecular transport in nanometer-sized pores of membrane gates, ANGEWANDTE CHEMIE-INTERNATIONAL EDITION **45** (2006) 3341 - 3345

■ Thathagar, MB, Elshof, JE ten, & Rothenberg, G, Pd nanoclusters in C-C coupling reaction: proof of leaching, ANGEWANDTE CHEMIE-INTERNATIONAL EDITION **45(18)** (2006) 2886 - 2890

■ Basabe-Desmonts, L; Reinhoudt, DN; Crego-Calama, M, Combinatorial fabrication of fluorescent patterns with metal ions using soft lithography, ADVANCED MATERIALS **18** (2006) 1028 - +

■ Cheng, JY; Zhang, F; Smith, HI; Vancso, GJ; Ross, CA, Pattern registration between spherical block-copolymer domains and topographical templates, ADVANCED MATERIALS **18** (2006) 597 - +

■ Spijksma, GI; Huiskes, C; Benes, NE; Kruidhof, H; Blank, DHA; Kessler, VG; Bouwmeester, HJM, Microporous zirconia-titania composite membranes derived from diethanolamine-modiried precursors, ADVANCED MATERIALS **18** (2006) 2165 - +

■ Zhang, WD; Phang, IY; Liu, TX, Growth of carbon nanotubes on clay: Unique nanostructured filler for high-performance polymer nanocomposites, ADVANCED MATERIALS **18** (2006) 73 - 77

■ Antezza, M; Pitaevskii, LP; Stringari, S; Svetovoy, VB, Casimir-Lifshitz force out of thermal equilibrium and asymptotic nonadditivity, PHYSICAL REVIEW LETTERS **97** (2006) - 223203

■ Baret, J-C; Mugele, F, Electrical discharge in capillary break-up: controlling the charge of a droplet, PHYSICAL REVIEW LETTERS **96** (2006) - 016106

■ Bergmann, RPHM; Meer, RM van der; Stijnman, M, Sandtke, M; Prosperetti, A; Lohse, D;, Giant Bubble Pinch-Off, PHYSICAL REVIEW LETTERS **96** (2006) 154505-1-154505-4 -

■ Bremond, NP, Arora, M, Ohl, CD, & Lohse, D, Controlled Multibubble Surface Cavitation, PHYSICAL REVIEW LETTERS **96** (2006) 224501-1 - 224501-4

■ Catalan, G; Janssens, A; Rispens, G; Csiszar, S; Seeck, O; Rijnders, G; Blank, DHA; Noheda, B, Polar domains in lead titanate films under tensile strain, PHYSICAL REVIEW LETTERS **96** (2006) - 127602

■ Dammer, SM, & Lohse, D, Gas Enrichment at Liquid-Wall Interfaces, PHYSICAL REVIEW LETTERS 96 (2006) 206101-1 - 206101-4

■ Dullens, RPA, Mourad, MCD, Aarts, DGAL, Hoogenboom, JP, & Kegel, WK, Shape-induced frustration of hexagonal order in polyhedral colloids, PHYSICAL REVIEW LETTERS **96** (2006) 028304-1 - 028304-4

■ Eijkel, JCT; Dan, B; Reemeijer, HW; Hermes, DC; Bomer, JG; van den Berg, A, Strongly accelerated and humidity-independent drying of nanochannels induced by sharp corners, PHYSICAL REVIEW LETTERS **95** (2005) - 256107

■ Grajcar, M; Izmalkov, A; van der Ploeg, SHW; Linzen, S; Plecenik, T; Wagner, T; Hubner, U; Il'ichev, E; Meyer, HG; Smirnov, AY; Love, PJ; van den Brink, AM; Amin, MHS; Uchaikin, S; Zagoskin, AM, Four-qubit device with mixed couplings, PHYSICAL REVIEW LETTERS **96** (2006) - 47006

■ Hernando, J; van Dijk, EMHP; Hoogenboom, JP; Garcia-Lopez, JJ; Reinhoudt, DN; Crego-Calama, M; Garcia-Parajo, MF; van Hulst, NF, Effect of disorder on ultrafast exciton dynamics probed by single molecule spectroscopy, PHYSICAL REVIEW LETTERS **97** (2006) - 216403

■ Naber, WJM; Fujisawa, T; Liu, HW; van der Wiel, WG, Surface-acoustic-wave-induced transport in a double quantum dot, PHYSICAL REVIEW LETTERS **96** (2006) - 136807

■ Park, BG; Banerjee, T; Lodder, JC; Jansen, R, Opposite spin asymmetry of elastic and inelastic scattering of nonequilibrium holes injected into a ferromagnet, PHYSICAL REVIEW LETTERS **97** (2006) - 137205

■ Sbragaglia, M, Benzi, R, Biferale, L, Succi, S, & Toschi, F, Surface Roughness-Hydrophobicity Coupling in Microchannel and Nanochannel Flows, PHYSICAL REVIEW LETTERS **97** (2006) 204503-1 - 204503-4

■ Smilde, HJH; Golubov, AA; Ariando; Rijnders, G; Dekkers, JM; Harkema, S; Blank, DHA; Rogalla, H; Hilgenkamp, H, Admixtures to d-wave gap symmetry in untwinned YBa2Cu3O7 superconducting films measured by angle-resolved electron tunneling, PHYSICAL REVIEW LETTERS **95** (2005) - 257001

■ Staicu, AD, & Mugele, F, Electrowetting-induced oil film entrapment and instability, PHYSICAL REVIEW LETTERS **97** (2006) 167801 -

■ Tögel, R, Luther, S, & Lohse, D, Viscosity Destabilizes Sonoluminescing Bubbles, PHYSICAL REVIEW LETTERS **96** (2006) 114301-1 - 114301-4

■ Tokura, Y; van der Wiel, WG; Obata, T; Tarucha, S, Coherent single electron spin control in a slanting Zeeman field, PHYSICAL REVIEW LETTERS **96** (2006) - 47202

■ van Gastel, R; Bartelt, NC; Kellogg, GL, Reversible shape transition of Pb islands on Cu(111), PHYSICAL REVIEW LETTERS **96** (2006) - 36106

■ van Nieuwstadt, JAH; Sandtke, M; Harmsen, RH; Segerink, FB; Prangsma, JC; Enoch, S; Kuipers, L, Strong modification of the nonlinear optical response of metallic subwavelength hole arrays, PHYSICAL REVIEW LETTERS **97** (2006) - 146102

■ Xu, PX; Xia, K; Zwierzycki, M; Talanana, M; Kelly, PJ, Orientation-dependent transparency of metallic interfaces, PHYSICAL REVIEW LETTERS **96** (2006) - 176602

■ Blum, C; Meixner, AJ; Subramaniam, V, Single oligomer spectra probe chromophore nanoenvironments of tetrameric fluorescent proteins, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY **128** (2006) 8664 - 8670

■ Cacciapaglia, R, Casnati, A, Mandolini, L, Reinhoudt, DN, Salvio, R, Sartori, A, & Ungaro, R, Catalysis of diribonucleoside monophosphate cleavage by water soluble copper(II)complexes of calix[4]arene based nitrogen ligands, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY **128(37)** (2006) 12322 - 12330

■ Crespo biel, O, Lim, CW, Ravoo, BJ, Reinhoudt, DN, & Huskens, J, Expression of a supramolecular complex at a multivalent interface, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY **128(51)** (2006) 17024 - 17032

■ Oshovsky, GV; Reinhoudt, DN; Verboom, W, Triple-ion interactions for the construction of supramolecular capsules, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY **128** (2006) 5270 - 5278

■ Sharpe, RBA; Burdinski, D; Huskens, J; Zandvliet, HJW; Reinhoudt, DN; Poelsema, B, Oxidized gold as an ultrathin etch resist applied in microcontact printing, JOURNAL OF THE AMERICAN CHEMICAL SOCIETY **128** (2006) 15560 - 15561

■ Bruinink, CM; Peter, M; Maury, PA; De Boer, M; Kuipers, L; Huskens, J; Reinhoudt, DN, Capillary force lithography: Fabrication of functional polymer templates as versatile tools for nanolithography, ADVANCED FUNCTIONAL MATERIALS **16** (2006) 1555 - 1565

■ Feng, CL, Vancso, GJ, & Schönherr, H, Fabrication of Robust Biomolecular Patterns by Reactive Microcontact Printing on NHS Ester Containing Polymer Films, ADVANCED FUNCTIONAL MATERIALS **16** (2006) 1306 - 1312

■ Speets, EA; Riele, PM te, Boogaart, MAF van den, Doeswijk, LM, Ravoo, BJ, Rijnders, AJHM, Brugger, JP, Reinhoudt, DN, & Blank, DHA, Formation of metal nano- and micro-patterns on self-assembled monolayers using pulsed laser deposition through nanostencils and electroless deposition, ADVANCED FUNCTIONAL MATERIALS **16** (2006) 1337 - 1743

■ Valsesia, A; Colpo, P; Meziani, T; Bretagnol, F; Lejeune, M; Rossi, F; Bouma, A; Garcia-Parajo, M, Selective immobilization of protein clusters on polymeric nanocraters, ADVANCED FUNCTIONAL MATERIALS **16** (2006) 1242 - 1246

■ Cambi, A; Joosten, B; Koopman, M; de Lange, F; Beeren, I; Torensma, R; Fransen, JA; Garcia-Parajo, M; van Leeuwen, FN; Figdor, CG, Organization of the integrin LFA-1 in nanoclusters regulates its activity, MOLECULAR BIOLOGY OF THE CELL **17** (2006) 4270 - 4281

■ De Pra, M; Kok, WT; Gardeniers, JGE; Desmet, G; Eeltink, S; van Nieuwkasteele, JW; Schoenmakers, PJ, Experimental study on band dispersion in channels structured with micropillars, ANALYTICAL CHEMISTRY **78** (2006) 6519 - 6525

■ Henneken, H; Assink, L; de Wit, J; Vogel, M; Karst, U, Passive sampling of airborne peroxyacetic acid, ANALYTICAL CHEMISTRY **78** (2006) 6547 - 6555

■ Leinweber, FC; Eijkel, JCT; Bower, JG; van den Berg, A, Continuous flow microfluidic demixing of electrolytes by induced charge electrokinetics in structured electrode arrays, ANALYTICAL CHEMISTRY **78** (2006) 1425 - 1434

■ Schulte-Ladbeck, R; Edelmann, A; Quintas, G; Lendl, B; Karst, U, Determination of peroxide-based explosives using liquid chromatography with on-line infrared detection, ANALYTICAL CHEMISTRY **78** (2006) 8150 - 8155

■ Andersson, SMH; Berg, A van den, Where are the biologists? A series of mini-reviews covering new trends in fundamental and applied research, and potential applications of miniaturised technologies, LAB ON A CHIP **6(4)** (2005) 467 - 470

■ Brivio, M; Verboom, W; Reinhoudt, DN, Miniaturized continuous flow reaction vessels: influence on chemical reactions, LAB ON A CHIP **6** (2006) 329 - 344

■ Eijkel, JCT, & Berg, A van den, Nanotechnology for membranes, filters and sieves, LAB ON A CHIP **6(1)** (2006) 19 - 23

■ Eijkel, JCT; van den Berg, A, Active transport: a new chemical separation method?, LAB ON A CHIP **6** (2006) 597 - 600

■ Eijkel, JCT; van den Berg, A, Young 4ever - the use of capillarity for passive flow handling in lab on a chip devices, LAB ON A CHIP **6** (2006) 1405 - 1408

■ Jong, J de, Lammertink, RGH, & Wessling, M, Membranes and microfluidics: a review, LAB ON A CHIP **6** (2006) 1125 - 1139

■ Kohlheyer, D; Besselink, GAJ; Schlautmann, S; Schasfoort, RBM, Free-flow zone electrophoresis and isoelectric focusing using a microfabricated glass device with ion permeable membranes, LAB ON A CHIP **6** (2006) 374 - 380

