

6 Literaturverzeichnis

Addicks, W. J., Flynn, G. L., Weiner, N.; Validation of a flow-through diffusion cell for use in transdermal research; *Pharm. Res.* 4 (4), (1987), 337-341

Aellig, W. H.; Agonists and antagonists of 5-hydroxytryptamine on venomotor receptors; in: Hrsg. Critchely, M., Friedman, A. P., Gorini, S., Sicuteri, F.; *Advances in Neurology* (33): Headache: Physiopathological and clinical concepts; Raven Press New York, (1982), 321-324

Agarwal, P., Fahn, S., Frucht, S. J.; Diagnosis and Management of pergolide-induced fibrosis; *Movement Disord.* 19 (6), (2004), 699-703

Ansell, J. M.; Fowler, J. A.; The acute oral toxicity and primary ocular and dermal irritation of selected N-alkyl-2-pyrrolidones; *Food Chem. Toxicol.* 26 (5), (1988), 475-479

Babu, R. J., Kanikkannan, N., Kikwai, L., Ortega, C., Andega, S., Ball, K., Yim, S., Singh, M.; The influence of various methods of cold storage of skin on the permeation of melatonin and nimesulide; *J. Control. Release* 86, (2003), 49-57

Baker, E. J., Hadgraft, J.; In vitro percutaneous absorption of arildone, a highly lipophilic drug, and the apparent no-effect of the penetration enhancer Azone[®] in excised human skin; *Pharm. Res.* 12 (7), (1995), 993-997

Baronti, F., Mouradian, M. M., Conant, K. E., Giuffra, M., Brughitta, G., Chase, T. N.; Partial dopamine agonist therapy of levodopa-induced dyskinesias; *Neurology* 42, (1992), 1241-1243

Barry, B. W.; Lipid-protein-partitioning theory of skin penetration enhancement; *J. Control. Release* 15, (1991), 237-248

Barry, B. W.; Novel mechanisms and devices to enable successful transdermal drug delivery; *Eur. J. Pharm. Sci.* 14, (2001), 101-114

Bashir, S. J.; Maibach, H. I.; Cutaneous metabolism of xenobiotics; in: Hrsg. Swarbrick, J.; *Percutaneous absorption: Drug-cosmetics-mechanisms-methology*; Marcel Dekker Inc. New York Basel, (1999), 65-80

Blessing, W. W., Seaman, B.; 5-Hydroxytryptamine receptors regulate sympathetic nerves constricting the cutaneous vascular bed in rabbits and rats; *Neuroscience* 117, (2003), 939-948

Borbujo, J., Garcia-Villalon, A. L., Gomez, B., Diequez, G.; Postjunctional α_1 and α_2 adrenoceptors in human skin arteries. An in vitro study; *J. Pharmacol. Exp. Ther.* 249 (1), (1989), 284-287

Bouwstra, J.A., Honeywell-Nguyen, P.L.; Skin structure and mode of action of vesicles; *Adv. Drug Deliver. Rev.* 54 (Suppl. 1), (2002), 41-55

Bronaugh, R. L., Hood, H. L., Kraeling, M. E. K., Yourick, J. J.; Determination of percutaneous absorption by in vitro techniques; in: Hrsg. Swarbrick, J.; *Percutaneous absorption: Drug-cosmetics-mechanisms-methology*; Marcel Dekker Inc. New York Basel, (1999a), 229-233

Bronaugh, R. L., Kraeling, M. E. K., Yourick, J. J., Hood, H. L.; Cutaneous metabolism during in vitro percutaneous absorption; in: Hrsg. Swarbrick, J.; *Percutaneous absorption: Drug-cosmetics-mechanisms-methology*; Marcel Dekker Inc. New York Basel, (1999b), 57-64

Bronaugh, R. L., Stewart, R. F., Congdon, E. R.; Methods for in vitro percutaneous absorption studies II. Animal models for human skin; *Toxicol. Appl. Pharmacol.* 62, (1982), 481-488

Brooks, D. J.; Dopamine agonists and their role in the treatment of Parkinson's disease; *J. Neurol. Neurosur. Ps.* 68, (2000), 685-690

Bucks, D., Maibach, H. I.; Occlusion does not uniformly enhance penetration in vivo; in: Hrsg. Swarbrick, J.; *Percutaneous absorption: Drug-cosmetics-mechanisms-methology*; Marcel Dekker Inc. New York Basel, (1999), 81-105

Büyüktimkin, N., Büyüktimkin, S., Rytting, J. H.; Chemical means of transdermal permeation enhancement; in: Hrsg. Ghosh, T. K., Pfister, W. R., Yum, S. I.; *Transdermal and topical drug delivery systems*; Interpharm Press Inc. Buffalo Grove, (1997), 357-475

Casiraghi, A., Minghetti, P., Cilurzo, F., Montanari, L., Naik, A.; Occlusive properties of monolayer patches: In vitro and in vivo evaluation; *Pharm. Res.* 19 (4), (2002), 423-426

Chase, T.; Levodopa therapy: Consequences of the nonphysiologic replacement of dopamine; *Neurology* 50 (5), (1998), 17-25

Chien, Y. W.; Systemic delivery of peptide-based pharmaceuticals by transdermal periodic iontotherapeutic system; in: Hrsg. Gurny, R., Teubner, A.; *Dermal and transdermal drug delivery*; Wissenschaftliche Verlagsgesellschaft Stuttgart, APV Paperback Band 31, (1993), 129-152

Chien, Y. W.; Systemic delivery of pharmacologically active molecules across the skin; in: Hrsg. Juliano, R. L.; *Targeted drug delivery*; Springer Verlag Berlin Heidelberg New York, (1991), 181-230

Cleary, G. W.; The first two decades of transdermal drug delivery systems and a peek into the 1990's; in: Hrsg. Gurny, R., Teubner, A.; *Dermal and transdermal drug delivery*; Wissenschaftliche Verlagsgesellschaft Stuttgart, APV Paperback Band 31, (1993), 13-32

Cornea-Herbert, V., Riad, M., Wu, C., Singh, S. K., Descarries, L.; Cellular and subcellular distribution of the serotonin 5-HT_{2A} receptor in the central nervous system of adult rat; *J. Comp. Neurol.* 409, (1999), 187-209

