

References

- Abdel-Raouf, M., Abdul-Raheim, A. & Abdel-Azim, A. (2011). Surface Properties and Thermodynamic Parameters of Some Sugar-Based Ethoxylated Amine Surfactants: Synthesis, Characterization, and Demulsification Efficiency. *Journal of Surfactants and Detergents*, 14(1), 113-121.
- Adam, S. C. (1999). Drug and excipient diffusion and solubility in acrylate adhesives measured by infrared-attenuated total reflectance (IR-ATR) spectroscopy. *Journal of Controlled Release*, 61(1-2), 219-231.
- Adamson, T. A. (1997). *Physical Chemistry of Surfaces* (6th Edition ed.). New York: Wiley.
- Alawi, S. M. (2011). Effect of N,N-dimethyl acetamide on the critical micelle concentration of aqueous solutions of sodium surfactants. *Journal of Molecular Liquids*, 160(2), 63-66.
- Anderson, D., Gruner, M. & Stainislas, L. (1988). Geometrical aspects of the frustration in the cubic phases of lyotropic liquid crystals. *Proc. NatL Acad Sci USA*, 85, 5364-5368.
- Anthony, P., Holst, O., Patrick, J. B. & Itzstein, M.V. (2009). *Microbial glycobiology: structure, Relevance and applications*. London: Academic Press is an imprint of Elsevier.
- Appukkuttan, P. D., Fokin, T., Valery, V. & Eycken, V. (2005). A Microwave assisted Click Chemistry Synthesis of 1,4-Disubstituted 1,2,3-Triazoles via a Copper(I)-Catalyzed Three-Component Reaction. *ChemInform*, 36(10), 485-492.
- Arora, B., Shafi, S., Singh, S., Ismail, T. & Sampath, K. M. (2008). A novel domino-click approach for the synthesis of sugar based unsymmetrical bis-1,2,3-triazoles. *Carbohydr. Res*, 343, 139-144.
- Ascêncio, D., Orsato, A., Robson, A., Duarte, M., Eugênia, R. & Miguel, D. (2006). Complete ¹H and ¹³C NMR assignment of digeneaside, a low-molecular-mass carbohydrate produced by red seaweeds. *Carbohydrate Research*, 341(5), 677-682.
- Attwood, T. K., Lydon, J. E., Hall, C. & Tiddy, G. J. T. (1990). The distinction between chromonic and amphiphilic lyotropic mesophases. *Liq. Cryst.*, 7, 657.
- Backer, H. J. (1937). Ethers-Sels de L'hexahydroxybenzène (composés planradiaires IV). *Recueil des Travaux Chimiques des Pays-Bas*, 56(12), 1161-1174.
- Balachandran, V., Lakshmi, A. & Janaki, A. (2011). Vibrational spectroscopic studies and Natural Bond Orbital analysis of 4,6-dichloro-2-(methylthio)pyrimidine based on density functional theory. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 81(1), 1-7.
- Balzer, D. & Luders, F. (2000). *Nonionic surfactants: Alkyl Polyglucosides*. New York, USA: Marcel Dekker, Inc.
- Banoub, J. & Bundle, D. R. (1979). Stannic tetrachloride catalyzed glycosidation of 8-ethoxycarbonyloctanol by cellobiose, lactose, and maltose octaacetates; synthesis of α - and β -glycosidic linkages. *Canadian Journal of Chemistry*, 57(16), 2085-2090.
- Barberá, J., Garcés, A. C., Jayaraman, N., Omenat, A., Serrano, J. L. & Stoddart, J. F. (2001). Sugar-Coated Discotic Liquid Crystals. *Advanced Materials*, 13(3), 175-180.

- Beavis, R.C. & Chait B.T. (1989). Matrix-assisted laser-desorption mass spectrometry using 355 nm radiation. *Rapid Commun. Mass Spectrom.* 3 (12): 436–9.
- Bechgaard, K. P. (1972). Mono-, di-, and trications of hexamethoxytriphenylene. Novel anodic trimerization. *Journal of the American Chemical Society*, 94(13), 4749-4750.
- Bellare, J. R., Davis, H. T., Miller, W. G. & Scriven, L. E. (1990). Polarized optical microscopy of anisotropic media: Imaging theory and simulation. *Journal of Colloid and Interface Science*, 136(2), 305-326.
- Bergmann, E. & Bergmann, B. O. (1937). Synthesis of Triphenylene. *Journal of the American Chemical Society*, 59(8), 1441-1442.
- Bhattacharya, S. (2005). Microcalorimetric and Conductivity Studies with Micelles Prepared from Multi-Headed Pyridinium Surfactants. *Langmuir*, 21(13), 5747-5751.
- Binder, H., Kohlstrunk, B. & Heerklotz, H. (1999). Hydration and Lyotropic Melting of Amphiphilic Molecules: A Thermodynamic Study Using Humidity Titration Calorimetry. *Journal of Colloid and Interface Science*, 220, 235–249.
- Bishop, C. T. (1963). Glycosidation of sugars. II. Methanolysis of D-xylose, D-arabinose, D-lyxose, and D-ribose. *Can. J. Chem*, 41, 2743-2758.
- Bisht, S., Fatima, S., Akhilesh, K., Neha, R., Jaiswal, N. & Rama. P. (2009). Synthetic studies in butenonyl C-glycosides: Preparation of polyfunctional alkanonyl glycosides and their enzyme inhibitory activity. *Bioorganic & Medicinal Chemistry Letters*, 19(10), 2699-2703.
- Blaskó, A., Bunton, A., Bunel, S., Ibarra, C. & Moraga, E. I. (1997). Determination of acid dissociation constants of anomers of amino sugars by ¹H NMR spectroscopy. *Carbohydrate Research*, 298(3), 163-172.
- Blokzijl, W. E. (1993). Hydrophobic Effects. Opinions and Facts. *Angewandte Chemie International Edition in English*, 32(11), 1545-1579.
- Bock, V. D., Hiemstra, H. & Maarseveen, J. H. (2006). CuI-Catalyzed Alkyne–Azide “Click” Cycloadditions from a Mechanistic and Synthetic Perspective. *European Journal of Organic Chemistry*, 2006(1), 51-68.
- Boden, N., Borner, R. C., Bushby, R. J., Cammidge, A. N. & Jesudason, M. V. (1993). The synthesis of triphenylene-based discotic mesogens New and improved routes. *Liquid Crystals*, 15(6), 851-858.
- Bonnaud, M., Weiss, J. M. & David, J. (2010). Interaction of a Food-Grade Cationic Surfactant (Lauric Arginate) with Food-Grade Biopolymers (Pectin, Carrageenan, Xanthan, Alginate, Dextran, and Chitosan). *Journal of Agricultural and Food Chemistry*, 58(17), 9770-9777.
- Boons, G. J. (1996). Strategies in oligosaccharide synthesis. *Tetrahedron*, 52, 1095-1121.
- Boons, G. K. (2000). *Organic synthesis with carbohydrates*: Blackwell Publishing.
- Boyd, B. J., Drummond, C. J., Krdkiewska, I. & Grieser, F. (2000). How Chain Length, Headgroup Polymerization, and Anomeric Configuration Govern the Thermotropic and Lyotropic Liquid Crystalline Phase Behavior and the Air–Water Interfacial Adsorption of Glucose-Based Surfactants. [doi: 10.1021/la991573w]. *Langmuir*, 16(19), 7359-7367.
- Brackmann, B. H. (2004). *The statical world of raw materials, safty alcohol and surfactants*. Paper presented at the CD Proceeding 6th World Surfactant Congress CESIO.