■ Malsche, DMW de, Clicq, D, Eghbati, H, Fekete, V, Gardeniers, JGE, & Desmet, G, An automated injection system for sub-micron sized channels used in shear-driven-chromatography, LAB ON A CHIP **6(10)** (2006) 1322 - 1327

■ Merkerk, RO, & Berg, A van den, More than technology alone, LAB ON A CHIP **6(7)** (2006) 838 - 839

■ van Merkerk, RO; van den Berg, A, More than technology alone, LAB ON A CHIP **6** (2006) 838 - 839

■ Wouden, EJ van der, Hermes, DC, Gardeniers, JGE, & Berg, A van den, Directional flow induced by synchronized longitudinal and zeta-potential controlling AC-electrical fields, LAB ON A CHIP **6(10)** (2006) 1300 - 1305

■ Chowdhury, SR; Witte, PT; Blank, DHA; Alsters, PL; ten Elshof, JE, Recovery of homogeneous polyoxometallate catalysts from aqueous and organic media by a mesoporous ceramic membrane without loss of catalytic activity, CHEMISTRY-A EUROPEAN JOURNAL **12** (2006) 3061 - 3066

■ Rozkiewicz, DI; Kraan, Y; Werten, MWT; de Wolf, FA; Subramaniam, V; Ravoo, BJ; Reinhoudt, DN, Covalent microcontact printing of proteins for cell patterning, CHEMISTRY-A EUROPEAN JOURNAL **12** (2006) 6290 - 6297

■ Crespo biel, O, Dordi, B, Maury, PA, Peter, M, Reinhoudt, DN, & Huskens, J, Patterned hybrid, multilayer nanostructures based on multivalent supramolecular interactions, CHEMISTRY OF MATERIALS **18(10)** (2006) 2545 - 2551

■ McIntosh, S; Vente, JF; Haije, WG; Blank, DHA; Bouwmeester, HJM, Oxygen stoichiometry and chemical expansion of Ba0.5Sr0.5Co0.8Fe0.2O3-delta measured by in situ neutron diffraction, CHEMISTRY OF MATERIALS **18** (2006) 2187 - 2193

■ Ohl, CD, Arora, M, Dijkink, RJ, Jong, N de, Delius, M, & Lohse, D, Sonoporation from jetting bubbles, BIOPHYSICAL JOURNAL (2006) -

■ Ohl, CD, Arora, M, Ikink, RP, Jong, N de, Versluis, M, Delius, M, & Lohse, D, Sonoporation from jetting cavitation bubbles, BIOPHYSICAL JOURNAL **91** (2006) 4285 - 4295

van Raaij, ME; Segers-Nolten, IMJ; Subramaniam, V, Quantitative morphological analysis reveals ultrastructural diversity of amyloid fibrils from alpha-synuclein mutants, BIOPHYSICAL JOURNAL **91** (2006) L96 - L98

Korczagin, I; Lammertink, RGH; Hempenius, MA; Golze, S; Vancso, GJ, Surface nano- and microstructuring with organometallic polymers, ORDERED POLYMERIC NANOSTRUCTURES AT SURFACES **200** (2006) 91 - 117

Schönherr, H, Degenhart, GH, Dordi, B, Feng, CL, Rozkiewicz, DI, Shovsky, A, & Vancso, GJ, Organic and Macrolecular Films and Assemblies as(Bio)reactive Platforms: From Model Studies on Structure-Reactivity Relationships to Submicrometer Patterning, ADVANCES IN POLYMER SCIENCE **200** (2006) 169 - 208

Schonherr, H; Degenhart, GH; Dordi, B; Feng, CL; Rozkiewicz, DI; Shovsky, A; Vancso, GJ, Organic and macromolecular films and assemblies as (bio)reactive platforms: From model studies on structure-reactivity relationships to submicrometer patterning, ORDERED POLYMERIC NANOSTRUCTURES AT SURFACES **200** (2006) 169 - 208

Vancso, GJ; Hillborg, H; Schonherr, H, Chemical composition of polymer surfaces imaged by atomic force microscopy and complementary approaches, POLYMER ANALYSIS, POLYMER THEORY **182** (2005) 55 - 129

Van Manen, HJ; Van Bruggen, R; Roos, D; Otto, C, Single-cell optical imaging of the phagocyte NADPH oxidase, ANTIOXIDANTS & REDOX SIGNALING **8** (2006) 1509 - 1522

Crego-Calama, M; Reinhoudt, DN; ten Cate, MGJ, Templation in noncovalent synthesis of hydrogen-bonded rosettes, TEMPLATES IN CHEMISTRY II **249** (2005) 285 - 316

Carlen, ET, Weinberg, MS, Dube, CE, Zapata, AM, & Borenstein, JT, Micromachined silicon plates for sensing molecular interactions, APPLIED PHYSICS LETTERS **89(17)** (2006) - 173123-1

Dekkers, JM; Rijnders, G; Blank, DHA, Role of Sn doping in In2O3 thin films on polymer substrates by pulsed-laser deposition at room temperature, APPLIED PHYSICS LETTERS **88** (2006) - 151908

Haq, E; Banerjee, T; Siekman, MH; Lodder, JC; Jansen, R, Excitation and spin-transport of hot holes in ballistic hole magnetic microscopy, APPLIED PHYSICS LETTERS **88** (2006) - 242501

Iannuzzi, D; Deladi, S; Gadgil, VJ; Sanders, RGP; Schreuders, H; Elwenspoek, MC, Monolithic fiber-top sensor for critical environments and standard applications, APPLIED PHYSICS LETTERS **88** (2006) - 53501

Jurna, M, Korterik, JP, Offerhaus, HL, & Otto, C, Noncritical phase-matched lithium triborate optical parametric oscillator for high resolution coherent anti-stokes Raman scattering spectroscopy and microscopy, APPLIED PHYSICS LETTERS **89** (2006) 251116/1-6 -

Laan, DC van der, Ekin, JW, Eck, HJN van, Dhallé, MMJ, Haken, B ten, Davidson, MW, & Schwartz, J, Effect of tensile strain on grain connectivity and flux pinning in Bi2Sr2Cu3Ox tapes, APPLIED PHYSICS LETTERS **88** (2006) 022511 -

Leca, V; Blank, DHA; Rijnders, G; Bals, S; van Tendeloo, G, Superconducting single-phase Sr1-xLaxCuO2 thin films with improved crystallinity grown by pulsed laser deposition, APPLIED PHYSICS LETTERS **89** (2006) - 92504

Mugele, F, Baret, J-C, & Steinhauser, D, Microfluidic mixing through electrowetting-induced droplet oscillations, APPLIED PHYSICS LETTERS **88(204106)** (2006) 204106-1 -

Ohl, CD, Arora, M, Dijkink, RJ, Janve, V, & Lohse, D, Surface cleaning from laser-induced cavitation bubbles, APPLIED PHYSICS LETTERS **89** (2006) 074102-1 - 074102-3

Suomalainen, S; Guina, M; Hakulinen, T; Okhotnikov, OG; Euser, TG; Marcinkevicius, S, 1 mu m saturable absorber with recovery time reduced by lattice mismatch, APPLIED PHYSICS LETTERS **89** (2006) - 71112

Ul Haq, E, Banerjee, T, Siekman, MH, Lodder, JC, & Jansen, R, Excitation and spin-transport of hot holes in ballistic hole magnetic microscopy, APPLIED PHYSICS LETTERS **88** (2006) 242501 - 242501

de Witte, PAJ; Hernando, J; Neuteboom, EE; van Dijk, EMHP; Meskers, SCJ; Janssen, RAJ; van Hulst, NF; Nolte, RJM; Garcia-Parajo, MF; Rowan, AE, Synthesis and characterization of long perylenediimide polymer fibers: From bulk to the single-molecule level, JOURNAL OF PHYSICAL CHEMISTRY B **110** (2006) 7803 - 7812

■ Rusu, PC; Brocks, G, Surface dipoles and work functions of alkylthiolates and fluorinated alkylthiolates on Au(111), JOURNAL OF PHYSICAL CHEMISTRY B **110** (2006) 22628 - 22634

■ Sanchez Mosteiro, G ir, Dijk, EMHP van, Hernando, J, Heilamann, M, Tinnefeld, P, Sauer, M, Koberlin, F, Patting, M, Wahl, M, Erdmann, R, Hulst, NF van, & Garcia Parajo, MF, DNA-based Molecular Wires: Multiple Emission Pathways of Individual Constructs, JOURNAL OF PHYSICAL CHEMISTRY B **110** (2006) 26349 - 26353

■ Korczagin, I; Hempenius, MA; Fokkink, RG; Stuart, MAC; Al-Hussein, M; Bomans, PHH; Frederik, PM; Vancso, GJ, Self-assembly of poly(ferrocenyldimethylsilane-b-methyl methacrylate) block copolymers in a selective solvent, MACROMOLECULES **39** (2006) 2306 - 2315

■ Spijksma, GI; Bouwmeester, HJM; Blank, DHA; Fischer, A; Henry, M; Kessler, VG, Chemistry of 2,2,6,6,-tetramethyl-3,5-heptanedione (Hthd) modification of zirconium and hafnium propoxide precursors, INORGANIC CHEMISTRY **45** (2006) 4938 - 4950

■ Eijkel, JCT; van den Berg, A, The promise of nanotechnology for separation devices - from a top-down approach to nature-inspired separation devices, ELECTROPHORESIS **27** (2006) 677 - 685

■ Wolbers, F, Braak, PM ter, Gac, S le, Luttge, R, Andersson, H, Vermes, I, & Berg, A van den, Evaluation of the viability of HL60 cells in contact with commonly used microchip materials, ELECTROPHORESIS **27** (2006) 5073 - 5080

■ Wolbers, F, Braak, PM ter, Le Gac, S, L ttge, R, Andersson, SMH, Vermes, I, & Berg, A van den, Viability study of HL60 cells in contact with commonly used microchip materials, ELECTROPHORESIS **27(24)** (2006) 5073 - 5080

■ Dekker, R; Driessen, A; Wahlbrink, T; Moormann, C; Niehusmann, J; Forst, M, Ultrafast Kerr-induced all-optical wavelength conversion in silicon waveguides using 1.55 mu m femtosecond pulses, OPTICS EXPRESS **14** (2006) 8336 - 8346

■ Engelen, RJP; Sugimoto, Y; Watanabe, Y; Korterik, JP; Ikeda, N; van Hulst, NF; Asakawa, K; Kuipers, L, The effect of higher-order dispersion on slow light propagation in photonic crystal waveguides, OPTICS EXPRESS **14** (2006) 1658 - 1672

■ Grivas, C, Shepherd, DP, Eason, RW, Laversenne, L, Moretti, P, Borca, CN, & Pollnau, M, Room-temperature continuous-wave operation of Ti:sapphire buried channel-waveguide lasers fabricated via proton implantation, OPTICS LETTERS **31(23)** (2006) 3450 - 3452

■ Hopman, WCL; Hollink, AJF; de Ridder, RM; van der Werf, KO; Subramaniam, V; Bogaerts, W, Nano-mechanical tuning and imaging of a photonic crystal micro-cavity resonance, OPTICS EXPRESS **14** (2006) 8745 - 8752

■ Huisstede, JHG; van der Werf, KO; Bennink, ML; Subramaniam, V, Force constant calibration corrections for silicon position detectors in the near-infrared, OPTICS EXPRESS 14 (2006) 8476 - 8481

■ Romanyuk, YE, Borca, CN, Pollnau, M, Rivier, S, Petrov, V, & Griebner, U, Yb-doped $KY(WO_{4})_{2}$ planar waveguide laser, OPTICS LETTERS **31(1)** (2006) 53 - 55

■ Baret, J-C; Decre, MMJ; Mugele, F, Self-excited drop oscillations in electrowetting, LANGMUIR (2006) -

■ Ebbesen, SD, Mojet, BL, & Lefferts, L, CO Adsorption and Oxidation at the Catalyst-Water Interface: An Investigation by Attenuated Total Reflection Infrared Spectroscopy, LANGMUIR **22(3)** (2006) 1079 - 1085