- CoTran[®] 9705 Produktinformation, 3M Drug Delivery Systems, St. Paul, USA, Stand: 1999
- CoTran[®] 9715 Produktinformation, 3M Drug Delivery Systems, St. Paul, USA, Stand: 1999
- Cvak, L.; Industrial production of ergot alkaloids; in: Hrsg. Kren, V, Cvak, L.; Ergot: The genus claviceps; Overseas Publishers Association, (1999), 373-409
- Degim I. T., Uslu, A., Hadgraft, J., Atay, T., Akay, C., Cevheroglu, S.; The effects of Azone[®] and capsaicin on the permeation of naproxen through human skin; *Int. J. Pharm.* 179 (1), (1999), 21-25
- Degim, I. T.; Understanding skin penetration: Computer aided modelling and data interpretation; *Curr. Comput.-Aided Drug Des.* 1, (2005), 11-19
- Demierre, M.-F., Vachon, L., Ho, V., Sutton, L., Cato, A., Leyland-Jones, B.; Phase I/II pilot study of methotrexate-laurocapram topical gel for the treatment of patients with early-stage mycosis fungoides; *Arch. Dermatol.* 139, (2003), 624-628
- Denet, A., Vanbever, R., Pr at, V.; Skin electroporation for transdermal and topical delivery; *Adv. Drug Deliver. Rev.* 56, (2004), 659-674
- Docherty, J. R.; Subtypes of functional α_1 - and α_2 -adrenoceptors; *Eur. J. Pharmacol.* 361, (1998), 1-15
- Doukas, A. G., Kollias, N.; Transdermal delivery with a pressure wave; *Adv. Drug Deliver. Rev.* 56, (2004), 559-579
- Elias, P. M.; Epidermal lipids, barrier function, and desquamation; *J. Invest. Dermatol.* 80, (1983), 44-49
- El-Kattan, A., Asbil, C.S., Haidar, S.; Transdermal testing: practical aspects and methods; *Pharm. Sci. Technol. To.* 3 (12), (2000), 426-430
- Eltze, M.; Characterization of the α_1 -adrenoceptor subtype mediating contraction of guinea pig spleen; *Eur. J. Pharmacol.* 260, (1994), 211-220
- EpiDerm[®] White Paper: Assessment of human skin irritation: Validation of in vitro models; MatTek Corporation, Ashland, USA, (2003)
- EpiDerm[®]-Produktinformation; MatTek Corporation, Ashland, USA, (2003)
- Faller, C., Bracher, M., Dami, N., Roguet, R.; Predictive ability of reconstructed human epidermis equivalents for the assessment of skin irritation of cosmetics; *Toxicol. In Vitro* 16 (5), (2002a), 557-572
- Faller, C., Bracher, M.; Reconstructed skin kits: Reproducibility of cutaneous irritancy testing; *Skin Pharmacol. Appl.* 15 (1), (2002b), 74-91

- Fang, J.-Y., Hwang, T.-L., Fang, C.-L., Chiu, H.-C.; In vitro and in vivo evaluations of the efficacy and safety of skin permeation enhancers using flurbiprofen as a model drug; *Int. J. Pharm.* 255, (2003), 153-166
- Feldmann, R. J., Maibach, H. I.; Regional variation of percutaneous penetration of 14C cortisol in man; *J. Invest. Dermatol.* 48 (2), (1967), 181-183
- Fiedler, H. P.; Fiedler Lexikon der Hilfsstoffe, Band 2 L - Z, Hrsg.: Hoepfner, E.-M., Reng, A., Schmidt, P. C., (2002), Editio Cantor Verlag Aulendorf
- Finnin, B. C., Morgan, T. M.; Transdermal penetration enhancers: Applications, limitations, and potential; *J. Pharm. Sci.* 88 (10), (1999), 955-958
- Fischer, P. A.; Parkinson heute – Diagnose und Therapie; in: Hrsg. Fischer, P. A., Frieling, B.; *Morbus Parkinson – neue Möglichkeiten mit Lisurid*; Walter de Gruyter Berlin New York, (1989), 1-11
- Fitzgerald, L. W., Burn, T. C., Brown, B. S., Patterson, J. P., Corjay, M. H., Valentine, P. A., Sun, J. H., Link, J. R., Abbaszade, I., Hollis, J. M., Largent, B. L., Hartig, P. R., Hollis, G. F., Meunier, P. C., Robichaud, A. J., Robertson, D. W.; Possible role of valvular serotonin 5-HT_{2B} receptors in the cardiopathy associated with fenfluramine; *Mol. Pharmacol.* 57, (2000), 75-81
- Flynn, G. L., Stewart, B.; Percutaneous drug penetration: Choosing candidates for transdermal development; *Drug Develop. Res.* 13, (1988), 169-185
- Flynn, G. L., Weiner, N. D.; Topical and transdermal delivery – provinces of realism; in: Hrsg. Gurny, R., Teubner, A.; *Dermal and transdermal drug delivery*; Wissenschaftliche Verlagsgesellschaft Stuttgart, APV Paperback Band 31, (1993), 33-65
- Foldvari, M.; Non-invasive administration of drugs through the skin: challenges in delivery design; *Pharm. Sci. Technol. To.* 3 (12), (2000), 417-425
- Franz, T. J.; Percutaneous absorption on the relevance of in vitro data; *J. Invest. Dermatol.* 64, (1975), 190-195
- Frederiksson, R., Lagerström, M. C., Lundin, L.-G., Schiöth, H. B.; The G-protein-coupled receptors in the human genome form five main families. Phylogenetic analysis, paralogon groups, and fingerprints. *Mol. Pharmacol.* 63, (2003), 1256-1272
- Funke, A. P., Schiller, R., Motzkus, H. W., Günther, C., Müller, R. H., Lipp, R.; Transdermal delivery of highly lipophilic drugs: In vitro fluxes of antiestrogens, permeation enhancers and solvents from liquid formulations; *Pharm. Res.* 19 (5), (2002), 661-668
- Furchgott, R. F.; The classification of adrenoceptors (adrenergic receptors). An evaluation from the standpoint of receptor theory; in: Hrsg. Blaschko, H., Muscholl, E.; *Catecholamines, Handbook of Experimental Pharmacology, Volume 33*; Springer-Verlag Berlin Heidelberg New York, (1972), 283-335

Gerlach, M., Double, K., Arzberger, T., Leblhuber, F., Tatschner, T., Riederer, P.; Dopamine receptor agonists in current clinical use: Comparative dopamine receptor binding profiles defined in the human striatum; *J. Neural Transm.* 110, (2003), 1119-1127

Gerlach, M., Double, K., Reichmann, H., Riederer, P.; Arguments for the use of dopamine receptor agonists in clinical and preclinical Parkinson's disease; in: Hrsg. Horowski, R., Mizuno, Y., Olanow, C. W., Poewe, W. H., Riederer, P., Stoessl, J. A., Youdim, M. B. H.; *Advances in research on neurodegeneration 10*; Springer Verlag Wien, (2003), 167-183