- Bräse, S., Gil, C., Knepper, K. & Zimmermann, V. (2005). Organic Azides: An Exploding Diversity of a Unique Class of Compounds. *Angewandte Chemie International Edition*, 44(33), 5188-5240.
- Brito, R. M. (1986). Determination of the critical micelle concentration of surfactants using the fluorescent probe N-phenyl-1-naphthylamine. *Analytical Biochemistry*, 152(2), 250-255.
- Broene, R. & Diederich, B. (1991). The synthesis of circumanthracene. *Tetrahedron Letters*, 32(39), 5227-5230.
- Bruce, D. W., Dunmur, D. A., Lalinde, E., Maitlis, P. M. & Styring, P. (1986). Novel types of ionic thermotropic liquid crystals. *Nature*, 323(6091), 791-792.
- Buestein, B. R. (1982). *Amphoteric Surfactants*. New York: Marcel Dekker.
- Buhler, E., Oelschlaeger, C., Waton, G., Rawiso, M., Schmidt, J., Talmon, Y. & Candau, S. J. (2006). Structural and Dynamical Properties of Ribbonlike Self-Assemblies of a Fluorinated Cationic Surfactant. *Langmuir*, 22(6), 2534-2542.
- Buranov, A. U. (2012). Fractionation of flax shives with pressurized aqueous ethanol. *Industrial Crops and Products*, 35(1), 77-87.
- Bush, C. A., Martin-Pastor, M. & Imbery, A. (1999). Structure and conformation of complex carbohydrates of glycoproteins, glycolipid and bacterial polysaccharides. *Annual Review of Biophysics and Biomolecular Structure*, 28(1), 269-293.
- Bushby, R. J. (2002). Discotic liquid crystals 25 years on. *Current Opinion in Colloid & Interface Science*, 7(5-6), 343-354.
- Calderer, M. C. (2001). Studies of layering and chirality of smectic A* liquid crystals. *Mathematical and Computer Modelling*, 34(12-13), 1273-1288.
- Capon, B. (1969). Mechanism in carbohydrate chemistry. *Chem. Rev.*, 69(4), 407-498.
- Caroline, E. (2006). Latest market analysis. *Focus on Surfactants*, 2006(5), 1-2.
- Carvalho, I., Andrade, P., Campo, V. L., Guedes, P. M., Sesti-Costa, R. & Field, R. A. (2010). 'Click chemistry' synthesis of a library of 1,2,3-triazole-substituted galactose derivatives and their evaluation against *Trypanosoma cruzi* and its cell surface trans-sialidase. *Bioorganic & Medicinal Chemistry*, 18(7), 2412-2427.
- Chan, K. L., Coumbarides, G. S., Islam, S. & Wyatt, P. B. (2005). Synthesis of propargyl C-glycosides using allenyltributylstannane. *Tetrahedron Letters*, 46(1), 61-65.
- Chandrasekhar, S. (1992). *Liquid Crystals*. New York: Cambridge University Press.
- Chapuzet, J. S. (1991). The anodic trimerization of aromatic orthodiesters: new developments. *Tetrahedron*, 47(4-5), 791-798.
- Charles, T. W. (1999). Carbohydrates Studied By NMR. In C. L. Editor-in-Chief: John (Ed.), *Encyclopedia of Spectroscopy and Spectrometry* (pp. 172-180). Oxford: Elsevier.
- Ching-Erh, L. (2004). Determination of critical micelle concentration of surfactants by capillary electrophoresis. *Journal of Chromatography A*, 1037(1-2), 467-478.
- Chou, C., Wang, D., Bagui, M., Hsu, J. & Peng, Z. (2010). Syntheses and optical properties of triphenylene-containing conjugated polymers. *Journal of Luminescence*, 130(6), 986-994.
- Crichton, R., Rawn, R. J. & Camille, F. (1990). In *Traité de Biochimie*. Paris.
- Christian G., K. (2008). *Anionic Surfactants (Surfactant Science)*: Publisher: CRC.
- Christiansen, D., Vaughan, H. A., Miland, J., Dodge, N., Mouhtouris, E. & Sandrin, M. S. (2011). Antibody responses to glycolipid-borne carbohydrates require CD4+ T cells but not CD1 or NKT cells. *Immunol Cell Biol*, 89(4), 502-510.

- Ciani, A., Goss, K. U. & Schwarzenbach, R. P. (2005). Determination of molar absorption coefficients of organic compounds adsorbed in porous media. *Chemosphere*, 61(10), 1410-1415.
- Clar, E. (1964). *Polycyclic Hydrocarbons* (Vol. 1+2). New York: John Wiley and Sons.
- Clar, E. (1972). *The Aromatic Sextet*. New York: Wiley.
- Cocinero, E. J., Çarçabal, P., Vaden, T. D., Simons, J. P. & Davis, B. G. (2011). Sensing the anomeric effect in a solvent-free environment. *Nature*, 469(7328), 76-79.
- Collings, P. J. (1997). *Introduction to Liquid crystals, Chemistry and Physics*. London: Taylor & Francis Ltd.
- Coppola, L., Gordano, A., Procopio, A. and Sindora, G. (2002). Phase equilibria and physical-chemical properties of sugar-based surfactants in aqueous solutions. *Colloid and Surface A: Physicochemical and Engineering Aspects.*, 196, 175-187.
- Cornelisse, J. H. (1975). Photosubstitution reactions of aromatic compounds. [doi: 10.1021/cr60296a001]. *Chemical Reviews*, 75(4), 353-388.
- Corrin, M. L. (1948). The effect of salts and chain length on the critical concentrations of colloidal electrolytes. *Journal of Colloid Science*, 3(4), 333-338.
- Cox, J. S., Woodard, G. D. & McCrone, W. C. (1971). Solid-state chemistry of cromolyn sodium (disodium cromoglycate). *J. Pharm. Sci.*, 60(10), 1458-1465.
- Craats, A. M., Stutzmann, N., Bunk, O., Nielsen, M. M., Watson, M., Müllen, K., Chanzy, H. D., Siringhaus, H. & Friend, R. H. (2003). Meso-Epitaxial Solution-Growth of Self-Organizing Discotic Liquid-Crystalline Semiconductors. *Advanced Materials*, 15(6), 495-499.
- Crich, D. (2010). Mechanism of a Chemical Glycosylation Reaction. *Accounts of Chemical Research*, 43(8), 1144-1153.
- Cui, Z. W. (2006). A continuum model for flows of cholesteric liquid crystal polymers and permeation flows. *Journal of Non-Newtonian Fluid Mechanics*, 138(1), 44-61.
- Curatolo, W. (1987). Glycolipid function. *Biochim Biophys Acta*, 906, 137-160.
- Dahmén, J., Frejd, T., Grönberg, G., Lave, T. & Noori, G. (1983). 2-Bromoethyl glycosides: applications in the synthesis of spacer-arm glycosides. *Carbohydrate Research*, 118(0), 292-301.
- Dahmén, J., Frejd, T., Grönberg, G., Lave, T. & Noori, G. (1983). 2-Bromoethyl glycosides: synthesis and characterisation. *Carbohydrate Research*, 116(2), 303-307.
- Davies, J. T. (1957). "A quantitative kinetic theory of emulsion type, I. Physical chemistry of the emulsifying agent," Gas/Liquid and Liquid/Liquid Interface. *Proceedings of the International Congress of Surface Activity*, 426-438.
- Davies, W. P. (1957). The synthesis of polycyclic aromatic compounds. Part I. The reaction of quinones with vinyl naphthalenes and related dienes. *Journal of the Chemical Society*, 4967-4970.
- Demus, D. R. (1984). *Textures of Liquid crystals*. Weinheim, New York: Verlag Chemie.
- Dickinson, A. J., LaRacunte, N. D., Mckitterick, C. B. & Collings, P.J. (2009). Aggregate structure and free energy changes in chromonic liquid crystals. *Mol. Cryst. Liq. Cryst.*, 509, 9-20.

- Diederich, F. H. (1978). Benzenoid versus Annulenic Aromaticity: Synthesis and Properties of Kekulene. *Angewandte Chemie International Edition in English*, 17(5), 372-374.
- Dominguez, A., Fernandez, A., Gonzalez, N., Iglesias, E. & Montenegro, L. (1997). Determination of Critical Micelle Concentration of Some Surfactants by Three Techniques. *Journal of Chemical Education*, 74(10), 1227-1231.
- Drickamer, K. T. (1998). Evolving views of protein glycosylation. *Trends Biochem Sci*, 23, 321-324.
- Drickamer, K. T. (2006). *Introduction to Glycobiology*: Oxford University Press.
- Drummond, C. J. (1998). Nonionic lactose and lactitol based surfactants: comparison of some physico-chemical properties. *Colloids and Surfaces A: Physico-chemical and Engineering Aspects*, 141(1), 131-142.
- Du Nooy, L. P. (1925). An interfacial tensiometer for universal use. *Journal of General Physiology*, 7(5), 625-631.
- Du, Y., Linhardt, R. J. & Vlahov, I. R. (1998). Recent advances in stereoselective c-glycoside synthesis. *Tetrahedron*, 54(34), 9913-9959.
- Dwek, R. (1995). Glycobiology: "towards understanding the function of sugars." *Biochem Soc Trans*, 23, 1-25.
- Dwek, R. (1995). Glycobiology: more functions for oligosaccharides. *Science*, 269, 1234-1235.
- Dyen, M. E., Herman, C. & Swern, D. (1966). Improved Preparation of 9-Octadecenes. *J. Am. Oil Chemists SOC*, 43, 431-432.
- Eastoe, J., Rueda, P., Harrison, B. J. & Pitt, A. R. (1994). Properties of a Dichained "Sugar Surfactant". *Langmuir*, 10(12), 4429-4433.
- Edwards, D. J., Jones, J. W., Lozman, O., Ormerod, A. P., Sintyureva, M. & Tiddy, G. J. T. (2008). Chromonic liquid crystal formation by Edicol Sunset Yellow. *J. Phys. Chem. B*, 112(1), 4628-4636.
- Ehud, M. L. (1996). Lipidic cubic phases: A novel concept for the crystallization of membrane proteins. *Proc. Natl. Acad. Sci. USA*, 93(14532-14535).
- Ellervik, U., Jansson, K. & Magnusson, G. (1998). Gas Chromatographic Investigation of the Boron Trifluoride Etherate-Induced Formation and Anomerization of Glucopyranosides. *Journal of Carbohydrate Chemistry*, 17(4-5), 777-784.
- Elsayed, Z., Salem, I., Shahin, M.I. & Mohammed, F. (2010). Applicability of Fourier Transform Infrared (FT-IR) Spectroscopy for Rapid Identification of Some Yeasts and Dermatophytes Isolated from Superficial Fungal Infections. *J Egypt Women Dermatol Soc*, 7(2), 105-110.
- Emsley, J. W. (2007). Forty years of Progress in Nuclear Magnetic Resonance Spectroscopy. *Progress in Nuclear Magnetic Resonance Spectroscopy*, 50(4), 179-198.
- Fahrenfort, J. (1961). Attenuated total reflection: A new principle for the production of useful infra-red reflection spectra of organic compounds. *Spectrochimica Acta*, 17(7), 698-709.
- Fahrenfort, J. (1989). Attenuated total reflection: A new principle for the production of useful infra-red reflection spectra of organic compounds. *Spectrochimica Acta Part A: Molecular Spectroscopy*, 45, Supplement 1(0), 251-263.
- Fahrenfort, J. (1962). On the determination of optical constants in the infrared by attenuated total reflection. *Spectrochimica Acta*, 18(9), 1103-1116.
- Falbe, J. (1987). *Surfactants in Consumer Products: Theory, Technology and Applications*. Berlin, Heidelberg, New York, London, Paris, Tokyo: Springer-Verlag.

