

11 Literaturverzeichnis

- Abbo H., Shavit U., Markel D. & Rimmer A. (2003): A numerical study on the influence of fractured regions on lake/groundwater interaction; the Lake Kinneret (Sea of Galilee) case. *J. Hydrol.* **283** (1-4): 225-243.
- Al-Momani, I.F. (2003): Trace elements in atmospheric precipitation at Northern Jordan measured by ICP-MS: acidity and possible sources. *Atm. Environm.*, **37**: 4507-4515.
- Artinger R., Kienzler B., Schussler W. & Kim J.I. (1998): Effects of humic substances on the Am-241 migration in a sandy aquifer: column experiments with Gorleben groundwater/sediment systems. *J. Contam. Hydrol.* **35** (1-3): 261-275.
- Banker R., Carmeli S., Hadas O., Telsche B., Porat R. & Sukenik A. (1997): Identification of cylin-drospormopsin in the cyanobacterium *Aphanizomenon ovalisporum* (Cyanophyceae) isolated from Lake Kinneret. *Israel J. Phycol.* **33**: 613-616.
- Barber, C. (1974): Major and trace element associations in limestones and dolomites. *Chem. Geol.* **14**: 273-280.
- Barnes I., Irwin W.P. & White D.E. (1978): Global distribution of carbon dioxide discharges and major zones of seismicity. US Geol. Survey, Water-Resources investigation 78-39, open file Report.
- Bau M. (1996): Controls of the fractionation of isovalent trace elements in magmatic and aqueous systems: Evidence for Y/Ho, Zr/Hf, and lanthanide tetrad effect. *Contrib. Mineral. Petrol.* **123**: 323-333.
- Bau M. (1999): Scavenging of dissolved yttrium and rare earths by precipitating iron oxyhydroxide: experimental evidence for Ce oxidation, Y-Ho fractionation, and lanthanide tetrad effect. *Geochim. Cosmochim. Acta.* **63**: 67-77.
- Bau M. & Möller P. (1992): Rare earth element fractionation in metamorphogenic hydrothermal calcite, magnesite and siderite. *Mineral. Petrol.* **45**: 231-246.
- Bau M. & Dulski P. (1995): Comparative study of yttrium and rare earth element behaviour in fluorine-rich hydrothermal fluids. *Contrib. Mineral. Petrol.* **119**: 213-223.
- Bau M. & Dulski P. (1996): Scavenging of dissolved yttrium and rare earths by precipitating iron oxyhydroxides: experimental evidence for Ce- oxidation, Y/Ho fractionation, and lanthanide tetrad effect. *Geochim. Cosmochim. Acta.* **63**: 67-77.
- Bau M., Möller P. & Dulski P. (1997): Yttrium and lanthanides in eastern Mediterranean seawater and their fractionation during redox-cycling. *Mar. Chemistry.* **56**: 123-131.
- Belitzky S. & Ben-Avraham Z. (2005): The morphotectonic pattern of Lake Kinneret. *J. Earth Sci.* **53**: 121-130.
- Ben-Avraham Z., Amit G., Golan A. & Begin Z.B. (1990): The bathymetry of Lake Kinneret and its structural significance. *Isr. J. Earth Sci.* **39**: 77-84.
- Ben-Avraham Z. & Ginzburg A. (1990): Displaced terranes and crustal evolution of the Levant and eastern Mediterranean. *Tectonics.* **9**: 613-622.

- Ben-Avraham Z., Ginzburg A., Makris J. & Eppelbaum L. (2002): Crustal structure of the Levant Basin, eastern Mediterranean. *Tectonophysics*. **346**: 23-43.
- Ben-Avraham Z., Ginzburg A. & Yuval Z. (1981): Seismic reflection and refraction investigations of Lake Kinneret – Central Jordan Valley, Israel. *Tectonophysics*. **80**: 165-181.
- Ben-Avraham Z. & Grasso M. (1991): Crustal structure variations and transcurrent faulting at the eastern and western margins of the eastern Mediterranean. *Tectonophysics*. **196**: 269-277.
- Ben-Avraham Z., Hanel R. & Villinger H. (1978): Heat flow through the Dead Sea rift. *Marine Geology*. **28**: 253-267.
- Ben-Avraham Z. & Lyakhovsky V (1992): Faulting processes along the northern Dead Sea transform and the Levant margin. *Geology*. **20**: 1139-1142.
- Ben-Avraham Z., Shaliv G. & Nur A. (1986): Acoustic reflectivity and shallow sedimentary structure in the Sea of Galilee, Jordan Valley. *Marine Geology*. **70**: 175-189.
- Ben-Avraham Z., tenBrink U., Bell R. & Reznikov M. (1996): Gravity field over the Sea of Galilee: Evidence for a composite basin along a transform fault. *J. Geophys. Res.* **101(B1)**: 533-544.
- Ben-Gai Y. & Ben-Avraham Z. (1995): Tectonic processes in offshore northern Israel and the evolution of the Carmel structure. *Marine and Petroleum Geology*. **12 (5)**: 533-548.
- Ben-Meir M. (2000): Water storage capacity in Israel. *Arch. Hydrobiol. Spec. Issues Advanc. Limnol.: Limnology and Lake Management 2000+*. **55**: 1-5;
- Bence A.E., Grove T.L. & Papike J.J. (1980): Basalts as probes of planetary interiors: constraints on the chemistry and mineralogy of their source regions. *Precamb. Res.* **10**: 249-279.
- Bentor Y.K. (1969): On the evolution of subsurface brines in Israel. *Chem. Geol.* **4**: 83-110.
- Bergelson G., Nativ R. & Bein A. (1998): Assessment of hydraulic parameters of the aquifers around the Sea of Galilee. *Ground Water*. **36 (3)**: 409-417.
- Berger D. (pers. Komm.): WaterShed Unit, Mekorot Co. Ltd. Bereitstellung der Abflussdaten für die Zu- und Abflüsse aus dem Hydrologischen Jahr 2002/2003 auf der Basis der vom Mekorot Co. Ltd. gemessenen Daten.
- Berman T. (1998): Lake Kinneret and its catchment: international pressures and environmental impacts. *Water Policy*. **1**: 193-207.
- Berman T., Parparov A., Yacobi Y.Z., Chava S. & Kaplan B. (online): Lake Kinneret: planktonic community production and respiration and the impact of bacteria on photic zone carbon cycle. Yigal Alon Kinneret Limnological Laboratory.
<http://www.iii.to.cnr.it/ecolmicro/ppt/Berman.pdf>
- BGR (1988): Hydrogeologische, geohydraulische und geothermische Untersuchungen an geplanten Standorten für die Endlagerung radioaktiver Abfälle – Teilprojekt Geothermik. Forschungsvorhaben KWA 53090, KWA 85050, KWA 8504 9/2 Bericht, Arch.-Nr. 103872; Hannover.
- Braitsch O. (1971): Salt deposits. Their origin and composition. Springer-Verlag, Berlin, 297 S.
- Braudo C.J., Mero F. & Mercado A. (1970): Detection of upward percolation of saline lake water. *J. Hydraulics Div. Proc. Am. Soc. Civil Eng.* **96**: 1795-1802.