Ghosh, T. K., Bagherian, A.; Development of a transdermal patch of methadone: In vitro evaluation across hairless mouse and human cadaver skin; *Pharm. Dev. Technol.* 1 (3), (1996), 285-291

Ghosh, T. K., Pfister, W. R.; Transdermal and topical delivery systems: An overview and future trends; in: Hrsg. Ghosh, T. K., Pfister, W. R., Yum, S. I.; *Transdermal and Topical Drug Delivery Systems*; Interpharm Press Inc. Buffalo Grove, (1997), 1-32

Gibb, W. R. G.; The diagnostic relevance of Lewy bodies and other inclusions in Parkinson's disease; in: Hrsg. Carlsson, A., Riederer, P., Beckmann, H.; *Early diagnosis and preventive therapy in Parkinson's disease*; Springer Verlag Wien New York, (1989), 171-180

Giustizieri, M. L., Albanesi, C., Fluhr, J., Gisondi, P., Norgauer, J., Girolomoni, G.; H₁ histamine receptor mediates inflammatory responses in human keratinocytes; *J. Allergy Clin. Immun.* 114 (5), (2004), 1176-1182

Glusa, E., Pertz, H. H.; Further evidence that 5-HT-induced relaxation of pig pulmonary artery is mediated by endothelial 5-HT_{2B}-receptors; *Brit. J. Pharmacol.* 130, (2000), 692-698

Gondaliya, D., Pundarikakshudu, K.; Studies in formulation and pharmacotechnical evaluation of controlled release transdermal delivery system of bupropion; *AAPS PharmSciTech*, 4 (1), Article 3, (2003)

Greaves, M., Marks, R., Robertson, I.; Receptors for histamine in human skin blood vessels: A review; *Brit. J. Dermatol.* 97, (1977), 225-228

Gregorios, G., Agyralides, G., Dallas, P.P., Rekkas, D. M.; Development and in vitro evaluation of furosemide transdermal formulations using experimental design techniques; *Int. J. Pharm.* 281, (2004), 35-43

Grubauer, G., Feingold, K. R., Harris, R. M., Elias, P. M.; Lipid content and lipid type as determinants of the epidermal permeability barrier; *J. Lipid Res.* 30, (1989), 89-96

Gupta, S. K., Sathyan, G., Hwang, S. S.; Clinical assesment of transdermal drug delivery systems; in: Hrsg. Ghosh, T. K., Pfister, W. R., Yum, S. I.; *Transdermal and topical drug delivery systems*; Interpharm Press Inc. Buffalo Grove, (1997), 215-248

Hadgraft, J.; Dermal and transdermal drug design; *Int. J. Pharm. Med.* 13, (1999a), 155-158

Hadgraft, J.; Passive enhancement strategies in topical and transdermal drug delivery; *Int. J. Pharm.* 184, (1999b), 1-6

Hadgraft, J.; Recent developments in topical and transdermal delivery; *Eur. J. Drug Metab. Ph.* 21 (2), (1996), 165-173

Hadgraft, J., Lewis, D., Beutner, D., Wolff, H. M.; In vitro assessment of transdermal devices containing nitroglycerin; *Int. J. Pharm.* 73, (1991), 125-130

Harrison, J. E., Watkinson, A. C., Green, D. M., Hadgraft, J., Brain, K.; The relative effect of Azone[®] and Transcutol[®] on permeant diffusivity and solubility in human stratum corneum; *Pharm. Res.* 13 (4), 1996), 542-546

He, N., Li, K., Suhonen, M., Warner, K. S., Higuchi, W. I.; Mechanistic study of alkyl azacycloheptanones as skin permeation enhancers by permeation and partition experiments with hairless mouse skin; *J. Pharm. Sci.* 92 (2), (2003), 297-310

Henry, S., McAllister, D. V., Allen, M. G., Prausnitz, M. P.; Microfabricated microneedles: A novel approach to transdermal drug delivery; *J. Pharm. Sci.* 87 (8), (1998), 922-925

Hertzsch, J.; n-Propyl-TDHL (Protergurid), ein neuer hochwirksamer Dopaminagonist, Wirkung und Kinetik am Menschen; Dissertation; Freie Universität Berlin, (1984)

Higuchi, T.; Mechanism of sustained-action medication. Theoretical analysis of rate of release of solid drugs dispersed in solid matrices; *J. Pharm. Sci.* 52, (1963), 1145-1149

Higuchi, W. I.; Diffusional models useful in biopharmaceutics; *J. Pharm. Sci.* 56 (3), (1967), 315-324

Higuchi, W. I.; Analysis of data on the medicament release from ointments; *J. Pharm. Sci.* 51, (1962), 802-804

Hirvonen, J., Rajala, R., Vihervaara, P., Laine, E., Paronen, P., Urtti, A.; Mechanism and reversibility of penetration enhancer action in the skin – A DSC study; *Eur. J. Pharm. Biopharm.* 40 (2), (1994), 81-85

Hirvonen, J., Rytting, J. H., Paronen, P., Urtti, A.; Dodecyl-N,N-dimethylamino acetate and Azone[®] enhance drug penetration across human, snake, and rabbit skin; *Pharm. Res.* 8 (7), (1991), 933-937

Horowski, R., Jähnichen, S., Pertz, H. H.; Fibrotic valvular heart disease is not related to chemical class but to biological function: 5-HT_{2B} receptor activation plays crucial role; *Movement Disord.* 19 (12), (2004), 1523-1524

Horvath, J., Fross, R. D., Kleiner-Fisman, G., Lerch, R., Stalder, H., Liaudat, S., Raskoff, W. J., Flachsbart, K. D., Rakowski, H., Pache, J.-C., Burkhard, P. R., Lang, A. E.; Severe multivalvular heart disease: A new complication of the ergot derivative dopamine agonists; *Movement Disord.* 19, (2004), 656-662

Itoh, T., Magavi, R., Casady, R.L., Nishihata, T., Rytting, J.H.; A method to predict the percutaneous permeability of various compounds: Shed snake skin as a model membrane; *Pharm. Res.* 7 (12), (1990), 1302-1306

Jaber, M., Robinson, S. W., Missale, C., Caron, M. G.; Dopamine receptors and brain function; *Neuropharmacology* 35 (11), (1996), 1503-1519

