



Publications of Yizhak Marcus

LIST OF PUBLICATIONS

I. Theses

1. Catalytic decomposition of hydrogen peroxide in homogeneous solution. M.Sc. thesis, Hebrew University, Jerusalem 1952 (in Hebrew).
2. The soluble complexes of uranium in phosphoric acid. Ph.D. thesis, Hebrew University Jerusalem, 1955 (in Hebrew).

II. Books, Chapters in Books, and Books Edited

1. C.D. Coryell and Y. Marcus, Ion exchange resins, in *Molecular Engineering*, A. von Hippel, ed., J. Wiley and Sons, Inc. and Technology Press, M.I.T., Cambridge, Mass., 1958, pp. 390-408.
2. Y. Marcus, Ion exchange studies of complex formation, in *Ion Exchange*, J.A. Marinsky, ed., M. Dekker, Inc., New York, 1966, Vol. 1, pp. 101-138.
3. Y. Marcus, Solvent extraction from molten salts, in *Solvent Extraction Chemistry*, D. Dyrssen, J.-O. Liljenzin and J. Rydberg, eds., North-Holland Publ. Co., Amsterdam, 1967, pp. 555-580.
4. Y. Marcus and A.S. Kertes, *Ion Exchange, and Solvent Extraction of Metal Complexes*, Wiley-Interscience, London, 1969, 1050 pp.
5. A.S. Kertes and Y. Marcus, eds. *Solvent Extraction Research*, Wiley-Interscience, New York, 1969, 439 pp.
6. Y. Marcus, Liquid extraction from molten salts, in *Advances in Molten Salt Chemistry*, Vol. I, J. Braunstein, G. Mamantov and G.P. Smith, eds., Plenum Press, New York, 1971, pp. 63-127.

7. Y. Marcus, ed., *Solvent Extraction Reviews*, Vol. 1, M. Dekker, New York, 1971, 239 pp.
8. Y. Marcus, Ion exchange in nonaqueous and mixed solvents, in *Ion Exchange and Solvent Extraction*, A.S. Marinsky and Y. Marcus, eds., Vol. 4, pp. 1-120, M. Dekker, New York, 1973.
9. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 3, M. Dekker, New York, 1973, 154 pp.
10. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 4, M. Dekker, New York, 1973, 254 pp.
11. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 5, M. Dekker, New York, 1973, 278 pp.
12. Y. Marcus, A.S. Kertes and E. Yanir, Equilibrium constants of liquid-liquid distribution reactions. Introduction and Part I. Organophosphorus extractants. *Pure and Applied Chemistry, Additional Publication*, Butterworth, London, 1974, 170 pp.
13. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 6, M. Dekker, New York, 1974, 301 pp.
14. A.S. Kertes, Y. Marcus, and E. Yanir, Equilibrium constants of liquid-liquid distribution reactions. II. Alkylammonium salt extractants. *Pure and Applied Chemistry, Additional Publication*, Butterworth, London, 1974, 85 pp.
15. Y. Marcus, Critical evaluation of some equilibrium constants involving organophosphorus extractants. *Pure and Applied Chemistry, Additional Publication*, Butterworth, London, 1974, 93 pp.
16. Y. Marcus with collaboration of D.G. Howery. Ion exchange equilibrium constants. *Pure and Applied Chemistry, Additional Publication*, Butterworth, London, 1975, 41 pp.
17. Y. Marcus, *Introduction to Liquid State Chemistry*, Wiley, Chichester, UK, 1977, xviii + 357 pp.
- 17a. Y. Marcus, *Introduction to Liquid State Chemistry* (in Japanese), Kagaku Dojin, Tokyo, 1980, 460 pp.
- 18a. L. Ben-Dor and Y. Marcus, eds., 25th IUPAC Congress, Jerusalem, 1975 (Symposium and Main Section Lectures), *Israel J. Chem.*, 14 (1976) 1-280.

- 18b. Y. Marcus and L. Ben-Dor, eds. 25th International Congress of Pure and Applied Chemistry (Jerusalem 1975) (Plenary Lectures), Pergamon, Oxford, 1977, pp. 1-73.
19. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 7, M. Dekker, New York, 1977, 312 pp.
20. Y. Marcus, A.S. Kertes and E. Yanir. Equilibrium constants of liquid-liquid distribution reactions. III. Compound forming extractants, solvating solvents and inert solvents. *IUPAC Chem. Data Series*, No. 15, Pergamon, Oxford, 1977, 47 pp.
21. Y. Marcus, Dead Sea brines - natural highly concentrated salt solutions, in *Ionic Liquids*, D.G. Lovering and D. Inman, eds., Plenum, London, 1981, pp. 97-115.
22. Y. Marcus, Complexes with water in *Gmelin Handbook of Inorganic Chemistry, Rare Earths*, Suppl. Vol. D3, 1981, pp. 1-14.
23. Y. Marcus, Thermal energy storage in molten salts and salt hydrates, in *Molten Salt Technology*, D.G. Lovering, ed., Plenum, London, 1982, pp. 457-498.
24. R. Keim, Y. Marcus, and C. Keller, eds., *Gmelin Handbook of Inorganic Chemistry, Uranium*, Suppl. Vol. D2, Solvent Extraction, 1982, 400 pp.
25. R. Keim, Y. Marcus, and C. Keller, eds., *Gmelin Handbook of Inorganic Chemistry, Uranium*, Suppl. Vol. D3, Anion Exchange, 1982, 405 pp.
26. Y. Marcus, Uranium isotope separation by ion exchange in *Gmelin Handbook of Inorganic Chemistry, Uranium*, Suppl. Vol. D4, 1982, pp. 204-231.
27. Y. Marcus, Uranium transfer through membranes, *Gmelin Handbook of Inorganic Chemistry, Uranium*, Suppl. Vol. D2, Solvent Extraction, 1982, pp. 232-243.
28. R. Keim, Y. Marcus, and C. Keller, eds., *Gmelin Handbook of Inorganic Chemistry, Uranium*, Suppl. Vol. D4, 1983, 319 pp.
29. Y. Marcus, Ion exchange and solvent extraction in *Gmelin Handbook of Inorganic Chemistry, Rare Earths*, Suppl. Vol. D6, 1983, pp. 1-136.
30. Y. Marcus, The thermodynamics of solvent extraction. in *Developments in Solvent Extraction*, S. Alegret, ed., Ellis-Horwood, Chichester, 1988, pp. 18-30.
31. Y. Marcus, *Ion Solvation*, Wiley, Chichester, 1985, 320 pp.
32. J.A. Marinsky and Y. Marcus, eds., *Ion exchange and solvent extraction*, M. Dekker, New York, Vol. 8, 1981, 438 pp.
33. J.A. Marinsky and Y. Marcus, eds., *Ion exchange and solvent extraction*,

- M. Dekker, New York, Vol. 9, 1985, 486 pp.
34. J.A. Marinsky and Y. Marcus, eds.: *Ion Exchange and Solvent Extraction*, M. Dekker, New York, Vol. 10, 1987, 275 pp.
 35. Y. Marcus: Principles of solutions and solubilities, Chapter 2 in *Solvent Extraction*, a textbook edited by J. Rydberg, C. Musikas, and G.R. Choppin, M. Dekker, New York, 1992, pp. 21-70.
 36. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 11, M. Dekker, New York, 1993.
 37. Y. Marcus: Ion exchange - isotope separation; in *Encyclopedia of Analytical Science*, A. Townsend, ed., Academic Press, London, 1995, pp. 2307-14.
 38. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 12, M. Dekker, New York, 1995.
 39. Y. Marcus: Ion solvation; Chapter 3 in *Liquid Liquid Interfaces: Theory and Methods*, A.G. Volkov and D. Deamer, eds., CRC Press, Boca Raton, 1996, pp. 39-61.
 40. J.A. Marinsky and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 13, M. Dekker, New York, 1997.
 41. Y. Marcus: *Ion Properties*, Marcel Dekker, New York, 1997, 272pp + database disk.
 42. Y. Marcus: *Properties of Solvents*, Wiley, Chichester, 1998, 239 pp.
 43. A.K SenGupta and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol.14, M. Dekker, New York, 2001, 357 pp.
 44. Y. Marcus and A.K SenGupta, eds., *Ion Exchange and Solvent Extraction*, Vol. 15, M. Dekker, New York, 2001, 504 pp.
 45. Y. Marcus: *Solvent Mixtures. Properties and Preferential Solvation*, M. Dekker, New York, 2002, 258 pp.
 46. Y. Marcus: Ion exchange - isotope separation; in *Encyclopedia of Analytical Science*, 2nd ed., A. Townsend, ed., Elsevier Science, London, 2004, 484-492.
 47. A.K SenGupta and Y. Marcus, eds., *Ion Exchange and Solvent Extraction*, Vol. 16, M. Dekker, New York, 2004, 378 pp.
 48. Y. Marcus, in J. Rydberg, M. Cox, C. Musikas, and G. R. Choppin, eds, *Solvent Extraction, Principles and Practice*, M. Dekker, New York, 2nd ed. 2004, revised and expanded, Chapter 2, pp. 27-80.

49. Y. Marcus: Substituted anilines as solvatochromic probes, in Z. Rappoport, ed., *The Chemistry of Anilines*, Wiley, Chichester, 2007, Part 1, 373-406.
50. Y. Marcus and A.K Sen Gupta, eds., *Ion Exchange and Solvent Extraction*, Vol 17, M. Dekker, New York, 2006, 390 pp.
51. Y. Marcus: Properties of individual ions in solution, in D. V. Bostrelli, ed., *Solution Chemistry Research Progress*, Nova Science publishers, Inc., Hauppauge, NY, (2008) 51-68..
52. Y. Marcus: Clustering in Liquid Mixtures of Water and Acetonitrile, Expert Commentary in D. V. Bostrelli, ed., *Solution Chemistry Research Progress*, Nova Science publishers, Inc., Hauppauge, NY, (2008) 1-4.
53. Y. Marcus: Heat Capacities of Molten Salts, in E. Wilhelm and T. Letcher, eds., *Heat Capacities*, Royal Soc. Chem., Cambridge, 2010, Ch. 22, pp. 472-489.
54. Y. Marcus and A. Kalinichev: Supercritical Water, in R. Ludwig, ed. *Water*, Wiley-VCH, Weinheim, 2009.
55. Y. Marcus: Ion properties, in W. Kunz, topical ed. (Electrolytes), *Encyclopedia of Applied Electrochemistry*, G. Kreysa, K.-I. Ota, R. Savinell, Robert F. (Eds.) Springer, Heidelberg, 2014.
56. Y. Marcus: Ion properties, in A. Ciferri and A. Perico, eds. *Ionic Interactions in Natural and Synthetic Macromolecules*, Wiley, New York, 2012, pp. 3-33.
57. Y. Marcus: *Supercritical Water*, Wiley, New York, 2012, 1-204.
58. Y. Marcus: *Ions in Water and Biophysical Implications. From Chaos to Cosmos*. Springer, London, 2012, 1-215.
59. Y. Marcus: Preferential solvation in mixed solvents, in P. E. Smith, J. P. O'Connell, and E. Matteoli, eds., *Fluctuation Theory of Solutions. Applications in Chemistry, Chemical Engineering, and Biophysics*, CRC Press, Boca Raton, 2013, pp. 65-92.
60. Y. Marcus: Hydrogen bonding in supercritical water, in Zh. Fang and Ch. Ch.Xu, eds., *Near-critical and Supercritical Water and their Applications for Biorefineries*, Springer, Dordrecht, 2014, pp. 1-39.
61. Y. Marcus: Volumetric behavior of room temperature ionic liquids. In E. Wilhelm and T.