- Buchbinder B., Magaritz M. & Buchbinder L.G. (1983): Turonian to Neogene paleokarst in Israel. *Paleogeog. Paleoclimatol. Paleoecol.* **43 (3-4)**: 329-350.
- Buchbinder B., Benjamini C. & Lipson-Benitah S. (2000): Sequence development of Late Cenomanian–Turonian carbonate ramps, platforms and basins in Israel. *Cretaceous Res.* **21**: 813–843.
- Burg A. (1998): Geochemistry and hydrology of perched carbonate aquifers in northern and central Israel (in Hebräisch). Dissertation, Hebrew University of Jerusalem.
- Byrne R.H. & Kim K-H (1993): Rare earth precipitation and coprecipitation behaviour: The limiting role of PO₄³⁻ on dissolved rare earth concentrations in seawater. *Geochim. Cosmochim. Acta.* **57**: 519-526.
- Byrne R.H. & Sholkovitz E.R. (1996): Marine chemistry and geochemistry of the lanthanides. Ch. 158 *In: Gschneidner K. A. Jr. & Eyring L.R. [ed.]: Handbook on the Physics and Chemistry of Rare Earths.* 23: 1-648.
- Cerdà A., (1998a): Effect of climate on surface flow along a climatological gradient in Israel: a field rainfall simulation approach. *J. Arid Environments.* **38**: 145-159.
- Cerdà A. (1998b): Relationships between climate and soil hydrological and erosional characteristics along climatic gradients in Mediterranean limestone areas. *Geomorphology.* **25**: 123–134.
- Chiba H. & Sakai H. (1985): Oxygen isotope exchange rate between dissolved sulphate and water at hydrothermal temperatures. *Geochim. Cosmochim. Acta.* **49**: 933-1000.
- Choppin G.R. (1984): Lanthanide complexation in aqueous solutions. *J. Less-Common Met.* **100**: 141-151.
- Clifford J. & Mugnier C.P. (2000): The State of Israel – Column Grid and Datums, *Photogramm. Engineer. & Remote Sensing.* **66 (8)**: 515.-517.
- Craig H. (1961): Isotopic variations in meteoric waters. *Science* **133**: 1702-1703.
- Dansgaard W. (1964): Stable isotopes in precipitation. *Tellus.* **16**: 436-468.
- Davidson M. R. & Dickson B. L. (1986): A porous flow model for steady state transport of radium in groundwater. *Water Res. Res.* **22**: 34–44.
- Davis S.N., Whittemore D.O. & Fabryka-Martin J. (1998): Uses of Chloride/Bromide Ratios in Studies of Potable Water. *Ground Water.* **36 (2)**: 338-350.
- Davison W. (1993): Iron and manganese in lakes. *Earth Sci Rev.* **34**: 116-163.
- De Baar H.J.W., German C.R., Elderfield H. & van Gaans P. (1988): Rare earth element distribution in anoxic waters of the Cariaco Trench. *Geochim. Cosmochim. Acta.* **52**: 1203-1219.
- Deines P. (1980): The isotopic composition of reduced organic carbon. P. 329-406. *In* Fritz P. & Fontes J.Ch. [Edn]: *Handbook of environmental isotope geochemistry.* Vol. I. Elsevier, Amsterdam.
- Diakonov I.I., Ragnarsdottir K.V. & Tagirov B.R. (1998): Standard thermodynamic properties and heat capacity equations of rare earth hydroxides: I. Ce(III)-, Pr-, Sm-, Eu(III)-, Gd-, Tb-, Dy-, Ho-, Er-, Tm-, Yb-, and Y-hydroxides. Comparison of thermochemical and solubility data. *Chem. Geol.* **151**: 327-347.

- Douville E., Bienvenu P., Charlou J.L., Donval J.P., Fouquet Y., Appriou P. & Gamo T. (1999): Yttrium and rare earth elements in fluids from various deep-sea hydrothermal systems. *Geochim. Cosmochim. Acta.* **63** (5): 627-643.
- Dulski P. (2001): Reference Materials for Geochemical Studies: New Analytical Data by ICP-MS and Critical Discussion of Reference Values. *Geostand. Newsletter.* **25**: 87-125.
- Dulski P. & Richert B.(unveröff.): Determination of Y and rare earth elements in natural aqueous fluids after preconcentration and matrix separation.
- Druckman Y. & Kashai E. (1981): The Helez Deep and Devorah 1A boreholes and their implication to oil prospects in Pre-Jurassic strata in Israel. Jerusalem: Geol. Surv. Israel Rep. OD/1/81: 23 S.
- DVWK (1992): Entnahme und Untersuchungsumfang von Grundwasserproben. – Regeln zur Wasserwirtschaft. **128**. Parey. Hamburg, Berlin
- DVWK (1993): Stoffeintrag und Grundwasserbewirtschaftung - DVWK-Fachausschuss “Grundwasserernutzung”. **104**. Wirtschafts- und Verlagsgesellschaft Gas und Wasser mbH, Bonn.
- DVWK (1996): Hydrogeochemische Stoffkreisläufe Teil 1. **110**. Wirtschafts- und Verlagsgesellschaft Gas und Wasser mbH, Bonn.
- DVWK (1998): Hydrogeochemische Stoffkreisläufe Teil 2. **117**. Wirtschafts- und Verlagsgesellschaft Gas und Wasser mbH, Bonn.
- Eckert W. & Trüper H.G. (1993): Microbially-related redox changes in a subtropical lake 1. In situ monitoring of the annual redox cycle. *Biogeochem.* **21**: 1-19.
- Eckert W., Imberger J. & Saggio A. (2002): Biogeochemical response to physical forcing in the water column of a warm monomictic lake. *Biogeochem.* **61**: 291-307.
- Eckert W., Didenko J., Efrat U. & Dganit E. (2003): Spatial and temporal variability of particulate phosphorus fractions in seston and sediments of Lake Kinneret under changing loading scenario. *Hydrobiologia.* **494**: 223-229.
- Eckstein Y. (1979): Heat flow and the hydrologic cycle: examples from Israel. *In: Čermák V. & Rybach L. [ed.] Terrestrial heat flow in Europe.* Springer, Berlin Heidelberg.
- Eckstein Y. & Maurath G. (1995): Terrestrial Heat Flow Density and Geothermal Regime in Israel. *In: Gupta M.L. & Yamano M. [ed.] Terrestrial Heat Flow and Geothermal Energy in Asia.* Oxford & IBH Publishing Co. PVT. Ltd. New Delhi Bombay Calcutta.
- Eckstein Y. & Simmons G. (1978): Measurement and interpretation of terrestrial heat flow in Israel. *Geothermics.* **6**: 117-142.
- Eckstein Z., Zakai D., Nachtom Y. & Fishelson G. (1994): The Allocation of Water Sources between Israel, the West Bank and Gaza: An economic viewpoint. Tel-Aviv Universität, Tel Aviv.
- Elderfield H. & Sholkovitz E.R. (1987): Rare earth elements in the pore waters of reducing nearshore sediments. *Earth Planet. Sci. Let.* **82**: 280-288.
- Eppelbaum L., Ben-Avraham Z., Katz Y. & Marco S. (2004): Sea of Galilee: Comprehensive analyses of magnetic anomalies. *Isr. J. Earth Sci.* **53**: 151-171.
- Epstein S. & Mayeda T. (1953): Variation of O-18 content of waters from natural sources. *Geochim. Cosmochim. Acta.* **4**: 213-224.