Jähnichen, S., Eltze, M., Pertz, H. H.; Evidence that α_{1B} -adrenoceptors are involved in noradrenaline-induced contraction of rat tail artery; *Eur. J. Pharmacol.* 488, (2004), 157-167

Jähnichen, S., Horowski, R., Pertz, H. H.; Agonism at 5-HT_{2B}-receptors is not a class effect of the ergolines; *Eur. J. Pharmacol.* 513, (2005), 225-228

Jain, S. K., Chourasia, M., Sabitha, R., Jain, R., Jain, A. K., Ashawat, M.; Development and characterization of transdermal drug delivery systems for diltiazem hydrochloride; *Drug Deliv.* 10, (2003), 169-177

Jankovic, J.; The relationship between Parkinson's disease and other movement disorders; in: Hrsg. Calne, D. B.; *Drugs for the treatment of Parkinson's disease*; Springer Verlag Berlin Heidelberg New York, (1989), 227-270

Jellinger, K.; Pathology of Parkinson's Syndrome; in: Hrsg. Calne, D. B.; *Drugs for the treatment of Parkinson's disease*; Springer Verlag Berlin Heidelberg New York, (1989), 47-112

Jenkinson, D. H., Barnard, E. A., Hoyer, D., Humphrey, P. P. A., Leff, P., Shankley, N. P.; International Union of Pharmacology Committee on Receptor Nomenclature and Drug Classification. IX. Recommendations on terms and symbols in quantitative pharmacology; *Pharmacol. Rev.* 47 (2), (1995), 255-266

Kalia, Y. N., Guy, R. H.; Modelling transdermal drug release; *Adv. Drug Deliv. Rev.* 48, (2001), 159-172

Kalia, Y. N., Naik, A., Garrison, J., Guy, R. H.; Iontophoretic drug delivery; *Adv. Drug Deliv. Rev.* 56 (2004), 619-658

Kanikkannan, N., Kandimalla, K., Lamba, S. S., Singh, M.; Structure-activity of chemical penetration enhancers in transdermal drug delivery; *Curr. Med. Chem.* 6, (1999), 593-608

Karande, P., Jain, A., Mitragotri, S.; Discovery of transdermal penetration enhancers by high-throughput screening; *Nat. Biotechnol.* 22 (2), (2004), 192-197

Kehr, W., Wachtel, H., Schneider, H. H.; Dopaminergic and antidopaminergic properties of ergolines structurally related to lisuride, *Acta Pharm. Suec.* 2, (1983), 98-110

Kim, J, Choi, H.; Effect of additives on the crystallization and the permeation of ketoprofen from adhesive matrix; *Int. J. Pharm.* 236, (2002), 81-85

Kim, J., Lee, C. H., Choi, H.; Transdermal delivery of physostigmine: Effects of enhancers and pressure-sensitive adhesives; *Drug Dev. Ind. Pharm.* 28 (7), (2002), 833-839

Kligman, A. M., Christophers, E.; Preparation of isolated sheets of human stratum corneum; *Arch. Dermatol.* 88, (1963), 702-705

- Kotiyan, P. N., Vavia, P. R.; Eudragits: Role of crystallization inhibitors in drug-in-adhesive transdermal systems of estradiol; *Eur. J. Pharm. Biopharm.* 52, (2001), 173-180
- Krishnaiah, Y. S. R., Bhaskar, P., Satyanarayana, V.; Formulation and evaluation of limonene-based membrane-moderated transdermal therapeutic system of nimodipine; *Drug Deliv.* 11, (2004), 1-9
- Krishnaiah, Y. S. R., Satyanarayana, V., Bhaskar, P.; Formulation and in vivo evaluation of membrane-moderated transdermal therapeutic systems of nicardipine hydrochloride using carvone as a penetration enhancer; *Drug Deliv.* 10, (2003a), 101-109
- Krishnaiah, Y. S. R., Satyanarayana, V., Bhaskar, P.; Influence of menthol and pressure-sensitive adhesives on the in vivo performance of membrane-moderated transdermal therapeutic system of nicardipine hydrochloride in human volunteers; *Eur. J. Pharm. Biopharm.* 55, (2003b), 329-337
- Kubilus, J.; (Firma MatTek, Ashland, USA) persönliche Kommunikation, (2005)
- Lambert, W. J., Higuchi, W. I., Knutson, K., Krill, S. L.; Dose-dependent enhancement effects of Azone[®] on skin permeability; *Pharm. Res.* 6 (89), (1989), 798-803
- Langer, R.; Transdermal drug delivery: Past progress, current status, and future prospects; *Adv. Drug Deliv. Rev.* 56, (2004), 557-558
- Launay, J. M., Herve, P., Peoch, K., Tournois, C., Callebert, J., Nebigil, C. G., Etienne, N., Drouet, L., Humbert, M., Simonneau, G., Maroteaux, L.; Function of the serotonin 5-hydroxytryptamine_{2B} receptor in pulmonary hypertension; *Nat. Med.* 8 (10), (2002), 1129-1135
- Lee, G., Parlicharla, P.; An examination of excised skin tissues used for in vitro membrane permeation studies; *Pharm. Res.* 3 (6), (1986), 356-359
- Lee, S., Kollias, N., McAuliffe, D. J., Flotte, T. J., Doukas, A. G.; Topical drug delivery in humans with a single photomechanical wave; *Pharm. Res.* 16 (11), (1999), 1717-1721
- Lee, S., McAuliffe, D. J., Kollias, N., Flotte, T. J., Doukas, A. G.; Permeabilization and recovery of the stratum corneum in vivo: The synergy of photomechanical waves and sodium lauryl sulfate; *Laser. Surg. Med.* 29 (2), (2001), 145-150
- Leysen, J. E.; 5-HT₂ receptors; *Curr. Drug Targets: CNS Neurol. Disord.* 3 (1), (2004), 11-26
- Lipp, R., Laurent, H., Günther, C., Riedl, J., Esperling, P., Täuber, U.; Prodrugs of gestodene for matrix-type transdermal drug delivery systems; *Pharm. Res.* 15 (9), (1998), 1419-1424
- Lipp, R.; Müller-Fahrnow, A.; Use of X-ray crystallography for the characterization of single crystals grown in steroid containing transdermal drug delivery systems. *Eur. J. Pharm. Biopharm.* 47, (1999), 133-138
- Lipp, R.; Strategien und Technologien zur Optimierung von Matrix-Transdermalsystemen; Habilitationsschrift; Freie Universität Berlin, (2000)

Lombry, C., Dujardin, N., Pr eat, V.; Transdermal delivery of macromolecules using skin electroporation; *Pharm. Res.* 17 (1), (2000), 32-37