- Letcher, eds., *Volume Properties*, Royal Soc. Chem., Cambridge, 2015, Ch. 19, pp. 512-525.
62. Y. Marcus: Volumetric behavior of molten salts and molten salt hydrates. In E. Wilhelm and T. Letcher, eds., *Volume Properties*, Royal Soc. Chem., Cambridge, 2015, Ch. 20, pp. 526-541.
 63. Y. Marcus: *Ions in solution and their solvation*. Wiley, New York, 2015, 305 pp.
 64. Y. Marcus: Internal pressure of neat liquids: a review. In T. Letcher, E. Wilhelm, eds., *Enthalpy and Internal Energy: Liquids, Solutions and Vapours*, RSC, Cambridge, 2017, Ch. 18, 477-504.
 65. Y. Marcus: *Ionic liquid properties. From molten salts to RTILs*. Springer Intl. Publ., Switzerland, 2016, 244 pp.
 66. Y. Marcus: *Deep Eutectic Solvents*, Springer, published December 2018.
 67. Y. Marcus: *Supercritical carbon dioxide*. Nova, published 2019.
 68. Y. Marcus: Preferential solvation in binary solvent mixtures. Chapter 3 in: *Advances in Chemical Research*, **56**, J. C. Taylor, ed., Nova, New York, 2019.
 69. Y. Marcus: The excess partial molar heat capacity of water as measure of its structure in binary aqueous solvent mixtures. Chapter in "Heat Capacity: theory and measurement." Nova, submitted April 2019.
 70. Y. Marcus: Mixed solvent systems comprising salt hydrate melts with water. MDPI/Encyclopedia, submitted April 2019.

III. Articles in refereed Journals

1. Y. Marcus: Mercury(II) halide mixed complexes in solution. I. The experimental method and the distribution of the neutral complex, *Acta Chem. Scand.*, **11** (1957) 329-339.
2. Y. Marcus: Mercury(II) halide mixed complexes in solution. II. Complexity constants of the binary complexes, *Acta Chem. Scand.*, **11** (1957) 599-609.
3. Y. Marcus: Mercury(II) halide mixed complexes in solution. III. The uncharged mixed complexes, *Acta Chem. Scand.*, **11** (1957) 610-618.
4. Y. Marcus: The anion exchange of metal complexes. V. The silver thiosulphate system, *Acta Chem. Scand.*, **11** (1957) 619-627.
5. Y. Marcus: Studies on the hydrolysis of metal ions. 20. The hydrolysis of cadmium ion, Cd^{2+} , *Acta Chem. Scand.*, **11** (1957) 690-692.

6. Y. Marcus: Mercury(II) halide mixed complexes in solution. IV. Mixed bromo-iodo complexes, *Acta Chem. Scand.*, 11 (1957) 811-825.
7. Y. Marcus: The anion exchange of metal complexes. VI. The uranyl-phosphate system. 2nd Intl. Conf. Peaceful Uses Atomic Energy, Geneva, Paper 1605 (1958) 19 pp; Vol. 3, Processing of Raw Materials, United Nations, Geneva, 1958, pp. 465-472.
8. Y. Marcus: The oxidation reduction couples U(IV)-U(VI) and Fe(II)-Fe(III) in phosphoric acid. *J. Phys. Chem.*, 62 (1958) 1314-1318.
9. Y. Marcus and F. Nelson: Anion exchange studies. XXV. The rare earths in nitrate solutions, *J. Phys. Chem.*, 63 (1959) 77-79.
10. Y. Marcus and C.D. Coryell: The anion exchange of metal complexes. I. Theory, *Bull. Res. Council Israel*, 8A (1959) 1-16.
11. Y. Marcus: The anion exchange of metal complexes. II. The silver-chloride system, *Bull. Res. Council Israel*, 8A (1959) 17-26.
12. Y. Marcus: The anion exchange of metal complexes. III. The cadmium chloride system, *J. Phys. Chem.*, 63 (1959) 1000-1004.
13. Y. Marcus: The anion exchange of metal complexes. IV. The iron(III) chloride system, *J. Inorg. Nucl. Chem.*, 12 (1960) 287-296.
14. Y. Marcus: Estimation of growth of a daughter of a radioactive nuclide, *Nucleonics*, 19 (March 1961) 76.
15. Y. Marcus and I. Abrahamer: The anion exchange of metal complexes. VII. The lanthanide-nitrate system, *J. Inorg. Nucl. Chem.*, 22 (1961) 141-150.
16. Y. Marcus: The uranium(VI) - nitrate - TBP solvent extraction system. A thermodynamic analysis, *Israel AEC Report*, IA-582 (1961) 35 pp, (cf. item 17).
17. Y. Marcus: Extraction of tracer quantities of uranium(VI) from nitric acid by tri-n-butyl phosphate, *J. Phys. Chem.*, 65 (1961) 1647-1648.
18. E. Foa, N. Rosenthal and Y. Marcus: Three phase formation in the system hydrochloric acid-water-tri-n-butyl phosphate-diluent, *J. Inorg. Nucl. Chem.*, 23 (1961) 109-114. *Israel AEC Report*, 1A-615.
19. J. Flegenheimer and Y. Marcus: Activities of isotopes for intermittent irradiations, *Nucleonics*, 20 (May 1962) 75-76. Idem, *Argentinian CNEA Informe* No. 62 (1962). Idem and M. Givon, *Israel AEC Report*, 1A-645.
20. Y. Marcus and I. Eliezer: Mercury(II) halide mixed complexes in solution. V. Comparison of calculated and experimental equilibrium constants. *J. Phys. Chem.* 66 (1962) 1661-1663. *Israel AEC Report*, 1A-731.
21. Y. Marcus: Solvent extraction of inorganic species, *Chem. Revs.*, 63 (1963) 139-170. *Israel AEC Report*, IA-740.
22. A. Heller, R. Elson and Y. Marcus: Uranium, plutonium, zirconium and beryllium complexes of 2-carboxypyridine-N-oxide, *J. Chem. Soc.*, (1962), 4738-4739. *Israel AEC Report*, IA-736.
23. A. Heller, Y. Marcus and I. Eliezer: N-Hydroxypolyvinylpyridinium type anion exchangers, *J. Chem. Soc.*, 1963, 1579-1583. *Israel AEC Report*, IA-736.
24. Y. Marcus and D. Maydan: Anion exchange of metal complexes. VIII. Effect of secondary cation. The zinc-chloride system., *J. Phys. Chem.*, 67 (1963) 979-983. *Israel AEC Report*, IA-764.
25. Y. Marcus and D. Maydan: Anion exchange of metal complexes. IX. Effect of crosslinking, *J. Phys. Chem.*, 67 (1963) 983-986. *Israel AEC Report*, IA-779.

26. D. Maydan and Y. Marcus: Anion exchange of metal complexes. X. The indium chloride system. Comparison of resin and liquid anion exchange. *J. Phys. Chem.*, 67 (1963) 987-990. *Israel AEC Report*, IA-780.
27. I. Eliezer and Y. Marcus: Anion exchange of metal complexes. XI. Application of the constant ionic medium method to the mercury halide system., *J. Inorg. Nucl. Chem.*, 25 (1963) 1465-1470. *Israel AEC Report*, IA-782.
28. Y. Marcus and I. Eliezer: Anion exchange of metal complexes. XII. The cadmium and mercury halide systems, *J. Inorg. Nucl. Chem.*, 25 (1963) 867-874. *Israel AEC Report*, IA-794.
29. Y. Marcus, M. Givon and G.R. Choppin: Anion exchange of metal complexes. XIII. The actinide(III)-nitrate system. *J. Inorg. Nucl. Chem.*, 25 (1963) 1457-1463. *Israel AEC Report*, IA-783.
30. M. Givon, Y. Marcus and M. Shiloh: A modified Debye theory of salting of non-electrolytes in electrolyte solutions, *J. Phys. Chem.*, 67 2495-97(1963).
31. Y. Marcus and M. Givon: Anion exchange of metal complexes. XIV. The effect of acidity on the sorption of lanthanides from lithium nitrate solutions, *J. Phys. Chem.*, 68 (1964) 2230-2234.
32. J. Soriano and Y. Marcus: Praseodymium(IV) nitrate, *Inorg. Chem.*, 3 (1964) 901-902.
33. M. Zangen and Y. Marcus: Solvent extraction from molten salts. I. Mercury(II) chloride, Bromide and iodide, *Israel J. Chem.*, 2 (1964) 49-55.
34. Y. Marcus, M. Givon and M. Shiloh: The chemistry of the trivalent actinides in aqueous solutions and their recovery, 3rd Intl. Conf. Peaceful Uses Atomic Energy, *Proceedings*, 10 (1965) 588-596.
35. Y. Marcus, I. Eliezer and M. Zangen: The stabilization of mixed complexes. *Proceedings Tihany Conf. Coord. Chem.*, 1964, Hungarian Acad. Sci. Akademiai Kiado, 1965.
36. J. Penciner and Y. Marcus. Activity coefficients of NaBr at high concentrations, *J. Chem. Eng. Data*, 10 (1964) 105-106.
37. M. Zangen and Y. Marcus: Solvent extraction from molten salts. III. The formation of anionic mercury(II) mixed-halide complexes, *Israel J. Chem.*, 2 (1964) 155-165.
38. M. Shiloh and Y. Marcus: A spectrophotometric study of trivalent actinide complexes in solution. I. Uranium, *Israel J. Chem.*, 3 (1965) 123-131.
39. M. Shiloh and Y. Marcus: A spectrophotometric study of trivalent actinide complexes in solution. II. Neptunium and plutonium, *J. Inorg. Nucl. Chem.*, 28 (1966) 2725-2732.
40. Y. Marcus: Anion exchange of metal complexes. XV. Anion exchange and amine extraction of lanthanides and trivalent actinides from chloride solutions. *J. Inorg. Nucl. Chem.*, 28 (1966) 209-219. *Israel AEC Report*, IA-1029 (1965).
41. J. Penciner, I. Eliezer and Y. Marcus: Anion exchange of metal complexes. XVI. Chloride complexes of zinc, cadmium and mercury in anhydrous ethanol. *J. Phys. Chem.*, 69 (1965) 2955. *Israel AEC Report*, IA-1029 (1965).
42. Y. Marcus and D. Cohen: Americium(III) perxenate, *Inorg. Chem.*, 5 (1966) 1740-1743, *Israel J. Chem.*, 3 (1965) 4 p.
43. Y. Marcus: The effective ligand activity and acidity function concepts in concentrated solutions, *Rec. Chem. Progr.*, 27 (1966) 105-118.
44. M. Noam and Y. Marcus: Liquid ion exchange membranes in electro dialysis processes, *Israel J. Chem.*, 4 (1966) 97-103.