- Ettinger M. & Langotzky Y. (1967): Hydrodynamics of the Mesozoic formations in the northern Negev. Semi-annual progress report on the geological research projects for the period Oct. 1966 – March 1967. Inst. Petrol. Res. And Geophysics Rep. 1023 und GSI Rep. OD/6/67.
- EXACT (1998): Water Resources of Palestinian, Jordanian, and Israeli Interest. Overview of Middle East Water Resources.
- Eugster H.P. & Jones B. (1979): Behaviour of major solutes during closed-basin brine evolution. *Am. J. Sci.* **179**: 609-631.
- Eugster H.P., Harvie C.E. & Weare J.H. (1980): Mineral equilibria in a six-component seawater system, Na-K-Mg-Ca-SO₄-Cl-H₂O, at 25°C. *Geochim. Cosmochim. Acta.* **44**: 1335-1347.
- Eyal A. (1984): The geology of the northern Arava Valley and its western margins in the En Yahav-Hazeva region. Jerusalem: Geol. Surv. Israel Rep. GSI/10/91, 63 p. (in Hebräisch, Englische Zusammenfassung).
- Farber E., Vengosh A., Gavrieli I., Marie A., Bullen T.D., Mayer B., Holtzman R., Segal M., Shavit U. (2004): The origin and mechanism of salinisation of the Lower Jordan River. *Geochim. Cosmochim. Acta.* **68**: 1989-2006.
- Flexer A., Yellin-Dror A., Kronfeld J., Rosenthal E., Ben-Avraham Z., Artsztein P.P., Davidson L. (2000): A Neogene salt body as the primary source of salinity in Lake Kinneret. *Arch. Hydrobil. Spec. Issues Advanc. Limnol.: Limnology and Lake Management 2000+*. **55**: 69-85.
- Flexer A. (2001): The Pre-Neogene Geology of the Near East. *In*: Horowitz, A. [Ed]: The Jordan Rift Valley. Balkema Publ., 730 p.
- Flexer A., Rosenthal E. & Möller, P. (2005): The paleoenvironment and the evolution of brines in the Jordan-Dead Sea Transform and in adjoining areas. *Int. J. Earth Sci.* DOI 10.1007/s00531-005-0057-3. paper: **94 (5)**: -.
- Fresenius W., Quentin K.-E. & Schneider W. (1988): *Water Analyses*. Springer, Berlin.
- Friedman G.M. (1999): Thermal anomalies associated with forced and free ground-water convection in the Dead Sea rift valley: Discussion and reply. *GSA Bulletin.* **111 (7)**: 1098-1102.
- Frieslander A., Bartov Y. & Garfunkel Z. (1997): The structure of the Arava – new results from geological and geophysical studies. *Terra Nostra* 4/97
- Freund R., Goldberg M., Weissbrod T., Druckman Y. & Derin B. (1975): The Triassic-Jurassic structure of Israel and its relation to the origin of the eastern Mediterranean. *Geol. Surv. Isr.* **65**: 1-26.
- Gaillardet J., Viers J. & Dupré B. (2003): Trace elements in river waters. S. 225-272. *In* Drever I. [Volume-ed]: Vol. 5: Surface and Ground Water, Weathering, and Soils. *In* Holland H.D. & Turekian K.K. [Edn]: *Treatise on Geochemistry*. Elsevier Pergamon.
- Gal M. (1966): Clay mineralogy in the study of the genesis of Terra Rossa and Rendzina soils originating from calcareous rocks. *In*: Proc. Of Int. Clay Conf., 1966, Jerusalem. **1**: 199-207.
- Ganor E. (1996): The depositional flux and velocity of the Sahara aerosol to the ground in Israel. *J. of Aerosol Sciences.* **27 (5)**: 824 (1).

- Ganor E., Deutsch Y. & Foner H.A. (2000): Mineralogical composition and sources of airborne settling particles on Lake Kinneret (The Sea of Galilee), Israel. *Water, Air and Soil Poll.* **118**: 245–262.
- Garfunkel Z. (1989): Tectonic setting of Phanerozoic Magmatism in Israel. *Israel J. Earth Sci.* **38 (3-4)**: 51-74.
- Garfunkel Z. (2001): The nature and history of motion along the Dead Sea Transform (Rift). *In*: Horowitz, A. [Ed]: *The Jordan Rift Valley*. Balkema Publ., 730 p.
- Garfunkel Z. & Ben-Avraham Z. (1996): The structure of the Dead Sea Basin. *Tectonophysics.* **266**: 155-176.
- Gat J.R. (2001): UNESCO/IAEA Series on Environmental Isotopes in the Hydrological Circle – Principles and Applications. Vol. II, IAEA, online-Publikation: www.iaeh.org/programmes/ripc/ih/volumes.htm
- Gat J.R & Dansgaard W. (1972): Stable isotope survey of freshwater occurrences in Israel and the Jordan Rift Valley. *J. Hydrol.* **16**: 177-211.
- Gat J., Mazor E. & Tzur Y. (1969): The stable isotope composition of mineral waters in the Jordan Rift Valley, *J. Hydrol.* **7**: 334-352.
- Gavrieli I., Yechieli Y., Halicz L., Spiro B., Bein A. & Efron D. (2003): The sulfur system in anoxic subsurface brines and its implication in brine evolutionary pathways: the Ca-chloride brines in the Dead Sea area. *Earth and Planetary Sci. Letters.* **186**: 199-213.
- Gehre M., Hoefling R., Kowski P., Strauch G. (1996): Sample preparation device for quantitative hydrogen isotope analysis using chromium metal. *Anal. Chem.* **68 (24)**: 4414–4417.
- Gill D. & Shiloni Y. (1995): Abundance and distribution of uranium in Senonian phosphorites, Arad basin, southern Israel. *J. Afr. Earth Sci.* **20 (1)**: 17-28.
- Ginzburg A. & Ben-Avraham, Z. (1986): Structure of the Sea of Galilee Graben, Israel, from magnetic measurements. *Tectonophysics.* **126**: 153-164.
- Ginzburg A. & Ben-Avraham, Z. (2001): Geophysics. *In*: Horowitz, A. [Ed]: *The Jordan Rift Valley*. Balkema Publ., 730 p.
- Givon M. (1984): Paleogeographic studies: Hordos Formation and Ein Gev Sands in eastern Lake Kinneret. Unveröff. MSc Arbeit, Dept. Geol., Hebrew University of Jerusalem, 86 p. (in Hebräisch).
- Glöer D. (2003): Entwicklung und Anwendung eines Anreicherungsverfahrens für Seltene Erden Elemente als geogene Tracer in einem ehemaligen Uranbergbauegebiet bei Ronneburg. unveröff. Diplomarbeit FSU Jena, IGW, 82 S.
- Goldman M., Gvirtzman H. & Hurwitz S. (2004): Mapping saline groundwater beneath the Sea of Galilee and its vicinity using time domain electromagnetic (TDEM) geophysical technique. *Isr. J. Earth Sci.* **53**: 187-197.
- Goldschmidt M. J., Arad A. & Neev, D. (1967): The mechanism of the saline springs in the Lake Tiberias depression. *Geol. Surv. Israel Bull.* **45**: 14.
- Goodfriend G.A. (1999): Terrestrial stable isotope records of Late Quaternary paleoclimates in the eastern Mediterranean region. *Quat. Sci. Rev.* **18**: 501-513.