- Faraday, M. (1825). On New Compounds of Carbon and Hydrogen, and on Certain Other Products Obtained during the Decomposition of Oil by Heat. *Philosophical Transactions of the Royal Society of London*, 115, 440–466.
- Fazio, F., Bryan, M. C., Blixt, O., Paulson, C. & Wong, C. (2002). Synthesis of Sugar Arrays in Microtiter Plate. *Journal of the American Chemical Society*, 124(48), 14397-14402.
- Ferdinand C., L. & Würthner, F. (2010). Self-assembly and semiconductivity of an oligothiophene supergelator. *Beilstein J. Org. Chem.*, 6, 1070-1078.
- Fernley, G. (1978). Zwitterionic surfactants: Structure and performance. *Journal of the American Oil Chemists' Society*, 55(1), 98-103.
- Fieldson, G. T. (1993). The use of FT-IR ATR spectroscopy to characterize penetrant diffusion in polymers. *Polymer*, 34(6), 1146-1153.
- Focher, B., Savelli, G & Torri, G. (1990). Neutral and ionic alkylglucopyranosides. Synthesis, characterization and properties. *Chem. Phys. Lipids*, 53, 141-155.
- Fraser-Reid, B., Udodong, U. E., Wu, Z., Ottosson, H., Merritt, J., Rao, C., Carmichael, R. & Madsen, R. (1992). n-Pentenyl Glycosides in Organic Chemistry: A Contemporary Example of Serendipity. *Synlett*, 1992(12), 927,942.
- Frederik C., Schidt, W. & Klaus, B. (1997). Purification of 2,3,6,7,10,11-Hexamethoxytriphenylene and Preparation of Hexakiscarbonylmethyl and Hexakiscyanomethyl Derivatives of 2,3,6,7,10,11-Hexahydroxytriphenylene. *Synthesis*, 11, 1285-1290.
- Freud, B. F., Woolverton, C. J. (1930). A theory of the ring method for the determination of surface tension. *Journal of the American Chemical Society*, 52(5), 1772-1782.
- Freudenmann, R., Behnisch, B. & Hanack, M. (2001). Synthesis of conjugated-bridged triphenylenes and application in OLEDs. *Journal of Materials Chemistry*, 11(6), 1618-1624.
- Galema, S. A., Engberts, F. N. & Van Doren, H. A. (1997). Synthesis, purification and liquid-crystalline behavior of several alkyl 1-thio-D-glycopyranosides. *Carbohydrate Research*, 303(4), 423-434.
- Geert, B. H. (2000). *Organic synthesis with carbohydrates*: Blackwell Publishing.
- Goodby, J. W. (2007). Editorial - liquid crystals. *Chemical Society Reviews*, 36(12), 1855-1856.
- Gray, G. W. (1984). *Smectic Liquid Crystals*. Glasgow, London: Hill.
- Grend, T. (2011). *CESIO- teh European Association of surfactant Manufacturers: Mission, Objectives and Issues* paper presented at the FECC Annual congress.
- Griffin, W. (1954). Calculation of HLB Values of Non-Ionic Surfactants. *Journal of the Society of Cosmetic Chemists*, 5, 259.
- Guo, C., Zhou, P., Shao, J., Yang, X. & Shang, Z. (2011). Integrating statistical and experimental protocols to model and design novel Gemini surfactants with promising critical micelle concentration and low environmental risk. *Chemosphere*, 84(11), 1608-1616.
- Gurst, J. E. (1991). NMR and the structure of D-glucose. *Journal of Chemical Education*, 68(12), 1003.
- Halasz, I., Odzak, R., Tomic, S. & Matkovic, D. (2005). 2-Bromoethyl 2,3,4,6-tetra-O-acetyl-[beta]-d-glucopyranoside. *Acta Crystallographica Section E*, 61(8), 2644-2645.
- Hall, L. D. (1964). Nuclear Magnetic Resonance. In L. W. Melville (Ed.), *Advances in Carbohydrate Chemistry* (Vol. Volume 19, pp. 51-93): Academic Press.

- Harrick, N. J. (1960). Semiconductor type and local doping determined through the use of infrared radiation. *Solid-State Electronics*, 1(3), 234-244.
- Harrick, N. J. (1965). Infrared spectra of powders by means of internal reflection spectroscopy. *Spectrochimica Acta*, 21(12), 2135-2139.
- Hartland, S. (2004). *Surface and Interfacial Tension: Measurement, Theory, and Applications* New Yourk, Basel: Marcel Dekker, INC.
- Hartley, G. S. (1936). Aqueous solutions of paraffin chain salts.
- Hartmuth, C. K. S. (2003). The growing impact of click chemistry on drug discovery. *Drug Discovery Today*, 8, 1128-1137.
- Hartshorne, N. H. (1973). Mesomorphism in the system disodium chromoglycaewater. *Mol. Cryst. Liq. Cryst*, 23, 343.
- Hauthal, H. G. (1989). Surfactants in Consumer Products-Theory, Technology and Application. Hrsg. Falbe, J. 547 S.,260 Abb., 122 Tab., 17 × 25 cm. Berlin, Heidelberg, New York, London, Paris, Tokyo: Springer-Verlag 1987. *Journal für Praktische Chemie*, 331(2), 367-368.
- Heinze, T., Liebert, T. F., Pfeiffer, K. S. & Hussain, M. A. (2003). Unconventional Cellulose Esters: Synthesis, Characterization and Structure-Property Relations. *Cellulose*, 10(3), 283-296.
- Helfinstine, S. L., Lavrentovich, O. D. & Woolverton, C. J. (2006). Lyotropic liquid crystal as a real-time detector of microbial immune complexes. *Letters in Applied Microbiology*, 43(1), 27-32.
- Hellsten, M. (1986). The industrial applications of nonionic surfactants. *Tenside Detergents*, 23, 337-341.
- Herndon, W. C., Nowak, P. C. & Connor, D. A. (1992). Empirical model calculations for thermodynamic and structural properties of condensed polycyclic aromatic hydrocarbons. *Journal of the American Chemical Society*, 114(1), 41-47.
- Hill, K., Von Rybinski, K. & Stoll, G. (1997). *Alkyl Polyglycosides : Technology, Properties and Applications*: VCH: Weinheim.
- Himo, F., Lovell, T., Hilgraf, R., Rostovtsev, V. V., Noodleman, L., Sharpless, K. B. & Fokin, V. (2004). Copper(I)-Catalyzed Synthesis of Azoles. DFT Study Predicts Unprecedented Reactivity and Intermediates. *Journal of the American Chemical Society*, 127(1), 210-216.
- Hinze, W. L. (1993). Critical review of surfactant-mediated phase separations (cloud-point extractions). Theory and applications. *Critical Reviews in Analytical Chemistry*, 24(2), 133-177.
- Hiroyuki, M., Yoji, I., Yosuke, N., Taku, N. & Yukio, S. (1997). Performance of a Novel Optical Compensation Film Based on Negative Birefringence of Discotic Compound for Wide-Viewing-Angle Twisted-Nematic Liquid-Crystal Displays. *Japanese Journal of Applied Physics*, 36, 143-147.
- Höhne G., H. (1996). *Differential Scanning Calorimetry*. Berlin Heidelberg: Springer-Verlag.
- Holger, S. (2001). Physics of colloidal dispersions in nematic liquid crystals. *Physics Reports*, 351(6), 387-474.
- Holmberg, K., Jonsson, B., Kronberg, B. & Lindman, B. (2003). *Surfactants and Polymers in aqueous Solution* (2nd edition ed.): John Wiley & Sons, Chichester.
- Horowitz, G. (2004). Organic thin film transistors: From theory to real devices. *Journal of Materials Research*, 19(07), 1946-1962.

