

List of Publications

Roland Hany

106. K. Strassel, S. P. Ramanandan, S. Abdolhosseinzadeh, M. Diethelm, F. Nüesch, R. Hany, *Solution-processed organic optical upconversion device*, ACS Appl. Mater. Interfaces **2019**, *11*, 23428-23435.
105. R. Aderne, K. Strassel, S. Jenatsch, M. Diethelm, R. Hany, F. Nüesch, R. dos Santos Carvalho, C. Legnani, M. Cremona, *Near-infrared absorbing cyanine dyes for all-organic optical upconversion devices*, Org. Electronics **2019**, *74*, 96-102.
104. R. Hany, M. Cremona, K. Strassel, *Recent advances with optical upconverters made from all-organic and hybrid materials*, Sci. Techn. Adv. Mater. **2019**, *20*, 497-510.
103. M. Diethelm, Q. Grossmann, A. Schiller, E. Knapp, S. Jenatsch, M. Kawecki, F. Nüesch, R. Hany, *Optimized electrolyte loading and active film thickness for sandwich polymer light-emitting electrochemical cells*, Adv. Optical Mater. **2019**, *7*, 1801278.
102. R. Hany, L. Hong, F. A. Castro, *Focus issue on organic and hybrid photovoltaics Foreword*, Sci. Techn. Adv. Mater. **2019**, *20*, 42-43.
101. M. Kawecki, R. Hany, M. Diethelm, S. Jenatsch, Q. Grossmann, L. Bernard, H. J. Hug, *Direct measurement of ion redistribution and resulting modification of chemical equilibria in polymer thin film light-emitting electrochemical cells*, ACS Appl. Mater. Interfaces **2018**, *10*, 39100-39106.
100. M. Makha, P. Schwaller, K. Strassel, S. B. Anantharaman, F. Nüesch, R. Hany, J. Heier, *Insights into photovoltaic properties of ternary organic solar cells from phase diagrams*, Sci. Technol. Adv. Mater. **2018**, *19*, 669-682.
99. A. Devižis, S. Jenatsch, M. Diethelm, V. Gulbinas, F. Nüesch, R. Hany, *Dynamics of charge distribution in sandwich-type light-emitting electrochemical cells probed by the stark effect*, ACS Photonics **2018**, *5*, 3124-3131.
98. L. Wang, S. Jenatsch, B. Ruhstaller, C. Hinderling, D. Gesevicius, R. Hany, F. Nüesch, *Organic salt semiconductor with high photoconductivity and long carrier lifetime*, Adv. Funct. Mater. **2018**, *28*, 1705724.
97. K. Strassel, A. Kaiser, S. Jenatsch, A. C. Véron, S. B. Anantharaman, E. Hack, M. Diethelm, F. Nüesch, R. Aderne, C. Legnani, S. Yakunin, M. Cremona, R. Hany, *Squaraine dye for a visibly transparent all-organic optical upconversion device with sensitivity at 1000 nm*, ACS Appl. Mater. Interfaces **2018**, *20*, 11063-11069.
96. S. Jenatsch, M. Regnat, R. Hany, M. Diethelm, F. Nüesch, B. Ruhstaller, *Time-dependent p-i-n structure and emission zone in sandwich-type light-emitting electrochemical cells*, ACS Photonics **2018**, *5*, 1519-1598.
95. S. Jenatsch, L. Wang, N. Leclaire, E. Hack, R. Steim, S. B. Anantharaman, J. Heier, B. Ruhstaller, L. Penninck, F. Nüesch, R. Hany, *Visible light-emitting host-guest electrochemical cells using cyanine dyes*, Org. Electronics **2017**, *48*, 77-84.
94. M. T. Neukom, S. Züfle, E. Knapp, M. Makha, R. Hany, B. Ruhstaller, *Why perovskite solar cells with high efficiency show small IV-curve hysteresis*, Sol. Energy Mater. Sol. Cells **2017**, *169*, 159-166.