Lopez, A., Llinares, F., Cortell, C., Herraez, M.; Comparative enhancer effects of Span[®] 20 with Tween[®] 20 and Azone[®] on the in vitro percutaneous penetration of compounds with different lipophilicities; *Int. J. Pharm.* 202, (2000), 133-140

L oschmann, P.-A., Rettig, K. J., Wachtel, H., Dorow, R., Jenner, P., Marsden, C. D.; Lisuride and proterguride reverse MPTP-induced Parkinsonism in the common marmoset; in: Hrsg. Nagatsu, T. et al.; *Basic, clinical and therapeutic aspects of Alzheimer's and Parkinson's disease*, Volume 2; Plenum Press New York, (1990), 565-568

Ma, X., Taw, J., Chiang, C.-M.; Control of drug crystallization in transdermal matrix system; *Int. J. Pharm.* 142, (1996), 115-119

Marano, M.; Kaumann, A. J.; On the statistics of drug-receptor constants for partial agonists; *J. Pharmacol. Exp. Ther.* 198, (1976), 518-525

Martanto, W., Davis, S. P., Holiday, N. R., Wang, J., Gill, H. S., Prausnitz, M. R.; Transdermal delivery of insulin using microneedles in vivo; *Pharm. Res.* 21 (6), (2004), 947-952

McAllister, D. V., Wang, P. M., Davis, S. P., Park, J., Canatelle, P. J., Allen, M. G., Prausnitz, M. R.; Microfabricated needles for transdermal delivery of macromolecules and nanoparticles: Fabrication methods and transport studies; *P. Natl. Acad. Sci. USA* 100 (24), (2003), 13755-13760

Meehan, E., Gross, Y., Davidson, D., Martin, M., Tsals, I.; A microinfusor device for the delivery of therapeutic levels of peptides and macromolecules; *J. Control. Release* 46, (1996), 107-116

Meidan, V. M., Al-Khalili, M., Michniak, B. B.; Enhanced iontophoretic delivery of buspirone hydrochloride across human skin using chemical permeation enhancers; *Int. J. Pharm.* 264, (2003), 73-83

Menghin, S.; Pertz, H. H., Kramer, K., Seifert, R., Schunack, W., Elz, S.; N(alpha)-imidazolylalkyl and pyridylalkyl derivatives of histaprodifen: Synthesis and in vitro evaluation of highly potent H₁-receptor agonists; *J. Med. Chem.* 46, (2003), 5458-5470

Menon, G. K., Elias, P. M.; Morphologic basis for a pore-pathway in mammalian stratum corneum; *Skin Pharmacol.* 10, (1997), 246

Menon, G. K., Kollias, N., Doukas, A. G.; Ultrastructural evidence of stratum corneum permeabilization induced by photomechanical waves; *J. Invest. Dermatol.* 121 (1), (2003), 104-109

Menon, G. K.; New insights into skin structure: Scratching the surface; *Adv. Drug Deliver. Rev.* 54 (Suppl. 1), (2002), 3-17

- Merino, G., Kalia, Y. N., Delgado-Charro, M. B., Potts, R. O., Guy, R. H.; Frequency and thermal effects on the enhancement of transdermal transport by sonophoresis; *J. Control. Release* 88 (1), (2003), 85-94
- Metman, L. V., Gillespie, M., Farmer, C., Bibbiani, F., Konitsiotis, S., Morris, M., Shill, H., Bara-Jimenez, W., Mouradian, M. M., Chase, T. N.; Continuous transdermal dopaminergic stimulation in Parkinson's disease; *Clin. Neuropharmacol.* 24 (3), 2001, 163-169
- Mitragotri, S., Blankschtein, D., Langer, R.; Transdermal drug delivery using low-frequency sonophoresis; *Pharm. Res.* 13 (3), (1996), 411-420
- Mitragotri, S., Blankschtein, D., Langer, R.; Ultrasound-mediated protein delivery; *Science* 269 (5225), (1995a), 850-853
- Mitragotri, S., Edwards, D. A., Blankschtein, D., Langer, R.; A mechanistic study of ultrasonically-enhanced transdermal drug delivery; *J. Pharm. Sci.* 84 (6), (1995b), 697-706
- Mitragotri, S., Kost, J.; Low frequency sonophoresis; *Adv. Drug Deliver. Rev.* 56, (2004), 589-601
- Mitragotri, S., Kost, J.; Low-frequency sonophoresis: A noninvasive method of drug delivery and diagnostics; *Biotechnol. Progr.* 16, (2000a), 488-492
- Mitragotri, S., Ray, D., Farrell, J., Tang, H., Yu, B., Kost, J., Blankschtein, D., Langer, R.; Synergistic effect of low-frequency ultrasound and sodium lauryl sulfate on transdermal transport; *J. Pharm. Sci.* 89 (7), (2000b), 892-900
- MTT ET-50 Protocol; MatTek Corporation, Ashland, USA, Stand: 19.02.2004
- Müller-Schweinitzer, E.; Vasoconstrictor responses to dihydroergocristine and dihydroergotamine: Evidence for the involvement of 5-HT₁-like receptors; *Cardiovasc. Drug. Ther.* 4, (1990), 1455-1460
- Naik, A., Kalia, Y. N., Guy, R. H.; Transdermal drug delivery: Overcoming the skin's barrier function; *Pharm. Sci. Technol. To.* 3 (9), (2000), 318-326
- Nebigil, C. G., Hickel, P., Messaddeq, N., Vonesch, J.-L., Douchet, M. P., Monassier, L., Gyorgy, K., Matz, R., Adriantsitohaina, R., Manivet, P., Launay, J.-M., Maroteaux, L.; Ablation of serotonin 5-HT_{2B} receptors in mice leads to abnormal cardiac structure and function; *Circulation* 103, (2001), 2973-2979
- Newman-Tancredi, A., Cussac, D., Quentric, Y., Touzard, M., Verrièle, L., Carpentier, N., Millan, M. J.; Differential actions of antiparkinson agents at multiple classes of monoaminergic receptor. III Agonist and antagonist properties at serotonin, 5-HT₁ and 5-HT₂ receptor subtypes; *J. Pharmacol. Exp. Ther.* 303, (2002), 815-822
- Nichols, D. E.; Hallucinogens; *Pharmacol. Therapeut.* 101 (2), (2004), 131-181

Obeso, J. A., Grandas, F., Herrero, M. T., Horowski, R.; The role of pulsatile versus continuous dopamine receptor stimulation for functional recovery in Parkinson's disease; *Eur. J. Neurosci.* 6, (1994), 889-897