- Horowitz, V. R., Janowitz, L. A., Modic, L. & Heiney, P. A. (2005). Aggregation behavior and chromonic liquid crystal properties of an anionic monoazo dye. *Physical Review E*, 72(4), 041710.
- Horowitz, V. R., Janowitz, L. A., Modic, A. L., Heiney, P. A. & Collings, P. J. (2005). Aggregation behavior and chromonic liquid crystal properties of an anionic monoazo dye. *Phys. Rev. E*, 72, 041710.
- Hotha, S., & Kashyap, S. (2006). 'Click chemistry' inspired synthesis of pseudo-oligosaccharides and amino acid glycoconjugates. *J. Org. Chem.*, 71, 364–367.
- Huisigen, R. (1961). Proceedings of the Chemical Society. October 1961. *Proceedings of the Chemical Society* (October), 357-396.
- Hunter, C. A. & Sanders, A. (1990). The nature of π - π interactions. *Journal of the American Chemical Society*, 112(14), 5525-5534.
- Hunter, R. J. (1994). *Introduction to Modern Colloid Science*: Oxford University Press.
- Hussain, A., Pina, A. S. & Roque, A. C. (2009). Bio-recognition and detection using liquid crystals. *Biosensors and Bioelectronics*, 25(1), 1-8.
- Inagaki, F., Kohda, D., Kodama, C. & Suzuki, A. (1987). Analysis of NMR spectra of sugar chains of glycolipids by multiple relayed COSY and 2D homonuclear: Hartman-Hahn spectroscopy. *FEBS Letters*, 212(1), 91-97.
- Inoue, T., Misono, T. & Lee, S. (2007). Comment on "Determination of the critical micelle concentration of dodecylguanidine monoacetate (dodine)". *Journal of Colloid and Interface Science*, 314(1), 334-336.
- InvictaHOG. (2006). (http://en.wikipedia.org/wiki/File:ABO_blood_type.svg)8/1/2011
- Ishihara, S., Furuki, Y. & Takeoka, S. (2008). Helical arrangement of a hydrogen-bonded columnar liquid crystal induced by a centered triphenylene derivative bearing chiral side-chains. *Polymers for Advanced Technologies*, 19(8), 1097-1104.
- Israelachvili, J. (1992). *Intermolecular Surfaces Forces*, 2nd edition, Academic Press Ltd, London.
- Itoh, T., Takamura, H., Watanabe, K., Araki, Y. & Ishido, Y. (1986). A facile procedure for regioselective 1-O-deacylation of fully acylated sugars with sodium methoxide. *Carbohydrate Research*, 156(0), 241-246.
- Jackson, E. L. H., C. S. (1938). The Structure of the Products of the Periodic Acid Oxidation of Starch and Cellulose1. *Journal of the American Chemical Society*, 60(5), 989-991.
- Jaeger, D. A., Mendoza, A. & Apkarian, R. P. (2006). Shamrock Surfactants with Terminal Carboxylate Headgroups and a Central Phosphorodithioate or Quaternary Ammonium Headgroup. *Langmuir*, 22(4), 1555-1560.
- James, A. R., Sandeep, K. & Helmut, R. (1996). Synthesis and Characterization of Fluorescent, Low-Symmetry Triphenylene Discotic Liquid Crystals: Tailoring of Mesomorphic and Optical Properties. *Chem. Mater.*, 8, 1402-1409.
- Jang, C., Wiepz, G., Schiller, H., Bertics, J., & Abbott, N. (2005). Using Liquid Crystals to Report Membrane Proteins Captured by Affinity Microcontact Printing from Cell Lysates and Membrane Extracts. *Journal of the American Chemical Society*, 127(25), 8912-8913.
- Jimenez, L. C. (2005). Antimicrobial efficacy of a benzethonium chloride hand sanitizer, in vitro and in vivo studies. *American Journal of Infection Control*, 33(5), e41-e42.

- Joshi, L., Kang, S. W., Kooijman, D. M. & Kumar, S. (2009). Concentration, temperature, and pH dependence of sunset-yellow aggregates in aqueous solutions: An xray investigation. *Phys. Rev. E*, 80, 041703.
- Juaristi, E. C. (1992). Recent studies of the anomeric effect. *Tetrahedron*, 48(24), 5019-5087.
- Jung, H. T., Kim, S. O., Yoon, D. K., Hudson, S. D., Percec, V., Holerca, M. N., Cho, W. D. & Mosier, P. E. (2002). Surface Order in Thin Films of Self-Assembled Columnar Liquid Crystals. *Macromolecules*, 35(9), 3717-3721.
- Kabalka, G. W., Varma, M., Varma, R., Srivastava, P. & Knapp, F. (1986). The tosylation of alcohols. *The Journal of Organic Chemistry*, 51(12), 2386-2388.
- Karsa, D. R. (2003). *Surfactants in Polymers, Coatings, Inks and Adhesives* (Vol. 1). Boca Raton: Blackwell Publishing Ltd.
- Kauzmann, W. (1959). Some factors in the interpretation of protein denaturation. *Adv Protein Chem*, 14, 1-63.
- Keehn, P. M. (1983). *Cyclophanes*. New York: Academic Press.
- Kett, W., Batley, M. & Redmond, J. (1997). Heterocyclic derivatives of sugars: an NMR study of the formation of 1-glycosyl-3,5-dimethyl-1 H-pyrazoles from hydrazones. *Carbohydrate Research*, 299(3), 129-141.
- King, B., Kroulík, J., Robertson, R., Rempala, P., Hilton, L., Korinek, J. & Gortari, L. (2007). Controlling the Scholl Reaction. *The Journal of Organic Chemistry*, 72(7), 2279-2288.
- King, B., Kroulík, J., Robertson, R., Rempala, P., Hilton, L., Korinek, J. & Gortari, L. (2007). Controlling the Scholl Reaction. *The Journal of Organic Chemistry*, 72(7), 2279-2288.
- Kishikawa, K., Furusawa, S., Yamaki, T., Kohmoto, S., Yamamoto, M. & Yamaguchi, K. (2002). Novel Superstructure of Nondiscoid Mesogens: Uneven-Parallel Association of Half-Disk Molecules, 3,4,5-Trialkoxybenzoic Anhydrides, to a Columnar Structure and Its One-Directionally Geared Interdigitation. *Journal of the American Chemical Society*, 124(8), 1597-1605.
- Kocyigit, O. G. (2010). Complexation properties and synthesis of a novel Schiff base with triphenylene nucleus. *Journal of Hazardous Materials*, 183(1-3), 334-340.
- Kocyigit, O. G. (2011). The (salophen)-bridged Fe/Cr (III) capped complexes with triphenylene core: Synthesis and characterization. *Journal of Organometallic Chemistry*, 696(19), 3106-3112.
- Koenigs, W. K. (1901). some derivatives of glucose and galactose. *Journal of the American Chemical Society*, 34(1), 957-981.
- Kolb, H., Finn, M. G. & Sharpless, K. B. (2001). Click Chemistry: Diverse Chemical Function from a Few Good Reactions. *Angewandte Chemie International Edition*, 40(11), 2004-2021.
- Kolb, H., Finn, M. G. & Sharpless, K. B. (2003). The growing impact of click chemistry on drug discovery. *Drug Discovery Today*, 8(24), 1128-1137.
- Kopylovich, M., Kukushkin, V., Haukka, M., Luzyanin, K. & Pombeiro, A. (2004). An Efficient Synthesis of Phthalocyanines Based on an Unprecedented Double-Addition of Oximes to Phthalonitriles. *Journal of the American Chemical Society*, 126(46), 15040-15041.
- Krieger, C., Diederich, F. Schweitzer, D. & Staab, H. (1979). Molecular Structure and Spectroscopic Properties of Kekulene. *Angewandte Chemie International Edition in English*, 18(9), 699-701.
- Kruglyakov, P. M. (2000). *Hydrophile - Lipophile Balance of Surfactants and Solid Particles* (Vol. 9, Physicochemical aspects and applications).