93. S. B. Anantharaman, S. Yakunin, C. Peng, M. V. G. Vismara, C. F. O. Graeff, F. A. Nüesch, S. Jenatsch, R. Hany, M. V. Kovalenko, J. Heier, *Strongly red-shifted photoluminescence band induced by molecular twisting in cyanine (Cy3) dye films*, J. Phys. Chem. C. **2017**, *121*, 9587.
92. A. Borgschulte, O. Sambalova, R. Delmelle, S. Jenatsch, R. Hany, F. Nüesch, *Hydrogen reduction of molybdenum oxide at room temperature*, Sci. Reports **2017**, *7*, 40761.

91. M. Makha, P. Testa, S. B. Anantharaman, J. Heier, S. Jenatsch, N. Leclaire, J.-N. Tisserant, A. C. Véron, L. Wang, F. Nüesch, R. Hany, *Ternary semitransparent organic solar cells with a laminated top electrode*, Sci. Technol. Adv. Mater. **2017**, *18*, 68-75.
90. S. Jenatsch, J. Groenewold, M. Döbeli, R. Hany, R. Crockett, J. Lübben, F. Nüesch, J. Heier, *Unexpected equilibrium ionic distribution in cyanine/C₆₀ heterojunctions*, Adv. Mater. Interfaces **2017**, 1600891.
89. M. Makha, S. L. Fernandes, S. Jenatsch, T. Offermans, J. Schleuniger, J.-N. Tisserant, A. C. Véron, R. Hany, *A transparent, solvent-free laminated top electrode for perovskite solar cells*, Sci. Technol. Adv. Mater. **2016**, *17*, 260.
88. S. Jenatsch, L. Wang, M. Bulloni, A. C. Véron, B. Ruhstaller, S. Altazin, F. Nüesch, R. Hany, *Doping evolution and junction formation in stacked cyanine dye light-emitting electrochemical cells*, ACS Appl. Mater. Interfaces **2016**, *8*, 6554-6562.
87. J.-N. Tisserant, P. A. Reissner, S. Jenatsch, H. Beyer, R. Hany, A. Stemmer, *Interfacial self-assembly of nanoporous C₆₀ thin films*, RSC Adv. **2016**, *6*, 23141-23147.
86. H. Zhang, B. Niesen, E. Hack, S. Jenatsch, L. Wang, A. C. Véron, M. Makha, R. Schneider, Y. Arroyo, R. Hany, F. Nüesch, *Cyanine tandem and triple-junction solar cells*, Org. Electronics **2016**, *30*, 191-199.
85. A. Devižis, J. De Jonghe-Risse, R. Hany, F. Nüesch, S. Jenatsch, V. Gulbinas, J.-E. Moser, *Dissociation of Charge Transfer States and Carrier Separation in Bilayer Organic Solar Cells: A Time-Resolved Electroabsorption Spectroscopy Study*, J. Am. Chem. Soc. **2015**, *137*, 8192-8198.
84. S. Jenatsch, T. Geiger, J. Heier, C. Kirsch, F. Nüesch, A. Paracchino, D. Rentsch, B. Ruhstaller, A. C. Véron, R. Hany, *Influence of Chemically p-type Doped Active Organic Semiconductor on the Film Thickness versus Performance Trend in Cyanine/C₆₀ Bilayer Solar Cells*, Sci. Techn. Adv. Mater. **2015**, *16*, 035003.
83. R. Steim, P. Chabrecek, U. Sonderegger, B. Kindle-Hasse, W. Siefert, T. Kroyer, P. Reinecke, T. Lanz, T. Geiger, R. Hany, F. Nüesch, *Laminated Fabric as Top Electrode for Organic Photovoltaics*, Appl. Phys. Lett. **2015**, *106*, 193301.
82. H. Zhang, S. Jenatsch, J. De Jonghe, F. Nüesch, R. Steim, A. C. Véron, R. Hany, *Transparent Organic Photodetector using a Near-Infrared Absorbing Cyanine Dye*, Scientific Reports **5**, 9439; DOI:10.1038/srep09439 (**2015**).