45. M. Zangen, Y. Marcus and E.D. Bergmann: Products of the reaction between alcohols and phosphorus pentoxide. I. Extractant efficiency of the various products. *Separation Sci.*, 2 (1967) 187-199.
46. M. Zangen, E.D. Bergmann and Y. Marcus: Products of the reaction between alcohols and phosphorus pentoxide. II. Paper chromatographic separation, *Separation Sci.*, 3 (1968) 1-9.
47. M. Zangen, E.D. Bergmann and Y. Marcus: Products of the reaction between alcohols and phosphorus pentoxide. III. Identification by infrared spectrophotometry, *Israel J. Chem.*, 5 (1967) 89-100.
48. Y. Marcus: On the use of the molar ratio method for determining association stoichiometry, *Israel J. Chem.*, 5 (1967) 143-149.
49. Y. Marcus: Metal chloride complexes studied by ion exchange and solvent extraction methods. I. Non-transition metal ions, lanthanides, actinides and d⁰ transition metal ions. *Coord. Chem. Revs.*, 2 (1967) 195-238; *Israel AEC Report*, IA-1087 (1966).
50. Y. Marcus: Metal chloride complexes studied by ion exchange and solvent extraction methods. II. Transition metal elements and hexavalent actinides. *Coord. Chem. Revs.*, 2 (1967) 257-297; *Israel AEC Report*, IA-1087 (1966).
51. I. Abrahamer and Y. Marcus: The interaction of lanthanide and nitrate ions in solution. I. Inner- and outer-sphere coordination in aqueous solutions. *Inorg. Chem.*, 6 (1967) 2103-2106.
52. I. Abrahamer and Y. Marcus: The interaction of lanthanide and nitrate ions in solutions. The relative interaction strength with nitrate and water in organic solvents, *J. Inorg. Nucl. Chem.*, 30 (1968) 1563-1575.
53. Y. Marcus: The solubility of americium(III) chloride in concentrated lithium chloride solutions, *Radiochimica Acta*, 8 (1967) 212-214.
54. M. Liquornik and Y. Marcus: Cation exchange in molten salts. I. The ion exchange properties of sodium zeolite A in molten sodium nitrate; exchange reactions with alkali-metal, thallium and silver ions. *J. Phys. Chem.*, 72 (1968) 2885-2890.
55. M. Liquornik and Y. Marcus: Cation exchange in molten salts. II. The occlusion of lithium, sodium, potassium and silver nitrates in the respective forms of zeolite A, *Israel J. Chem.*, 6 (1968) 115-122.
56. M. Liquornik and Y. Marcus: Cation exchange in molten salts. III. The ion exchange properties of sodium zeolite A in molten sodium nitrate; exchange with calcium and strontium cations, *J. Phys. Chem.*, 72 (1968) 4704-4705.
57. Y. Marcus and M. Zangen: The use of distribution measurements for determining the activity of the solute in molten salt mixtures. *Proc. Symp. on Thermodynamics of Nucl. Materials with Emphasis on Solution Systems*, IAEA, Vienna, 1967, Paper SM 98/17 (1968) 155-165.
58. E. Yanir, M. Givon and Y. Marcus: Coexistence of tetravalent plutonium and uranium in aqueous solution, *J. Inorg. Nucl. Chem.*, 30 (1968) 1322-4.
59. Y. Marcus and J. Naveh: Anion exchange of metal complexes. XVII. Selective swelling of the exchanger in mixed aqueous-organic solvents, *J. Phys. Chem.*, 73 (1969) 591-596.
60. M. Shiloh, M. Givon and Y. Marcus: Spectrophotometric study of trivalent actinides in solution. III. Americium bromide, iodide, carbonate and nitrate, *J. Inorg. Nucl. Chem.*, 31 (1969) 1807-1914.

61. Y. Marcus and M. Shiloh: Spectrophotometric study of trivalent actinides in solution. IV. Americium with chloride ligand, *Israel J. Chem.*, 7 (1969) 31-43.
62. J. Soriano, J. Shamir, A. Netzer and Y. Marcus: NMR evidence for the (HF_2^-) anion, *Inorg. Nucl. Chem. Letters*, 5 (1969) 209-214.
63. Y. Marcus: Mass-action law versus non-specific non-ideality in solvent extraction equilibria. (Plenary lecture at 11. ICCG), *Pure and Appl. Chem.*, 20 (1969) 85-92.
64. E. Yanir, Y. Marcus and M. Givon: Higher oxidation states of americium in phosphate solutions, *Inorg. Nucl. Chem. Letters*, 5 (1969) 369-372.
65. Y. Marcus: Recommended symbols for solution equilibria, *Pure and Appl. Chem.*, 18 (1969) 457-464.
66. Y. Marcus and I. Eliezer: Stability of mixed complexes in solution, *Coord. Chem. Rev.*, 4 (1969) 273-322.
67. Y. Marcus, J. Shamir and J. Soriano: Mutual solubilities of anhydrous hydrogen fluoride and aliphatic hydrocarbons, *J. Phys. Chem.*, 74 (1970) 133-139.
68. Y. Marcus and E. Eyal: Anion exchange of metal complexes. XVIII. Sorption of metal ions from anhydrous chloride-containing methanol and ethanol. *J. Inorg. Nucl. Chem.*, 32 (1969) 2045-2057.
69. Y. Marcus, J. Naveh and M. Nissim: Anion exchange of metal complexes. XIX. Volumetric studies of the exchanger in mixed solvents, *J. Phys. Chem.*, 73 (1969) 4415-4417.
70. A. Aladgem, Y. Marcus and L. Rozeanu: Electrodeposition of tantalum-nickel alloys. Proc. 7th Intl. Conf. Electrodeposition, *Intl. Council for Electrodeposition*, London 1968, 32-35.
71. E. Yanir, M. Givon and Y. Marcus: Direct determination of the formal potential of the Am(IV)-Am(III) and Am(VI)-Am(V) couples in phosphoric acid, *Inorg. Nucl. Chem. Letters*, 6 (1970) 415-429.
72. N. Yellin and Y. Marcus: Coordination solvation in relation to mixed complexes. Proc. 3rd Conf. Coord. Chem., Debrecen, Hungary, 1970; *Akademiai Kiado* (1971) 113-119.
73. J. Soriano, J. Shamir and Y. Marcus: Distribution of amines between liquid hydrogen fluoride and hexane. *Solvent Extraction*, Proc. ISEC '71, The Hague, *Soc. Chem. Industry*, London, 1971, pp. 3-8.
74. Y. Marcus and M. Bomse: Octahedral chloride complexes of trivalent actinides and lanthanides in solution, *Israel J. Chem.*, 8 (1970) 901-911. Proc. XIII. Intl. Conf. Coord. Chem., Cracow-Zakopane, Sept. 1970, Vol. 1, 67-68.
75. Y. Marcus, E. Hoffman and A.S. Kertes: Abbreviations for commonly used (non-chelating) extractants, *J. Inorg. Nucl. Chem.*, 33 (1971) 863-867.
76. M. Liquornik and Y. Marcus: Ion exchange in molten salts. V. Potassium zeolite A as an ion exchanger in nitrate melts, *J. Phys. Chem.*, 75 (1971) 2523-2525.
77. Y. Marcus, E. Yanir and M. Givon: The standard potential of the americium III/IV couple. *Trans. K.T.H., Stockholm, Sillen Memorial Volume*, 265 (1972) 228-238.
78. Y. Marcus: The softness parameters of ions. Prediction of the occurrence of miscibility gaps in molten salt mixtures, *Israel J. Chem.*, 10 (1972) 659-683.
79. Y. Marcus and E. Eyal: Anion exchange of metal complexes. XX. Exchange of chloroargentate and perhenate from anhydrous ethanolic and methanolic hydrogen chloride solutions, *J. Inorg. Nucl. Chem.*, 34 (1972) 1667-1673.