- Gophen, M. & Gal I. (1992): Lake Kinneret. Tel Aviv: Ministry of Defence-Israel Publisher and Kinneret Authority, Water Commission. 335 S. (in Hebräisch).
- Grandjean-Lécuyer P., Feist R- & Albarède F. (1993): Rare earth elements in biogenic apatites. *Geochim. Cosmochim. Acta.* **57**: 2507-2514.
- GSI, Ben-Avraham Z., Amit G., Golan A. & Begin Z.B. (1990): Sea of Galilee - The bathymetric map. 1: 50.000. Geological Survey of Israel, 30 Malkhei Israel St., 95501 Jerusalem, Israel.
- Gvirtzman H., Garven G. & Gvirtzman D. (1997a): Thermal anomalies associated with forced and free ground-water convection in the Dead Sea rift valley. *GSA Bulletin.* **109 (9)**: 1167-1176.
- Gvirtzman H., Garven G. & Gvirtzman D. (1997b): Hydrogeological modelling of the saline hot springs at the Sea of Galilee, Israel. *Water Res. Res.* **33 (5)**: 913-926.
- Gvirtzman H. & Stanislavsky E. (2000): Large – scale flow of geofluids at the Dead Sea Rift. *J. Geochem. Exploration.* **69-70**: 207-211.
- Haas J.R., Shock E.L. & Sassani D.C. (1995): Rare earth elements in hydrothermal systems: Estimates of standard partial molal thermodynamic properties of aqueous complexes of the rare earth elements at high pressures and temperatures. *Geochim. Cosmochim. Acta.* **59**: 4329-4350.
- Haase-Schramm A., Goldstein S.L. & Stein M. (2004): U-Th dating of Lake Lisan (late Pleistocene Dead Sea) aragonite and implications for glacial East Mediterranean climate change. *Geochim. Cosmochim. Acta.* **68 (5)**: 985-1005.
- Hadas O. & Pinkas R. (1992): Sulfate-reduction process in sediments of Lake Kinneret, Israel. *Hydrobiologica.* **235/236**: 295-301.
- Håkanson L., Parparov A., Hambright K.D. (2000): Modelling the impact of water level fluctuations on water quality (suspended particulate matter) in Lake Kinneret, Israel. *Eco Modell.* **128**: 101–125.
- Hambright K.D., Parparov A. & Berman T. (2000): Indices of water quality for sustainable management and conservation of an arid region lake, Lake Kinneret (Sea of Galilee), Israel. *Aquatic Conserv: Mar. Freshw. Ecosyst.* **10**: 393-406.
- Hannigan R.E. & Sholkovitz E.R. (2001): The development of middle rare earth elements in freshwaters: weathering of phosphate minerals. *Chem. Geol.* **175**: 495-508.
- Hazan N., Stein M. & Marco S. (2005): Lake Kinneret levels and active faulting in the Tiberias area. *J. Earth Sci.* **53**: 199-205.
- HSI (2004): Hydrological Service of Israel. PO Box 6381, Jerusalem 91063, Israel.
- Heimann A., Steinitz G., Mor D. & Shaliv G. (1996): The Coverbasalt formation, its age and its regional and tectonic setting: implications from K-Ar and $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology. *Israel J. Earth Sci.* **38**: 173-184.
- Herrmann B. (1990): Lösungen im Salzstock. in: Fortsachreibung des Zusammenfassenden Zwischenberichtes über bisherige Ergebnisse der Standortuntersuchung Gorleben vom Mai 1983. – ET-2/90. Bundesamt für Strahlenschutz, Fachbereich Nukleare Entsorgung und Transport, Salzgit-ter.

- Herut B. (1992): The chemical composition and sources of dissolved salts in rainwater in Israel. Dissertation, Hebrew University of Jerusalem (in Hebräisch, Englische Zusammenfassung).
- Herut B., Gavrieli I. & Halicz L. (1998): Coprecipitation of trace and minor elements in modern authigenic halites from the hypersaline Dead Sea brine. *Geochim. Cosmochim. Acta.* **62 (9)**: 1587-1598.
- Holser W.T. & Kaplan I.R. (1966): Isotope geochemistry of sedimentary sulfates. *Chem. Geol.* **1**: 93-135.
- Horowitz A. (1973): Development of the Hula Basin. *Israel J. Earth Sci.* **22**: 107-139.
- Horowitz A. (2001): The Jordan Rift Valley. Balkema Publ., 730 p.
- Horowitz A. & Assaf G. (1981): Configuration of interpluvial and pluvial climates in the Levant. *Beihefte Tübinger Atlas des vorderen Orients.* **8(A)**: 110-120.
- Hsü K.J., Montadert L., Bernoulli D., Cita M.B., Erickson A., Garrison R.E., Kidd R.B., Mèlières F., Müller C. & Wright R. (1977): History of the Mediterranean salinity crisis. *Nature.* **267**: 399-403.
- Hurwitz S., Garfunkel Z., Ben-Gai Y., Reznikov M., Rotstein Y. & Gvirtzman H. (2002): The tectonic framework of a complex pull-apart basin: seismic reflection observations in the Sea of Galilee, Dead Sea transform. *Tectonophysics.* **359**: 289-306.
- Hurwitz S., Stanislavsky E., Lyakhovsky V., Gvirtzman H. (2000): Transient groundwater-lake interactions in a continental rift: Sea of Galilee. *Israel. GSA Bulletin.* **112 (11)**: 1694–1702.
- Imberger J. (1998): Flux paths in a stratified lake: A review. S. 1-18. *In*: Imberger J. [Ed], *Physical processes in lakes and oceans. Coastal and Estuarine Studies.* Vol. 54. Am. Geophys. Union.
- Inbar N., Flexer A. & Yellin-Dror A. (mdl. Mitteilung): The Zemah Salt body and its implication on the salinity of Lake Kinneret. Präsentation im Rahmen des Doktoranden-Programms im German-Israelian-Jordanian-Palestinian Joint Research Programm (02WT0162) des BMBF.
- Irber, W. (1996): Laugungsexperimente an peraluminischen Graniten als Sonde für Alterationsprozesse im finalen Stadium der Granitkristallisation mit Anwendung auf das Rb-Sr-Isotopensystem. Dissertation. Freie Universität. Berlin.
- Issar A.S. (1993): Recharge and salination processes in the carbonate aquifers in Israel. *Environmental Geology.* **21**: 152-159.
- Issar A.S., Bahat D. & Wakshal E. (1988): Occurrence of secondary gypsum veins in joints in chalks in the Negev. *Catena.* **15**: 241-247.
- Johannesson K.H., Stetzenbach K.J., Hodge V.F. & Lyons W.B. (1996): Rare earth element complexation behavior in circumneutral pH groundwaters: Assessing the role of carbonate and phosphate ions. *Earth Plan. Sci. Let.* **139**: 305-319.
- Johannesson K.H., Farnham I.M., Guo C. & Stetzenbach K.J. (1999): Rare earth element fractionation and concentration variations along a groundwater flow path within a shallow, basin-fill aquifer, southern Nevada, USA. *Geochim. Cosmochim. Acta.* **63 (18)**: 2697-2708.
- Johannesson K.H. & Hendry M.J. (2000): Rare earth element geochemistry of groundwaters from a thick till and clay-rich aquitard sequence, Saskatchewan, Canada. *Geochim. Cosmochim. Acta.* **64 (9)**: 1493-1509.