81. H. Zhang, A. Borgschulte, F. A. Castro, R. Crockett, O. Deniz, J. Heier, S. Jenatsch, F. Nüesch, C. Sanchez-Sanchez, A. Zoladek-Lemanczyk, R. Hany, *Photochemical Transformations in Fullerene and Molybdenum Oxide Affect the Stability of Bilayer Organic Solar Cells*, Adv. Energy Mater. **2015**, *5*, 1400734.
80. J. Heier, C. Peng, A. C. Véron, R. Hany, T. Geiger, F. A. Nüesch, M. V. G. Vismara, C. F. O. Graeff, *Cyanine dyes in solid state organic heterojunction solar cells*, SPIE, ed. Z. H. Kafafi, P. A. Lane and I. D. W. Samuel **2014**, 9184, 918408.
79. J.-N. Tisserant, R. Brönnimann, R. Hany, S. Jenatsch, F. A. Nüesch, R. Mezzenga, G.-L. Bona, J. Heier, *Resonance Light-Scattering in Dye-Aggregates Forming in Dewetting Droplets*, ACS Nano **2014**, *8*, 10057-10065.
78. S. Jenatsch, R. Hany, A. C. Véron, M. Neukom, S. Züfle, A. Borgschulte, B. Ruhstaller, F. Nüesch, *Influence of molybdenum oxide interface solvent sensitivity on charge trapping in bilayer cyanine solar cells*, J. Phys. Chem. C **2014**, *118*, 17036-17045.

77. L. Wang, C. Hinderling, S. Jenatsch, F. Nüesch, D. Rentsch, R. Steim, H. Zhang, R. Hany, *Cyanine dye polyelectrolytes for organic bilayer solar cells*, *Polymer* **2014**, 55, 3195-3201.
76. A. C. Véron, H. Zhang, A. Linden, F. Nüesch, J. Heier, R. Hany, T. Geiger, *NIR-absorbing heptamethine dyes with tailor-made counterions for application in light to energy conversion*, *Organic Letters* **2014**, 16, 1044-1047.
75. J.-N. Tisserant, R. Hany, E. Wimmer, A. Sàncchez-Ferrer, J. Adamcik, G. Wicht, F. Nüesch, D. Rentsch, A. Borgschulte, R. Mezzenga, J. Heier, *Diyne-functionalized fullerene self-assembly for thin film solid-state polymerization*, *Macromolecules* **2014**, 47, 721-728.
74. H. Zhang, G. Wicht, C. Gretener, M. Nagel, F. Nüesch, Y. Romanyuk, J.-N. Tisserant, R. Hany, *Semitransparent organic photovoltaics using a near-infrared absorbing cyanine dye*, *Solar Energy Materials & Solar Cells* **2013**, 118, 157-164.
73. G. Wicht, S. Bücheler, M. Dietrich, T. Jäger, F. Nüesch, T. Offermans, J.-N. Tisserant, L. Wang, H. Zhang, R. Hany, *Stability of bilayer trimethine cyanine dye / fullerene organic solar cells*, *Solar Energy Materials & Solar Cells* **2013**, 117, 585-591.
72. J.-N. Tisserant, G. Wicht, O. F. Göbel, E. Bocek, G.-L. Bona, T. Geiger, R. Hany, R. Mezzenga, S. Partel, P. Schmid, W. B. Schweizer, J. Heier, *Growth and alignment of thin film organic single crystals from dewetting patterns*, *ACS Nano* **2013**, 7, 5506-5513.
71. W. Kylberg, F. A. de Castro, P. Chabrecek, T. Geiger, J. Heier, P. G. Nicholson, F. Nüesch, E. Theocharous, U. Sonderegger, R. Hany, *Spatially resolved photocurrent mapping of efficient organic solar cells fabricated on a woven mesh electrode*, *Prog. Photovolt: Res. Appl.* **2013**, 21, 652-657.