■ Ling, XY; Reinhoudt, DN; Huskens, J, Ferrocenyl-functionalized silica nanoparticles: Preparation, characterization, and molecular recognition at interfaces, LANGMUIR **22** (2006) 8777 - 8783

■ Mewe, AA; Kooij, ES; Poelsema, B, Seeded-growth approach to selective metallization of microcontact-printed patterns, LANGMUIR **22** (2006) 5584 - 5587

■ Nijhuis, CA; Sinha, JK; Wittstock, G; Huskens, J; Ravoo, BJ; Reinhoudt, DN, Controlling the supramolecular assembly of redox-active dendrimers at molecular printboards by scanning electrochemical microscopy, LANGMUIR **22** (2006) 9770 - 9775

■ Perl, A; Peter, M; Ravoo, BJ; Reinhoudt, DN; Huskens, J, Heavyweight dendritic inks for positive microcontact printing, LANGMUIR **22** (2006) 7568 - 7573

■ Sharpe, RBA; Burdinski, D; van der Marel, C; Jansen, JAJ; Huskens, J; Zandvliet, HJW; Reinhoudt, DN; Poelsema, B, Ink dependence of poly(dimethylsiloxane) contamination in microcontact printing, LANGMUIR **22** (2006) 5945 - 5951

■ Tocha, E; Schonherr, H; Vancso, GJ, Quantitative nanotribology by AFM: A novel universal calibration platform, LANGMUIR **22** (2006) 2340 - 2350

■ Crespo-Biel, O; Ravoo, BJ; Reinhoudt, DN; Huskens, J, Noncovalent nanoarchitectures on surfaces: from 2D to 3D nanostructures, JOURNAL OF MATERIALS CHEMISTRY **16** (2006) 3997 - 4021

■ Oshovsky, GV; Reinhoudt, DN; Verboom, W, Self-assembled hemicapsules with inherent functionalities: Modeling of a supramolecular electrostatic self-assembly, JOURNAL OF ORGANIC CHEMISTRY **71** (2006) 7441 - 7448

■ Huisstede, JHG; van Rooijen, BD; van der Werf, KO; Bennink, ML; Subramaniam, V, Dependence of silicon position-detector bandwidth on wavelength, power, and bias, OPTICS LETTERS **31** (2006) 610 - 612

■ van der Molen, KL; Zijlstra, P; Lagendijk, A; Mosk, AP, Laser threshold of Mie resonances, OPTICS LETTERS **31** (2006) 1432 - 1434

■ Pirozhenko, I; Lambrecht, A; Svetovoy, VB, Sample dependence of the Casimir force, NEW JOURNAL OF PHYSICS **8** (2006) - 238

■ van der Wiel, WG; Stopa, M; Kodera, T; Hatano, T; Tarucha, S, Semiconductor quantum dots for electron spin qubits, NEW JOURNAL OF PHYSICS **8** (2006) - 28

■ Ludden, MJW; Peter, M; Reinhoudt, DN; Huskens, J, Attachment of streptavidin to beta-cyclodextrin molecutar printboards via orthogonal, host-guest and protein-ligand interactions, SMALL **2** (2006) 1192 - 1202

■ Nijhuis, CA; Oncel, N; Huskens, J; Zandvliet, HJW; Ravoo, BJ; Poelsema, B; Reinhoudt, DN, Room-temperature single-electron tunneling in dendrimer-stabilized gold nanoparticles anchored at a molecular printboard, SMALL **2** (2006) 1422 - 1426

■ Salazar, RB; Shovsky, A; Schonherr, H; Vancso, GJ, Dip-pen nanolithography on (bio)reactive monolayer and block-copolymer platforms: Deposition of lines of single macromolecules, SMALL **2** (2006) 1274 - 1282

■ Lisowski, W; Keim, EG; van den Berg, AHJ; Smithers, MA, Thermal desorption of deuterium from modified carbon nanotubes and its correlation to the microstructure, CARBON **44** (2006) 974 - 982

■ Castricum, HL; Mittelmeijer-Hazeleger, MC; Sah, A; ten Elshof, JE, Increasing the hydrothermal stability of mesoporous SiO2 with methylchlorosilanes - a 'structural' study, MICROPOROUS AND MESOPOROUS MATERIALS **88** (2006) 63 - 71

■ Hoogenboom, JP; den Otter, WK; Offerhaus, HL, Accurate and unbiased estimation of power-law exponents from single-emitter blinking data, JOURNAL OF CHEMICAL PHYSICS **125** (2006) - 204713

■ Wormeester, H; Henry, AI; Kooij, ES; Poelsema, B; Pileni, MP, Ellipsometric identification of collective optical properties of silver nanocrystal arrays, JOURNAL OF CHEMICAL PHYSICS **124** (2006) - 204713

■ Abranyi, A; Szazdi, L; Pukanszky, B; Vancso, GJ; Pukanszky, B, Formation and detection of clay network structure in poly (propylene)/layered silicate nanocomposites, MACROMOLECULAR RAPID COMMUNICATIONS **27** (2006) 132 - 135

■ Zou, S; Hempenius, MA; Schonherr, H; Vancso, GJ, Force spectroscopy of individual stimulus-responsive poly (ferrocenyldimethylsilane) chains: Towards a redox-driven macromolecular motor, MACROMOLECULAR RAPID COMMUNICATIONS **27** (2006) 103 - 108

■ Fekete, V; Clicq, D; De Malsche, W; Gardeniers, H; Desmet, G, Detection enhancement in nano-channels using micro-machined silicon groove, JOURNAL OF CHROMATOGRAPHY A **1130** (2006) 151 - 157

■ Henneken, H; Hayen, H; Vogel, M; Karst, U, Validation of a diffusive sampling method for airborne low-molecular isocyanates using 4-nitro-7-piperazinobenzo-2-oxa-1,3-diazole-impregnated filters and liquid chromatography-tandem mass spectrometry, JOURNAL OF CHROMATOGRAPHY A **1134** (2006) 112 - 121

■ Vankrunkelsven, S; Clicq, D; Cabooter, D; De Malsche, W; Gardeniers, JGE; Desmet, G, Ultra-rapid separation of an angiotensin mixture in nanochannels using shear-driven chromatography, JOURNAL OF CHROMATOGRAPHY A **1102** (2006) 96 - 103

■ Vrouwe, EX; Luttge, R; Olthuis, W; van den Berg, A, Rapid inorganic ion analysis using quantitative microchip capillary electrophoresis, JOURNAL OF CHROMATOGRAPHY A **1102** (2006) 287 - 293

■ Crespo-Biel, O; Ravoo, BJ; Huskens, J; Reinhoudt, DN, Writing with molecules on molecular printboards, DALTON TRANSACTIONS (2006) 2737 - 2741

■ Benzi, R; Biferale, L; Sbragaglia, M; Succi, S; Toschi, F, Mesoscopic Modelling of a Two-Phase Flow in Presence of the Boundaries: the Contact Angle., PHYSICAL REVIEW E STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS **74** (2006) 021509-1-021509-15 -

■ Born, F, Siegel, M, Hollmann, EK, Braak, H, Golubov, A, Gusakova, DYu, & Kupriyanov, MY, Multiple 0-p transitions in SFS Josephson tunnel junctions, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **74** (2006) 140501(R) -

■ Brinkman, A, & Golubov, A, Crossed Andreev reflection in diffusive contacts: quasiclassical Keldysh-Usadel formalism, PHYSICAL REVIEW B CONDENSED MATTER **74** (2006) 214512 -

■ Calzavarini, E, Doering, CR, Gibbon, JD, Lohse, D, Tanabe, A, & Toschi, F, Exponentially growing solutions in homgeneous Rayleigh-Bénard convection, PHYSICAL REVIEW E STATISTICAL PHYSICS, PLASMAS, FLUIDS, AND RELATED INTERDISCIPLINARY TOPICS **73** (2006) 035301-1 - 035301-4

■ Carbone, F, Zangrando, M, Brinkman, A, Nicolaou, A, Bondino, F, Magnano, E, Nugroho, AA, Parmigiani, F, Jarlborg, Th, & Marel, D van der, Electronic structure of MnSi: The role of electron-electron interactions, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **73** (2006) - 085114

■ Chesca, B; Doenitz, D; Dahm, T; Huebener, RP; Koelle, D; Kleiner, R; Ariando; Smilde, HJH; Hilgenkamp, H, Observation of Andreev bound states in YBa2Cu3O7-x/Au/Nb ramp-type Josephson junctions, PHYSICAL REVIEW B **73** (2006) - 14529

■ Fauré, M, Buzdin, AI, Golubov, A, & Kupriyanov, MY, Properties of superconductor/ferromagnet structures with spin-dependent scattering, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **73** (2006) 064505 -

■ Huijben, J; van Houselt, A; Zandvliet, HJW; Poelsema, B, Influence of dimer buckling on dimer diffusion: A scanning tunneling microscopy study, PHYSICAL REVIEW B **73** (2006) - 73311

■ Kalkman, J, Gersen, H, Kuipers, L, & Polman, A, Excitation of surface plasmons at SIO2/Ag interface by silicon quantum dots: experiment and theory, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **73(7)** (2006) 075317/1-8 -

■ Kawabata, S, Kashiwaya, S, Asano, Y, Tanaka, Y, & Golubov, A, Macroscopic quantum dynamics of pi-junction with ferromagnetic insulators, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **74** (2006) 180502 -

■ Khomyakov, PA; Brocks, G, Stability of conductance oscillations in monatomic sodium wires, PHYSICAL REVIEW B **74** (2006) - 165416

■ Kirtley, JR; Tsuei, CC; Ariando; Smilde, HJH; Hilgenkamp, H, Antiferromagnetic ordering in arrays of superconducting pi-rings, PHYSICAL REVIEW B **72** (2005) - 214521

■ Park, BG; Banerjee, T; Min, BC; Lodder, JC; Jansen, R, Tunnel spin polarization of Ni80Fe20/SiO2 probed with a magnetic tunnel transistor, PHYSICAL REVIEW B **73** (2006) - 172402

■ Pepe, GP, Latempa, R, Parlato, L, Ruotolo, A, Ausanio, G, Peluso, G, Barone, A, Golubov, A, Fominov, IV, & Kupriyanov, MY, Proximity effect in planar superconducting tunnel junctions containing Nb/NiCu superconductor/ferromagnet bilayers, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **73** (2006) 054506 -

■ Rogacki, K, Batlogg, B, Karpinski, J, Zhigadlo, ND, Schuck, G, Kazakov, SM, Wägli, P, Puzniak, R, Wisniewski, A, Carbone, F, Brinkman, A, & Marel, D van der, Strong magnetic pair breaking in Mn-substituted MgB2 single crystals, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **73** (2006) 174520 -

■ Rusu, PC; Brocks, G, Work functions of self-assembled monolayers on metal surfaces by first-principles calculations, PHYSICAL REVIEW B **74** (2006) - 73414

■ van der Molen, KL; Mosk, AP; Lagendijk, A, Intrinsic intensity fluctuations in random lasers, PHYSICAL REVIEW A **74** (2006) - 53808

■ Xia, K; Zwierzycki, M; Talanana, M; Kelly, PJ; Bauer, GEW, First-principles scattering matrices for spin transport, PHYSICAL REVIEW B **73** (2006) - 64420

■ Xu, PX, & Xia, K, Ab initio calculations of the alloy resistivities of lattice-matched and lattice-mismatched metla pairs: Influence of local-impurity-induced distortions, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **74** (2006) 184206-1 - 184206-6

■ Xu, PX; Karpan, VM; Xia, K; Zwierzycki, M; Marushchenko, I; Kelly, PJ, Influence of roughness and disorder on tunneling magnetoresistance, PHYSICAL REVIEW B **73** (2006) - 180402

■ Yokoyama, T, Tanaka, Y, & Golubov, A, Resonant proximity effect in normal metal/diffuse ferromagnet/superconductor junctions, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **73** (2006) 094501 -

■ Yokoyama, T, Tanaka, Y, Golubov, A, & Asano, Y, Nonmonotonic temperature dependence of critical current in diffusive d-wave junctions, PHYSICAL REVIEW B CONDENSED MATTER AND MATERIALS PHYSICS **73** (2006) 14050R -