- Kagi H., Dohmoto Y., Takano S. & Masuda A. (1993): Tetrad effect in lanthanides partitioning between calcium sulfate crystal and its saturated solution. *Chem, Geol.* **107**: 71-82.
- Kafri U., Lang B., Halicz L. & Yoffe O. (2002): Geochemical characterisation and pollution phenomena of aquifer waters in northern Israel. *Environm. Geology.* **42 (4)**: 370-386.
- Kashai E.L. (1988): A review of the relations between the tectonics, sedimentation and petroleum occurrences of the Dead-Sea – Jordan Rift System. S. 883-909. *In*: W. Manspeizer [Ed]: Triassic-Jurassic rifting. Amsterdam, Elsevier.
- Katz A., Kolodny Y. & Nissenbaum A. (1977): The geochemical evolution of the Pleistocene Lake Lisan – Dead Sea system. *Geochim. Cosmochim. Acta.* **41**: 1609-1626.
- Katz A. & Kolodny N. (1988): Hypersaline brine diagenesis and evolution in the Dead Sea – Lake Lisan system (Israel). *Geochim. Cosmochim. Acta.* **53**: 59-67.
- Kawabe I., Ohta A., Ishii S., Tokumura M. & Miyauchi K. (1999): REE partitioning between Fe-Mn oxyhydroxides precipitates and weakly acid NaCl solution: convex tetrad effect and fractionation of Y and Sc from heavy lanthanides. *Geochem. J.* **33**:167-179.
- Kendall C. & Doctor D.H. (2003): Stable Isotope Applications in Hydrologic Studies. P. 319-364. *In* Drever I. [Volume-ed]: Vol. 5: Surface and Ground Water, Weathering, and Soils. *In* Holland H.D. & Turekian K.K. [Edn]: Treatise on Geochemistry. Elsevier Pergamon.
- Killops S.D. & Killops V.J. (1997): Einführung in die organische Geochemie. Enke, Stuttgart. 225 S.
- King G.M. (1992): Ecological aspects of methane oxidation, a key determinant of global methane dynamics. *Adv. Microb. Ecol.* **12**: 431-468.
- Kinsman D.J.J. and Holland H.D. (1969): The co-precipitation of cations with CaCO₃ – IV. The co-precipitation of Sr²⁺ with aragonite between 16° and 96°C. *Geochim. Cosmochim. Acta.* **33**: 1-17
- Klein-BenDavid O., Sass E. & Katz A. (2004): The evolution of marine evaporitic brines in inland basins: The Jordan–Dead Sea Rift valley. *Geochim. Cosmochim Acta.* **68 (8)**: 1763-1775.
- Klein-BenDavid O., Gvirtzman H. & Katz A. (2005): Geochemical identification of fresh water sources in brackish groundwater mixtures; the example of Lake Kinneret (Sea of Galilee), Israel. *Chem. Geol.* **214**: 45-59.
- Knappe A., Möller P., Dulski P. & Pekdeger A. (2005): Positive gadolinium anomaly in surface water and ground water of urban area Berlin, Germany. *Chemie der Erde/Geochemistry.* **65**: 167-189.
- Kolodny Y., Katz A., Starinsky A., Moise T. & Simon E. (1999): Chemical tracing of salinity sources in Lake Kinneret (Sea of Galilee), Israel. *Limnol. Oceanogr.* **44 (4)**: 1035-1044.
- Kornexl B.E., Gehre M., Höfling R. & Werner R.A. (1999): On-line d18O Measurements of Organic and Inorganic Substances. *Rapid Commun. Mass Spectrom.* **13**: 1685-1693.
- Kronfeld J., Vogel J.C. & Rosenthal A. (1992): Natural isotopes and water stratification in the Judea Group aquifer (Judea Desert). *Israel J. Earth Sci.* **39**: 71-77.
- Laval B., Imberger J., Hodges B.R. & Stocker R. (2003): Modeling circulation in lakes: Spatial and temporal variations. *Limnol. Oceanogr.* **48 (3)**: 983-994.

- Leleyter L., Probst J.L., Depetris P., Haida S., Mortatti J., Pouault R. & Samuel J. (1999): Distribution des terres rares dans les sédiments fluviaux: fractionnement entre les phases labiles et résiduelles. C.R. Acad. Sci. Paris, Sciences de la terre et des planètes/Earth Planet. Sci. **329**: 45-52.
- Levitte D., Maurath G. & Eckstein, Y. (1984): Terrestrial heat flow in a 3.5 km deep borehole in the Jordan–Dead Sea rift valley. Geol. Soc. of Am. Abstr. with Progs. **16**: 575.
- Lowell J.D. & Genike G.J. (1972): Seafloor spreading and structural evolution of the southern Red Sea. AAPG Bull. **56**: 247-259.
- Lucas L.L. & Unterweger M.P. (2000): Comprehensive Review and Critical Evaluation of the Half-Life of Tritium. J. Res. of NIST, 105 (4): 541-549.
- Lyakhovsky V., Ben-Avraham Z. & Achmon M. (1994): The origin of the Dead Sea Rift. Tectonophysics. **240**: 29-43.
- Marcus E. & Slager J. (1985): The sedimentary-magmatic sequence of the Zemah 1 well (Dead Sea Rift, Israel) and its emplacement in time and space. Israel J. Earth Sci. **34** (1): 1-10.
- Markel D. (1998): The biogeochemical cycles of sulphur and iron in marsh sediments (Agmon Lake, Israel). Dissertation, Hebrew University of Jerusalem.
- Markel D., Kolodny Y., Luz B. & Nishri A. (1994): Phosphorus cycling and phosphorus sources in Lake Kinneret: tracing by oxygen isotopes in phosphate. Isr. J. Earth Sci. **43**: 165-178.
- Martens C.S. & Berner R.A. (1977): Interstitial water chemistry of anoxic Long Island Sound sediments: 1. Dissolved Gases. Limnol. Oceanogr. **22**: 10-25.
- Masuda A. & Ikeuchi Y. (1979): Lanthanide tetrad effect observed in marine environment. Geochem. J. **13**: 19-22.
- Matmon A., Enzel Y., Zilberman E. & Heimann A. (1999): Late Pliocene and Pleistocene reversal of drainage systems in northern Israel: tectonic implications. Geomorphology. **28**: 43-59.
- Mattheß G. (1990): Lehrbuch der Hydrogeologie 2: Die Beschaffenheit des Grundwassers. 2. Aufl., 498 S. Gebr. Bornträger.
- Matthes S. (1990): Mineralogie. Springer Berlin, 448 S.
- Mazor E. & Rosenthal E. (1967): Notes on the sulphur cycle in the mineral waters and rocks of the Lake Tiberias – Dead Sea rift valley, Israel. Isr. J. Earth Sci. **16**: 198-205.
- Maurath G. & Eckstein A. (1995): Heat Flow and Tectonics of South-West Asia. Terrestrial Heat Flow and Geothermal Energy in Asia. South-Asia edition. In: Gupta M.L. & Yamano M. [ed.]: Oxford & IBH Publishing Co. PVT. Ltd. New Delhi Bombay Calcutta.
- McCaffrey M.A., Lazar B. & Holland H.D. (1987): The evaporation path of seawater and the coprecipitation of Br⁻ and K⁺ with halite. J. of Sedimentary Petrology. **57** (5): 928-937.
- Megonigal J.P., Hines M.E. & Visscher P.T. (2003): Anaerobic Metabolism: Linkages to trace gases and aerobic processes. S. 317-424. In: Schlesinger W.H. [Vol.-ed.]: Vol. 8, Biogeochemistry. In: Holland H.D. & Turekian K.K. [Edn]: Treatise on Geochemistry. Elsevier Pergamon.
- Mero F. (1978): Hydrology. In: Serruya C. [ed.]: Lake Kinneret. Monographiae Biologicae, 32, Dr. W Junk bv Publishers The Hague-Boston-London.