Oh, S. Y., Jeong, S. Y., Park, T. G., Lee, J. H.; Enhanced transdermal delivery of AZT (zidovudine) using iontophoresis and penetration enhancer; *J. Control. Release* 51, (1998), 161-168

Olanow, C. W., Obeso, J. A.; Preventing levodopa-induced dyskinesias; *Ann. Neurol.* 47 (1), (2000), 167-176

Olanow, C. W.; Present and future directions in the management of motor complications in patients with advanced PD; *Neurology* 61 (Suppl. 3), (2003), 24-33

Oppanol[®]-Kundeninformation, BASF, Ludwigshafen, Deutschland, (1984)

Panchagnulla, R.; Transdermal delivery of drugs; *Indian J. Pharmacol.* 29, (1997), 140-156

Park, E.-S., Chang, S.-J., Rhee, Y.-S., Chi, S.-C.; Effects of adhesives and permeation enhancers on the skin permeation of captopril; *Drug Dev. Ind. Pharm.* 27 (9), (2001), 975-980

Pertz, H. H., Eich, E.; Ergot alkaloids and their derivatives as ligands for serotonergic, dopaminergic, and adrenergic receptors; in: Hrsg. Kren, V, Cvak, L.; *Ergot: The genus claviceps*; Overseas Publishers Association, (1999), 411-440

Pertz, H. H., Elz, S.; In vitro pharmacology of sarpogrelate and the enantiomers of its metabolite: 5-HT_{2A} receptor specificity, stereoselectivity and modulation of ritanserin-induced depression of 5-HT contractions in rat tail artery; *J. Pharm. Pharmacol.* 47, (1995), 310-316

Peterson, T.A., Wick, S. M., Ko, C.; Design, development, manufacturing and testing of transdermal drug delivery systems; in: Hrsg. Ghosh, T. K., Pfister, W. R., Yum, S. I.; *Transdermal and topical drug delivery systems*; Interpharm Press Inc. Buffalo Grove, (1997), 249-297

Pfeiffer, R. F.; A promising new technology for Parkinson's disease; *Neurology* 65 (2) Suppl. 1, (2005), 6-9

Pfeiffer, R. F.; Potential of transdermal drug delivery in Parkinson's disease; *Drug. Aging* 19 (8), (2002), 561-570

Pfister, W. R.; Transdermal and dermal therapeutic systems: Current status; in: Hrsg. Ghosh, T. K., Pfister, W. R., Yum, S. I.; *Transdermal and topical drug delivery systems*; Interpharm Press Inc. Buffalo Grove, (1997), 33-112

Physicians' Desk Reference 58, Thomson PDR at Montvale, NJ, (2004)

Ponec, M., Boelsma, E., Gibbs, S., Mommass, M.; Characterization of reconstructed skin models; *Skin Pharmacol. Appl.* 15 (Suppl. 1), (2002a), 4-17

- Ponec, M., Boelsma, E., Weerheim, A., Mulder, A., Bouwstra, J., Mommass, M.; Lipid and ultrastructural characterization of reconstructed skin models; *Int. J. Pharm.* 203, (2000), 211-225
- Ponec, M.; Skin constructs for replacement of skin tissues for in vitro testing; *Adv. Drug Deliv. Rev.* 54 (Suppl. 1), (2002b), 19-30
- Pongjanyakul, T., Prakongpan, S., Panomsuk, S., Puttipipatkachorn, S., Priprem, A.; Shed king cobra and cobra skin as model membranes for in-vitro nicotine permeation studies; *J. Pharm. Pharmacol.* 54, (2002), 1345-135
- Pongjanyakul, T., Prakongpan, S., Priprem, A.; Permeation studies comparing cobra skin with human skin using nicotine transdermal patches; *Drug Dev. Ind. Pharm.* 26 (6), (2000), 635-642
- Prausnitz, M. R., Mitragotri, S., Langer, R.; Current status and future potential of transdermal drug delivery, *Nat. Rev. Drug Discov.* 3, (2004), 115-124
- Prausnitz, M. R.; Microneedles for transdermal drug delivery; *Adv. Drug Deliv. Rev.* 56 (2004), 581-587
- Pschyrembel *Klinisches Wörterbuch*, 256. Auflage, Walter de Gruyter Berlin New York, (1990), S. 657
- Rama Rao, P., Ramakrishna, S., Diwan, P. V.; Drug release kinetics from polymeric films containing propranolol hydrochloride for transdermal use; *Pharm. Dev. Technol.* 5 (4), (2000), 465-472
- Riederer, P.; Biochemistry of dopaminergic systems in Parkinson's disease; in: Hrsg. Van Manen, J., Rinne, U. K.; *Lisuride: A new dopamine agonist and Parkinson's disease*; Excerpta Medica Amsterdam, (1986), 44-53
- Roberts, M. S., Horlock, E.; Effect of repeated skin application on percutaneous penetration of salicylic acid; *J. Pharm. Sci.* 67, (1974), 1685-1687
- Rote Hand Brief Parkotil[®], Lilly Deutschland GmbH, (22.11.2004)
- Rote Hand Brief Parkotil[®], Lilly Deutschland GmbH, (30.06.2004)
- Rote Liste 2005; Hrsg. Rote Liste Service GmbH, Frankfurt/Main, Editio Cantor Verlag Aulendorf, (2005)
- Rothman, R. B., Baumann, M. H., Savage, J. E., Rauser, L., McBride, A., Hufeisen, S. J., Roth, B. L.; Evidence for possible involvement of 5-HT_{2B}-receptors in the cardiac valvulopathy associated with fenfluramine and other serotonergic medications; *Circulation* 102, (2000), 2836-2841
- Roy, S. D., Gutierrez, M., Flynn, G. L., Cleary, G. W.; Controlled transdermal delivery of fentanyl: Characterizations of pressure-sensitive adhesives for matrix patch design; *J. Pharm. Sci.* 85 (5), (1996), 491-495