80. N. Yellin and Y. Marcus: Raman study of mixed cyanide-iodide complexes of cadmium in aqueous solution, *Israel J. Chem.*, 10 (1972) 919-924.
81. Y. Marcus and J. Naveh: Swelling of anion exchangers in mixed solvents. III. A calorimetric study, *Israel J. Chem.*, 10 (1972) 899-909.
82. Y. Marcus and Z. Kolarik: Thermodynamics of liquid-liquid distribution reactions. I. The dioxouranium(VI) nitrate-water-tri-n-butyl phosphate-n-dodecane system, *J. Chem. Eng. Data*, 18 (1973) 155-163.
83. Y. Marcus: Nonstoichiometric interactions of long-chain ammonium salts in organic solvents, *J. Phys. Chem.*, 77 (1973) 516-519; *Acta Pharm. Suec.*, 9 (1972) 617.
84. N. Yellin and Y. Marcus: A Raman spectrophotometric study of the stability of aqueous coordinatively-saturated mixed bromo-iodo complexes of cadmium, *J. Inorg. Nucl. Chem.*, 36 (1974) 1331-1335.
85. N. Yellin and Y. Marcus: Solvent effects on the stability of mixed ligand complexes, *J. Inorg. Nucl. Chem.*, 36 (1974) 1325-1330.
86. Y. Marcus and Z. Kolarik: Thermodynamics of liquid-liquid distribution reactions. IV. The synergistic extraction of uranium(VI) with di-2-ethylhexyl phosphoric acid and tri-n-butyl phosphate, *Inorg. Nucl. Chem. Letters*, 10 (1974) 275-282.
87. Y. Marcus: Thermodynamics of liquid-liquid distribution reactions. II. Lithium bromide-water-2-ethylhexan-1-ol system. Proc. 3rd. Intl. Conf. Thermod., Baden (Vienna), 1973, Vol. I, 180-187; *J. Chem. Eng. Data*, 20 (1975) 141-144.
88. Y. Marcus and Z. Kolarik: Thermodynamics of liquid-liquid distribution reaction. III. The U(VI), Nd(III) and Ho(III) nitrate-water-di-(2 ethylhexyl) phosphoric acid-hydrocarbon diluent extraction systems, *J. Inorg. Nucl. Chem.*, 38 (1976) 1069-1073.
89. Y. Marcus: Some thermodynamic data concerning the dioxouranium(VI) ion and its compounds and reactions. *J. Inorg. Nucl. Chem.*, 37 (1975) 493-501.
90. Y. Marcus: Analytical chemistry in Israel (an editorial review) *Analyt. Letters*, 8/9 (1975) 593-601.
91. Y. Marcus, N. Ben-Zvi and I. Shiloh: Molar volumes and ion pairing of lithium halides in alcohols, *J. Soln. Chem.*, 5 (1976) 87-106.
92. Y. Marcus: Development and publication of solvent extraction methods, *Talanta* 23 (1976) 203-209.
93. S. Amdur, J. Padova, D. Saad and Y. Marcus: Thermodynamics of mixed electrolyte solutions. III. The aqueous system NaCl-Pr₄NCl-H₂O at 25°C, *J. Chem. Thermod.*, 8 (1976) 77-82.
94. J. Padova, D. Rosenzweig and Y. Marcus: Apparent molar volumes in mixed salt solutions. IV. The ternary systems Me₄NBr+NaBr+H₂O and Pr₄NBr+NaBr+ H₂O at 298.15 K, *J. Chem. Thermod.*, 8 (1976) 431-437.
95. D. Rosenzweig, J. Padova and Y. Marcus: Thermodynamics of mixed electrolyte solutions. V. An isopiestic study of the aqueous systems tetra-n-propylammonium bromide-sodium bromide and tetramethylammonium bromide-sodium bromide at 25°C, *J. Phys. Chem.*, 80 (1976) 601-605.
96. D. Saad, J. Padova and Y. Marcus: Thermodynamics of mixed electrolyte solutions. VI. An isopiestic study of a pseudo-ternary system NaCl-KCl- MgCl₂-H₂O at 25°C, *J. Soln. Chem.*, 4 (1975) 983-993.
97. Y. Marcus and M. Okamoto: Thermodynamics of the anion exchange of cyanide and thiocyanate on a strong anion exchanger. *J. Phys. Chem.*, 80 (1976) 2456-2461.

98. Y. Marcus: Enthalpy and entropy of transfer of lithium halides between water and long chain alcohols. *J. Phys. Chem.*, 80 (1976) 2451-2456.
99. Y. Marcus and Z. Kolarik: The enthalpies of mixing of organophosphate esters with hydrocarbons. *J. Soln. Chem.*, 6 (1977) 39-56.
100. Y. Marcus: Activities of water and potassium chloride in Dead Sea brines, *Geochim. Cosmochim. Acta*, 41 (1977) 1739-1747.
101. Y. Marcus and L.E. Asher: Extraction of phosphoric acid with long-chain tertiary amines. I. Extraction from aqueous phosphoric acid solutions, *J. Inorg. Nucl. Chem.*, 39 (1977) 2035-2040.
102. Y. Marcus and H. Barak: Mercury(II) iodide in terphenyls. Solubility and vapor pressure, *J. Phys. Chem.*, 81 (1977) 2197-2200.
103. Y. Marcus, L.E. Asher and H. Barak: Extraction of phosphoric acid with long-chain tertiary amines. II. Extraction from potassium hydrogen phosphate and various acid solutions, *J. Inorg. Nucl. Chem.*, 40 (1978) 325- 329.
104. H. Barak, A. Loewenschuss and Y. Marcus: The Raman spectrum of mercury iodide in high temperature solvents, *Spectroscopy Letters*, 10, 719-726 (1977); 11 (1978) 285- 292.
105. Y. Marcus and L.E. Asher: The extraction of alkali halides from aqueous solutions with crown ethers, *J. Phys. Chem.*, 82 (1978) 1246-1254.
106. L.E. Asher and Y. Marcus: Selective extraction of alkali halides with crown ethers; Proc. ISEC '77, *CIM Spec. Publ.*, 21 (1979) 130-134.
107. Y. Marcus: Thermodynamics of liquid-liquid distribution reactions. V. Enthalpy- and entropy-controlled extraction processes; Proc. ISEC '77, Proc. ISEC '77, *CIM Spec. Publ.*, 21 (1979) 154-158.
108. Y. Marcus and J. Naveh: Swelling of anion exchangers in mixed solvents. IV. Swelling and the invasion of lithium chloride, *J. Phys. Chem.*, 82 (1978) 858-863.
109. Y. Marcus and J.T. Wei: Anion exchange of metal complexes. XXI. Sorption of uranyl chloride from anhydrous methanolic, ethanolic and isopropanolic hydrogen chloride solutions, *J. Inorg. Nucl. Chem.*, 40 (1978) 549-551.
110. J. Naveh and Y. Marcus: On the dependence of the swelling of ion exchange resins on their crosslinking, *J. Chromatog.*, 148 (1978) 495-499.
111. Y. Marcus: Evaluation of solubility data of the mercury(I) chloride-water system, *J. Phys. Chem. Ref. Data*, 9 (1981) 1307-1325. [
112. Y. Marcus: The ionic dissociation of aqueous hydrobromic acid. I. Estimate from vapor pressure and activity coefficient data, *J. Chem. Soc. Faraday Trans., 1*, 75 (1979) 1715-1727.
113. J. Hormadaly and Y. Marcus: Anion solvation in protic solvents. I. Spectroscopic study, *J. Phys. Chem.*, 83 (1979) 2843-2848.
114. Y. Marcus, E. Pross and J. Hormadaly: Anion solvation in protic solvents. II. Salt distribution study, *J. Phys. Chem.*, 84 (1980) 2708-2715.
115. Y. Marcus, E. Pross and N. Soffer: The Hammett acidity function of hydrobromic acid and its ionic dissociation, *J. Phys. Chem.*, 84 (1980) 1725-1729.
116. Y. Marcus: Single ion Gibbs-free energies of transfer from water to organic and mixed solvents. *Revs. in Anal. Chem.*, 5 (1980) 53-137.

117. N. Soffer, Y. Marcus, and J. Shamir: Ionic dissociation of aqueous hydrobromic acid. Part 2. Estimate from proton magnetic resonance data at 6 to 60 deg, *J. Chem. Soc. Faraday Trans., 1*, 76 (1980) 2347-2361.
118. Y. Marcus, L.E. Asher, J. Hormadaly, and E. Pross: Selective extraction of potassium chloride by crown ethers in substituted phenol solvents, *Hydrometallurgy*, 7 (1981) 27-39.
119. D. Saad, J. Padova and Y. Marcus: Thermodynamics of mixed electrolyte solutions. XI. An isopiestic study of the quaternary system NaCl-KCl- CaCl₂-water at 25 deg., *J. Soln. Chem.*, 9 (1980) 259-268.
120. J.A. Epstein, E.M. Feist, J. Zmora and Y. Marcus: Extraction of lithium from the Dead Sea, *Hydrometallurgy*, 6 (1981) 269-275.
121. N. Soffer and Y. Marcus: Ionic dissociation of aqueous hydrobromic acid. Part 4. Estimate from p.m.r. data at 90 and 120 deg. and from 81-Br nuclear quadrupole relaxation data, *Ber. Bunsenges. Phys. Chem.*, 86 (1981) 72-73.
122. Y. Marcus and N. Soffer: Ionic dissociation of aqueous hydrobromic acid. Part 5. Estimate from refractive index and density measurements, *J. Soln. Chem.*, 10 (1981) 549-562.
123. Y. Marcus and T. Nakashima: Thermodynamic model for the extraction of lithium from chloride brines containing aluminium and magnesium, *Hydrometallurgy*, 9 (1982) 135-148.
124. Y. Marcus and T. Nakashima: Ion transport through a liquid membrane against a concentration gradient. *J. Phys. Chem.*, 87 (1983) 794-797.
125. S. Glikberg and Y. Marcus: Relation of Gibbs-free energy of transfer of ions from water to polar solvents with the properties of the solvents and of the ions, *J. Soln. Chem.*, 12 (1983) 255-270.
126. Y. Marcus: Solvent extraction by selective solvation of ions, *Pure Appl. Chem.*, 54 (1982) 2327-2335.
127. Y. Marcus: Volume changes on ion pairing of symmetrical electrolytes, *Z. Naturforsch.*, A38 (1983) 247-251.
128. Y. Marcus: A quasi-lattice quasi-chemical theory of preferential solvation of ions, *Austr. J. Chem.*, 36 (1983) 1719-1738.
129. Y. Marcus: Ionic radii in aqueous solutions, *J. Solution Chem.*, 12 (1983) 271-275.
130. Y. Marcus: Thermodynamics of transfer of single ions from water to non-aqueous and mixed solvents. I. Gibbs-free energies of transfer to non-aqueous solvents. *Pure Appl. Chem.*, 55 (1983) 977-1022.
131. A. Loewenschuss and Y. Marcus: The entropies of gaseous polyatomic ions, *Chem. Rev.*, 84 (1984) 89-116.
132. A. Ben-Naim and Y. Marcus: Solubility and thermodynamics of solution of xenon in liquid n-alkanes, *J. Chem. Phys.*, 80 (1984) 4438-4440.
133. Y. Marcus: The effectivity of solvents as electron pair donors, *J. Soln. Chem.*, 13 (1984) 599-628.
134. Y. Marcus, V. Dangor and S. Lessery: The phase diagram of magnesium bromide and chloride hexahydrate mixtures, *Thermochim Acta*, 77 (1984) 216-226.
135. A. Ben-Naim and Y. Marcus: Solvation thermodynamics of non-ionic solutes, *J. Chem. Phys.*, 81 (1984) 2016-2027.