■ Krijnen, GJM; Dijkstra, M; van Baar, JJ; Shankar, SS; Kuipers, WJ; de Boer, RJH; Altpeter, D; Lammerink, TSJ; Wiegerink, R, MEMS based hair flow-sensors as model systems for acoustic perception studies, NANOTECHNOLOGY **17** (2006) S84 - S89

■ Woldering, LA; Otter, AM; Husken, BH; Vos, WL, Focused ion beam milling of nanocavities in single colloidal particles and self-assembled opals, NANOTECHNOLOGY **17** (2006) 5717 - 5721

■ Szazdi, L; Pukanszky, B; Vancso, GJ; Pukanszky, B, Quantitative estimation of the reinforcing effect of layered silicates in PP nanocomposites, POLYMER **47** (2006) 4638 - 4648

■ Zhang, X; Vancso, GJ, Special issue on single chain polymers, POLYMER **47** (2006) 2481 - 2482

■ Zou, S; Korczagin, I; Hempenius, MA; Schonherr, H; Vancso, GJ, Single molecule force spectroscopy of smart poly(ferrocenylsilane) macromolecules: Towards highly controlled redox-driven single chain motors, POLYMER **47** (2006) 2483 - 2492

■ Hoang, T; Leminh, P; Holleman, J; Schmitz, J, The effect of dislocation loops on the light emission of silicon LEDs, IEEE ELECTRON DEVICE LETTERS **27** (2006) 105 - 107

■ Hempen, C; Glasle-Schwarz, L; Kunz, U; Karst, U, Determination of telmisartan in human blood plasma Part I: Immunoassay development, ANALYTICA CHIMICA ACTA **560** (2006) 35 - 40

■ Hempen, C; Glasle-Schwarz, L; Kunz, U; Karst, U, Determination of telmisartan in human blood plasma Part II: Liquid chromatography-tandem mass spectrometry method development, comparison to immunoassay and pharmacokinetic study, ANALYTICA CHIMICA ACTA **560** (2006) 41 - 49

■ Radivojevic, D, Seshan, K, & Lefferts, L, Preparation of well-dispersed Pt/SiO2 catalysts using low-temperature treatments, APPLIED CATALYSIS A: GENERAL **301(1)** (2006) 51 - 58

■ Steinmann, T; Casas, J; Krijnen, G; Dangles, O, Air-flow sensitive hairs: boundary layers in oscillatory flows around arthropod appendages, JOURNAL OF EXPERIMENTAL BIOLOGY **209** (2006) 4398 - 4408

■ Bos, SJ; van Leeuwen, SM; Karst, U, From fundamentals to applications: recent developments in atmospheric pressure photoionization mass spectrometry, ANALYTICAL AND BIOANALYTICAL CHEMISTRY **384** (2006) 85 - 99

■ Fox, MB, Esveld, DC, Valero, A, Luttge, R, Mastwijk, HC, Bartels, PV, Berg, A van den, & Boom, RM, Electroporation of cells in microfluidic devices: a review, ANALYTICAL AND BIOANALYTICAL CHEMISTRY **385(3)** (2006) 474 - 485

■ Hempen, C; Karst, U, Labeling strategies for bioassays, ANALYTICAL AND BIOANALYTICAL CHEMISTRY **384** (2006) 572 - 583

■ Lisowski, W; Keim, EG; Van den Berg, AHJ; Smithers, MA, Structural and chemical characterisation of titanium deuteride films covered by nanoscale evaporated palladium layers, ANALYTICAL AND BIOANALYTICAL CHEMISTRY **385** (2006) 700 - 707

■ Chowdhury, SR; Peters, AM; Blank, DHA; ten Elshof, JE, Influence of porous substrate on mesopore structure and water permeability of surfactant templated mesoporous silica membranes, JOURNAL OF MEMBRANE SCIENCE **279** (2006) 276 - 281

■ de Lint, WBS; Zivkovic, T; Benes, NE; Bouwmeester, HJM; Blank, DHA, Electrolyte retention of supported bi-layered nanofiltration membranes, JOURNAL OF MEMBRANE SCIENCE **277** (2006) 18 - 27

■ Gestel, T van, Kruidhof, H, Blank, DHA, & Bouwmeester, HJM, Preparation and characterization of a corrosion-resistant ZrO2 nanofiltration membrane with a MWCO < 300, JOURNAL OF MEMBRANE SCIENCE **284** (2006) 128 - 136

■ Gestel, TJJ van, Kruidhof, H, Blank, DHA, & Bouwmeester, HJM, ZrO2 and TiO2 membranes for nanofiltration and pervaporation: Part 1. Preparation and characterization of a corrosion-resistant ZrO2 nanofiltration membrane with a MWCO < 300, JOURNAL OF MEMBRANE SCIENCE **284** (2006) 128 - 136

■ Gielens, FC; Knibbeler, RJJ; Duysinx, PFJ; Tong, HD; Vorstman, MAG; Keurentjes, JTF, Influence of steam and carbon dioxide on the hydrogen flux through thin Pd/Ag and Pd membranes, JOURNAL OF MEMBRANE SCIENCE **279** (2006) 176 - 185

■ Girones, M; Akbarsyah, IJ; Nijdam, W; van Rijn, CJM; Jansen, HV; Lammertink, RGH; Wessling, M, Polymeric microsieves produced by phase separation micromolding, JOURNAL OF MEMBRANE SCIENCE **283** (2006) 411 - 424

■ Van Gestel, T; Kruidhof, H; Blank, DHA; Bouwmeester, HJM, ZrO2 and TiO2 membranes for nanofiltration and pervaporation - Part 1. Preparation and characterization of a corrosion-resistant ZrO2 nanofiltration membrane with a MWCO < 300, JOURNAL OF MEMBRANE SCIENCE **284** (2006) 128 - 136

■ Yi, JX; Zuo, YB; Liu, W; Winnubst, L; Chen, CS, Oxygen permeation through a Ce0.8Sm0.2O2-delta-La0.8Sr0.2CrO3-delta dual-phase composite membrane, JOURNAL OF MEMBRANE SCIENCE **280** (2006) 849 - 855

■ Iannuzzi, D, Deladi, S, Slaman, M, Rector, JH, Schreuders, H, & Elwenspoek, MC, A fiber-top cantilever for hydrogen detection, SENSORS AND ACTUATORS B(CHEMICAL) **1** (2006) 3 -

■ Krommenhoek, EE; Gardeniers, JGE; Bomer, JG; Van den Berg, A; Li, X; Ottens, M; van der Wielen, LAM; van Dedem, GWK; Van Leeuwen, M; van Gulik, WM; Heijnen, JJ, Monitoring of yeast cell concentration using a micromachined impedance sensor, SENSORS AND ACTUATORS B-CHEMICAL **115** (2006) 384 - 389

■ Lambeck, PV; van Lith, J; Hoekstra, HJWM, Three novel integrated optical sensing structures for the chemical domain, SENSORS AND ACTUATORS B-CHEMICAL **113** (2006) 718 - 729

■ Reinoso-Garcia, MM; Janczewski, D; Reinhoudt, DN; Verboom, W; Malinowska, E; Pietrzak, M; Hill, C; Baca, J; Gruner, B; Selucky, P; Gruttner, C, CMP(O) tripodands: synthesis, potentiometric studies and extractions, NEW JOURNAL OF CHEMISTRY **30** (2006) 1480 - 1492

■ Oshovsky, G, Reinhoudt, DN, & Verboom, W, The underestimated role of counter ions in electrostatic self-assembly: [1+1]cavitand-calix[4]arene capsules based on azinium-sulfonate interactions, EUROPEAN JOURNAL OF ORGANIC CHEMISTRY **2006(12)** (2006) 2810 - 2816

■ Shovsky, GV; Reinhoudt, DN; Verboom, W, The underestimated role of counter ions in electrostatic self-assembly: [1+1] cavitand-calix[4]arene capsules based on azinium-sulfonate interactions, EUROPEAN JOURNAL OF ORGANIC CHEMISTRY (2006) 2810 - 2816

■ Kooij, ES; Poelsema, B, Shape and size effects in the optical properties of metallic nanorods, PHYSICAL CHEMISTRY CHEMICAL PHYSICS **8** (2006) 3349 - 3357

■ Brouwer, DM; de Jong, BR; Soemers, HMJR; Van Dijk, J, Sub-nanometer stable precision MEMS clamping mechanism maintaining clamp force unpowered for TEM application, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) S7 - S12

■ Deladi, S; Iannuzzi, D; Gadgil, VJ; Schreuders, H; Elwenspoek, MC, Carving fiber-top optomechanical transducers from an optical fiber, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) 886 - 889

■ Dijkink, RJ, Dennen, JP van der, Ohl, CD, & Prosperetti, A, The 'acoustic scallop': a bubble powered actuator, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16(8)** (2006) 1653 - 1659

■ Fazal, I; Louwerse, MC; Jansen, HV; Elwenspoek, MC, Design, fabrication and characterization of a novel gas microvalve using micro- and fine-machining, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) 1207 - 1214

■ Fernandez, LJ; Berenschot, E; Wiegerink, RJ; Flokstra, J; Jansen, HV; Elwenspoek, M, Fabrication of thick silicon nitride blocks embedded in low-resistivity silicon substrates for radio frequency applications, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) 862 - 868

■ Fernandez, LJ; Wiegerink, RJ; Flokstra, J; Sese, J; Jansen, HV; Elwenspoek, M, A capacitive RF power sensor based on MEMS technology, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) 1099 - 1107

■ Haneveld, J; Berenschot, E; Maury, P; Jansen, H, Nano-ridge fabrication by local oxidation of silicon edges with silicon nitride as a mask, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) S24 - S28

■ Kuijpers, AA; Krijnen, GJM; Wiegerink, RJ; Lammerink, TSJ; Elwenspoek, M, A micromachined capacitive incremental position sensor: part 1. Analysis and simulations, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) S116 - S124

■ Kuijpers, AA; Krijnen, GJM; Wiegerink, RJ; Lammerink, TSJ; Elwenspoek, M, A micromachined capacitive incremental position sensor: part 2. Experimental assessment, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) S125 - S134

■ Lerou, PPM, Venhorst, GCF, Berends, CF, Burger, JF, Brake, HJM ter, & Rogalla, H, Fabrication of a micro cryogenic cooler using MEMS-technology, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) 1919 - 1925

■ Llona, LDV; Jansen, HV; Elwenspoek, MC, Seedless electroplating on patterned silicon, JOURNAL OF MICROMECHANICS AND MICROENGINEERING **16** (2006) S1 - S6

■ Min, BC; Lodder, JC; Jansen, R; Motohashi, K, Cobalt-Al2O3-silicon tunnel contacts for electrical spin injection into silicon, JOURNAL OF APPLIED PHYSICS **99** (2006) - 08S701

■ Park, BG; Haq, E; Banerjee, T; Min, BC; Lodder, JC; Jansen, R, Excitation and transport of hot holes in a magnetic tunnel transistor, JOURNAL OF APPLIED PHYSICS **99** (2006) - 08S703

■ van Dijk, FR; Zandvliet, HJW; Poelsema, B, Energetics and dynamics of Cu(001)-c(2x2)Cl steps, JOURNAL OF APPLIED PHYSICS **99** (2006) - 123506

■ Zhang, L, Bain, JA, Zhu, JG, Abelmann, L, & Onoue, T, The effect of external magnetic field on mark size in heat-assisted probe recording on CoNi/PT multilayers, JOURNAL OF APPLIED PHYSICS **99(2)** (2006) 1 - 5

■ Zhang, L; Bain, JA; Zhu, JG; Abelmann, L; Onoue, T, Dynamic domain motion of thermal-magnetically formed marks on CoNi/Pt multilayers, JOURNAL OF APPLIED PHYSICS **100** (2006) - 53901

■ Wolbers, F, Andersson, H, Vermes, I, & Berg, A van den, Miniaturisation in the biotechnology laboratory, BIOTECHNOLOGY AND BIOENGINEERING (2006) -