- Kuda, T., Yano, T. & Kuda, T. (2008). Resistances to benzalkonium chloride of bacteria dried with food elements on stainless steel surface. *LWT - Food Science and Technology*, 41(6), 988-993.
- Kumar, S., Schuhmacher, P., Henderson, P., Rego, J. & Ringsdorf, H. (1996). Synthesis of New Functionalized Discotic Liquid Crystals for Photoconducting Applications. *Molecular Crystals and Liquid Crystals Science and Technology. Section A. Molecular Crystals and Liquid Crystals*, 288(1), 211-222.
- Kumar, S. (2001). Liquid crystals: experimental study of physical properties and phase transition. London: University Press(Cambridge).
- Kumar, S. (2005). Triphenylene-based discotic liquid crystal dimers, oligomers and polymers. *Liquid Crystals*, 32(9), 1089-1113.
- Kumar, S. (2006). Self-organization of disc-like molecules: chemical aspects. *Chemical Society Reviews*, 35(1), 83-109.
- Kumar, S. (2005). A convenient and economic method for the synthesis of monohydroxy-pentaalkoxy- and hexaalkoxytriphenylenediscotics. *Tetrahedron Letters*, 46(15), 2603-2605.
- Kumar, S. (2005). Ionic discotic liquid crystals: synthesis and characterization of pyridinium bromides containing a triphenylene core. *Tetrahedron Letters*, 46(23), 4127-4130.
- Kunieda, H. S. (1976). Krafft points, critical micelle concentrations, surface tension, and solubilizing power of aqueous solutions of fluorinated surfactants. *The Journal of Physical Chemistry*, 80(22), 2468-2470.
- Kunieda, H. S. (1976). Krafft points, critical micelle concentrations, surface tension, and solubilizing power of aqueous solutions of fluorinated surfactants. *The Journal of Physical Chemistry*, 80(22), 2468-2470.
- Kwang-Chan A., J. & Oee-Sook, P. (2006). A Simple and Cost Effective Synthesis of 3,11-Dimethylnonacosan-2-one, A Female Sex Pheromone of the German Cockroach. *Molecules*, 11, 751-757.
- Laarhoven, W. H. (1966). The formation of stilbenes and phenanthrenes by irradiation of dibenzyl sulfides. *Tetrahedron Letters*, 7(41), 5003-5007.
- Lackner, B., Bretterbauer, K. & Falk, H. (2005). An Efficient Route to Emodic Amine and Analogous O-Methyl Protected Derivatives Starting from Emodin. *Monatshefte fur Chemie*, 136, 1629-1639.
- Lang, K. F., Buffleb, H. & Zander, M. (1963). Pyrolysen von mehrkernigen aromatischen Kohlenwasserstoffen. *Angewandte Chemie*, 75(3), 170-170.
- Laschat, S., Baro, A., Steinke, N., Giesselmann, F., Hägele, C., Scalia, G., Judele, R., Kapatsina, E., Sauer, S., Schreivogel, A. & Tosoni, M. (2007). Discotic Liquid Crystals: From Tailor-Made Synthesis to Plastic Electronics. *Angewandte Chemie International Edition*, 46(26), 4832-4887.
- Laschat, S., Baro, A., Steinke, N., Giesselmann, F., Hägele, C., Scalia, G., Judele, R., Kapatsina, E., Sauer, S., Schreivogel, A. & Tosoni, M. (2007). Discotic Liquid Crystals: From Tailor-Made Synthesis to Plastic Electronics. *Angewandte Chemie International Edition*, 46(26), 4832-4887.
- Laughlin, R. G. (1994). *The Aqueous Phase Behaviour of Surfactants*. London: Academic Press.
- Laurance, D. H. (1974). Solutions to The Hidden-Resonance Problem in Proton Nuclear Magnetic Resonance Spectroscopy. In R. S. Tipson & H. Derek (Eds.), *Advances in Carbohydrate Chemistry and Biochemistry* (Vol. Volume 29, pp. 11-40): Academic Press.

- Laurent, F. B. (2005). Microwave-accelerated Fischer glycosylation. *Tetrahedron Letters*, 46, 3485–3488.
- Lemieux, R. U., Kullnig, R. K., Bernstein, H. J. & Schneider, W. G. (1958). Configurational Effects on the Proton Magnetic Resonance Spectra of Six-membered Ring Compounds¹. *Journal of the American Chemical Society*, 80(22), 6098-6105.
- Li, N., Luo, H. & Liu, S. (2004). A new method for the determination of the critical micelle concentration of Triton X-100 in the absence and presence of β -cyclodextrin by resonance Rayleigh scattering technology. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 60(8-9), 1811-1815.
- Liu, M. R. (1999). Solvent Suppression Methods in NMR Spectroscopy. Editor-in-Chief: John (Ed.), *Encyclopedia of Spectroscopy and Spectrometry (Second Edition)* (pp. 2604-2610). Oxford: Academic Press.
- Liu, X., Gong, L., Mao, X. & Liu, J. (1999). The synthesis of sucrose ester and selection of its catalyst. *Journal of Molecular Catalysis A: Chemical*, 147(1-2), 37-40.
- Loginova, P., Yakovleva, E., Galat, M. & Boichenko, P. (2009). Effect of aliphatic alcohols and aliphatic carboxylic acids on the critical micelle concentration and counter-ion binding degree of sodium dodecylsulfate. *Journal of Molecular Liquids*, 145(3), 177-181.
- Lomax, E. G. (1996). *Amphoteric Surfactants*. New York: Marcel Dekker.
- López, O., Cócera, M., Parra, J. L. & Maza, A. (2001). Influence of the alkyl chain length of alkyl glucosides on their ability to solubilize phosphatidylcholine liposomes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 193(1-3), 221-229.
- Lubineau, A., Augé, J. & Drouillat, B. (1995). Improved synthesis of glycosylamines and a straightforward preparation of N-acylglycosylamines as carbohydrate-based detergents. *Carbohydrate Research*, 266(2), 211-219.
- Lundborg, M. (2011). Structural Analysis of Glycans by NMR Chemical Shift Prediction. *Analytical Chemistry*, 83(5), 1514-1517.
- Lutz, J. (2008). Efficient construction of therapeutics, bioconjugates, biomaterials and bioactive surfaces using azide-alkyne “click” chemistry. *Advanced Drug Delivery Reviews*, 60(9), 958-970.
- Lydon, J. E. (1980). New Models for the Mesophases of Disodium Cromoglycate. *Molecular Crystals and Liquid Crystals*, 64(1), 19-24.
- Lydon, J. E. (1998). Chromonic liquid crystal phases. *Current Opinion in Colloid & Interface Science*, 3(5), 458-466.
- Lydon, J. E. (2004). Chromonic mesophases. *Current Opinion in Colloid & Interface Science*, 8(6), 480-490.
- Lydon, J. E., Goodby, G. W. & Vill, V. (1998). *Handbook of Liquid Crystals* (Vol. 2B). New York: Willey-VCH.
- Ma, C., Xu, Y., Wang, H. & Ye, X. (1998). Determination of the first and second CMCs of surfactants by adsorptive voltammetry. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 143(1), 89-94.
- Magdassi, S., Benmoshe, M., Talmon, Y. & Danino, D. (2003). Microemulsions based on anionic gemini surfactant. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 212(1), 1-7.
- Maiti, P. K., Lansac, Y., Glaser, M. A. & Clark, A. (2002). Isodesmic self-assembly in lyotropic chromonic systems. *Liquid Crystals*, 29(5), 619-626.

- Maldonado, S., Lucas, R., Comelles, F., González, M., Parra, J., Medina, I. & Morales, J. (2011). Synthesis and characterization of phenolic antioxidants with surfactant properties: glucosyl and glucuronosyl alkyl gallates. *Tetrahedron*, 67(38), 7268-7279.
- Manickam, M., Belloni, M., Kumar, S., Varshney, S. K., Shankar, D. S., Ashton, R., Preece, J. A. & Spencer, N. (2001). The first hexagonal columnar discotic liquid crystalline carbazole derivatives induced by noncovalent π - π interactions. *Journal of Materials Chemistry*, 11(11), 2790-2800.
- Manickam, M. K. (1999). New Mixed Tail Triphenylene Discotic Liquid Crystals. *Molecular Crystals and Liquid Crystals Science and Technology. Section A. Molecular Crystals and Liquid Crystals*, 326(1), 165-176.
- Mariani, P., Spinozzi, F., Federiconi, F., Amenitsch, H., Spindler, L. & Drevensek, O. (2009). Small angle X-ray scattering analysis of deoxyguanosine 5'-monophosphate self-assembling in solution: nucleation and growth of G-uadruplexes. *J. Phys. Chem. B*, 113, 7934-7944.
- Masakatsu, H. (2001). Synthetic glycolipid/water systems. *Current Opinion in Colloid & Interface Science*, 6(3), 268-276.
- Matharu, A., Jeeva, S. & Ramanujam, P. S. (2007). Liquid crystals for holographic optical data storage. *Chemical Society Reviews*, 36(12), 1868-1880.
- Matsumura, S., Imai, K., Yoshikawa, S., Kawada, K. & Uchibori, T. (1990). Surface activities, biodegradability and antimicrobial properties of n-alkyl glucosides, mannosides and galactosides. *J. Am. Oil Chem. Soc.*, 67(12), 996-1001.
- Maura, M. (1998). Self-assembly in fluorocarbon surfactant systems. *Current Opinion in Colloid & Interface Science*, 3(5), 467-477.
- Mazaleyrat, J., Waskelman, M. (1996). The Williamson Reaction: A New and Efficient Method for the Alternate Resolution of 2,2'-Bis(bromomethyl)-1,1'-binaphthyl and 1,1'-Binaphthalene-2,2'-diol. *The Journal of Organic Chemistry*, 61(8), 2695-2698.
- McKenzie, D. C., Bunton, C. A., Nicoli, F. & Savelli, G. (1987). Dynamic and classical light scattering by bolaform micelles: comparison with normal micelles. *The Journal of Physical Chemistry*, 91(22), 5709-5713.
- Meier, H. (1992). The Photochemistry of Stilbenoid Compounds and Their Role in Materials Technology. *Angewandte Chemie International Edition in English*, 31(11), 1399-1420.
- Milkereit, G., Gerber, S, Brandenburg, K., Morr, M. & Volkmar, V. (2005). Synthesis and mesomorphic properties of glycosyl dialkyl- and diacyl-glycerols bearing saturated, unsaturated and methyl branched fatty acid and fatty alcohol chains: Part I. Synthesis. *Chemistry and Physics of Lipids*, 135(1), 1-14.
- Mitchell, R. H., Boekeldeide, V. (1974). Transformation of sulfide linkages to carbon-carbon double bond. Syntheses of cis- and trans-15,16-dimethyldihydropyrene and trans-15,16-dihydropyrene. *Journal of the American Chemical Society*, 96(5), 1547-1557.
- Molinier, V., Fenet, B., Fitremann, J., Bouchu, A. & Queneau, Y. (2006). Concentration measurements of sucrose and sugar surfactants solutions by using the ^1H NMR method. *Carbohydrate Research*, 341(11), 1890-1895.
- Monson, R. (1971). *Advanced Organic Synthesis Method and techniques*. New York: Academic press.
- Müller, M., Kübel, C. & Müllen, K. (1998). Giant Polycyclic Aromatic Hydrocarbons. *Chemistry-A European Journal*, 4(11), 2099-2109.