- Mero F. & Simon E. (1992): The simulation of chloride inflows into Lake Kinneret. *J. Hydrol.* **138**: 345-360.
- Michelson H. (1978): Stratigraphy of the lake area. *In*: Serruya C. [ed.]: Lake Kinneret. *Monographiae Biologicae*, 32, Dr. W Junk bv Publishers The Hague-Boston-London.
- Michelson H., Flexer A. & Erez Z. (1987): A comparison of the eastern and the western sides of the Sea of Galilee and its implication on the tectonics of the northern Jordan Rift Valley. *In*: Ben-Avraham Z. (editor), *Sedimentary Basins within the Dead Sea and Other Rift Zones. Tectonophysics.* **141**: 125-134.
- Millero F.J., Sotolongo S. & Izaguirre M. (1987): The oxidation kinetics of Fe(II) in seawater. *Cosmochim. Geochim. Acta.* **51**: 793-801.
- Millot G. (1964): *Geologie des Argiles.* Masson et Cie, Paris, 499 p.
- Mizutani Y. & Rafter T.A. (1969): Oxygen isotopic composition of sulphates, Part 3: Oxygen isotopic fractionation in the bisulphate ion-water system. *N.Z.J. Sci.* **12**: 54.
- Moise T., Starinsky A., Katz A. & Kolodny Y (2000): Ra isotopes and Rn in brines and ground waters of the Jordan-Dead Sea Rift Valley: Enrichment, retardation, and mixing. *Geochim. Cosmochim. Acta.* **64 (14)**: 2371–2388.
- Möller P. (1986): *Anorganische Geochemie.* Heidelberger Taschenbücher, Springer Berlin, 326 S.
- Möller P. (1998): Rare earth elements and yttrium fractionation caused by fluid migration. S. 9-31. *In*: Novák M. & Rosenbaum J. [eds.]: *Challenges to chemical geology. Refereed papers from MAEGS-10.* Czech Geological Survey.
- Möller P. (2001): The behaviour of REE and Y in water rock interactions. S. 989-992. *In*: Cidu [ed.]: *Water-Rock Interaction 2001.* Swets & Zeitlinger, Lisse.
- Möller P. (2002): The distribution of rare earth elements and yttrium in water-rock interactions: field observations and experiments. S. 97-123. *In*: Stober I. & Bucher K. [ed.]: *Water-Rock Interaction.* Kluwer Academic Press.
- Möller P., (einger.): The hydrochemical composition of groundwaters and salinisation processes in the Jordan-Dead Sea Rift system. *In*: Hötzel [ed.]: *Sustainable water resources management in the Jordan-Dead Sea Rift System.* Springer, Berlin.
- Möller P. & Holzbecher E. (1998): Eu anomalies in hydrothermal fluids and minerals: A combined thermochemical and dynamic phenomenon. *Freiberger Forschungshefte C 475 - Hans-Jürgen Behr Festschrift - 73-84.*
- Möller P. Bau M., Dulski P. & Lüders V. (1998): REE and yttrium fractionation in fluorite and their bearing on fluorite formation. S. 575-592. *In*: *Proceedings of the Ninth Quadrennial IAGOD Symposium.* E. Schweitzerbart'sche Verlagsbuchhandlung (Nägele u. Obermiller).
- Möller P., Rosenthal E., Dulski P., Geyer S. & Guttman Y. (2003a): Rare earths and yttrium hydrostratigraphy along the Lake Kinneret–Dead Sea–Arava transform fault, Israel and adjoining territories. *Appl. Geochem.* **18**: 1613–1628.
- Möller P., Dulski P. & Morteani G. (2003b): Partitioning of rare earth elements, yttrium, and major elements among source rocks, liquid and vapor of Larderello-Travale Geothermal Field, Tuscany (Central Italy). *Geochim. Cosmochim. Acta.* **76**: 171-183.

- Möller P., Geyer S., Rosenthal E., Guttman Y., Dulski P. & Flexer A. (einger.): Sources of salination of groundwater along the Jordan - Dead Sea - Red Sea transform: around Lake Kinneret, the Arava Valley (Israel), and in adjoining territories, *Chem. Geol.*
- Mook W.G. (2001): UNESCO/IAEA Series on Environmental Isotopes in the Hydrological Circle – Principles and Applications. Vol. I, IAEA, online-Publikation: www.iaeh.org/programmes/ripc/ih/volumes.htm
- Nathan Y. (1969): Studies on Palygorskite. unveröff. MSc.-Arbeit, Hebrew University of Jerusalem, 153 p. (in Hebräisch).
- Nathan Y., Shiloni Y., Roded R., Gal I. & Deutsch Y. (1979): The geochemistry of the northern and central Negev phosphorites (southern Israel). *Geol. Surv. Isr. Bull.* **43**: 41.
- Nativ R., Adar E., Dahan O. & Nissim I. (1997): Water salinization in arid regions – observations from the Negev dessert, Israel. *J. Hydrol.* **196**: 271-296.
- Nelson B.J., Wood S.A. & Osiensky J.I. (2003): Partitioning of REE between solution and particulate matter in natural waters: a filtration study. *J. Solid State Chem.* **171**: 51-56.
- Neumann J. & G. Stanhill (1979): The general meteorological background. *In*: Serruya C. [ed.]: Lake Kinneret. *Monographiae Biologicae*, 32, Dr. W Junk bv Publishers The Hague-Boston-London.
- Nishri A. & Koren N. (1993): Sediment transport in Lake Kinneret. *Verh. Internat. Verein. Limnol.* **25**: 290-292.
- Nishri A., Stiller M., Rimmer A., Geifman Y. & Krom M. (1999): Lake Kinneret (The Sea of Galilee): the effects of diversion of external salinity sources and the probable chemical composition of the internal salinity sources. *Chem. Geol.* **158**: 37-52.
- Nishri A., Imberger J., Eckert W., Ostrovsky I. & Geifman Y. (2000): The physical regime and the respective biogeochemical processes in the lower water mass of Lake Kinneret. *Limnol. Oceanogr.* **45** (4): 972-981.
- Nüsslein B., Eckert W. & Conrad R. (2003): Stable isotope biogeochemistry of methane formation in profundal sediments of Lake Kinneret (Israel). *Limnol. Oceanogr.* **48** (4): 1439-1446.
- Osmond J. K. & Cowart J. B. (1992): Ground water. S. 290–334. *In*: Ivanovich M. & Harmon R.S. [Edn]: Uranium-Series Disequilibrium: Applications to Marine and Environmental Problems Clarendon Press, 2. Auflage.
- Paces T., Möller P., Fuganti A., Morteani G. & Pecek J. (2001): Sparkling mineral water at western rim of the Doupovske hory Mountains (Czech Republic): genesis by water-rock interaction and deep-seated CO₂. *Bull. Czech Geol. Surv.* **76**: 189-202.
- Petters S.W. (1991): Regional Geology of Africa. *Lecture Notes in Earth Sciences*, 40, p. 608-621. (aus: http://www.geo.tu-freiberg.de/oberseminar/os02_03/claudia_twarz.pdf)
- Picard L. (1931): Geological researches in the Judean Dessert. Goldberg Press Jerusalem. 108 S.
- Picard L. (1959): Geology and oil exploration in Israel. *Bull. Res. Coun. Israel.* **8G** (1): 1-30.
- Pollinger U. (1986): Phytoplankton periodicity in a subtropical lake (Lake Kinneret, Israel). *Hydrobiologia.* 138: 127-138.