■ Haselberg, R; Hempen, C; van Leeuwen, SM; Vogel, M; Karst, U, Analysis of microperoxidases using liquid chromatography, post-column substrate conversion and fluorescence detection, JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES **830** (2006) 47 - 53

■ Bankras, R; Holleman, J; Schmitz, J; Sturm, M; Zinine, A; Wormeester, H; Poelsema, B, In situ reflective high-energy electron diffraction analysis during the initial stage of a trimethylaluminum/water ALD process, CHEMICAL VAPOR DEPOSITION **12** (2006) 275 - 279

■ Glyanenko, PV, Kamenetsky, YuM, Nemudry, AP, Zhogin, IL, Bouwmeester, HJM, & Ismagilov, ZR, Oxygen diffusion in nanostructured perovskites, CATALYSIS TODAY **118(1-2)** (2006) 151 - 157

■ Nardello, V; Aubry, JM; De Vos, DE; Neumann, R; Adam, W; Zhang, R; ten Elshof, JE; Witte, PT; Alsters, PL, Inorganic compounds and materials as catalysts for oxidations with aqueous hydrogen peroxide, JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL **251** (2006) 185 - 193

■ Diemeer, MBJ, Hilderink, LTH, Dekker, R, & Driessen, A, Low-Cost and Low-Loss Multimode Waveguides of Photodefinable Epoxy, IEEE PHOTONICS TECHNOLOGY LETTERS **18(15)** (2006) 1624 - 1626

■ Hopman, WCL; Dekker, R; Yudistira, D; Engbers, WFA; Hoekstra, HJWM; de Ridder, RM, Fabrication and characterization of high-quality uniform and apodized Si3N4 waveguide gratings using laser interference lithography, IEEE PHOTONICS TECHNOLOGY LETTERS **18** (2006) 1855 - 1857

■ Benzi, R; Biferale, L; Sbragaglia, M; Succi, S; Toschi, F, Mesoscopic Modelling of a Two-Phase Model for Describing Apparant Slip in Microchannel Flows, EUROPHYSICS LETTERS **74** (2006) 651 - 657

■ Biena, M; Vallade, M; Quillet, C; Mugele, F, Electrical field induced curvature increase on a drop of conducting liquid, EUROPHYSICS LETTERS **74** (2006) 103 -

■ Kuczaj, AK, Geurts, BJ, & Lohse, D, Response maxima in time-modulated turbulence: Direct numerical simulations, EUROPHYSICS LETTERS **73(6)** (2006) 851 - 857

■ Sbragaglia, M, & Succi, S, A note on the Lattice Boltzmann Method Beyond the Chapman Enskog Limits, EUROPHYSICS LETTERS **73** (2006) 370 - 376

■ Zandvliet, HJW, The 2D Ising square lattice with nearest- and next-nearest-neighbor interactions, EUROPHYSICS LETTERS **73** (2006) 747 - 751

■ Zandvliet, HJW, The 2D Ising square lattice with nearest- and next-nearest-neighbor interactions (vol 73, pg 747, 2006), EUROPHYSICS LETTERS **74** (2006) 1123 - 1124

■ Karakaya, K; Zinine, A; van Berkum, JGM; Verheijen, MA; Rittersma, ZM; Rijnders, G; Blank, DHA, Characterization of laminated CeO2-HfO2 high-k gate dielectrics grown by pulsed laser deposition, JOURNAL OF THE ELECTROCHEMICAL SOCIETY **153** (2006) F233 - F236

■ Kovalgin, A; Holleman, J, Low-temperature LPCVD of polycrystalline GexSi1-x films with high germanium content, JOURNAL OF THE ELECTROCHEMICAL SOCIETY **153** (2006) G363 - G371

■ Kovalgin, AY; Holleman, J; Iordache, G; Jenneboer, T; Falke, F; Zieren, V; Goossens, MJ, Low-power, antifuse-based silicon chemical sensor on a suspended membrane, JOURNAL OF THE ELECTROCHEMICAL SOCIETY **153** (2006) H181 - H188

■ Svetovoy, VB; Berenschot, JW; Elwenspoek, MC, Precise test of the diffusion-controlled wet isotropic etching of silicon via circular mask openings, JOURNAL OF THE ELECTROCHEMICAL SOCIETY **153** (2006) C641 - C647

■ Yang, B, & Prosperetti, A, A second-order boundary-fitted projection method for free-surface flow computations, JOURNAL OF COMPUTATIONAL PHYSICS **213(2)** (2006) 574 - 590

■ Zhang, Q, Ichiki, K, & Prosperetti, A, On the computation of ensemble averages for spatially non-uniform particle systems, JOURNAL OF COMPUTATIONAL PHYSICS **212(1)** (2006) 247 - 267

■ Hueting, RJE; Heringa, A, Analysis of the subthreshold current of pocket or halo-implanted nMOSFETs, IEEE TRANSACTIONS ON ELECTRON DEVICES **53** (2006) 1641 - 1646

■ Merticaru, AR, Mouthaan, AJ, & Kuper, FG, Current Degradation of a-Si:H/SiN TFTs at Room Temperature and Low Voltages, IEEE TRANSACTIONS ON ELECTRON DEVICES **53(9)** (2006) 2273 - 2279

■ Ahlers, G; Brown, E; Fontenele Araujo Jr, F; & Funfschilling, D, Non-Oberleck-Boussinesq effects in strongly turbulent Rayleigh-Bénard convection, JOURNAL OF FLUID MECHANICS **569** (2006) 409 - 445

■ Benzi, R; Biferale, L; Sbragaglia, M; Succi, S; Toschi, F, Mesoscopic Modelling of Heterogeneous Boundary Conditions for Microchannel Flows, JOURNAL OF FLUID MECHANICS **548** (2006) 257 - 280

■ Lu, X, & Prosperetti, A, Axial stability of Taylor bubbles, JOURNAL OF FLUID MECHANICS **568** (2006) 173 - 192

■ Marmottant, P; Raven, JP; Gardeniers, H; Bomer, JG; Hilgenfeldt, S, Microfluidics with ultrasound-driven bubbles, JOURNAL OF FLUID MECHANICS **568** (2006) 109 - 118

■ Prosperetti, A, Zhang, Q, & Ichiki, K, The stress system in a suspension of heavy particles: antisymmetric contribution, JOURNAL OF FLUID MECHANICS **554** (2006) 125 - 146

■ Kooij, ES; Galca, AC; Poelsema, B, Versatile transmission ellipsometry to study linear ferrofluid magneto-optics, JOURNAL OF COLLOID AND INTERFACE SCIENCE **304** (2006) 261 - 270

■ Tjerkstra, RW, Electrochemical formation of porous GaP in aqueous HNO3, ELECTROCHEMICAL AND SOLID STATE LETTERS **9** (2006) C81 - C84

■ Le Minh, P, & Holleman, J, Silicon light-emitting diode antifuse: properties and devices, JOURNAL OF PHYSICS D: APPLIED PHYSICS **39** (2006) 3749 - 3754

■ Zhang, L; Bain, JA; Zhu, JG; Abelmann, L; Onoue, T, Heat-assisted magnetic probe recording on a granular CoNi/Pt multilayered film, JOURNAL OF PHYSICS D-APPLIED PHYSICS **39** (2006) 2485 - 2487

■ Mateos-Timoneda, MA; Crego-Calama, M; Reinhoudt, DN, Amplification of chirality in hydrogen-bonded tetrarosette helices, CHEMISTRY-A EUROPEAN JOURNAL **12** (2006) 2630 - 2638

■ Ciotti, M, Nijhuis, A, Ribani, PL, Savoldi Richard, L, & Zanino, R, THELMA code electromagnetic model of ITER superconducting cables and application to the ENEA Stability Experiment, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19** (2006) 987 - 997

■ Demencik, E, Usak, P, Polak, M, Piel, H, & Dhallé, MMJ, Lateral critical current distribution and self-field profile of Bi-2223/Ag conductors: measurements and calculations, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19(8)** (2006) 848 - 853
■ Devred, A, Baudouy, B, Baynham, DE, Boutboul, T, Canfer, S, Chorowski, M, Fabbricatore, P, Farinon, S, Felice, H, Fessia, P, Fydrych, J, Granata, V, Greco, M, Greenhalgh, J, Leroy, D, Loverige, P, Matkowski, M, Michalski, G, Michel, F, Oberli, L, Ouden, A, Overview and status of the Next European Dipole Joint Research Activity, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19(3)** (2006) 67 - 83
■ Godeke, A, Haken, B ten, Kate, HHJ ten, & Larbalestier, DC, A general scaling relation for the critical current density in Nb3Sn, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19(10)** (2006) 100 - 116
■ Ilyin, Y, Nijhuis, A, Wessel, WAJ, & Abbas, W, Critical current and axial strain variation of bronze Nb3Sn strand scaled with the deviatoric scaling law, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19** (2006) -
■ Kovac, P, Husek, I, Melisek, T, Martinez, E, & Dhallé, MMJ, Properties of doped ex and in situ MgB2 multi-filament superconductors, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19(10)** (2006) 1076 - 1082
■ Nijhuis, A, & Ilyin, Y, Transverse Load Optimisation in Nb3Sn CICC Design; Influence of Cabling, Void Fraction and Strand Stiffness, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19** (2006) 945 - 962
■ Nijhuis, A, Ilyin, Y, & Kate, HHJ ten, Influence of the Magnetic Field Profile on ITER Conductor Testing, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19** (2006) 783 - 791
■ Nijhuis, A, Ilyin, Y, & Wessel, WAJ, Spatial periodic contact stress and critical current of a Nb3Sn strand measured in TARSIS, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19** (2006) 1089 - 1096
■ Nijhuis, A, Ilyin, Y, Wessel, WAJ, & Abbas, W, Critical current and strand stiffness of three types Nb3Sn strand subjected to spatial periodic bending, SUPERCONDUCTOR SCIENCE AND TECHNOLOGY **19** (2006) 1136 - 1145
■ Portesi, C; Mijatovic, D; Veldhuis, D; Brinkman, A; Monticone, E; Gonnelli, RS, MgB2 magnetometer with a directly coupled pick-up loop, SUPERCONDUCTOR SCIENCE & TECHNOLOGY **19** (2006) S303 - S306
■ van Zalk, M; Brinkman, A; Golubov, AA; Hilgenkamp, H; Kim, TH; Moodera, JS; Rogalla, H, Fabrication of multiband MgB2 tunnel junctions for transport measurements, SUPERCONDUCTOR SCIENCE & TECHNOLOGY **19** (2006) S226 - S230
■ van der Rijt, JAJ; van der Werf, KO; Bennink, ML; Dijkstra, PJ; Feijen, J, Micromechanical testing of individual collagen fibrils, MACROMOLECULAR BIOSCIENCE **6** (2006) 697 - 702
■ Oncel, N; van Beek, WJ; Huijben, J; Poelsema, B; Zandvliet, HJW, Diffusion and binding of CO on Pt nanowires, SURFACE SCIENCE **600** (2006) 4690 - 4693
■ Dziomkina, N, Hempenius, MA, & Vancso, GJ, Synthesis of Cationic Core-Shell Latex Particles, EUROPEAN POLYMER JOURNAL **42** (2006) 81 - 91
■ Feng, CL; Embrechts, A; Vancso, GJ; Schonherr, H, Reactive mu CP on ultrathin block copolymer films: Localized chemistry for micro- and nano-scale biomolecular patterning, EUROPEAN POLYMER JOURNAL **42** (2006) 1954 - 1965
■ Tomczak, N; Gu, SY; Han, MY; van Hulst, NF; Vancso, GJ, Single light emitters in electrospun polymer nanofibers: Effect of local confinement on radiative decay, EUROPEAN POLYMER JOURNAL **42** (2006) 2205 - 2210
■ Vancso, GJ, European Polymer Journal announces new section on macromolecular nanotechnology, EUROPEAN POLYMER JOURNAL **42** (2006) 1 - 2
■ Vancso, GJ, Macromolecular Nanotechnology in European Polymer Journal - Preface, EUROPEAN POLYMER JOURNAL **42** (2006) 1953 - 1953
■ Berg, ThH van den; Luther, S; Lohse, D, Energy spectra in microbubbly turbulence, PHYSICS OF FLUIDS **18** (2006) 038103-1-038103-3 -
■ Bremond, NP, Arora, M, Dammer, SM, & Lohse, D, Interaction of cavitation bubbles on a wall, PHYSICS OF FLUIDS **18** (2006) 121505-1 - 121505-10
■ Jong, J de, Jeurissen, RJM, Borel, GH, Berg, M van den, Versluis, M, Wijshoff, H, Prosperetti, A, Reinten, H, & Lohse, D, Entrapped air bubbles in piezo-driven inkjet printing: Their effect on the droplet velocity, PHYSICS OF FLUIDS **18** (2006) 121511-1 - 121511-7
■ Resagk, C; du Puits, R; Thess, A; Dolzhansky, FV; Grossmann, S; Araujo, FF; Lohse, D, Oscillations of the large scale wind in turbulent thermal convection, PHYSICS OF FLUIDS **18** (2006) - 95105