- Mukherjee, P., Padhan, S. K., Dash, S., Patel, S. & Mishra, B. K. (2011). Clouding behaviour in surfactant systems. *Advances in Colloid and Interface Science*, 162(1-2), 59-79.
- Murakami, T. (2007). Efficient synthesis of [omega]-mercaptoalkyl 1,2-trans-glycosides from sugar peracetates. *Carbohydrate Research*, 342(8), 1009-1020.
- Nastishin, Y. A., Liu, H., Schneider, T., Nazarenko, V., Vasyuta, R., Shiyanovskii, S. V. & Lavrentovich, O. D. (2005). Optical characterization of the nematic lyotropic chromonic liquid crystals: light absorption, birefringence, and scalar order parameter. *Phys. Rev. E*, 72, 041711.
- Neo, G., López, C., Romero, V., Antelo, B., Delamano, J., Pérez, A., Fernández, D., Almeida, F., & Tojo, G. (2010). Preparation of Phenanthrenes by Photocyclization of Stilbenes Containing a Tosyl Group on the Central Double Bond. A Versatile Approach to the Synthesis of Phenanthrenes and Phenanthrenoids. *The Journal of Organic Chemistry*, 75(20), 6764-6770.
- Nilsson, F., Soderman, O. & Jahansson, I. (1996). Physical-chemical properties of n-octyl-glucoside/water system. A phase diagram, self diffusion NMR, and SAXS study. *Langmuir*, 12, 902-908.
- Nostro, P., Ninham, B., Ambrosi, M., Fratoni, L., Palma, S., Allemandi, D. & Baglioni, P. (2003). Hofmeister Effect in Coagels of Ascorbic Acid Based Surfactants. *Langmuir*, 19(23), 9583-9591.
- Paillet, S., Grassl, B. & Desbrières, J. (2009). Rapid and quantitative determination of critical micelle concentration by automatic continuous mixing and static light scattering. *Analytica Chimica Acta*, 636(2), 236-241.
- Pandit, N. K., Kanjia, J., Patel, K. & Pontikes, D. G. (1995). Phase behavior of aqueous solutions containing nonionic surfactant-polyethylene glycol mixtures. *International Journal of Pharmaceutics*, 122(1-2), 27-33.
- Park, J., Teren, S., Tepp, W. H., Beebe, J., Johnson, E. A. & Abbott, N. L. (2006). Formation of Oligopeptide-Based Polymeric Membranes at Interfaces between Aqueous Phases and Thermotropic Liquid Crystals. *Chemistry of Materials*, 18(26), 6147-6151.
- Pasquali, R. C., Sacco, N. & Bregni, C. (2009). The Studies on Hydrophilic-Lipophilic Balance (HLB): Sixty Years after William C. Griffin's Pioneer Work. *Latin American Journal of Pharmacy*, 28(2), 313-317.
- Patt, S. L. (1984). 2-Dimensional NMR in Carbohydrate Structural Analysis. *Journal of Carbohydrate Chemistry*, 3(4), 493-511.
- Paulsen, H. (1982). Advances in selective chemical syntheses of complex oligosaccharides. *Angew. Chem. Int. Ed.*, 21, 155-224.
- Pavia, D. L., Lampman, G. M., Kriz, S. & Vyvyan, R. (2009). *Introduction to spectroscopy* (Forth edition ed.): Brooks-Cole.
- Pensé, A. M., Vauthier, C., Puisieux, F. & Benoit, J. P. (1992). Microencapsulation of benzalkonium chloride. *International Journal of Pharmaceutics*, 81(2-3), 111-117.
- Pérez-Balderas, F., Ortega-Muñoz, M., Morales-Sanfrutos, J., Hernández-Mateo, F., Calvo-Flores, F., Calvo-Asín, A. & Santoyo-González, F. (2003). Multivalent Neoglycoconjugates by Regiospecific Cycloaddition of Alkynes and Azides Using Organic-Soluble Copper Catalysts. *Organic Letters*, 5(11), 1951-1954.
- PerkinElmer, I. (2005). *FT-IR Spectroscopy-Attenuated Total Reflectance (ATR)*, Technical note.

- Pernak, J. S. (1996). 3-Alkylthiomethyl-1-ethylimidazolium chlorides. Correlation between critical micelle concentrations and minimum inhibitory concentrations. *European Journal of Medicinal Chemistry*, 31(11), 901-903.
- Pletnev, M. Y., Bertozzi, M. (2006). Green and Natural Surfactants: Recent Developments. *Soft-Journal edition* 6, 132, 2-12.
- Prescher, A. & Bertozzi, R. (2005). Chemistry in living systems. *Nat Chem Biol*, 1(1), 13-21.
- Punna, S., Kuzelka, J., Wang, Q. & Finn, M. G. (2005). Head-to-Tail Peptide Cyclodimerization by Copper-Catalyzed Azide-Alkyne Cycloaddition. *Angewandte Chemie International Edition*, 44(15), 2215-2220.
- Rawn, R. J., Camille, F. & Crichton, R. (1990). *In Traité de Biochimie*. Paris.
- Raynes, E. P. (1987). Supertwisted nematic liquid crystal displays. *Displays*, 8(2), 59-63.
- Reinitzer, F. (1888). Beiträge zur Kenntniss des Cholesterins. *Monatshefte für Chemie*, 9, 421-441.
- Rempala, P., Kroulík, J. & Benjamin T. (2004). A Slippery Slope: Mechanistic Analysis of the Intramolecular Scholl Reaction of Hexaphenylbenzene. *Journal of the American Chemical Society*, 126(46), 15002-15003.
- Rempala, P., Kroulík, J. & Benjamin T. (2006). Investigation of the Mechanism of the Intramolecular Scholl Reaction of Contiguous Phenylbenzenes. *The Journal of Organic Chemistry*, 71(14), 5067-5081.
- Richard, J. P. (2002). Efficient preparation of 2-methyl-1,3-dioxolane-2-ethanol and 2-(2-bromoethyl)-2-methyl-1,3-dioxane from 4-hydroxy-2-butanone. *Synthetic Communications*, 32(3), 449-455.
- Richards, S. V. (2011). *Essential Practical NMR for Organic Chemistry*. Singapore: John Wiley & Sons, Ltd.
- Richmond, J. (1990). *Cationic Surfactants (Surfactant Science)*: Publisher: CRC.
- Robert, J. L. (1995). *X-ray scattering and magnetic birefringence studies of aqueous solutions of chromonic molecular aggregates*: Brandeis University.
- Rodionov, V. O., Fokin, V. & Finn, M. G. (2005). Mechanism of the Ligand-Free CuI-Catalyzed Azide-Alkyne Cycloaddition Reaction. *Angewandte Chemie International Edition*, 44(15), 2210-2215.
- Roger, A. (1949). *Organic Reactions*.
- Rostovtsev, V., Green, G., Fokin, V. & Sharpless, K. B. (2002). A Stepwise Huisgen Cycloaddition Process: Copper(I)-Catalyzed Regioselective "Ligation" of Azides and Terminal Alkynes. *Angewandte Chemie International Edition*, 41(14), 2596-2599.
- Roy, B. M. (2007). Sulfuric acid immobilized on silica: an excellent catalyst for Fischer type glycosylation. *Tetrahedron Letters*, 48(22), 3783-3787.
- Roy, B. M. (2007). Sulfuric acid immobilized on silica: an excellent catalyst for Fischer type glycosylation. *Tetrahedron Letters*, 48(22), 3783-3787.
- Ruan, X., Song, G., Zhang, Y. & Li, Y. (2007). Facile conversion of alcohols to olefins by tosylation and subsequent promoted β -elimination. *Journal of Ocean University of China (English Edition)*, 6(2), 196-198.
- Ruckenstein, E. N. (1975). Critical micelle concentration. Transition point for micellar size distribution. *The Journal of Physical Chemistry*, 79(24), 2622-2626.
- Russell, R. E. (1997). High-resolution Mass Spectrometry and Accurate Mass Measurements with Emphasis on the Characterization of Peptides and Proteins by Matrix-assisted Laser Desorption/Ionization Time-of-Night Mass Spectrometry. *Journal of mass spectroscopy*, 32, 263-276.