- Postgate J.R. (1984): The sulphate-reducing bacteria. Cambridge University Press. 2. Aufl. 208 S.
- Raab M. (1998): The origin of the evaporates in the Jordan-Dead Sea Valley in view of the evolution of brines and evaporates during seawater evaporation. Jerusalem: Geol. Surv. Israel Rep. GSI/1/98: 134 S.
- Ragab R. & Prudhomme C. (2002): Climate Change and Water Resources Management *In* Arid and Semi-arid Regions: Prospective and Challenges for the 21st Century. Biosys. Eng. **81 (1)**: 3-34.
- Reznikov M., Ben-Avraham Z., Garfunkel Z., Gvirtzman H. & Rotstein Y. (2005): Structural and stratigraphic framework of Lake Kinneret. Israel J. Earth Sci. **53**: 131-149.
- Rimmer A. (2000): The influence of lake level on the discharge of the Kinneret saline springs. Arch. Hydrobiol. Spec. Issues Advanc. Limnol. Limnology and Lake Management 2000+. **55**: 55-67.
- Rimmer A. & Berger D. (1998): Kinneret 10b pump test analysis, WaterShed Unit, Mekorot, Israel. (in Hebräisch). *In*: Abbo H., Shavit U., Markel D. & Rimmer A. (2003): A numerical study on the influence of fractured regions on lake/groundwater interaction; the Lake Kinneret (Sea of Galilee) case. J. Hydrol. **283 (1-4)**: 225-243.
- Rimmer A., Hurwitz S. & Gvirtzman H. (1999): Spatial and temporal characteristics of saline springs: Sea of Galilee, Israel. Ground Water, **37 (5)**: 663-673.
- Rosenthal E. (1987): Chemical composition of rain and groundwater in replenishment areas of the Bet Shean-Harod multiple aquifer system, Israel. J. Hydrol. **89**: 329-352.
- Rosenthal E. (1988): Hydrochemistry of groundwater at unique outlets of the Bet She'an-Harod multiple aquifer system. J. Hydrol. **97**: 75-87.
- Rosenthal E., Weinberger G. & Kronfeld J. (1999): Groundwater salinization caused by residual neogene and pliocene sea water – An example from the Judea group aquifer, southern Israel. Ground Water, **37 (2)**: 261-270.
- Rosenthal E., Flexer A., Möller P. & Davidson L. (2004): The evolution of brines in the Jordan Valley and in adjoining areas. S: 1550-1553. *In*: Chatzipetros A. A. & Pavlides S. B. [ed.]: 5th International Symposium on Eastern Mediterranean Geology, Tessaloniki.
- Rosenthal Y., Katz A. & Tchernov E. (1989): The reconstruction of quaternary freshwater lakes from the chemical and isotopic composition of gastropod shells: the Dead Sea Rift, Israel. Palaeogeogr. Palaeoclimatol. Palaeoecol., **74**: 241-253.
- Rozanski K. & Gröning M. (2003): Quantifying uncertainties of tritium in ay samples using electrolytic enrichment and scintillation spectrometry.
<http://www.iaea.or.at/programmes/rial/pci/isotopehydrology/docs/intercomparison/ViennaH3-v12.htm>.
- Roessler H.J. & Lange H. (1972) Geochemical tables. VEB Deutscher Verlag f. Grundstoffindustrie Leipzig. 468 S.
- Salingar Y., Geifman Y. & Aranovich M. (1993): Orthophosphate and calcium carbonate solubilities in the Upper Jordan watershed basin. J. Environ. Qual. **22**: 672-677.
- Sandler A., Brenner I. & Halicz L. (1988): Trace element distribution in waters of the northern catchment area of Lake Kinneret, northern Israel. Environ. Geol. Water Sci. **11**: 35-44.

- Sandler A., Hambright K.D., Brenner I. & Halicz L. (1993): Temporal and vertical patterns of trace and major elements in Lake Kinneret. Report GSI/17/93.
- Sandler A., Hambright K.D., Brenner I. & Halicz L. (1993): Seasonal depth profiles of trace and major elements in Lake Kinneret. *Isr. J. Earth Sci.* **43**: 117-128.
- Schachtschabel P., Blume H.-P., Brümmer G., Hartge K.H. & Schwertmann U. (1998): Scheffer/Schachtschabel: Lehrbuch der Bodenkunde. Enke, Stuttgart. 476 S.
- Schijf J., de Baar H.J.W., Millero F.J. (1995): Vertical distributions and speciation of dissolved rare earth elements in the anoxic brines of Bannock Basin, eastern Mediterranean Sea. *Geochim. Cosmochim. Acta.* **59 (16)**: 3285-3299.
- Schulman H., Reshef M. & Ben-Avraham Z. (2004): The structure of the Golan Heights and its tectonic linkage to the Dead Sea Transform and the Palmyrides folding. *Isr. J. Earth Sci.* **53**: 225-237.
- Serruya C. (1971): Lake Kinneret: The nutrient chemistry of the sediments. *Limnol. Oceanogr.* **16**: 510-521.
- Serruya C. (1973): Sediments. *In*: Berman T. [ed.]: Lake Kinneret Data Record, Israel Nat. Council. Res. Dev., **13-73**: 39-45.
- Serruya C. (1978a): The chemical environment. *In*: Serruya C. [ed.]: Lake Kinneret. *Monographiae Biologicae*, 32, Dr. W Junk bv Publishers The Hague-Boston-London.
- Serruya C. (1978b): Sediments. *In*: Serruya C. [ed.]: Lake Kinneret. *Monographiae Biologicae*, 32, Dr. W Junk bv Publishers The Hague-Boston-London.
- Serruya C. (1978c): Water Motions. *In*: Serruya C. [ed.]: Lake Kinneret. *Monographiae Biologicae*, 32, Dr. W Junk bv Publishers The Hague-Boston-London.
- Shabani M.B., Tasuku A. & Masuda A. (1992): Preconcentration of Trace Rare-Earth Elements in Seawater by Complexation with Bis(2-ethylhexyl) Hydrogen Phosphate and 2-Ethylhexyl Dihydrogen Phosphate Adsorbed on a C18 Cartridge and Determination by Inductively Coupled Plasma Mass Spectrometry. *Anal. Chem.* **64**: 737-743.
- Shaked Y., Erel Y. & Sukenik A. (2004): The biogeochemical cycle of iron and associated elements in Lake Kinneret. *Geochim. Cosmochim. Acta.* **68 (7)**: 1439-1451.
- Shaliv G., Mimran Y. & Hatzor, Y. (1991): The sedimentary and structural history of the Bet She'an area and its regional implications. *Israel J. Earth Sci.* **40 (1-4)**: 161-179.
(aus Horowitz 2001)
- Shavit U. & Furman A. (2001): the location of deep salinity sources in the Israeli Coastal aquifer. *J. Hydrol.* **250**: 63-77.
- Shentsis I. & Ben-Zvi A. (2001): Considering diversity in precipitation variability when updating seasonal flow forecasts. *J. Hydrol.* **249**: 87-101.
- Siebert C. (2001): Untersuchung des hydraulisch-hydrochemischen Verhaltens eines Muschelkalk-Karstgrundwasserleiters am Beispiel der Mühlthalquellen bei Jena. Friedrich Schiller Universität Jena, unveröffentlichte Diplomarbeit. 115 S.