■ de Jong, J; de Bruin, G; Reinten, H; van den Berg, M; Wijshoff, H; Versluis, M; Lohse, D, Air entrapment in piezo-driven inkjet printheads, JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA **120** (2006) 1257 - 1265

■ Yntema, DR, Druyvesteyn, WF, & Elwenspoek, MC, A four paricle velocity sensor device, JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA (2006) -

■ Giannotti, MI; Lv, H; Ma, Y; Steenvoorden, MP; Overweg, AR; Roerdink, M; Hempenius, MA; Vancso, GJ, Stimulus responsive poly(ferrocenylsilanes): Redox chemistry of iron in the main chain, JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS **15** (2005) 527 - 540

■ van Leeuwen, FWB; Davis, JT; Verboom, W; Reinhoudt, DN, Non-covalent (iso) guano sine-based ionophores for alkali(ne earth) cations, INORGANICA CHIMICA ACTA **359** (2006) 1779 - 1785

■ Fang, DL; Wang, ZB; Yang, PH; Liu, W; Chen, CS; Winnubst, AJA, Preparation of ultra-fine nickel manganite powders and ceramics by a solid-state coordination reaction, JOURNAL OF THE AMERICAN CERAMIC SOCIETY **89** (2006) 230 - 235

■ Ran, S; Winnubst, L; Wiratha, W; Blank, DHA, Sintering behavior of 0.8 mol%-CuO-doped 3Y-TZP ceramics, JOURNAL OF THE AMERICAN CERAMIC SOCIETY **89** (2006) 151 - 155

■ Henneken, H; Vogel, M; Karst, U, Effects of humidity and filter material on diffusive sampling of isocyanates using reagent-coated filters, JOURNAL OF ENVIRONMENTAL MONITORING **8** (2006) 1014 - 1019

■ Boukamp, BA; Verbraeken, M; Blank, DHA; Holtappels, P, SOFC-anodes, proof for a finite-length type Gerischer impedance?, SOLID STATE IONICS **177** (2006) 2539 - 2541

■ Holtappels, P; Verbraeken, M; Vogt, U; Blank, DHA; Boukamp, BA, Preparation and electrochemical characterisation of supporting SOFC-Ni-YZT anodes, SOLID STATE IONICS **177** (2006) 2029 - 2032

■ McIntosh, S; Vente, JF; Haije, WG; Blank, DHA; Bouwmeester, HJM, Phase stability and oxygen non-stoichiometry of SrCo0.8Fe0.2O3-delta measured by in situ neutron diffraction, SOLID STATE IONICS **177** (2006) 833 - 842

■ McIntosh, S; Vente, JF; Haije, WG; Blank, DHA; Bouwmeester, HJM, Structure and oxygen stoichiometry of SrCo0.8Fe0.2O3-delta and Ba0.5Sr0.5Co0.8Fe0.2O3-delta, SOLID STATE IONICS **177** (2006) 1737 - 1742

■ Wang, ZB; Zhao, CH; Yang, PH; Winnubst, L; Chen, CS, Effect of annealing in O-2 or N-2 on the aging of Fe(0.5)Mn(1.84)Ni(0.66)O4NTC-ceramics, SOLID STATE IONICS **177** (2006) 2191 - 2194

■ Ran, S; Winnubst, L; Wiratha, W; Blank, DHA, Synthesis, sintering and microstructure of 3Y-TZP/CuO, JOURNAL OF THE EUROPEAN CERAMIC SOCIETY **26** (2006) 391 - 396

■ Wang, ZB; Zhao, CH; Yang, PH; Winnubst, AJA; Chen, CS, X-ray diffraction and infrared spectra studies of FexMn2.34-xNi0.66O4 (0 < x < 1) NTC ceramics, JOURNAL OF THE EUROPEAN CERAMIC SOCIETY **26** (2006) 2833 - 2837

■ Esquivel-Sirvent, R; Villarreal, C; Mochan, WL; Contreras-Reyes, AM; Svetovoy, VB, Spatial dispersion in Casimir forces: a brief review, JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL **39** (2006) 6323 - 6331

■ Svetovoy, VB; Esquivel, R, The Casimir free energy in high- and low-temperature limits, JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL **39** (2006) 6777 - 6784

■ Hiremath, KR; Stoffer, R; Hammer, M, Modeling of circular integrated optical microresonators by 2-D frequency domain coupled mode theory, OPTICS COMMUNICATIONS **257** (2006) 277 - 297

■ Suryanto, A; van Groesen, E, Self-splitting of multisoliton bound states in planar Kerr waveguides, OPTICS COMMUNICATIONS **258** (2006) 264 - 274

■ Uranus, HP, Hoekstra, HJWM, & Groesen, E van, Considerations on material composition for low-loss hollow-core integrated optical waveguides, OPTICS COMMUNICATIONS **260(2)** (2006) 577 - 582

■ Szazdi, L; Abranyi, A; Pukanszky, B; Vancso, JG; Pukanszky, B, Morphology characterization of PP/clay nanocomposites across the length scales of the structural architecture, MACROMOLECULAR MATERIALS AND ENGINEERING **291** (2006) 858 - 868

■ Brinkman, A; van der Ploeg, SHW; Golubov, AA; Rogalla, H; Kim, TH; Moodera, JS, Charge transport in normal metal-magnesiumdiboride junctions, JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS **67** (2006) 407 - 411

■ Yokoyama, T, Tanaka, Y, Golubov, A, Inoue, J, & Asano, Y, Theory of charge transport in diffusive normal metal/conventional superconductor point contacts in the presence of magnetic impurity, JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS **67** (2006) 68 -

■ Eijkel, K; Hruby, J; Kubiak, G; Scott, M; Brokaw, J; Saile, V; Walsh, S; White, C; Walsh, D, Commercial importance of a unit cell: nanolithographic patenting trends for microsystems, microfabrication, and nanotechnology, JOURNAL OF MICROLITHOGRAPHY MICROFABRICATION AND MICROSYSTEMS **5** (2006) - 11014

■ Saravanan, S; Berenschot, E; Krijnen, G; Elwenspoek, M, A novel surface micromachining process to fabricate AlN unimorph suspensions and its application for RF resonators, SENSORS AND ACTUATORS A-PHYSICAL **130** (2006) 340 - 345

■ Eijkel, JCT; van den Berg, A, Nanofluidics: what is it and what can we expect from it?, MICROFLUIDICS AND NANOFLUIDICS **1** (2005) 249 - 267

■ Kohlheyer, D; Besselink, GAJ; Lammertink, RGH; Schlautmann, S; Unnikrishnan, S; Schasfoort, RBM, Electro-osmotically controllable multi-flow microreactor, MICROFLUIDICS AND NANOFLUIDICS **1** (2005) 242 - 248

■ Gokcan, H; Lodder, JC; Jansen, R, Effect of nonmagnetic spacer on hot-electron transport in the spin-valve transistor, MATERIALS SCIENCE AND ENGINEERING B-SOLID STATE MATERIALS FOR ADVANCED TECHNOLOGY **126** (2006) 129 - 132

■ Merticaru, AR, Mouthaan, AJ, & Kuper, FG, Determination of the contribution of defect creation and charge trapping to the degradation of a-Si:H/SiN TFTs at room temperature and low voltages, JOURNAL OF NON-CRYSTALLINE SOLIDS **352(36-37)** (2006) 3849 - 3853

■ Olah, A; Hernpenius, MA; Zou, S; Vancso, GJ, Adhesion studies of latex film surfaces on the meso- and nanoscale, APPLIED SURFACE SCIENCE **252** (2006) 3714 - 3728

■ Iannuzzi, D; Deladi, S; Berenschot, JW; de Man, S; Heeck, K; Elwenspoek, MC, Fiber-top atomic force microscope, REVIEW OF SCIENTIFIC INSTRUMENTS **77** (2006) - 106105

■ Nijhuis, A, Wessel, WAJ, Ilyin, Y, Ouden, A den, & Kate, HHJ ten, Critical current measurement with spatial periodic bending imposed by electromagnetic force on a standard test barrel with slots, REVIEW OF SCIENTIFIC INSTRUMENTS **77** (2006) 054701 -

■ Postma, S; van der Walle, P; Offerhaus, HL; van Hulst, NF, Compact high-resolution spectral phase shaper, REVIEW OF SCIENTIFIC INSTRUMENTS **76** (2005) - 123105

■ Campbell, M; Heijne, EHM; Llopart, X; Colas, P; Giganon, A; Giomataris, Y; Chefdeville, M; Colijn, AP; Fornaini, A; van der Graaf, H; Kluit, P; Timmermans, J; Visschers, JL; Schmitz, J, GOSSIP: A vertex detector combining a thin gas layer as signal generator with a CMOS readout pixel array, NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT **560** (2006) 131 - 134

■ Chefdeville, M; Colas, P; Giomataris, Y; van der Graaf, H; Hejine, EHM; van der Putten, S; Salm, C; Schmitz, J; Smits, S; Timmermans, J; Visschers, JL, An electron-multiplying 'Micromegas' grid made in silicon wafer post-processing technology, NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT **556** (2006) 490 - 494

■ Kessler, VG; Spijksma, GI; Seisenbaeva, GA; Hakansson, S; Blank, DHA; Bouwmeester, HJM, New insight in the role of modifying ligands in the sol-gel processing of metal alkoxide precursors: A possibility to approach new classes of materials, JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY **40** (2006) 163 - 179

■ Kuswandi, B; Nuriman; Verboom, W; Reinhoudt, DN, Tripodal receptors for cation and anion sensors, SENSORS **6** (2006) 978 - 1017

■ Waard, A de, Bassan, M, Benzaim, Y, Fafone, V, Flokstra, J, Frossati, G, Gottardi, L, Herbschleb, CT, Karbalai-Sadegh, A, Kuit, KH, Mark, H van der, Minenkov, Y, Oonk, JBR, Pallottino, GV, Pleikies, J, Rocchi, A, Usenko, O, & Visco, M, Preparing for science run 1 of MiniGrail, CLASSICAL AND QUANTUM GRAVITY **23** (2006) 79 - 84

■ Kinge, S; Bonnemann, H, One-pot dual size- and shape selective synthesis of tetrahedral Pt nanoparticles, APPLIED ORGANOMETALLIC CHEMISTRY **20** (2006) 784 - 787

■ Vente, JF; McIntosh, S; Haije, WG; Bouwmeester, HJM, Properties and performance of BaxSr1-xCo0.8Fe0.2O3-delta materials for oxygen transport membranes, JOURNAL OF SOLID STATE ELECTROCHEMISTRY **10** (2006) 581 - 588

■ Phang, IY; Aldred, N; Clare, AS; Callow, JA; Vancso, GJ, An in situ study of the nanomechanical properties of barnacle (Balanus amphitrite) cyprid cement using atomic force microscopy (AFM), BIOFOULING **22** (2006) 245 - 250