- Sajan, D., Joseph, L., Vijayan, N. & Karabacak, M. (2011). Natural bond orbital analysis, electronic structure, non-linear properties and vibrational spectral analysis of l-histidinium bromide monohydrate: A density functional theory. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 81(1), 85-98.
- Sakai, K., Kaji, M., Takamatsu, Y., Tsuchiya, K., Torigoe, K., Tsubone, K., Yoshimura, T., Esumi, K. & Sakai, H. (2009). Fluorocarbon-hydrocarbon gemini surfactant mixtures in aqueous solution. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 333(1-3), 26-31.
- Schick, M. J. (1963). Effect of temperature on the critical micelle concentration of nonionic detergents. Thermodynamics of micelle formation. *The Journal of Physical Chemistry*, 67(9), 1796-1799.
- Schick, M. J. (1987). *Nonionic Surfactants (Surfactant Science)*: CRC.
- Schilling, C. & Bräse, S. (2010). Cycloaddition Reactions with Azides: An Overview *Organic Azides* (pp. 269-284): John Wiley & Sons, Ltd.
- Schleyer, P., Jiao, H., Hommes, N., Malkin, G. & Malkina, O. (1997). An Evaluation of the Aromaticity of Inorganic Rings: Refined Evidence from Magnetic Properties. *Journal of the American Chemical Society*, 119(51), 12669-12670.
- Schmidt, R. (1994). Anomeric-oxygen activation for glycoside synthesis: the trichloroacetimidate method. *Adv Carbohydr Chem Biochem.*, 50, 21-123.
- Schmidt, R. (1980). Facile Synthesis of α - and β -O-Glycosyl Imidates; Preparation of Glycosides and Disaccharides. *Angewandte Chemie International Edition in English*, 19(9), 731-732.
- Schmidt-Mende, L., Fechtenkötter, A., Müllen, K., Moons, E., Friend, R. H. & MacKenzie, J. D. (2001). Self-Organized Discotic Liquid Crystals for High-Efficiency Organic Photovoltaics. *Science*, 293(5532), 1119-1122.
- Schonfeldt, N. (1970). *Surface Active Ethylene Oxide Adducts*: Pergamon Press Oxford.
- Schott, H., Han, S. (1976). Effect of inorganic additives on solutions of nonionic surfactants IV: Krafft points. *Journal of Pharmaceutical Sciences*, 65(7), 979-981.
- Schwartz, A. M., Perry, M. & Berch, J. (1977). *Surface Active Agents and Detergents* (Vol. Vol II). New York: R. Krieger Pub. Co.
- Shi, Y., Luo, H. & Nian, B. L. (2011). Determination of the critical premicelle concentration, first critical micelle concentration and second critical micelle concentration of surfactants by resonance Rayleigh scattering method without any probe. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 78(5), 1403-1407.
- Shiyanovskii, S. V., Schneider, T., Smalyukh, I. I., Ishikawa, T., Niehaus, G. D., Doane, K. J., Woolverton, C. J. & Lavrentovich, O. D. (2005). Real-time microbe detection based on director distortions around growing immune complexes in lyotropic chromonic liquid crystals. *Physical Review E*, 71(2), 020702.
- Skaife, J. A., N. L. (2000). Quantitative Interpretation of the Optical Textures of Liquid Crystals Caused by Specific Binding of Immunoglobulins to Surface-Bound Antigens. *Langmuir*, 16(7), 3529-3536.
- Smirnyagin, V. B. (1968). Glycosidation of sugars. IV. Methanolysis of D-glucose, D-galactose, and D-mannose. *Can. J. Chem*, 46, 3085-3090.
- Smith, M. B. (2007). *March's Advanced Organic Chemistry* (6th ed ed.): John Wiley and Sons.

- Song, H., Lee, J. Y., Lee, H. J. & Moon, D. K. (2011). Synthesis of novel triphenylene-based discotic liquid crystals with naphthalene moiety in the side chains for photo-polymerisation. *Journal of Industrial and Engineering Chemistry*, 17(3), 445-449.
- Sonoda, M., Itahashi, K. & Tobe, Y. (2002). Flash vacuum pyrolysis of 1,6-diphenyl-1,5-hexadien-3-yne: tandem diaryldienyne cyclizations to form chrysene. *Tetrahedron Letters*, 43(30), 5269-5272.
- Speers, A.E.(2004). Chemical strategies for activity-based proteomics. *ChemBioChem*, 5, 41-47.
- Srividhya, M., Chandrasekar, K., Baskar, G. & Reddy, B. S. (2007). Physico-chemical properties of siloxane surfactants in water and their surface energy characteristics. *Polymer*, 48(5), 1261-1268.
- Stabel, A., Herwig, P., Müllen, K. & Rabe, J. P. (1995). Diodelike Current-Voltage Curves for a Single Molecule-Tunneling Spectroscopy with Submolecular Resolution of an Alkylated, peri-Condensed Hexabenzocoronene. *Angewandte Chemie International Edition in English*, 34(15), 1609-1611.
- Stackhouse, P. J. (2008). Influence of branched chains on the mesomorphic properties of symmetrical and unsymmetrical triphenylene discotic liquid crystals. *Liquid Crystals*, 35(5), 597-607.
- Stanley, F. E., Warner, A. M., Schneiderman, E. & Stalcup, A. M. (2009). Rapid determination of surfactant critical micelle concentrations using pressure-driven flow with capillary electrophoresis instrumentation. *Journal of Chromatography A*, 1216(47), 8431-8434.
- Staples, E. J. (1978). Nuclear magnetic resonance technique to distinguish between micelle size changes and secondary aggregation in anionic and nonionic surfactant solutions. *Journal of the Chemical Society, Faraday Transactions 1: Physical Chemistry in Condensed Phases*, 74, 2530-2541.
- Staroszczyk, H., Pielichowska, J., Sztuka, K., Stangret, J. & Kołodziejska, I. (2012). Molecular and structural characteristics of cod gelatin films modified with EDC and TGase. *Food Chemistry*, 130(2), 335-343.
- Straathof, A. H., Bekkum, V. & Kieboom, A. G. . (1988). Efficient preparation of octyl-D-glucopyranoside monohydrate: a recirculation procedure involving water removal by product crystallisation. *Starch /Starke*, 40(6), 229-234.
- Straathof, A. J., Romein, J. , Rantwijk, F. V., Kieboom, A. G. & Bekkum, H. V. (1987). Preparation of long-chain alkyl D-glucosides by alcoholysis of 1,2:5,6-di-O-isopropylidene-D-glucofuranose. *Starch/Stärke*, 39(10), 362-368.
- Szabó, K., Marek, N. & Kunsági-Máté, S. (1993). Determination of critical micelle concentration in the thionin-sodium dodecyl sulphate micellar system. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 75(0), 133-136.
- Tadros, T. F. (2005). *In Applied Surfactants: Principles and Applications*. Weinheim, Germany: Wiley VCH Verlag: .
- Takeuchi, N., Takikawa, Y. & Shibuya, N. (1993). Actions of benzalkonium chloride as a potent depressant at the neuromuscular junction. *Neuropharmacology*, 32(4), 377-385.
- Tam-Chang, S. (2008). Chromonic liquid crystals: properties and applications as functional materials. *Chem. Commun*, 1957-1967.
- Tan, C. H., Huang, Z. J. & Huang, X. G. (2010). Rapid determination of surfactant critical micelle concentration in aqueous solutions using fiber-optic refractive index sensing. *Analytical Biochemistry*, 401(1), 144-147.