- Roy, S. D.; Preformulation aspects of transdermal drug delivery systems; in: Hrsg. Ghosh, T. K., Pfister, W. R., Yum, S. I.; Transdermal and topical drug delivery systems; Interpharm Press Inc. Buffalo Grove, (1997), 139-166
- Santi, P., Colombo, P., Bettini, R., Catellani, P. L., Minutello, A., Volpato, N. M., Drug reservoir composition and transport of salmon calcitonin in transdermal iontophoresis; *Pharm. Res.* 14 (1), (1997), 63-66
- Sanvordeker, D. R., Cooney, J. G., Wester, R. C.; Transdermal nitroglycerin pad; US Patent #4,336,243
- Sasaki, H., Kojima, M., Mori, Y., Nakamura, J., Shibasaki, J.; Enhancing effect of pyrrolidone derivatives on transdermal drug delivery II. Effect of application concentration and pre-treatment of enhancer; *Int. J. Pharm.* 60, (1990a), 177-183
- Sasaki, H., Kojima, M., Mori, Y., Nakamura, J., Shibasaki, J.; Enhancing effect of pyrrolidone derivatives on transdermal penetration of 5-fluorouracil, triamcinolone acetonide, indomethacin, and flurbiprofen; *J. Pharm. Sci.* 80 (6), (1991), 533-538
- Sasaki, H., Kojima, M., Nakamura, J., Shibasaki, J.; Enhancing effect of combining two pyrrolidone vehicles on transdermal drug delivery; *J. Pharm. Pharmacol.* 42, (1990b), 196-199
- Sasaki, H., Kojima, M., Nakamura, J., Shibasaki, J.; Acute toxicity and skin irritation of pyrrolidone derivatives as transdermal penetration enhancers; *Chem. Pharm. Bull.* 38 (8), (1990c), 2308-2310
- Sasaki, H., Kojima, M., Nakamura, J., Shibasaki, J.; Enhancing effect of pyrrolidone derivatives on transdermal penetration of phenolsulfonphthalein and indomethacin from aqueous vehicle; *Chem. Pharm. Bull.* 38 (3), (1990d), 797-799
- Sasaki, H., Kojima, M., Nakamura, J., Shibasaki, J.; Enhancing effect of pyrrolidone derivatives on the transdermal penetration of sulfaguanidine, aminopyrine and Sudan III; *J. Pharmacobio-Dynam.* 13 (3), (1990e), 200-205
- Schenkel, I., Müller, P., Pethice, D.; The therapeutic value of transdermal drug delivery; in: Hrsg. Gurny, R., Teubner, A.; Dermal and transdermal drug delivery; Wissenschaftliche Verlagsgesellschaft Stuttgart, APV Paperback Band 31, (1993), 173-185
- Scheuplein, R. J.; Mechanism of percutaneous absorption II. Transient diffusion and the relative importance of various routes of skin penetration; *J. Invest. Dermatol.* 48 (1), (1967), 79-88
- Scheuplein, R. J.; Mechanism of percutaneous adsorption I. Routes of penetration and the influence of solubility; *J. Invest. Dermatol.* 45 (5), (1965), 334-346
- Scheuplein, R. J.; Permeability of the skin: A review of major concepts and some new developments; *J. Invest. Dermatol.* 67, (1976), 672-676

Schöning, C., Flieger, M., Pertz, H. H.; Complex interaction of ergovaline with 5-HT_{2A}, 5-HT_{1B/1D}, and α_1 receptors in isolated arteries of rat and guinea pig; *J. Anim. Sci.* 79, (2001), 2202-2209

Schwarz Pharma Pressemitteilung; Phase III data for rotigotine in advanced Parkinson's disease at EFNS Congress; (2005)

Serratrice, J., Disdier, P., Habib, G., Viallet, F., Weiller, P.; Fibrotic valvular heart disease subsequent to bromocriptine treatment; *Cardiol. Rev.* 10 (6), (2002), 334-336

Setola, V., Hufeisen, S. J., Grande-Allen, K. J., Vesely, I., Glennon, R. A., Blough, B., Rothman, R. B., Roth, B. L.; 3,4-Methylenedioxyamphetamine (MDMA, "Ecstasy") induces fenfluramine-like proliferative actions on human cardiac valvular interstitial cells in vitro; *Mol. Pharmacol.* 63 (6), (2003), 1223-1229

Shaker, D. S., Ghanem, A.-H., Li, S. K., Warner, K. S., Hashem, F. M., Higuchi, W. I.; Mechanistic studies of the effect of hydroxypropyl- β -cyclodextrin on in vitro transdermal permeation of corticosterone through hairless mouse skin; *Int. J. Pharm.* 253, (2003), 1-11

Siewert, M., Dressman, J., Brown, C. K., Shah, V. P.; FIP/AAPS Guidelines to dissolution / in vitro release testing of novel/special dosage forms; *AAPS PharmSciTech* 4 (1), (2003), Artikel 7

Simon, G.A., Maibach, H.I.; Relevance of hairless mouse as an experimental model of percutaneous penetration in man; *Skin Pharmacol. Appl.* 11, (1998), 80-86

Simula, D. V., Edwards, W. D., Tazelaar, H. D., Conolly, H. M., Schaff, H. V.; Surgical pathology of carcinoid heart disease: A study of 139 valves from 75 patients spanning 20 years; *Mayo Clin. Proc.* 77, (2002), 137-147

Singh, B. N., Singh, R. B., Singh, J.; Effects of ionization and penetration enhancers on the transdermal delivery of 5-fluorouracil through excised human stratum corneum; *Int. J. Pharm.* 298, (2005), 98-107

Sinha, V. R., Kaur, M. P.; Permeation enhancers for transdermal drug delivery; *Drug Dev. Ind. Pharm.* 26 (11), (2000), 1131-1140

Solupor[®] 10P05A; Product Data Sheet, Version 2, DSM Solutech, Heerlen, Niederlande

Stocchi, F., Ruggieri, S., Vacca, L., Olanow, C. W.; Prospective randomized trial of lisuride infusion versus oral levodopa in patients with Parkinson's disease; *Brain* 125, (2002), 2058-2066

Stocchi, F.; Prevention and treatment of motor fluctuations; *Parkinsonism Relat. D.* 9, (2003), 73-81

Stoughton, R. B.; Enhanced percutaneous penetration with 1-dodecylazacycloheptan-2-one; *Arch. Dermatol.* 118 (7), (1982), 474-477

Strassner, D. S.; Synthese, in vitro-Pharmakologie und Struktur-Wirkungsbeziehungen chiraler 5-HT_{2A}-Rezeptorantagonisten der 3-Phenylchinolin-Reihe; Dissertation; Freie Universität Berlin, (2003)

Sugibayashi, K., Nakayama, S., Seki, T., Hosoya, K.-I., Morimoto, Y.; Mechanism of skin penetration-enhancing effect by laurocapram; *J. Pharm. Sci.* 81 (1), (1992), 58-64

Suhonen, T. M., Bouwstra, J. A., Urtti, A.; Chemical enhancement of percutaneous absorption in relation to stratum corneum structural alterations; *J. Control. Release* 59, (1999), 149-161