- 136 Y. Marcus: Thermodynamics of transfer of single ions from water to non-aqueous and mixed solvents. 2. Enthalpies and entropies of transfer to non-aqueous solvents, *Pure Appl. Chem.*, 57 (1985) 1103-1129.
137. Y. Marcus: Thermodynamics of transfer of single ions from water to non-aqueous and mixed solvents. 3. Standard electrode potentials of transfer to non-aqueous solvents at 298.15 K, *Pure Appl. Chem.*, 57 (1985) 1129-1132.
138. Y. Marcus: Thermodynamics of transfer of single ions from water to non-aqueous and mixed solvents. 4. The selection of the extrathermodynamic assumptions, *Pure Appl. Chem.*, 58 (1986) 1721-1736.
139. Y. Marcus and A. Loewenschuss: Standard entropies of hydration of ions; *Annu. Rep. Part C (Royal Soc. Chem., London)* 1984. Chapter 4., 81-135 (1985).
140. Y. Marcus and A. Ben-Naim: A study of the structure of water and its dependence on solutes, based on the isotope effects on solvation thermodynamics; *J. Chem. Phys.*, 83, 4744-4759 (1985).
141. Y. Marcus and S. Glikberg: Recommended methods for the purification of solvents and tests for impurities. Methanol and ethanol; *Pure Appl. Chem.*, 57, 855-864 (1985).
142. Y. Marcus: The hydration entropies of ions and their effects on the structure of water; *J. Chem. Soc., Faraday Trans. 1*, 82, 233-240 (1986).
143. Y. Marcus and A. Loewenschuss: Entropies of tetrahedral M-phenyl species; *J. Chem. Soc., Faraday Trans. 1*, 82, 993-1006 (1986).
144. Y. Marcus: Solvation numbers of ions, obtained from their entropies of solvation; *J. Solution Chem.*, 15, 291-306 (1986).
145. M.H. Abraham and Y. Marcus: The thermodynamics of solvation of ions. Part 1. The heat capacities of hydration at 298.15 K; *J. Chem. Soc., Faraday Trans. 1*, 82, 3255-3274 (1986).
146. Y. Marcus and A. Loewenschuss. Standard thermodynamic functions for the gaseous MO_2^{2+} ions and for their hydration; *J. Chem. Soc. Faraday Trans. 1*, 82, 2873-2886 (1986).
147. Y. Marcus: On enthalpies of hydration, ionization potentials, and the softness of ions; *Thermochim. Acta*, 104, 389-394 (1986).
148. Y. Marcus: The thermodynamics of solvation of ions. Part 2. The enthalpy of hydration at 298.15 K; *J. Chem. Soc., Faraday Trans. 1*, 83, 339-349 (1987).
149. A. Loewenschuss and Y. Marcus: Standard thermodynamic functions of gaseous polyatomic ions at 100 to 1000 K; *J. Phys. Chem. Reference Data*, 16, 61-89 (1987).
150. Y. Marcus: Purification of solvents and tests for impurities. 1-propanol, 2-propanol, and 2-methyl-2-propanol; *Pure Appl. Chem.*, 58, 1411-1418 (1986).
151. M. Bloemendal and Y. Marcus: A random contact point model for the correlation and prediction of pair interaction coefficients in dilute solutions. Application to enthalpies in alkanols, amides and water; *A. I. Ch. E. J.*, 33, 1800-1807 (1987).
152. Y. Marcus: Solvent release on ion association from entropy data; *J. Solution Chem.*, 16, 735-744 (1987).
153. N. Soffer, M. Bloemendal and Y. Marcus: The molar refractivities of tetra-n-alkyl-ammonium salts and ions; *J. Chem. Eng. Data*, 32, 43-46 (1988).
154. Y. Marcus: Linear solvation energy relationships. A scale describing the 'softness' of solvents; *J. Phys. Chem.*, 91, 4422-4428 (1987).

155. Y. Marcus: The thermodynamics of solvation of ions. Part 4. Application of the TATB extrathermodynamic assumption to the hydration of ions and the properties of hydrated ions; *J. Chem. Soc., Faraday Trans. 1*, 83, 2985-2992 (1987).
156. Y. Marcus: The thermodynamics of ion hydration and its interpretation in terms of a common model; *Pure Appl. Chem.*, 59, 1093-1102 (1987).
157. M.H. Abraham, Y. Marcus, and K. Lawrence: The thermodynamics of solvation of ions. Part 3. The heat capacity for solvation of gaseous ions in methanol at 298.15 K; *J. Chem. Soc., Faraday Trans. 1*, 84, 175-185 (1988).
158. Y. Marcus, M.J. Kamlet, and R.W. Taft: Linear solvation energy relationships. Standard molar Gibbs free energies and enthalpies of transfer of ions into non-aqueous solvents; *J. Phys. Chem.*, 92, 3613-3622 (1988).
159. Y. Marcus: Preferential solvation of ions. Part 2. The solvent composition near the ion; *J. Chem. Soc., Faraday Trans. 1*, 84, 1465-1475 (1988).
160. M. Bloemendal, Y. Marcus, M. Booij, R. Hofstee, and G. Somsen: Enthalpies of solution and solvation of amides in DMF: the application of the random contact point approach to these quantities; *J. Solution Chem.*, 17, 15-33 (1988).
161. Y. Marcus and M. Soffer: Solubilities and vapor pressures in the quinquary system NaCl- KCl-MgCl₂-CaCl₂-H₂O. Part 1. Predictions and measurements at 25 degrees; *J. Chem. Soc., Faraday Trans. 1*, 84, 3575-3585 (1988).
162. Y. Marcus: Ionic radii in aqueous solutions; *Chem. Rev.*; 88, 1475-1498 (1988).
163. M. Bloemendal and Y. Marcus: The random contact point model for pair interaction coefficients of unlike solute molecules; *J. Solution Chem.*, 18, 437-446 (1989).
164. M. Bloemendal, Y. Marcus, A.H. Sijpkens, and G. Somsen: The role of hydrophobicity in protein structure is overestimated; *Int. J. Peptide Protein Res.*, 34, 405-408 (1989).
165. Y. Marcus: Preferential solvation. Part 3. Binary solvent mixtures; *J. Chem. Soc., Faraday Trans. 1*, 85, 381-389 (1989).
166. M.J. Kamlet, R.M. Doherty, M.H. Abraham, Y. Marcus, and R.W. Taft: Linear solvation energy relationships. 46. An improved equation for correlation and prediction of octanol/water partition coefficients of organic non-electrolytes (including strong hydrogen bond donor solutes); *J. Phys. Chem.*, 92, 5244-5255 (1988).
167. E. Högfeldt and Y. Marcus: A useful method for summarizing data in ion exchange. II. Some anion exchange equilibria; *Chem. Scripta*, 29, 127-132 (1989).
168. Y. Marcus: Preferential Solvation. Part 4. A comparison of the Kirkwood-Buff and the quasi-chemical approaches; *J. Chem. Soc., Faraday Trans. 1*, 85, 3019-3032 (1989).
169. Y. Marcus and T. Mussini: The extrapolation of emf data to infinite dilution in non-aqueous and mixed solvents; *Pure Appl. Chem.*, 63, 1647-1658 (1991).
170. Y. Marcus: Thermodynamic functions of transfer of single ions from water to non-aqueous and mixed solvents. Part 5. Gibbs energies of transfer into aqueous alcohols; *Pure Appl. Chem.*, 62, 899-940 (1990).
171. Y. Marcus: The pH of highly saline waters; *Pure Appl. Chem.*, 61, 1133-1138 (1989).
172. Y. Marcus: Recommended methods for the purification of solvents and tests of impurities. 1,2-Ethandiol and 2,2,2-trifluoroethanol; *Pure Appl. Chem.*, 62, 139-147 (1990).
173. Y. Marcus: Diluent effects in solvent extraction; *Ion Exch. Solv. Extr.*, 7, 567-575 (1989).
174. Y. Marcus: Structural aspects of water in 1-octanol; *J. Solution Chem.*, 19, 507-517 (1990).

175. Y. Marcus: Extraction of alkanol isomers; *J. Org. Chem.*, (Kamlet Memorial) 55, 2224-2226 (1990).
176. Y. Marcus and M. Soffer: Solubilities and vapor pressures in the quinquinary system NaCl- KCl-MgCl₂-CaCl₂-H₂O. Part 2. Predictions and measurements at 30 to 45°C; *J. Chem. Soc., Faraday Trans.*, 86, 495-500, 1990.
177. Y. Marcus: The effectivity of solvents as hydrogen bond donors; *J. Solution Chem.*, 20, 929-945 (1991).
178. Y. Marcus: Preferential solvation in mixed solvents. Part 5. Binary mixtures of water and organic solvents; *J. Chem. Soc., Faraday Trans. 1*, 86, 2215-2224, 1990.
179. A.-K.S. Labban and Y. Marcus: The solubility and solvation of salts in mixed non-aqueous solvents. 1. Potassium halides in mixed aprotic solvents; *J. Solution Chem.*, 20, 221-232, 1990.
180. Y. Marcus and Y. Migron: On the polarity, hydrogen bonding, and structure of mixtures of water and cyanomethane; *J. Phys. Chem.*, 95, 400-406, 1991.
181. Y. Migron and Y. Marcus: Two re-introduced solvatochromic indicators for hydrogen bond donation and acceptance; *J. Phys. Org. Chem.*, 14, 310-314 (1991).
182. Y. Marcus: Solubility and solvation in mixed solvent systems; *Pure Appl. Chem.*, 62, 2069-2076, 1990.
183. Y. Migron and Y. Marcus: The polarity and hydrogen bonding ability of some binary aqueous-organic mixtures; *J. Chem. Soc., Faraday Trans.*, 87, 1339-1343 (1991).
184. Y. Marcus: Linear solvation energy relationships. Correlation and prediction of the distribution of organic solutes between water and immiscible organic solvents; *J. Phys. Chem.*, 95, 8886-8891 (1991).
185. Y. Marcus: Preferential solvation in mixed solvents. Part 6. Binary mixtures of methanol, ethanol, acetone, or triethylamine with another organic solvent; *J. Chem. Soc., Faraday Trans.*, 87, 1843-1849 (1991).
186. Y. Marcus: Preferential solvation of Ag(I), Cu(I), and Cu(II) ions in aqueous acetonitrile; *J. Chem. Soc. Dalton Trans.*, 1991, 2265-2268.
187. Y. Marcus: The thermodynamics of solvation of ions. Part 5 The Gibbs free energy of hydration of ions at 298.15 K; *J. Chem. Soc., Faraday Trans.*, 87, 2995-2997 (1991).
188. H. Schneider, Y. Migron, and Y. Marcus: Hydrogen bond donation properties of aqueous solvent mixture from ¹³C nmr data of dialkylbenzamides; *Z. Phys. Chem.*, 175, 145-164 (1992).
189. Y. Marcus: Correlation of the distribution of organic solutes between water and 'wet' organic solvents with the properties of the solutes and the solvents; *Ion Exchange and Solvent Extraction*, 10, 527-538 (1992).
190. Y. Marcus: The structuredness of solvents; *J. Solution Chemistry*, 21, 1216-1230 (1992).
191. Y. Migron, Y. Marcus, and M. Dodu: Computer search for solvent and solute parameters that determine partition data; *Chemomet. Intell. Lab. Syst.*, 22, 191-7 (1994).
192. Y. Marcus: Thermodynamics of solvation of ions. Part 6. The standard partial molar volumes of aqueous ions at 298.15 K; *J. Chem. Soc., Faraday Trans.*, 89, 713-718 (1993).
193. H.B.D. Jenkins and Y. Marcus: Viscosity B-coefficient of the aqueous cyanide and azide ions; *J. Solution Chem.*, 22, 95-98 (1993).