70. E. Berner, T. Jäger, T. Lanz, F. Nüesch, J.-N. Tisserant, G. Wicht, H. Zhang, R. Hany, *Influence of crystalline titanium oxide layer smoothness on the performance of inverted organic bilayer solar cells*, *Appl. Phys. Lett.* **2013**, 102, 183903.
69. D. Rentsch, C. Stähelin, M. Obkircher, R. Hany, M. Simeunovic, D. Samson, G. Loidl, F. Dick, *Quantitative assessment of preloaded 4-alkoxybenzyl alcohol resins for solid-phase peptide syntheses by 1D and 2D HR-MAS NMR*, *ACS Comb. Sci.* **2012**, 14, 613-620.
68. F.A. de Castro, F. Nüesch, C. Walder, R. Hany, *Challenges found when patterning semiconducting polymers with electric fields for organic solar cell applications*, *J. Nanomaterials* **2012**, Article ID 478296.
67. W. Kylberg, Y. Zhang, A. Aebersold, F. Araujo de Castro, T. Geiger, J. Heier, S. Kuster, C.-Q. Ma, P. Bäuerle, F. Nüesch, J.-N. Tisserant, R. Hany, *Oligothiophene dendron – decorated squaraine dyes: synthesis, thin film formation, and performance in organic solar cells*, *Org. Electronics* **2012**, 13, 1204-1212.
66. J.-N. Tisserant, R. Hany, S. Partel, G.-L. Bona, R. Mezzenga, J. Heier, *Dewetting-driven hierarchical self-assembly of small semiconducting molecules*, *Soft Matter* **2012**, 8(21), 5804-5810.
65. W. Kylberg, P. Sonar, J. Heier, J.-N. Tisserant, C. Müller, F. Nüesch, Z.-K. Chen, A. Dodabalapur, S. Yoon, R. Hany, *Synthesis, thin-film morphology, and comparative study of bulk and bilayer heterojunction organic photovoltaic devices using soluble diketopyrrolopyrrole molecules*, *Energy & Environ. Sci.* **2011**, 4, 3617-3624.
64. W. Kylberg, F. A. de Castro, P. Chabrecek, U. Sonderegger, B. Tsu-Te Chu, F. Nüesch, R. Hany, *Woven electrodes for flexible organic photovoltaic cells*, *Advanced Materials* **2011**, 23, 1015-1019.
63. J. Heier, R. Steiger, R. Hany, F. Nüesch, *Template synthesis of cyanine dye H-aggregates on nanostructured PCBM substrates*, *Phys. Chem. Chem. Phys.* **2011**, 13, 15714-15722.

62. R. Hany, B. Fan, F. A. de Castro, J. Heier, W. Kylberg, F. Nüesch, *Strategies to improve cyanine dye multi layer organic solar cells*, 25th EU PVSEC Proceedings **2010**, 297-302, DOI: 10.4229/25thEUPVSEC2010-1CO.10.2
61. F. A. de Castro, J. Heier, F. Nüesch, R. Hany, *Origin of the Kink in Current-Density Versus Voltage Curves and Efficiency Enhancement of Polymer-C60 Heterojunction Solar Cells*, IEEE Journal of selected topics in quantum electronics **2010**, 16(6), 1690.
60. R. Hany, B. Fan, F. A. de Castro, J. Heier, W. Kylberg, F. Nüesch, *Strategies to improve cyanine dye multi layer organic solar cells*, Prog. Photovoltaics **2011**, 19, 851-857.
59. R. Hartmann, R. Hany, B. Witholt, M. Zinn, *Simultaneous biosynthesis of two copolymers in pseudomonas putida GPo1 using a two-stage continuous culture system*, Biomacromol. **2010**, 11, 1488-1493.
58. B. Fan, F. A. de Castro, B. Tsu-Te Chu, J. Heier, D. Opris, R. Hany, F. Nüesch, *Improved performance of cyanine solar cells with polyaniline anodes*, J. Mater. Chem. **2010**, 20, 2952-2955.