■ Botchev, MA, & Golub, GH, A Class of Nonsymmetric Preconditioners for Saddle Point Problems, SIAM JOURNAL ON MATRIX ANALYSIS AND APPLICATIONS **27(4)** (2006) 1125 - 1149

■ Timmer, BH; van Delft, KM; Koelmans, WW; Olthuis, W; van den Berg, A, Selective low concentration ammonia sensing in a microfluidic lab-on-a-chip, IEEE SENSORS JOURNAL **6** (2006) 829 - 835

■ Marmottant, PGM, Versluis, M, Jong, N de, Hilgenfeldt, S, & Lohse, D, High-speed imaging of an ultrasound-driven bubble in contact with a wall: "Narcissus" effect and resolved acoustic streaming, EXPERIMENTS IN FLUIDS **41(2)** (2006) 147 - 153

■ Huskens, J, Multivalent interactions at interfaces, CURRENT OPINION IN CHEMICAL BIOLOGY **10(6)** (2006) 537 - 543

■ Liu, Y; Kang, S; Chen, Y; Yang, YW; Huskens, J, Photo-induced switchable binding behavior of bridged bis(beta-cyclodextrin) with an azobenzene dicarboxylate linker, JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY **56** (2006) 197 - 201

■ Balakrishnan, M; Faccini, M; Diemeer, MBJ; Verboom, W; Driessen, A; Reinhoudt, DN; Leinse, A, Photodefinable electro-optic polymer for high-speed modulators, ELECTRONICS LETTERS **42** (2006) 51 - 52

■ Mitsuzuka, K; Kikuchi, N; Shimatsu, T; Kitakami, O; Aoi, H; Muraoka, H; Lodder, JC, Pt content dependence of magnetic properties of CoPt/Ru patterned films, IEEE TRANSACTIONS ON MAGNETICS **42** (2006) 3883 - 3885

■ Pamme, N, Eijkel, JCT, & Manz, A, On-chip free-flow magnetophoresis: Separation and detection of mixtures of magnetic particles in continuous flow, JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS **307(2)** (2006) 237 - 244

■ Zhang, L, Bain, JA, Zhu, JG, Abelmann, L, & Onoue, T, Characterization of heat-assisted magnetic probe recording on CoNi/Pt multilayers, JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS **305(1)** (2006) 16 - 23

■ Brake, HJM ter, Buchholz, F-Im, Burnell, G, Claeson, T, Crete, DG, Febvre, P, Gerritsma, GJ, Hilgenkamp, H, Humphreys, R, Ivanov, ZG, Jutzi, W, Khabipov, MI, Mannhart, J, Meyer, HG, Niemeyer, J, Ravex, A, Rogalla, H, Russo, M, Satchell, J, Siegel, M, Töpf, SCENET roadmap for superconductor digital electronics, PHYSICA C **439** (2006) 1 - 41

■ Gonnelli, RS; Daghero, D; Calzolari, A; Ummarino, GA; Tortello, M; Stepanov, VA; Zhigadlo, ND; Rogacki, K; Karpinski, J; Portesi, C; Monticone, E; Mijatovic, D; Veldhuis, D; Brinkman, A, Recent achievements in MgB2 physics and applications: A large-area SQUID magnetometer and point-contact spectroscopy measurements, PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS **435** (2006) 59 - 65

■ Yokoyama, T, Tanaka, Y, Golubov, A, Inoue, J, & Asano, Y, Josephson current between p-wave superconductors, PHYSICA C **445** (2006) 963 -

■ Uranus, HP, A simple and intuitive procedure for evaluating mode degeneracy in photonic crystal fibers, AMERICAN JOURNAL OF PHYSICS **74** (2006) 211 - 217

■ Zhang, L; Bain, JA; Zhu, JG; Abelmann, L; Onoue, T, A model of heat transfer in STM-based magnetic recording on CoNi/Pt multilayers, PHYSICA B-CONDENSED MATTER **381** (2006) 204 - 208

■ Ilyin, Y, Nijhuis, A, & Kate, HHJ ten, Interpretation of conduit voltage measurements on the Poloidal Field Insert Sample using the CUDI-CICC numerical code, CRYOGENICS **46** (2006) 517 - 529

■ Nijhuis, A, & Kate, HHJ ten, CHATS-2005 - Workshop on Computation of Thermohydraulic Transients in Superconductors, CRYOGENICS **46** (2006) 479 - 480

■ Wiegerinck, GFM, Burger, JF, Holland, HJ, Hondebrink, E, Brake, HJM ter, & Rogalla, H, A sorption compressor with a single sorber bed for use with Linde-Hampson cold stage, CRYOGENICS **46** (2006) 9 - 20

■ Salm, C; Hof, AJ; Kuper, FG; Schmitz, J, Reduced temperature dependence of hot carrier degradation in deuterated nMOSFETs, MICROELECTRONICS RELIABILITY **46** (2006) 1617 - 1622

■ Hermes, DC; Heuser, T; van der Wouden, EJ; Gardeniers, JGE; van den Berg, A, Fabrication of microfluidic networks with integrated electrodes, MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS **12** (2006) 436 - 440

■ Murillo Vallejo, R, Siekman, MH, Bolhuis, T, Abelmann, L, & Lodder, JC, Thermal stability and switching field distribution of CoNi/Pt patterned media, MICROSYSTEM TECHNOLOGIES **17(65)** (2006) -

■ Oosterbroek, RE; Hermes, DC; Kakuta, M; Benito-Lopez, F; Gardeniers, JGE; Verboom, W; Reinhoudt, DN; van den Berg, A, Fabrication and mechanical testing of glass chips for high-pressure synthetic or analytical chemistry, MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS **12** (2006) 450 - 454

■ Yudistira, D; Hoekstra, H; Hammer, M; Marpaung, D, Slow light excitation in tapered 1D photonic crystals: Theory, OPTICAL AND QUANTUM ELECTRONICS **38** (2006) 161 - 176

■ Valkering, T, Slow light via a tapered grating: Transfer matrix approach, OPTICAL AND QUANTUM ELECTRONICS **38** (2006) 83 - 96

■ Valkering, TP, Bloch amplitudes and energy of slow light in a tapered grating, JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS **15** (2006) 381 - 400

■ Davelaar, GG, & Abelmann, L, Comment on Y. Wang, D. Liui, Y. Wang, "Discovering the capacity of Human memory" Brain and Mind 4(2003), SYNTHESE **189** (2006) 198 -

■ Davelaar, GG; Abelmann, L, Comment on Wang, Liu, and Wang (2003), SYNTHESE **153** (2006) 457 - 458

■ Tiggelaar, RM; Gardeniers, JGE; van den Berg, A, Silicon-based microreactors as research tools in chemistry, CHIMICA OGGI-CHEMISTRY TODAY **24** (2006) 52 - 54

■ Kozorezov, AG, Brammertz, G, Hijmering, RA, Wigmore, JK, Peacock, A, Martin, D, Verhoeve, P, Golubov, A, & Rogalla, H, Quasiparticle dynamics in superconducting tunnel junctions, NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH. SECTION A, ACCELERATORS, SPECTROMETERS, DETECTORS AND ASSOCIATED EQUIPMENT **559** (2006) 695 -

■ Franke, HR, Jordaan, AF, Wolbers, F, Vermes, I, Oostrom, KAM, & Mooren, MJ van der, Ex vivo measurement of cell apoptosis and proliferation in breast tissue of healthy women: Influence of age and steroid status. An exploratory study, EUROPEAN JOURNAL OF OBSTETRICS AND GYNECOLOGY AND REPRODUCTIVE BIOLOGY **129(1)** (2006) 96 - 98

■ Vysotsky, VS, Sytnikov, V, Rakhmanov, AL, & Ilyin, Y, Analysis of stability and quench in HTS devices - new approaches, FUSION ENGINEERING AND DESIGN **81** (2006) 2417 - 2424

■ Berg, ThH van den; Luther, S; Mazzitelli, I; Rensen, JM; Toschi, F; Lohse, D, Turbulent bubbly flow, JOURNAL OF TURBULENCE **7(14)** (2006) 1 - 12

■ Bonn, D, Wegdam, G, Meer, RM van der, & Lohse, D, Mythes uit Hollywood die op drijfzand rusten, NEDERLANDS TIJDSCHRIFT VOOR NATUURKUNDE **72** (2006) 148 - 151

■ Crego-Calama, M, Self-assembled monolayers on glass for combinatorial sensing and (nano)fabrication, ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY **230** (2005) U1155 - U1155

■ Demencik, E, Dhallé, MMJ, Kate, HHJ ten, & Polak, M, The current distribution in Bi-2223/Ag HTS conductors: comparing Hall probe and magnetic knife, JOURNAL OF PHYSICS. CONFERENCE SERIES **43(1)** (2006) 83 - 86

■ Fazal, I, Louwerse, MC, Jansen, HV, & Elwenspoek, MC, Stepper Motor Actuated Microvalve, JOURNAL OF PHYSICS. CONFERENCE SERIES **34** (2006) 1032 - 1037

■ Hempenius, MA; Korczagin, I; Fokkink, RG; Stuart, MAC; Al-Hussein, M; Bomans, PHH; Frederik, PM; Vancso, GJ, Self-assembly of PFS-b-PMMA block copolymers in a selective solvent, ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY **231** (2006) -

■ Hempenius, MA; Korczagin, I; Vancso, GJ, Poly(ferrocenylsilane-block-methacrylate)s via sequential anionic and atom transfer radical polymerization, METAL-CONTAINING AND METALLOSUPRAMOLECULAR POLYMERS AND MATERIALS **928** (2006) 320 - 333

■ Hoogenboom, R; Huskens, J; Schubert, US, Grid forming metal coordinating macroligands: Synthesis and complexation, METAL-CONTAINING AND METALLOSUPRAMOLECULAR POLYMERS AND MATERIALS **928** (2006) 63 - 71

■ Iannuzzi, D, Deladi, S, & Elwenspoek, MC, Fiber-top cantilevers: a new sensor on the tip of a fiber, LECTURE NOTES IN COMPUTER SCIENCE **17(12)39** (2006) 39 -

■ Iannuzzi, D, Deladi, S, Schreuders, H, Slaman, M, Rector, JH, & Elwenspoek, MC, Fiber-top cantilever: a new generation of micromachined sensors for multipurpose applications, JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B(OPTICAL PHYSICS) **1** (2006) 4 -

■ Jansen, R, Magnetisme op nanoschaal - Een kijkje in de wondere wereld van nanomagnetisme, NEVAC BLAD **44(1)** (2006) 5 - 10

■ Jong, BR de, Brouwer, DM, Jansen, HV, Boer, MJ de, Lammertink, TG, Stramigioli, S, & Krijnen, GJM, A planar 3 dof sample manipulator for nano-scale characterization, PROCEEDINGS OF THE IEEE **750** (2006) 753 -

■ Lambeck, PV, Integrated optical sensors for the chemical domain, MEASUREMENT SCIENCE AND TECHNOLOGY **17** (2006) -

■ Lohse, D, Bubble puzzles, NONLINEAR PHENOMENA IN COMPLEX SYSTEMS **9(2)** (2006) 125 - 132

■ Lohse, D, Endliche Turbulenz, PHYSIK JOURNAL **5(1)** (2006) 18 - 19

■ Moehwald, H, Controlling permeability and mechanics of core/shell micro- and nanocapsules, ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY **231** (2006) -

■ Riele, PM te, Vroegindeweij, F, Janssens, JA, Roesthuis, FJG, Rijnders, AJHM, & Blank, DHA, Zeefdrukken op de nanoschaal, NEVAC BLAD **44(3)** (2006) 71 - 75

■ Ross, CA; Cheng, JY; Ilievski, F; Mayes, AM; Thomas, EL; Smith, HI; Vancso, GJ, Templated self-assembly of block copolymers for nanolithographic applications, ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY **230** (2005) U4160 - U4160

■ Schonherr, H; Feng, CL; Vancso, GJ, Reactive block copolymer film platforms: From tailored biointerfaces to nanoperidic arrays, ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY **231** (2006) -