194. H. Schneider, Y. Badrieh, Y. Migron, and Y. Marcus: Hydrogen bond donation properties of organic solvents and their aqueous mixtures from ^{13}C nmr data of pyridine-N-oxide; *Z. Phys. Chem.*, **177**, 143-156 (1992).
195. Y. Marcus and Y. Migron: Solubility of asymmetric quaternary and non-quaternary ammonium salts in water and nonaqueous solvents at 298.15 K and their transfer Gibbs free energies between them; *J. Chem. Soc., Faraday Trans.*, **89**, 2437-2439 (1993).
196. S. Cohen, Y. Marcus, Y. Migron, S. Dikstein, and A. Shafran: Water sorption, binding and solubility of polyols; *J. Chem. Soc., Faraday Trans.*, **89**, 3271-3279 (1993).
197. Y. Marcus: The properties of organic liquids that are relevant to their use as solvating solvents; *Chem. Soc. Rev.*, 1993, **22**, 409-416.
198. Y. Marcus: A simple empirical model describing the thermodynamics of hydration of ions of widely varying charges, sizes and shapes; *Biophys. Chem.*, **51**, 111-127 (1994).
199. Y. Marcus: Viscosity B-coefficients, structural entropies and heat capacities, and the effects of ions on the structure of water; *J. Solution Chem.*, **23**, 831-847 (1994).
200. Y. Marcus: The use of chemical probes for the characterization of solvent mixtures. Part 1. Completely non-aqueous mixtures; *J. Chem. Soc., Perkin Trans. 2*, 1994, 1015-21.
201. Y. Marcus, G. Hefter, and T.-S. Pang: Ionic partial molar volumes in nonaqueous solvents; *J. Chem. Soc., Faraday Trans.*, **90**, 1899-903 (1994).
202. Y. Marcus: The use of chemical probes for the characterization of solvent mixtures. Part 2. Aqueous mixtures; *J. Chem. Soc., Perkin Trans. 2*, 1994, 1751-8.
203. G.L. Soldi, Y. Marcus, M.J. Blandamer, and P. Cullis: Titration calorimetric determination of the pairwise interaction parameters of glycerol, D-threitol, mannitol, and D-glucitol in dilute aqueous solutions; *J. Solution Chem.*, **24**, 201-209, 1995.
204. Y. Marcus: Preferential solvation in mixed solvents. Part 7. Binary mixtures of water and alkanolamines. *J. Chem. Soc., Faraday Trans.*, **91**, 427-430 (1995).
205. Y. Marcus: Transfer free energies of divalent anions from water to organic solvents and aqueous-organic mixtures; *Z. Naturf. A*, **50A**, 51-58 (1995).
206. Y. Marcus: Water binding to organic molecules; *Cell Biochem. & Funct.*, **13**, 157-163 (1995).
207. H.D.B. Jenkins and Y. Marcus: Ionic B-coefficients in solution; *Chem. Rev.*, **95**, 2695-2726 (1995).
208. Y. Marcus: Transfer of ions between solvents: some new results on volumes, heat capacities and some other quantities; *Pure Appl. Chem.*, **68**, 1495-1500 (1996).
209. Y. Marcus and G.T. Hefter: Ionic partial molar heat capacities in non-aqueous solvents; *J. Chem. Soc., Faraday Trans.*, **92**, 757-761 (1996).
210. G. Hefter and Y. Marcus: A critical assessment of the methods for obtaining ionic volumes in solution; *J. Solution Chem.*, **26**, 249-266 (1997).
211. Y. Marcus: The structuredness of solvents. 2. Data for ambient conditions; *J. Solution Chem.*, **25**, 455-469 (1996).
212. S. Teller, Y. Marcus, and Y. Tur'yan: A spectrophotometric and voltammetric study of cobalt triethanolamine complexes in aqueous solutions in the absence and presence of oxygen; *Polyhedron*, **16**, 1047-1056 (1997).
213. A. Loewenschuss and Y. Marcus: Standard thermodynamic functions of some additional isolated ions at 100 - 1000 K; *J. Phys. Chem. Ref. Data*, **25**, 1495-1507 (1996).
214. Ya. I. Tur'yan and Y. Marcus: "Primary" Hydration Numbers of the

- Hydrohalic Acids and Equilibrium Constants of their Resolution on the Basis of the EMF Method; *J. Chem. Soc. , Faraday Trans. ,* **92** , 4505-4510 (1996).
215. A.-K.S. Labban and Y. Marcus: The solubility and solvation of salts in mixed nonaqueous solvents. 2. Potassium halides in mixed protic solvents, *J. Solution Chem.*, **26**, 1-12 (1997).
216. A.-K.S. Labban and Y. Marcus: Solvatochromic parameters of ethanolamines; *J. Chem. Soc. , Faraday Trans. ,* **93**, 77-79 (1997).
217. Y. Marcus and G.T. Hefter: The compressibilities of liquids at ambient temperature and pressure; *J. Mol. Liquids*, **73,74**, 61-75 (1997).
218. M. Rozenberg, A. Loewenschuss, and Y. Marcus: IR spectrum and hydrogen bonding of ethanol crystals at 150 to 18 K; *Spectrochim. Acta A*, **A53**, 1969-74 (1997).
219. Y. Marcus: On the solubilities of buckminsterfullerene and sulfur hexafluoride in various solvents; *J. Phys. Chem.*,**101**, 8617-8623 (1997).
220. M. Rozenberg, A. Loewenschuss, and Y. Marcus: IR spectrum and hydrogen bonding in tetrityls; *Carbohydr. Res.*, **304**, 183-186 (1997).
221. L. Ben-Dor and Y. Marcus: The octahedral - square-planar transition in nickel chelates (a lab experiment); *J. Chem. Educ.*, **75**, 1458-1459 (1998).
222. M. Rozenberg, A. Loewenschuss, and Y. Marcus: IR study of water interaction with polyethylene glycol; *Spectrochim. Acta A*, **A54**, 1819-1826 (1998).
223. Y. Marcus: Some thermodynamic aspects of ion transfer; *Electrochim. Acta*, **44**, 91-98 (1998).
224. Y. Marcus: The structuredness of water at elevated temperatures along the saturation line; *J. Mol. Liquids*, **79**, 151-165 (1999).
225. Y. Marcus: On the relationships between transport and thermodynamic properties of organic liquids at ambient conditions; *Fluid Phase Equil.*, **154**, 311-321 (1999).
226. Y. Marcus and G. Hefter: On the pressure and electric field dependencies of the relative permittivity of liquids; *J. Solution Chem.*, **28**, 579-596 (1999).
227. Y. Marcus: The structuredness of supercritical water up to 600 °C and 100 MPa as obtained from relative permittivity data; *J. Mol. Liquids*, **81**, 101-113, (1999).
228. M. Rozenberg, A. Loewenschuss, H.-D. Lutz, and Y. Marcus: The manifestation of hydrogen bonding in IR spectra of tetrityls (300-20 K); *Carbohydr. Res.*, **315**, 89-97 (1999).
229. A.V. Iogansen (M. Rozenberg, translator, and Y. Marcus, editor): Direct proportionality of the hydrogen bonding energy and the intensification of the stretching (ν_{HX}) vibration in infrared spectra; *Spectrochim Acta A*, **A55**, 1585-1612 (1999).
230. C. Kalidas, G.T. Hefter, and Y. Marcus: Gibbs energies of transfer of cations from water to aqueous organic solvents; *Chem. Rev.*,**100**, 819-852 (2000).
231. Y. Marcus: Preferential solvation in mixed solvents. Part 8. Aqueous methanol from sub-ambient to elevated temperatures; *Phys. Chem. Chem. Phys.*, **1**, 2975-2983 (1999).
232. M. Rozenberg, A. Loewenschuss, and Y. Marcus: Empirical estimation of H-bonding energy of H₂, N₂, and CO with OH groups of ice surfaces;

- Langmuir*, **15**, 5454-5456 (1999).
233. Y. Marcus: On transport properties of hot liquid and supercritical water and their relationship to the hydrogen bonding; *Fluid Phase Equil.*, **164**, 131-142 (1999).
234. Y. Marcus, G. Hefter, and T. Chen: Relationships among solvent softness scales; *J. Solution Chem.*, **29**, 201-216 (2000).
235. Y. Marcus, G. Hefter, and T. Chen: Application of the tetraphenylarsonium tetraphenylborate (TATB) assumption to the hydration entropies of ions; *J. Chem. Thermodyn.*, **32**, 639-649 (2000).
236. Y. Marcus: Supercritical water: relationships of certain measured properties to the extent of hydrogen bonding obtained from a semi-empirical model; *Phys. Chem. Chem. Phys.*, **2**, 1465-1472 (2000).
237. Y. Marcus: Some thermodynamic and structural aspects of mixtures of glycerol with water; *Phys. Chem. Chem. Phys.*, **2**, 4891-4896 (2000).
238. M. Rozenberg, A. Loewenschuss, and Y. Marcus: An empirical correlation between stretching vibration red shift and hydrogen bond length; *Phys. Chem. Chem. Phys.*, **2**, 2699-2702 (2000).
239. M. Rozenberg, A. Loewenschuss, and Y. Marcus: IR spectra and hydrogen Bonding of pentitols and pyranosides at 20 and 300 K; *Carbohydrate Research*, **328**, 307-319 (2000).
240. Y. Marcus, A.L. Smith, M.V. Korobov, A.L. Mirakyan, N.V. Avramenko, and E.B. Stukalin: Solubility of C₆₀ fullerene; *J. Phys. Chem. B*, **105**, 2499-2506 (2001).
241. Y. Marcus: Preferential solvation in mixed solvents. 10. Completely miscible aqueous co-solvent binary mixtures at 298.15 K. *Monatsh. Chem.*, **132**, 1387-1411, 2001.
242. B.V. Lebedev, N.N. Smirnova, L.Ya. Tsvetkova, Y. Marcus, and G.T. Hefter; Heat capacity of tetraphenylphosphonium and -arsonium perchlorate *J. Chem. Thermodyn.*, **33**, 485-498, (2001).
243. A.F. Danil de Namor, D. Kowalska, Y. Marcus, and J. Villanueva-Salas; Thermodynamics of complexation of a lower rim caklix(4)arene ketone derivative and the sodium cation in N,N-dimethylformamide/acetonitrile mixtures. *J. Phys. Chem.*, **B105**, 7542-7549 (2001).
244. G.T. Hefter, Y. Marcus, and W.E. Waghorne; Enthalpies and entropies of transfer of electrolytes and ions from water to mixed aqueous organic solvents. *Chem. Rev.*, **102**, 2773-2836 (2002).
245. Y. Marcus, A. Minevich, and L. Ben-Dor; Differential drop calorimetry (DDC) for the determination of heats of fusion and freezing. *J. Chem. Thermodyn.*, **35**, 1009-1018 (2003).
246. A. Minevich and Y. Marcus; Densities and excess and partial molar volumes of aqueous pyrrolidine at 25 and 50 °C and aqueous morpholine at 25 and 60 °C. *J. Chem. Eng. Data*, **48**, 208-210 (2003).