57. J. Heier, R. Steiger, F. Nüesch, R. Hany, *Fast assembly of cyanine dyes into aggregates onto [6,6]-phenyl c₆₁-butyric acid methyl ester surfaces from organic solvents*, Langmuir **2010**, 26, 3955-3961.
56. B. Fan, F. A. de Castro, J. Heier, R. Hany, F. Nüesch, *High performing doped cyanine bilayer solar cell*, Org. Electronics **2010**, 11, 583-588.
55. F. A. Castro, H. Benmansour, J.-E. Moser, C. F. O. Graeff, F. Nüesch, R. Hany, *Photoinduced hole-transfer in semiconducting polymer/low-bandgap cyanine dye blends: evidence for unit charge separation quantum yield*, Phys. Chem. Chem Phys. **2009**, 11, 8886-8894.
54. F. A. Castro, P. Chabrecek, R. Hany, F. Nüesch, *Transparent, flexible and low-resistive precision fabric electrode for organic solar cells*, Phys. Status Solidi RRL **2009**, 3(7-8), 278.
53. R. Hany, M. Brinkmann, D. Ferri, R. Hartmann, E. Pletscher, D. Rentsch, M. Zinn, *Crystallization of an Aromatic Biopolyester*, Macromolecules **2009**, 42, 6322-6326.
52. B. Fan, Y. Maniglio, M. Simeunovic, S. Kuster, T. Geiger, R. Hany, F. Nüesch, *Squaraine planar-heterojunction solar cells*, Int. J. Photoenergy **2009**, Article ID 581058.
51. A. Grubelnik, L. Wiesli, P. Furrer, D. Rentsch, R. Hany, V. R. Meyer, *A simple HPLC-MS method for the quantitative determination of the composition of bacterial medium chain-length polyhydroxyalkanoates*, J. Sep. Sci. **2008**, 31, 1739.
50. T. Geiger, H. Benmansour, B. Fan, R. Hany, F. Nüesch, *Low-band gap polymeric cyanine dyes absorbing in the nir region*, Macromol. Rapid Commun. **2008**, 29, 651.
49. A. Geiser, B. Fan, H. Benmansour, F. A. Castro, J. Heier, B. Keller, K. E. Mayerhofer, F. Nüesch, R. Hany, *Poly(3-hexylthiophene)/C60 heterojunction solar cells: implication of morphology on performance and ambipolar charge collection*, Sol. Energy Mater. Sol. Cells **2008**, 92, 464.
48. B. Fan, R. Hany, J.-E. Moser, F. Nüesch, *Enhanced cyanine solar cell performance upon oxygen doping*, Org. Electronics **2008**, 9, 85.
47. J. Heier, J. Groenewold, S. Huber, F. Nüesch, R. Hany, *Nanoscale structuring of semiconducting molecular blend films in the presence of mobile counterions*, Langmuir **2008**, 24, 7316.
46. J. Heier, J. Groenewold, F. A. Castro, F. Nüesch, R. Hany, *Enlarged bilayer interfaces from liquid-liquid dewetting for photovoltaic applications*, Org. Optoelect. and Photonics III, Proc. of SPIE **2008**, 6999, 69991J.

45. H. Benmansour, F. A. Castro, M. Nagel, J. Heier, R. Hany, F. Nüesch, *Ionic space charge driven organic photovoltaic devices*, Chimia **2007**, *61*, 787.
44. J. Heier, F. A. Castro, F. Nüesch, R. Hany, *Interface control in organic heterojunction photovoltaic cells by phase separation processes*, Org. Photovol. VIII, Proc. of SPIE **2007**, *6656*, 66560P-1.
43. K. K. Akurati, A. Vital, G. Fortunato, R. Hany, F. Nüesch, T. Graule, *Flame synthesis of TiO_2 nanoparticles with high photocatalytic activity*, Solid State Sciences **2007**, *9*, 247.