Sun, Y.; Skin absorption enhancement by physical means: Heat, ultrasound and electricity; in: Hrsg. Ghosh, T. K., Pfister, W. R., Yum, S. I.; *Transdermal and topical drug delivery Systems*; Interpharm Press Inc. Buffalo Grove, (1997), 327-355

Surber, C., Schwarb, F. P., Smith, E. W.; Tape stripping method; in: Hrsg. Swarbrick, J.; *Percutaneous absorption: Drug-cosmetics-mechanisms-methology*; Marcel Dekker Inc. New York Basel, (1999), 395-409

Surfadone[®] LP100; Toxicity Information, ISP, Köln, Deutschland, (02/10/2004)

Surfadone[®] LP300; Toxicity Information, ISP, Köln, Deutschland, (02/10/2004)

Suwanpidokkul, N., Thongnopnua, P., Umprayn, K.; Transdermal delivery of zidovudine (AZT): the effects of vehicles, enhancers, and polymer membranes on permeation across cadaver pig skin; *AAPS PharmSciTech* 5 (3), (2004), Article 48

Tang, H., Wang, C. C. J., Blankschtein, D., Langer, R.; An investigation of the role of cavitation in low-frequency ultrasound-mediated transdermal drug delivery; *Pharm. Res.* 19 (8), (2002), 1160-1169

Tao, S. L., Desai, T. A.; Microfabricated drug delivery systems: From particles to pores; *Adv. Drug Deliver. Rev.* 55, (2003), 315-328

Tezel, A., Mitragotri, S.; Interaction of inertial cavitation bubbles with stratum corneum lipid bilayers during low-frequency sonophoresis; *Biophys. J.* 85 (6), (2003), 3502-3512

The Parkinson Study Group; A controlled trial of rotigotine monotherapy in early Parkinson's disease; *Arch. Neurol.* 60, (2003), 1721-1728

Tsai, J. C., Thornfeldt, R. H., Gao, W. N., Feingold, K. R., Elias, P. M.; Metabolic approaches to enhance transdermal drug delivery. 1. Effect of lipid synthesis inhibitors; *J. Pharm. Sci.* 85 (6), (1996), 643-648

Van Camp, G., Flamez, A., Cosyns, B., Goldstein, J., Perdaens, C., Schoors, D.; Heart valvular disease in patients with Parkinson's disease treated with high-dose pergolide; *Neurology* 61, (2003), 859-861

Van Camp, G., Flamez, A., Cosyns, B., Weytjens, C., Muyltermans, L., van Zandijcke, M., De Sutter, J., Santens, P., Decoodt, P., Moerman, C., Schoors, D.; Treatment of Parkinson's disease with pergolide and relation to restrictive valvular heart disease; *Lancet* 363, (2004), 1179-1183

Vanbever, R., Leroy, M. A., Pr at, V.; Transdermal permeation of neutral molecules by skin electroporation; *J. Control. Release* 54 (3), (1998), 243-250

Verma, R. K., Garg, S.; Development and evaluation of osmotically controlled oral drug delivery system of glipizide; *Eur. J. Pharm. Biopharm.* 57, (2004), 513-525

Wachtel, H., Dorow, R., Sauer, G.; Novel 8α -aminoergolines with inhibitory and stimulatory effects on Prolactin secretion in rats; *Life Sci.* 35, (1984), 1859-1867

Wachtel, H., Dorow, R.; Dual action of central dopamine function of transdihydrolisuride, a 9, 10-dihydrogenated analogue of the ergot dopamine agonist lisuride; *Life Sci.* 32, (1983), 421-432.

Wachtel, H.; Central dopaminergic and antidopaminergic effects of ergot derivatives structurally related to lisuride; in: Hrsg. Calne, D. B., Horowski, R., McDonald, R. J., Wuttke, W.; Lisuride and other dopamine agonists; Raven Press New York, (1983), 109-125

Wester, R. C., Maibach, H. I.; Dose response of percutaneous absorption; in: Hrsg. Swarbrick, J.; Percutaneous absorption: Drug-cosmetics-mechanisms-methology; Marcel Dekker Inc. New York Basel, (1999b), 297-313

Wester, R. C., Maibach, H. I.; Regional variation in percutaneous absorption; in: Hrsg. Swarbrick, J.; Percutaneous absorption: Drug-cosmetics-mechanisms-methology; Marcel Dekker Inc. New York Basel, (1999a), 107-116

Wiechers, J. W., Drenth, B. F. H., Jonkman, J. H. G.; Percutaneous absorption, metabolic profiling, and excretion of the penetration enhancer Azone[®] after multiple dosing of an Azone[®]-containing triamcinolone acetonide cream in humans; *J. Pharm. Sci.* 79 (2), (1990), 111-115

Wilhelmus, K. R.; The Draize eye test; *Surv. Ophtalmol.* 45 (6), (2001), 493-515

Williams, A. C., Barry, B. W.; Penetration enhancers; *Adv. Drug Deliver. Rev.* 56 (5), (2003), 603-618

Woitalla, D., M ller, T., Benz, S., Horowski, R., Przuntek, H.; Transdermal lisuride delivery in the treatment of Parkinson's disease; *J. Neural Transm* 68, (2004), 89-95

Yoneto, K., Ghanem, A.-H., Higuchi, W., Peck, K. D., Kevin Li, S.; Mechanistic studies of the 1-alkyl-2-pyrrolidones as skin permeation enhancers; *J. Pharm. Sci.* 84 (3), (1995), 312-317

Yoneto, K., Kevin Li, D., Higuchi, W. I., Shimabayashi, S.; Influence of the permeation enhancers 1-alkyl-2-pyrrolidones on the permeant partitioning into the stratum corneum; *J. Pharm. Sci.* 87 (2), (1997), 209-214

Yum, S. I.; Transdermal therapeutic systems and rate controlled drug delivery; Med. Prog. Technol. 15, (1989), 47-52

Zhong, H., Minnemann, K. P.; α_1 -Adrenoceptor subtypes; Eur. J. Pharmacol. 375, (1999), 261-276

Zhou, X., Xu, J., Yao, K., Liu, D., Wang, L., Wang, X., Yang, X., Liu, Y., Fang, Y.; Interaction of 1-dodecyl-azacycloheptan-2-one with mouse stratum corneum; J. Biomat. Sci.-Polym. E. 16 (5), (2005), 563-574

Zimmermann, I.; Determination of pK_a values from solubility data; Int. J. Pharm. 13, (1983), 57-65