247. Y. Marcus; Preferential Solvation in Mixed Solvents. 11. Eight Additional Completely Miscible Aqueous Co-solvent Binary Mixtures and the Relationship between the Volume-Corrected Preferential Solvation Parameters and the Structures of the Co-Solvents. *Phys. Chem. Chem. Phys.*, **4**, 4462-4471 (2002).
248. Y. Marcus, H.B.D. Jenkins, and L. Glasser; Ion volumes – a comparison. *J. Chem. Soc., Dalton Trans.*, **2002**, 3795-3798.
249. Sh. Cohen, Lina Ben-Dor and Y. Marcus; A New Double Salt: Triacetatohexaaquodimagnesium Nitrate. *J. Crystal Growth*, **254** 151-155 (2003).
250. Y. Marcus; Preferential Solvation in Mixed Solvents. 12. Aqueous glycols. *J. Mol. Liquids*, **107**, 109-126 (2003).
251. Y. Marcus; The sizes of molecules – revisited. *J. Phys. Org. Chem.*, **16**, 398-408 (2003).
252. A.E. Sagiv and Y. Marcus: The connection between in vitro water uptake and in vivo skin moisturization. *Skin Res. Technol.*, **9**, 306-311 (2003).
253. Y. Marcus; The Standard Partial Molar Volumes of Ions in Solution. Part 1. The Volumes in Single Solvents at 298.15 K. *J. Mol. Liquids*, **118**, 3-8 (2005).
254. Y. Marcus, A. Minevich, and L. Ben-Dor; Solid-Liquid Phase Diagrams of some Binary Salt Hydrate Mixtures Involving Magnesium Nitrate and Acetate, Magnesium and Aluminum Nitrates, Ammonium Alum and Sulfate, and Ammonium Alum and Aluminum Sulfate. *Thermochimica Acta*, **412**, 163-170 (2004).
255. Y. Marcus and G. Hefter; The standard partial molar volumes of electrolytes and ions in non-aqueous solvents. *Chem. Rev.*, **104**, 3405-3452 (2004).
256. Shmuel Cohen, Georgia Wollmann, Lina Ben-Dor and Yizhak Marcus; A mixed magnesium and nickel nitrate hexahydrate compound: an unexpected restructuring. *J. Cryst. Growth*, **270**, 589-592 (2004)
257. Y. Marcus; The standard partial molar volumes of ions in solution. Part 2. The volumes in two binary solvent mixtures with no preferential solvation. *J. Solution Chem.*, **33**, 549-559 (2004).
258. Y. Marcus, A. Minevich, and L. Ben-Dor; Solid-liquid phase equilibria of some binary salt hydrate mixtures involving ammonium alum, *J. Thermal Analysis and Calorim.*, **81**, 51-56 (2005).
259. A. Minevich, Y. Marcus, and L. Ben-Dor; Densities of solid and molten salt hydrates and their mixtures and viscosities of some of them, *J. Chem. Eng. Data*, **49**, 1451-1455 (2004).
260. Y. Marcus: Solvatochromic probes in supercritical fluids, *J. Phys. Org. Chem.*, **18**, 373-384 (2005).
261. Y. Marcus: BET modeling of solid-liquid phase diagrams of common ion binary salt hydrate mixtures. I. The BET parameters; *J. Solution Chem.*, **34**, 297-306 (2005).
262. Y. Marcus: BET modeling of solid-liquid phase diagrams of common ion binary salt hydrate mixtures. II. Calculation of liquidus temperatures; *J. Solution Chem.*, **34**, 307-315 (2005).
263. Y. Marcus: The standard partial molar volumes of ions in solution. Part 3. Volumes in solvent mixtures where preferential solvation takes place; *J. Solution Chem.*, **34**, 317-331 (2005).

264. Y. Marcus, A. Minevich, and L. Ben-Dor: Solid-liquid equilibrium diagrams of common-Ion binary salt hydrate mixtures involving nitrates and chlorides of magnesium, nickel, cobalt, and manganese; *Thermochim. Acta*, **342**, 23-29 (2005).
265. Y. Marcus: On the activity coefficients of charge-symmetrical ion pairs; *J. Mol. Liquids*, **123**, 8-13 (2006).
266. Y. Marcus: Metal ion complexation by cryptand 222. A thermodynamic approach; *Rev. Anal. Chem.*, **23**, 269-302 (2004).
267. Y. Marcus: Electrostriction, ion solvation, and solvent release on ion pairing; *J. Phys. Chem. B*, **109**, 18541-18549 (2005).
268. Y. Marcus: Are solubility parameters relevant to supercritical fluids? *J. Supercrit. Fluids.*, **38**, 7-16 (2006).
269. Y. Marcus: Preferential Solvation in Mixed Solvents. 13. Mixtures of Tetrahydrofuran with Organic Solvents: Kirkwood-Buff Integrals and Volume-Corrected Preferential Solvation Parameters, *J. Solution Chem.*, **35**, 251-277 (2006).
270. Y. Marcus: Preferential Solvation in Mixed Solvents. 14. Mixtures of 1,4-Dioxane with Organic Solvents: Kirkwood-Buff Integrals and Volume-Corrected Preferential Solvation Parameters, *J. Mol. Liquids*, **128**, 115-126 (2006).
271. Y. Marcus: Ionic volumes in solution; *Biophys. Chem.*, **124**, 200-207 (2006).
272. Y. Marcus and G. Hefter: Ion pairing; *Chem. Rev.*, **106**, 4585-4621 (2006).
273. Y. Marcus: On the molar volumes and viscosities of electrolytes; *J. Solution Chem.*, **35**, 1271-1286 (2006).
274. Y. Marcus: Solvent Release upon Ion Association from Entropy Data. II, *J. Phys. Chem. B*, **111**, 572-580 (2007).
275. Y. Marcus: On the Relation between Thermodynamic, Transport and Structural Properties of Electrolyte Solutions, *Elektrokhimiya* **44**, 18-31 (2008); *Russ. J. Electrochem.*, **44**, 16-27 (2008).
276. Y. Marcus: Preferential solvation of ions in mixed solvents. 5. The alkali metal, silver, and thallium(I) cations in aqueous organic solvents according to the inverse Kirkwood-Buff integral (IKBI) approach. *J. Solution Chem.*, **36**, 1385-1399 (2007).
277. Y. Marcus: Gibbs energies of transfer of anions from water to mixed aqueous organic solvents. *Chem. Rev.*, **107**, 3880-3897 (2007).
278. N.N. Smirnova, L.Ya. Tsvetkova, T.A. Bykova, and Y. Marcus: Thermodynamic properties of N,N-dimethylformamide and N,N-dimethylacetamide, *J. Chem. Thermodyn.*, **39**, 1508-1513 (2007).
279. Y. Marcus: Preferential solvation of ions in mixed solvents. 6. Univalent anions in aqueous organic solvents according to the inverse Kirkwood-Buff integral (IKBI) approach, *J. Chem. Thermodyn.*, **39**, 1338-1345 (2007).
280. Y. Marcus: On the preferential solvation of drugs and PAHs in binary solvent mixtures, *J. Mol. Liquids*, **140**, 61-67, 2008.
281. Y. Marcus: The standard partial molar entropy of the aqueous tetra-*n*-butylammonium cation, *J. Chem. Thermodyn.* **40**, 1314-1347 (2008).

282. Y. Marcus: Tetraalkylammonium Ions in Aqueous and Nonaqueous Solutions. *J. Solution Chem.*, **37**, 1071-1098 (2008).
283. N. N. Smirnova, L. Ya. Tsvetkova, T. A. Bykova, V. A. Ruchenin, and Yizhak Marcus: Thermodynamic properties of tetrabutylammonium iodide and tetrabutylammonium tetraphenylborate, *Thermochim. Acta*, **483**, 15-20 (2009).
284. Y. Marcus: The effects of ions on the structure of water: structure breaking and –making; *Chem. Rev.*, **109**, 1346-1370 (2009).
285. Y. Marcus: Preferential solvation of ibuprofen and naproxen in aqueous 1,2-propanediol, *Acta Chem. Sloven.*, **56**, 40-44 (2009).
286. Y. Marcus: On water structure in concentrated salt solutions, *J. Solution Chem.*, **38**, 513-516 (2009).
287. Y. Marcus: Heat capacities of molten salts with polyatomic anions, *Thermochim. Acta*, **495**, 81-84 (2009).
288. Y. Marcus: The standard partial molar volumes of ions in solution. Part 4. ionic volumes in water at 0 to 100 °C, *J. Phys. Chem. B*, **113**, 10285-10291 (2009). [7]
289. Y. Marcus: Cohesive energy of molten salts and its density. *J. Chem. Thermodyn.*, **42**, 60-64 (2010).
290. Y. Marcus: The effect of ions on the structure of water. *Pure Appl. Chem.* **82**, 1889-1899 (2010).
291. Y. Marcus: On the intrinsic volumes of ions in aqueous solutions. *J. Solution Chem.* **39**, 1031-1038 (2010).
292. Y. Marcus: The surface tension of aqueous electrolytes and ions. *J. Chem. Eng. Data*, **55**, 3641-3644 (2010).
293. M. A. Ruidiaz, D. R. Delgado, F. Martínez, and Y. Marcus: Solubility and preferential solvation of indomethacin in 1,4-dioxane + water solvent mixtures. *Fluid Phase Equil.* **299**, 259-265 (2010).
294. Y. Marcus: Water structure enhancement in water-rich binary solvent mixtures. *J. Mol. Liq.*, **158**, 23-26 (2011).
295. Y. Marcus: Electrostriction in electrolyte solutions. *Chem. Rev.* **111**, 2761-2783 (2011). [9]
296. D. R. Delgado, A. R. Holguín, F. Martínez, and Y. Marcus: Solubility and preferential solvation of meloxicam in ethanol + water mixtures. *Fluid Phase Equil.* **305**, 88-95 (2011).
297. A. R. Holguín, D. R. Delgado, F. Martínez, and Y. Marcus: Solution Thermodynamics and Preferential Solvation of Meloxicam in Propylene Glycol + Water Mixtures. *J. Solution Chem.* **40**, 1987-1999 (2011).
298. Y. Marcus: Water structure enhancement in water-rich binary solvent mixtures. Part II. The Excess Partial Molar Heat Capacity of the Water. *J. Mol. Liq.*, **166**, 62-66 (2012). [12]
299. Y. Marcus: Hansen Solubility Parameters for Supercritical Water. *J. Supercrit. Fluids*, **62**, 60-64 (2012).
300. Y. Marcus: The viscosity *B*-coefficient of the thiocyanate anion. *J. Chem. Eng. Data*, **57**, 617-619 (2012).
301. Y. Marcus: The guanidinium ion. *J. Chem. Thermodyn.* **48**, 70-74 (2012)
302. Y. Marcus: Are ionic Stokes radii of any use? *J. Solution Chem.* **41**, 2082-2090 (2012).
303. Y. Marcus: The Standard Partial Molar Volumes of Ions in Solution. Part 5. Ionic Volumes in Water at 125 to 200 °C. *J. Phys. Chem. B*, **116**, 7232–7239 (2012).