42. F. A. Castro, C. F. O. Graeff, J. Heier, R. Hany, *Interface morphology snapshots of vertically segregated thin films of semiconducting polymer/polystyrene blends*, Polymer **2007**, *48*, 2380.
41. M. Nagel, R. Hany, T. Lippert, M. Molberg, F. A. Nüesch, D. Rentsch, *Aryltriazene Photopolymers for UV-Laser Applications: Improved Synthesis and Photodecomposition Study*, Macromol. Chem. Phys. **2007**, *208*, 277.
40. P. Furrer, R. Hany, D. Rentsch, A. Grubelnik, K. Ruth, S. Panke, M. Zinn, *Quantitative analysis of bacterial medium-chain-length poly([R]-3-hydroxyalkanoates) by gas chromatography*, J. Chromatography A **2007**, *1143*, 199.
39. F. A. Castro, H. Benmansour, C. F. O. Graeff, F. Nüesch, E. Tutis, R. Hany, *Nanostructured Organic Layers via Polymer Demixing for Interface-Enhanced Photovoltaic Cells*, Chem. Mater. **2006**, *18*, 5504.
38. F. A. Castro, A. Faes, T. Geiger, C. F. O. Graeff, M. Nagel, F. Nüesch, R. Hany, *On the use of cyanine dyes as low-bandgap materials in bulk heterojunction photovoltaic devices*, Syn. Metals **2006**, *156*, 973.
37. R. Hartmann, R. Hany, E. Pletscher, A. Ritter, B. Witholt, M. Zinn, *Tailor-made olefinic PHAs by Pseudomonas putida GPo1: Batch versus chemostat production*, Biotech. and Bioeng. **2006**, *93*, 737.
36. K.K. Akurati, A. Vital, R. Hany, B. Bommer, T. Graule, M. Winterer, *One-step flame synthesis of SnO_2/TiO_2 composite nanoparticles for photocatalytic applications*, Int. J. Photoenergy **2005**, *7*, 153.
35. M. Zinn, R. Hany, *Tailored Material Properties of Polyhydroxyalkanoates through Biosynthesis and Chemical Modification*, Adv. Engin. Mater. **2005**, *7* No. 5, 408.
34. R. Hany, R. Hartmann, C. Böhlen, S. Brandenberger, J. Kawada, C. Löwe, M. Zinn, B. Witholt, R. H. Marchessault, *Chemical synthesis and characterization of POSS-functionalized poly[3-hydroxyalkanoates]*, Polymer **2005**, *46*, 5025.
33. R. Hartmann, R. Hany, T. Geiger, T. Egli, B. Witholt, M. Zinn, *Tailored Biosynthesis of Olefinic Medium-Chain-Length Poly[(R)-3-hydroxyalkanoates] in Pseudomonas putida Gpo1 with Improved Thermal Properties*, Macromolecules **2004**, *37*, 6780.
32. T. Geiger, P. Delavy, R. Hany, J. Schleuniger, M. Zinn, *Encapsulated Zosteric Acid Embedded in Poly[3-hydroxyalkanoate] Coatings – Protection against Biofouling*, Polymer Bulletin **2004**, *52*, 65.
31. M. Zinn, R. Hartmann, D. Noger, E. Pletscher, Q. Ren, J. Wüthrich, R. Hany, *Tailor-made synthesis of polyhydroxyalkanoate*, BioWorld **2004**, *3*, 4 (www.bioworld.ch).
30. R. Hany, C. Böhlen, T. Geiger, R. Hartmann, J. Kawada, M. Schmid, M. Zinn, R. H. Marchessault, *Chemical Synthesis of Crystalline Comb Polymers from Olefinic Medium-Chain-Length Poly[3-hydroxyalkanoates]*, Macromolecules **2004**, *37*, 385.
29. R. Hany, C. Böhlen, T. Geiger, M. Schmid, M. Zinn, *Toward Non-Toxic Antifouling: Synthesis of Hydroxy-, Cinnamic Acid-, Sulfate-, and Zosteric Acid-Labeled Poly[3-hydroxyalkanoates]*, Biomacromolecules **2004**, *5*, 1452.