- Tanford, C. (1980). *The hydrophobic effect: Formation of Micelles and Biological Membranes*. Somerset, NJ: John Wiley & Sons.
- Terasawa, N., Monobe, H. & Kiyohara, K. (2006). Mesomorphic phase transition behavior of novel triphenylene compounds possessing fluoroalkylated side chains. *Journal of Fluorine Chemistry*, 127(7), 954-961.
- Tharwat, F. T. (2005). *Applied Surfactants: Principles and Applications*. Weinheim: Wiley-VCH.
- Thisbe, K. L. (2000). *Essential of carbohydrate chemistry and biochemistry*. Weinheim: WILEY-VCH verlag GmbH.
- Thorsteinsson, M. V., Richter, J., Lee, A. L. & DePhillips, P. (2005). 5-Dodecanoylamino fluorescein as a probe for the determination of critical micelle concentration of detergents using fluorescence anisotropy. *Analytical Biochemistry*, 340(2), 220-225.
- Tiddy, G. J. T. (1980). Surfactant-water liquid crystal phases. *Physics Reports*, 57(1), 1-46.
- Tiddy, G. J. T., Mateer, D. L., Ormerod, A. P., Harrison, W. J. & Edwards, D. J. (1995). Highly ordered aggregates in dilute water-dye systems. *Langmuir*, 11, 390-393.
- Tietze, L. F., Boge, K. & Vill, V. (1994). Liquid-crystalline D-glucose dialkyl acetals and dodecyl D-glucofuranosides. *Chem. Ber*, 127, 1065-1068.
- Tohru, I. (2009). Micelle formation of polyoxyethylene-type nonionic surfactants in bmimBF₄ studied by ¹H NMR and dynamic light-scattering. *Journal of Colloid and Interface Science*, 337(1), 240-246.
- Tomasik, M. R. C., P. J. (2008). Aggregation Behavior and Chromonic Liquid Crystal Phase of a Dye Derived from Naphthalenecarboxylic Acid. *The Journal of Physical Chemistry B*, 112(32), 9883-9889.
- Tommasi, N., Pizza, C., Aquino, R. & Naheed, M. (1997). Flavonol and Chalcone Ester Glycosides from *Bidens leucantha*. *Journal of Natural Products*, 60(3), 270-273.
- Toralf, S. (2007). *Polarized light in liquid crystals and polymers*. Hoboken, New Jersey: John Wiley & sons.
- Tornøe, C. W., Christensen, C. & Meldal, M. (2002). Peptidotriazoles on Solid Phase: [1,2,3]-Triazoles by Regiospecific Copper(I)-Catalyzed 1,3-Dipolar Cycloadditions of Terminal Alkynes to Azides. *The Journal of Organic Chemistry*, 67(9), 3057-3064.
- Tsujii, K. (1997). *In Surface Activity: Principles, Phenomena, and Applications*. San Diego, London, New York, Tokyo: Academic Press Ed.
- Ulfvin, A., Backer, A. E., Clausen, H., Hakomori, S., Rydberg, L., Samuelsson, B. E. & Breimer, M. E. (1993). Expression of glycolipid blood group antigens in single human kidneys: Change in antigen expression of rejected ABO incompatible kidney grafts. *Kidney Int*, 44(6), 1289-1297.
- Ulrike, H. (2010). Quantitative NMR spectroscopy in pharmaceutical applications. *Progress in Nuclear Magnetic Resonance Spectroscopy*, 57(2), 229-240.
- Van Nelson, J. A., Seung-Ryeol, S., & Abbott, N. L. (2002). Amplification of Specific Binding Events between Biological Species Using Lyotropic Liquid Crystals. *Langmuir*, 18(13), 5031-5035.
- Varma, R. S. (1998). Surfactant pillared clays in phase transfer catalysis: A new route to alkyl azides from alkyl bromides and sodium azide. *Tetrahedron Letters*, 39(19), 2915-2918.

- Vasilevskaya, A. S., Generalova, E. V. & Sonin, A. S. (1989). Chromonic mesophases. *Russian Chemical Reviews*, 58(9), 904-914.
- Vill, V., Minden, H. M. & Brandenburg, K. (2000). Thermotropic and lyotropic properties of long chain alkyl glycopyranosides: Part I: monosaccharide headgroups. *Chemistry and Physics of Lipids*, 104(1), 75-91.
- Vliegthart, J. F. (1980). High resolution ^1H NMR spectroscopy of carbohydrate structures. *Advances in Experimental Medicine and Biology*, 125, 77-91.
- Vogel, A. I., Tatchell, A. R., Furnis, B. S., Hannaford, A. J., Smith, P. W. G. (1989). *Vogel's Textbook of Practical Organic Chemistry* Singapore: Pearson Education Limited.
- Von Rybinski, W. (1998). Alkyl Polyglycosides-Properties and Applications of a new Class of Surfactants. *Angewandte Chemie International Edition*, 37(10), 1328-1345.
- Wang, P., Hu, H. & Wang, Y. (2007). Application of the Excited State Meta Effect in Photolabile Protecting Group Design. *Organic Letters*, 9(15), 2831-2833.
- Wang, P., Hu, H. & Wang, Y., Spencer, C., Liang, X. & Pan, L. (2008). Sequential Removal of Photolabile Protecting Groups for Carbonyls with Controlled Wavelength. *The Journal of Organic Chemistry*, 73(16), 6152-6157.
- Wang, Z., Xu, J., Zhang, W., Zhuang, B. & Hanshi, Q. (2008). Cloud point of nonionic surfactant Triton X-45 in aqueous solution. *Colloids and Surfaces B: Biointerfaces*, 61(1), 118-122.
- Wang, Z. (2010). Zemplén Deacetylation *Comprehensive Organic Name Reactions and Reagents*: John Wiley & Sons, Inc.
- Wang, Z. L., Liu, Y. & Zhang, Z. (Eds.). (2002). *Handbook of Nanophase and Nanostructured Materials*: Springer.
- Wendorff, J., Christ, T., Glösen, B., Greiner, A., Kettner, A., Sander, R., Stümpflen, V. & Tsukruk, V. (1997). Columnar discotics for light emitting diodes. *Advanced Materials*, 9(1), 48-52.
- Wennerström, H. L. (1979). Micelles. Physical chemistry of surfactant association. *Physics Reports*, 52(1), 1-86.
- Wu, J., Kolb, U. & Mullen, K. (2006). A water-soluble hexa-peri-hexabenzocoronene: synthesis, self-assembly and role as template for porous silica with aligned nanochannels. *Chemical Communications*(1), 48-50.
- Wydro, K., Paulah, Y. (2005). A study of the interaction of dodecyl sulfobetaine with cationic and anionic surfactant in mixed micelles and monolayers at the air/water interface. *Journal of Colloid and Interface Science*, 286(1), 387-391.
- Wyn-Jones, E. (1983). *Aggregation Processes in Solution (Studies in Physical and Theoretical Chemistry)*. Amsterdam, Oxford, New-York: Elsevier.
- Xiao, S., Myers, M., Miao, Q., Sanaur, S., Pang, K., Steigerwald, M. L. & Nuckolls, C. (2005). Molecular Wires from Contorted Aromatic Compounds. *Angewandte Chemie International Edition*, 44(45), 7390-7394.
- Xinyu, Z., Zhibing, G., & Shin-Tson, W. (2005). Transflective Liquid Crystal Displays. *Journal of Display Technology*, 1(1), 15.
- Yang, J., Hoffmeister, D., Liu, L., Fu, X. & Thorson, J. S. (2004). Natural product glycorandomization. *Bioorganic & Medicinal Chemistry*, 12(7), 1577-1584.
- Yu, L., Tan, M., Ho, B., Ding, J. L. & Wohland, T. (2006). Determination of critical micelle concentrations and aggregation numbers by fluorescence correlation spectroscopy: Aggregation of a lipopolysaccharide. *Analytica Chimica Acta*, 556(1), 216-225.

- Yu, L. (1982). Deuteron resonance of nematic disodium cromoglycate-water systems. *Mol. Cryst. Liq. Cryst.*, 80, 129-143.
- Yuan, J., Yip, A., Nguyen, N., Chu, J., Wen, X. & Acosta, E. J. (2010). Effect of surfactant concentration on transdermal lidocaine delivery with linker microemulsions. *International Journal of Pharmaceutics*, 392(1-2), 274-284.
- Zander, M. (1983). *Handbook of Polycyclic Aromatic Hydrocarbons*. New York: Marcel Dekker.
- Zelcer, A., Donnio, B., Bourgoigne, C., Cukiernik, F. D. & Guillon, D. (2007). Mesomorphism of Hybrid Siloxane-Triphenylene Star-Shaped Oligomers. *Chemistry of Materials*, 19(8), 1992-2006.
- Zhang, J. Z., Wang, Z. I., Liu, J. Chen, S. & Liu, G.Y. (2003). *Self-Assembled Nanostructures*. New York NY: Plenum Publishers.
- Zhang, S., Fu, L., Yang, D. & Zongwen, U. (2000). Formation of a metastable phase induced by a liquid crystalline phase in a novel chloropoly(aryl ether ketone). *Macromolecular Rapid Communications*, 21(16), 1144-1147.
- Zhang, X., Jackson, J. K. & Burt, H. M. (1996). Determination of surfactant critical micelle concentration by a novel fluorescence depolarization technique. *Journal of Biochemical and Biophysical Methods*, 31(3-4), 145-150.
- Zhi, L., Wu, J. & Müllen, K. (2005). Star-Shaped Hexa-peri-hexabenzocoronene "Heptamer": Synthesis and Self-Assembly. *Organic Letters*, 7(26), 5761-5764.
- Zhou, H., Zhou, F., Tang, S., Wu, P., Chen, Y., Tu, Y., Wu, J. & Tian, Y. (2012). Two-photon absorption dyes with thiophene as π electron bridge: Synthesis, photophysical properties and optical data storage. *Dyes and Pigments*, 92(1), 633-641.
- Zhu, X. (2009). New Principles for Glycoside-Bond Formation. *Angewandte Chemie International Edition*, 48(11), 1900-1934.
- Zniber, R., Achour, R., Cherkaoui, M. Z. & Gonnio, B., Gehringer, L. & Guillon, D. (2002). Columnar mesophase from a new hybrid siloxane-triphenylene. *Journal of Materials Chemistry*, 12(8), 2208-2213.