■ Schonherr, H; Salazar, RB; Shovsky, A; Vancso, GJ, AFM tip mediated nanofabrication of (bio) reactive polymer platforms: Towards deposition of single dendrimer molecules onto reactive films, ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY **231** (2006) -

■ Selig, A; Koop, R, Stam, D; Berg, A van den; Flokstra, J; Laan, E; Zegers, T, Atmosferisch en Geofysisch Planeetonderzoek, ZENIT **232** (2006) 237 -

■ Vancso, GJ; Zou, S; Hempenius, MA; Ma, YJ; Schonherr, H, Surface grafted, single-chain macromolecular motors from redox responsive, "smart" poly(ferrocenylsilanes), ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY **231** (2006) -

■ Versluis, M, Blom, C, Meer, RM van der, Weele, JP van der, & Lohse, D, Leaping shampoo and the stable Kaye effect., JOURNAL OF STATISTICAL MECHANICS **07(p07007)** (2006) p07007-1 - 07007-12

■ Ymeti, A, Greve, J, Lambeck, PV, Wink, T, Hovell, SWFM van, Beumer, TAM, Heideman, RG, Subramaniam, V, & Kanger, JS, Fast ultrasensitive virus detection using a Young interferometer, NANO LETTERS. WEB RELEASE (2006) -

■ Boogaard, A, Kovalgin, AY, Aarnink, AAI, Wolters, RAM, Holleman, J, Brunets, I, & Schmitz, J, Langmuir-probe characterization of an inductively-coupled remote plasma system intended for CVD and ALD, ECS TRANSACTIONS **2(7)** (2006) 181 - 191

■ Collings, EW, Sumption, MD, Dietderich, DR, Ilyin, Y, & Nijhuis, A, AC loss and contact resistance of Nb3Sn Rutherford cables in response of surface and heat treatment, IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY **16** (2006) 1200 - 1203

■ Eck, HJN van, Koppers, WR, Smeets, P, Ouden, A den, Goedheer, WJ, Lopes Cardozo, NJ, & Kleyn, AW, Pre-design of the superconducting magnet system for magnum-psi, IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY **16(2)** (2006) 906 -

■ Gusakova, DYu, Golubov, A, & Kupriyanov, MY, Superconducting decay length in a ferromagnetic metal, JETP LETTERS **83** (2006) 418 -

Gusakova, DYu, Golubov, A, Kupriyanov, MY, & Buzdin, AI, Density of states in SF bilayers with arbitrary strength of magnetic scattering, JETP LETTERS **83** (2006) 327 -

Hayen, H; Vogel, M; Karst, U, Recent developments in the determination of formaldehyde in air samples using derivatizing agents, GEFAHRSTOFFE REINHALTUNG DER LUFT **63** (2003) 295 - 298

Ilyin, Y, Nijhuis, A, Eijnden, NC van den, Wessel, WAJ, & Kate, HHJ ten, Axial tensile stress strain characterisation of 36 strands cable, IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY **16** (2006) 1249 - 1252

Le Minh, P, Hoang, T, Holleman, J, & Schmitz, J, Influence of interface recombination in light emission from lateral Si-based light emitting devices, ECS TRANSACTIONS **3(11)** (2006) 9 - 16

Lerou, PPM, Vanapalli, S, Jansen, HV, Burger, JF, Veenstra, TT, Venhorst, GCF, Holland, HJ, Elwenspoek, MC, Brake, HJM ter, & Rogalla, H, Microcooling developments at the University of Twente, ADVANCES IN CRYOGENIC ENGINEERING **51** (2006) 977 - 984

Nijhuis, A, Ilyin, Y, & Kate, HHJ ten, The effect of inter-bundle resistive barriers on the coupling loss and current distribution in ITER NbTi Cable-in-Conduit Conductors, IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY **16** (2006) 868 - 871

Ouden, A den, Boutboul, T, Pedrini, D, Previtali, V, Quettier, L, & Volpini, G, Critical current measurements on Nb3Sn conductors for the NED project, IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY **16(2)** (2006) 1265 -

Schasfoort, RBM, Verdoold, R, & Beusink, JB, High Density Protein Micro Arrays, BIOFORUM EUROPE **10** (2006) 60 - 62

Wolbers, F, Andersson, H, Vermes, I, & Berg, A van den, Miniaturisation in clinical diagnostics, CLINICAL MATERIALS **30** (2006) 22 - 25

Zanino, R, Bagnasco, M, Baker, W, Bellina, F, Bruzzone, P, Della Corte, A, Ilyin, Y, Martovetsky, N, Mitchell, N, Muzzi, L, Nijhuis, A, Nunoya, Y, Okuno, K, Rajainmaki, H, Ribani, PL, Ricci, M, Salpietro, E, Savoldi Richard, L, Shikov, A, Sytnikov, V, Tak, Implications of NbTi short-sample test results and analysis for the ITER Poloidal Field Conductor Insert(PFCI), IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY **16** (2006) 886 - 889

BOOKS MONOGRAPHY - EDITORIAL BOOK

Lammertink, R.G.H. (2006). Young Chemist Workshop - Micro Reactor Technology. Enschede: University of Twente.

Radovanovic, S., Annema, A.J., & Nauta, B. (2006). High-Speed Photodiodes in Standard CMOS Technology (The international series in engineering and computer science). Dordrecht: Springer.

Vancso, G.J., & Reiter, G. (2006). Ordered Polymeric Nanostructures at Surfaces (Advances in Polymer Science, 200). Berlijn: Springer-Verlag.

BOOKS - CHAPTER

Boon, M. (2006). Innovatie als beeldenstorm. In H. Procee & I. Baas (Eds.), 202020. Universiteit Twente in twintig vooruitzichten (pp. 42-56). Enschede: Faculty Club Foundation Press University of Twente.

Driessen, A., Hoekstra, H.J.W.M., Hopman, W.C.L., Kelderman, H., Lambeck, P.V., Lith, J. van, Klunder, D.J.W., Ridder, R.M. de, Krioukov, E., & Otto, C. (2006). Ultracompact Optical Sensors based on high index-contrast Photonic Structures. In F. Baldini, A.N. Chester, J. Homola, & S. Martellucci (Eds.), Optical Chemical Sensors (NATO Science Series, Series II: Mathematics, Physics and Chemistry) (pp. 281-295). Dordrecht, The Netherlands: IOP.

Geuzebroek, D.H., & Driessen, A. (2006). Ring-resonator-based wavelength filters. In H. Venghaus (Ed.), Wavelength filters in fibre optics (Springer series in optical sciences) (pp. 341-379). Berlin/Heidelberg: Springer Verlag.

Hempenius, M.A., Korczagin, I., & Vancso, G.J. (2006). Poly(ferrocenylsilane-block-methacrylate)s via Sequential Anionic and Atom Transfer Radical Polymerization. In U.S. Schubert, G.R. Newkome, & I. Manners (Eds.), Metal-Containing and Metallosupramolecular Polymers and Materials (ACS Symposium Series, 928) (pp. 320-333). New York: Oxford University Press.

■ Jansen, R. (2006). The spin-valve transistor.. In Y. Xu & S. Thompson (Eds.), Spintronic Materials and Technology (pp. 371-413). London: CRC Press.
■ Kuper, F.G., & Fan, X.J. (2006). Reliability practice. In Mechanics of Microelectronics (Solid Mechanics and Its Applications) (pp. 35-63). London: Springer Verlag.
■ Lambeck, P.V., & Hoekstra, H.J.W.M. (2006). Planar Waveguiding Systems for Optical Sensing. In F. Baldini, A.N. Chester, J. Homola, & S. Martellucci (Eds.), Optical Chemical Sensors (NATO Science Series, Series II: Mathematics, Physics and Chemistry) (pp. 261-280). Dordrecht: Springer Verlag.
■ Lodder, J.C. (2006). Patterned Nanomagnetic Films. In D. Sellmyer & R. Skomski (Eds.), Advanced Magnetic Nanostructures (pp. 261-288). New York: Springer Verlag.
■ Luttge, R. (2006). Exposure: An art from the past carrying the economical success of the 21st century. In Scintilla Jaarboek 2005-2006.
■ Pollnau, M. (2006). Waveguide fabrication methods in Dielectric solids. In B. Di Bartolo & O. Forte (Eds.), Advances in Spectroscopy for Lasers and Sensing (NATO Science Series, Series II: Mathematics, Physics and Chemistry) (pp. 335-350). Dordrecht: Springer Verlag.
■ Prosperetti, A. (2007). Averaged equations for multiphase flows. In A. Prosperetti & G. Tryggvason (Eds.), Computational Methods for Multiphase Flow. Cambridge: Cambridge University Press.
■ Prosperetti, A. (2007). Coupled methods for multi-fluid models. In A. Prosperetti & G. Tryggvason (Eds.), Computational Methods for Multiphase Flow. Cambridge: Cambridge University Press.
■ Ridder, R.M. de, & Roeloffzen, C.G.H. (2006). Interleavers. In H. Venghaus (Ed.), Wavelength Filters for Fibre Optics (Springer Series in Optical Sciences) (pp. 381-432). Berlin, Germany: Springer-Verlag.
■ Rijnders, A.J.H.M., & Blank, D.H.A. (2006). Growth Kinetics During Pulsed Laser Deposition. In R. Eason (Ed.), Pulsed Laser Deposition of Thin Films (pp. 177-190). New Jersey, USA: John Wiley & Sons, Inc..
■ Rijnders, A.J.H.M., & Blank, D.H.A. (2006). In Situ Diagnostics by High-Pressure RHEED During PLD. In R. Eason (Ed.), Pulsed Laser Deposition on Thin Films (pp. 85-97). New Jersey, USA: John Wiley & Sons, Inc..
■ Schasfoort, R.B.M., & Tudos, A.J. (2006). Separation and detection on a chip. In G. Urban (Ed.), BioMEMS (pp. 243). Springer.
■ Schönherr, H., & Vancso, G.J. (2006). Chemical Force Microscopy: Nanometer-Scale Surface Analysis with Chemical Sensitivity. In P. Samori (Ed.), Scanning Probe Micoscopies Beyond Imaging ¿ Manipulation of Molecules and Nanostructures (pp. 275-314). New York: Wiley & Sons.
■ Zou, S(han), Schönherr, H., & Vancso, G.J. (2006). Atomic Force Microscopy-Based Single-Molecule Force Spectroscopy of Synthetic Supramolecular Dimer and Polymers. In P. Samori (Ed.), Scanning Probe Micoscopies Beyond Imaging ¿ Manipulation of Molecules and Nanostructures (pp. 315-354). New York: Wiley & Sons.

PATENTS

■ Ashima sah, A.S., Castricum, H.L., Vente, J.F., Blank, D.H.A., & Elshof, J.E. ten (16-01-2006). Microporous molecular separtaion membrane with high hydrothermal stability. no EP 06100388.
■ Broekmaat, J.J., Roesthuis, F.J.G., Blank, D.H.A., & Rijnders, A.J.H.M. (23-10-2006). Side Approach No EP 06076925.4. no No EP 06076925.4.
■ Decre, M.M.J., Blees, M., Eerd, P.P.J. van, Schroeders, R.J.M., Burdinski, D., Sharpe, R.B.A., & Huskens, J. (12-01-2006). Soft lithographic stamp with a chemically patterned surface. no WO 2006/003592 A2.
■ Hasper, A., Snijders, G.J., Vandezande, L., De Blank, M.J., & Bankras, R.G. (23-03-2006). Deposition of TiN films in a batch reactor. no US2006/0060137A1.
■ Ingham, C.J., Sprenkels, A.J., Bomer, J.G., Hylckama Vlieg, J. van, Vos, W.M., & Berg, A. van den (26-10-2006). Biochip and process for the production of a biochip. no WO2006112709 A2.
■ Ingham, C.J., Sprenkels, A.J., Hylckama Vlieg, J. van, & Vos, W.M. (18-04-2006). High throughput screening method for assessing heterogeneity of microorganisms. no WO2006112713.

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