28. J. Burri, R. Crockett, R. Hany, D. Rentsch, *Gasoline Composition Determined by 1H NMR Spectroscopy*, Fuel **2004**, *83*, 187.

27. D. Rentsch, R. Hany, S. Barthélémy, R. Steinauer, *Quantitative Determination of Loadings and Oxidation Products of Polystyrene-Bound Phosphines Using ³¹P MAS NMR*, J. Comb. Chem. **2003**, 5, 610.
26. M. Zinn, H.-U. Weilenmann, R. Hany, M. Schmid, Th. Egli, *Tailored Synthesis of Poly([R]-3-hydroxybutyrate-co-3-hydroxyvalerate) (PHB/HV) in Ralstonia eutropha DSM 428*, Acta Biotechnol. **2003**, 23, 309.
25. D. Rentsch, R. Hany, S. Barthélémy, R. Steinauer, *Improved reproducibility of chemical reactions on purified polystyrene resins monitored by ³¹P MAS NMR*, Tetrahedron Letters **2003**, 44, 6987.
24. D. Banerjee, G. Furrer, R. Hany, D. Rentsch, B. Wehrli, *Chemical Reactivity of Aqueous Aluminum Nanoclusters*, Geochim. Cosmochim. Acta **2002**, 66 (Suppl. 1), A48.
23. A. P. Andrade, P. Neuenschwander, R. Hany, Th. Egli, B. Witholt, Z. Li, *Synthesis and Characterization of Novel Copoly(ester-urethane) Containing Blocks of Poly-[*(R*]-3-hydroxyoctanoate] and Poly-[*(R*]-3-hydroxybutyrate]*, Macromol. **2002**, 35, 4946.
22. A. P. Andrade, B. Witholt, R. Hany, Th. Egli, Z. Li, *Preparation and Characterization of Enantiomerically Pure Telechelic Diols from mcl-Polyhydroxyalkanoates*, Macromol. **2002**, 35, 684.
21. A. Fliessbach, F. Eyhorn, P. Mäder, D. Rentsch, R. Hany, "DOC" Long-term Farming Systems Trial: *Microbial Biomass, Activity and Diversity Affect the Decomposition of Plant Residues*, 363 – 369, in "Sustainable Management of Soil Organic Matter", CAB International 2001, eds R. M. Rees, B. C. Ball, C. D. Campbell and C. A. Watson.
20. H. Raschke, M. Meier, J. G. Burken, R. Hany, M. D. Müller, J. R. van der Meer, H.-P. E. Kohler, *Biotransformation of Various Substituted Aromatic Compounds to Chiral Dihydrodihydroxy Derivatives by Escherichia coli DH5α (pTCB1444), Which Expresses the Chlorobenzene Dioxygenase Genes (tcbAa, Ab, Ac, Ad) from Pseudomonas sp. strain P51*, Appl. and Environ. Microbiology **2001**, 67, 3333.
19. R. Hany, D. Rentsch, B. Dhanapal, D. Obrecht, *Quantitative Determination of Resin Loading in Solid-Phase Organic Synthesis Using ¹³C MAS NMR*, J. Comb. Chem. **2001**, 3, 85.
18. K. Jung, R. Hany, D. Rentsch, T. Storni, Th. Egli, B. Witholt, *Characterization of New Bacterial Copolymers Containing 3-Hydroxyoxoalkanoates and Acetoxy-3-hydroxyalkanoates*, Macromolecules **2000**, 33, 8571.
17. R. P. X. Hesselmann, R. von Rummell, S. M. Resnick, R. Hany, A. J. B. Zehnder, *Anaerobic Metabolism of Bacteria Performing Enhanced Biological Phosphate Removal*, Wat. Res. **2000**, 34, 3487.
16. H.-R. Buser, R. Hany, M. D. Müller, Th. Poiger, D. Rentsch, *Comment on Influence of the Chemical Environment on Metolachlor Conformations*, J. Agric. Food Chemistry **2000**, 48, 4448.