304. Y. Marcus: The structure of and interactions in binary acetonitrile + water mixtures. *J. Phys. Org. Chem.*, **25**, 1072-1085 (2012).
305. Y. Marcus: Prediction of Salting-out and Salting-in Constants, *J. Mol. Liq.*, **177**, 7-10 (2013).
306. Y. Marcus: Volumes of Aqueous Hydrogen and Hydroxide Ions at 0 to 200 °C. *J. Chem. Phys.*, **137**, 154501-1/5 (2012).
307. Y. Marcus: Individual ionic surface tension increments in aqueous solutions. *Langmuir*, **29**, 2881-2888 (2013).
308. Y. Marcus: The internal pressure of liquids and solutions. *Chem. Rev.*, **113**, 6536-6551 (2013).
309. Y. Marcus: The compressibilities of molten salts. *J. Chem. Thermodyn.* **61**, 7-10 (2013)
310. Y. Marcus: Volumetric properties of molten salt hydrates. *J. Chem. Eng. Data*, **58**, 488-491 (2013).
311. Y. Marcus: Volumetric behavior of molten salts. *Thermochim. Acta* **559**, 111-116 (2013).
312. Y. Marcus: Evaluation of the static permittivity of aqueous electrolytes. *J. Solution Chem.*, **42**, 2354-2363 (2013).
313. Y. Marcus: The surface tension and the cohesive energy density of molten salts. *Thermochim. Acta*, **571**, 77-81 (2013)
314. Y. Marcus: The compressibility and surface tension product of molten salts. *J. Chem. Phys.*, **139**, 124509/1-4 (2013).
315. Y. Marcus: The fluidity of room temperature ionic liquids. *Fluid Phase Equil.*, **363**, 66-69 (2014).
316. Y. Marcus: The enthalpy of formation of gaseous tetra-*n*-propylammonium cations. *J. Chem. Thermodyn.*, **71**, 196-199 (2014).
317. Y. Marcus: The fluidity of molten salts re-examined. *Fluid Phase Equil.* **366**, 57-60 (2014)
318. Y. Marcus: The molar volumes of ions in solution. Part 7. Electrostriction and hydration numbers of aqueous polyatomic anions at 25 °C. *J. Phys. Chem. B*, **118**, 2172-2175 (2014).
319. Y. Marcus: On the concentration dependence of the hydration numbers of electrolytes. *J. Phys. Chem. B*, **118**, 10471-10478 (2014).
320. Y. Marcus: On the solubility of non-ionic organic solutes in seawater. *Pure Appl. Chem.* **87**, 503-508 (2015).
321. Y. Marcus: Ionic and molar volumes of room temperature ionic liquids. *J. Mol. Liq.* **209**, 289-293 (2015)
322. Y. Marcus: The effect of complex anions on the structure of water. *J. Solution Chem.*, **44**, 2258-2265 (2015).
323. Y. Marcus: Are solubility parameters relevant for the solubility of liquid organic solutes in room temperature ionic liquids? *J. Mol. Liq.* **214**, 31-36 (2016).
324. Y. Marcus: Specific ion effects on the surface tension and surface potential of aqueous electrolytes. *Curr. Opinion Coll. Interf. Sci.* **23**, 94-99 (2016).
325. Y. Marcus: Total and partial solubility parameters of supercritical methanol. *J. Supercrit. Fluids*, **111**, 43-46 (2016).
326. Y. Marcus: The internal pressure and cohesive energy density of liquid metallic elements *Int. J. Thermophys.* **38**, 1-9 (2016).

327. Y. Marcus: The internal pressure and cohesive energy density of two inorganic liquids: bromine and carbon disulfide. *J. Chem. Thermodyn.*, **98**, 317-318 (2016).
328. Y. Marcus: Some thermophysical properties of methanol and aqueous methanol mixtures at sub- and supercritical conditions. *J. Mol. Liq.*, **239**, 10-13 (2017).
329. Y. Marcus: The viscosity and conductivity of single molten salts. *Chem. Phys. Lett.* **650**, 40-42 (2016).
330. Y. Marcus: On the compressibility of liquid metals. *J. Chem. Thermodyn.*, **109**, 11-15 (2017).
331. Y. Marcus: Electrostriction of several non-aqueous solvents at ambient conditions and solvation numbers of ions in them. *J. Phys. Chem. B*, **120**, 9755-9758 (2016).
332. Y. Marcus: Solubility parameters of permanent gases. *J. Chem.* 4701919/1-18 (2016).
333. Y. Marcus: Cold, warm, hot, and supercritical ethanol and aqueous ethanol mixtures. In *Trends in Physical Chemistry*, **15**, 37-52 (2016).
334. Y. Marcus: Relationships between the internal pressure, the cohesive energy and the surface tension of liquids. *Phys. Chem. Liq.*, **55**, 522-531 (2017).
335. Y. Marcus: Solvation numbers of divalent metal salts and ions in some non-aqueous Solvents. *J. Solution Chem.*, **46**, 225-233 (2017).
336. Y. Marcus: The structure of mixtures of water and methanol derived from their cohesive energy densities and internal pressures at 298 to 473 K. *J. Phys. Chem B*, **121**, 863-866 (2017)
337. Y. Marcus: Room temperature ionic liquids: their cohesive energies, solubility parameters and solubilities in them. *J. Solution Chem.* **46**, 1778-1791 (2017).
338. Y. Marcus: On the surface tension of room temperature ionic liquids. *Fluid Phase Equil.*, **444**, 56-60 (2017).
339. Y. Marcus: Salts forming low-melting eutectics with water: BET parameters, *J. Solution Chem.*, **46**, 1451-1455 (2017).
340. F. Sommer, Y. Marcus, and S. Kubik: Effects of solvent properties on the anion-binding of a neutral water-soluble bis(cyclopeptide) in water and aqueous solvent mixtures, *ACS Omega*. **2**. 3669-3680 (2017).
341. Y. Marcus: Drugs in binary solvent mixtures – their preferential solvation. *Chronicles Pharm. Sci.* **1**, 170-180 (2017).
342. Y. Marcus: Gas solubility in deep eutectic solvents. *Monatsh. Chem.* (Gamsjaeger memorial). 149, 211-217 (2018).
343. Y Marcus: Unconventional deep eutectic solvents: aqueous salt hydrates. *ACS Sustain. Chem. Eng.*, **5**, 11780-11787 (2017).
344. Y. Marcus: A Relationship between the effect of uni-univalent electrolytes on the structure of water and on its volatility. *J. Chem. Phys.*, **148**, 222807/1-4 (2018).
345. Y. Marcus: The solubility parameter of carbon dioxide – an enigma. *ACS Omega*, **3**, 524-528 (2018).
346. Y. Marcus: Extraction by subcritical and supercritical water, methanol, ethanol and their mixtures. *Separations*, **5**, 4/1-18 (2018) DOI: 10.3390/separations5010004.
347. Y. Marcus: Estimation of the critical temperatures of some more deep eutectic solvents from their surface tensions. *Advances in Materials Science and Engineering*, 2018, 5749479-1/3.
348. Y. Marcus: Total and Partial Solubility Parameters of Sub- and Supercritical Ethanol. *J. Chem. Thermodyn.*, **126**, 187-189, 2018.

349. Y. Marcus: The isothermal compressibility and surface tension product of room temperature ionic liquids. *J. Chem. Thermodyn.* **124**, 149-152 (2018).
350. Y. Marcus: Do doubly charged monatomic anions exist in aqueous solutions? *Arch. Org. Inorg. Chem.Sci.(AOICS)*, published without corrections, March 2018.
351. Y. Marcus: The solubility parameter of carbon dioxide and its solubility in ionic liquids, *J. Solution Chem.*, **48**, 1025–1034(2019).
352. Y. Marcus: Standard potentials, measurements in water and mixed aqueous organic Solvents. *Elsevier Reference Module*, 2018. doi.org/10.1016/B978-0-12-409547-2.14334-3
353. Y. Marcus, H. D. B. Jenkins: Standard absolute entropy, S_{298}° , of salt hydrates from volumes and hydrate numbers and the thermodynamic difference rule. *Chem Phys. Lett.*, **708**, 106-108 (2018).
354. Y. Marcus: The entropy of deep eutectic solvent formation, *Entropy*, **20**, 524/1-5 (2018).
355. Y. Marcus: Preferential solvation in mixed solvents. 15. Mixtures of acetonitrile with organic solvents. *J. Chem. Thermodyn.* **135**, 55-59 (2019).
356. Y. Marcus: Some advances in supercritical fluid extraction. *Processes*, **7**, 156-171 (2019).
357. Y. Marcus: Preferential solvation in mixed solvents. 16. Mixtures of N,N-dimethylformamide and propylene carbonate with organic solvents. *J. Chem. Thermodyn.* **140**, 105903, 1-4 (2020).
358. Y. Marcus: Preferential solvation in mixed solvents. 17. Mixtures of dimethylsulfoxide with organic solvents. *J. Chem. Thermodyn.* submitted, June 2019.
359. Y. Marcus: How are heat capacity data related to the structure of water in binary aqueous solvent mixtures? *Thermochim. Acta*, submitted, August 2019.