15. S. A. Heberle, D. S. Aga, R. Hany, St. R. Müller, *Simultaneous Quantification of Acetanilide Herbicides and Their Oxanilic and Sulfonic Acid Metabolites in Natural Waters*, Anal. Chem. **2000**, 72, 840.
14. R. Hany, H. W. Jäckle, *Untersuchung von Basisölen unterschiedlicher Herkunft für die Herstellung von ACEA-konformen Motorenölen*, Tribologie + Schmierungstechnik **1999**, 46, 50.
13. D. S. Aga, S. Heberle, D. Rentsch, R. Hany, St. R. Müller, *Sulfonic and Oxanilic Acid Metabolites of Acetanilide Herbicides: Separation of Diastereomers and Enantiomers by Capillary Zone Electrophoresis and Identification by ¹H NMR Spectroscopy*, Environ. Sci. Technol. **1999**, 33, 3462.
12. R. P. X. Hesselmann, Th. Fleischmann, R. Hany, A. J. B. Zehnder, *Determination of polyhydroxyalkanoates in activated sludge by ion chromatographic and enzymatic methods*, J. Microbiol. Methods **1999**, 35, 111.

11. G. Chollon, R. Hany, U. Vogt, K. Berroth, *A Silicon-29 MAS-NMR Study of α -Silicon Nitride and Amorphous Silicon Oxynitride Fibres*, J. Europ. Ceramic Soc. **1998**, *18*, 535.
10. D. Rentsch, R. Hany, W. von Philipsborn, *^{55}Mn , ^{13}CO and ^{55}Mn , ^{31}P Coupling Constants of Organomanganese Complexes: Comparison of NMR Results from Experiments in Solution and in the Solid State*, Magn. Res. Chem. **1997**, *35*, 832.
9. K. W. Weissmahr, St. B. Haderlein, R. P. Schwarzenbach, R. Hany, R. Nüesch, *In Situ Spectroscopic Investigations of Adsorption Mechanisms of Nitroaromatic Compounds at Clay Minerals*, Environ. Sci. Technol. **1997**, *31*, 240.
8. M. Maurer, W. Gujer, R. Hany, S. Bachmann, *Intracellular Carbon Flow in Phosphorus Accumulating Organisms from Activated Sludge Systems*, Wat. Res. **1997**, *31*, 907.
7. M. Ghazvini, R. Hany, H. W. Jäckle, E. Steinhauer, *Nachweis konjugierter Diolefine in Benzinen mittels Hochleistungs-Flüssigchromatographie*, Erdöl Erdgas Kohle **1996**, *112*, 210.
6. W. Caseri, R. Hany, *Solvents in waterborne paints: ^1H -NMR spectroscopy*, Europ. Coating J. **1995**, *6*, 708.
5. B. A. Keller, Ch. Löwe, R. Hany, *Investigation of the Thermal Degradation of Polyacrylonitrile on Various Glasses*, Surface and Interface Anal. **1994**, *22*, 284.
4. R. Hany, H. Fischer, *Absolute Chemically Induced Nuclear Polarizations from the Photodissociation of Phenylsubstituted Ketones. Radical Pair Precursor States and Memory Effects*, Chem. Phys. **1993**, *172*, 131.
3. Dissertation Universität Zürich **1992**: *Untersuchung von Photoreaktionen aromatischer Ketone mit chemisch induzierter dynamischer Kernspinpolarisation*.
2. H. Fischer, R. Baer, R. Hany, I. Verhoolen, M. Walbiner, *2,2-Dimethoxy-2-phenylacetophenone: Photochemistry and Free Radical Photofragmentation*, J. Chem. Soc. Perkin Trans. 2 **1990**, 787.
1. R. Hany, J.-K. Vollenweider, H. Fischer, *Separation and Analysis of CIDNP Spin Orders for a Coupled Multiproton System*, Chem. Phys. **1988**, *120*, 169.