- Siebert C., Möller P., Geyer S., Guttman Y. & Berger D. (2004): Tracing saline water entries in Lake Kinneret. S. 1568-1571. *In: Chatzipetros A. A. & Pavlides S. B. [ed.]: Proceeding of 5th International Symposium on Eastern Mediterranean Geology. Thessaloniki.*
- Siebert C., Möller P., Geyer S. & Berger D. (2005): The dynamic hydrochemical environment of Lake Tiberias, Israel. *Geochim. Cosmochim. Acta.* **69 (10S)**: A424.
- Siebert C., Geyer S., Möller P., Rosenthal E., Berger D. & Guttman J. (einger. a): Lake Tiberias and its dynamic hydrochemical environment - Seasonal changes of hydrochemistry of ground- and lake water. *In: Hötzel [ed.]: Sustainable water resources management in the Jordan-Dead Sea Rift System. Springer, Berlin.*
- Siebert C., Möller P., Magri F., & Geyer S. (einger.b): Sources of salinity in Lake Kinneret, Israel. *Limnol. Oceanogr.*
- Simon E. & Mero F. (1992): The salinisation mechanism of Lake Kinneret, *J. Hydrol.* **138**: 327-343.
- Simpson B. & Carmi I. (1983): The hydrology of the Jordan River (Israel): hydrographic and isotopic investigations. *J. Hydrol.* **62**: 225-242.
- Singer A. (1966): The mineralogy of the clay fraction from basaltic soils in the Galilee. *Israel J. Earth Sci.* **17**: 138-146.
- Singer A. (1971): Clay minerals in the soils of Ramat Hagolan. *Isr. J. of Earth Sci.* **20**: 105-112.
- Singer A., Banin A. & Gal M. (1971): Note Electron micrographs of Lake Kinneret sediments. *Isr. J. of Earth-Sci.* **20**: 125-128.
- Singer A., Gal M. & Banin A. (1972): Clay minerals in recent sediments of Lake Kinneret (Tiberias), Israel. *Sediment Geology.* **8 (4)**: 289-308.
- Singer A. & Navrot J. (1973): Some aspects of the Ca and Sr weathering cycle in the Lake Kinneret (Lake Tiberias) drainage basin. *Chem. Geol.* **12**: 209-218.
- Sivan O., Erel Y., Mandler D. & Nishri A. (1998): The dynamic redox chemistry of iron in the epilimnion of Lake Kinneret (Sea of Galilee). *Geochim. Cosmochim. Acta.* **62 (4)**: 565-576.
- Smith S.V., Serruya S., Geifman Y. & Berman T. (1989): Internal sources and sinks of water, P, N, Ca and Cl in Lake Kinneret, Israel. *Limnol. Oceanogr.* **34**: 1202-1213.
- Sneh A. (1993): Stratigraphic position of marine Pliocene deposits in the Lower Galilee and the Yizre'el Valley. *Geol. Surv. Israel, Curr. Res.* **8**: 74-75
- Stanislavsky E. & Gvirtzman H. (1999): Basin – scale migration of continental – rift brines: Paleohydrologic modeling of the Dead Sea basin. *Geology.* **27 (9)**: 791-794.
- Starinsky A. (1974): Relationship between Ca-chloride brines and sedimentary rocks in Israel. PhD thesis, The Hebrew University of Jerusalem, Israel. 176 p. (in Hebräisch, englische Zusammenfassung).
- Staudt W. & Schoonen M.A.A. (1994): Sulfate in sedimentary carbonates. Kapitel 26, 8 S. *In: Vairavamurthy A. & Schoonen M.A.A. [Edn]: ACS Symp.* **612**: Geochemical Transformations of Sedimentary Sulfur.
- Stevens C.M. & Rust F.E. (1982): The carbon isotopic composition of atmospheric methane. *J. Geophys. Res.* **87**: 4879-4882.

- Stiller M., Carmi I. & Münnich K.O. (1975): Water transport through Lake Kinneret sediments traced by tritium. *Earth and Planet. Sci. Lett.* **25**: 297-304.
- Stiller M. (1994): The chloride content in pore water of Lake Kinneret sediments. *Isr. J. Earth Sci.* **43**: 179-185.
- Stiller M. & Nissenbaum A. (1996): Cl/Br ratio in pore water from Lake Kinneret (Sea of Galilee). *Isr. J. Earth Sci.* **45**: 153-160.
- Stosch H.-G. (2000): Geochemie der Seltenen Erden. online-Manuskript. 196 S. <http://www.geologie.uni-freiburg.de/root/people/fschaft/SeltenErden.pdf>
- Straub K.L., Benz M., Schlink B & Widdel F. (1996): Anaerobic, nitrate dependent microbial oxidation of ferrous iron. *Appl. Environ. Microbiol.* **62**: 1458-1460.
- Sulin V.A. (1935): Oil field waters of the USSR. *Red. Gorno-Toplivoy Lit., Moscow-Leningrad*, p. 104-124 (in Russisch).
- Sulin V.A. (1946): Waters of petroleum formations in the system of natural waters. *Gostoptekizdat, Moscow*, p. 33-96 (in Russisch).
- Tang J. & Johannesson K.H. (2003): Speciation of rare earth elements in natural terrestrial waters: Assessing the role of dissolved organic matter from the modelling approach. *Geochim. Cosmochim. Acta.* **67 (13)**: 2321-2339.
- Taylor C.B. (1976): Isotope hydrology laboratory technical procedure. Note **No.19**, International Atomic Energy Agency, Vienna.
- Taylor S.R. & McLennan S.M. (1985): The continental crust: its composition and evolution. An Examination of the geochemical record preserved in sedimentary rocks. *Blackwell Sci. Pub., Oxford*. 301 S.
- Tibor G. & Ben-Avraham Z. (1991): Late tertiary seismic facies and structures of the Levant passive margin off central Israel, eastern Mediterranean. *Marine Geology.* **105**: 253-273.
- Tibor G., Ben-Avraham Z., Herut B., Nishri A. & Zurieli A. (2005): Bottom morphology and shallow structures in the northwestern part of Lake Kinneret. *J. Earth Sci.* **53**: 173-186.
- Thompson R., Turner G.M., Stiller M. & Kaufman A. (1985): Near East paleomagnetic secular variation recorded in sediments from the Sea of Galilee (Lake Kinneret). *Quart. Res.* **23**: 175-188.
- Toulkeridis T., Podwojewski P. & Clauer N (1998): Tracing of the source of gypsum in New Caledonian soils by REE contents and S - Sr isotopic compositions. *Chem. Geol.* **145**: 61-71
- Uzdowski, E. (1973): Das geochemische Verhalten des Strontiums bei der Genese und Diagenese von Ca-Karbonat- und Ca-Sulfat-Mineralen. *Contrib. Mineral. Petrol.* **38**: 177-195.
- Veizer J., (1969): Reactions controlling strontium abundance in natural waters. *In: K.H.Wedepohl [ed.] Handbook of geochemistry II/4, 38-H-1 38-H-13.*
- Veizer J., (1978): Simulation of limestone diagenesis: a model based on strontium depletion: Discussion. *Can. J. Earth Sci.* **15**: 1683 – 1685.
- Vengosh A. & Rosenthal E. (1994): Saline groundwater in Israel: its bearing on the water crisis in the country. *J. Hydrol.* **156**: 389-430.

- Wallhäuser K.H. (1965): Mikrobiologische Untersuchungen über Flutwässer bei der Erdölgewinnung. Erdöl u. Kohle. **18**: 328-335. (aus Matthes in spider)
- Wedepohl K.H. (1978): Handbook of Geochemistry. Springer Verlag, Berlin.
- Weinstein Y. (2000): Spatial and temporal geochemical variability in basin-related volcanism, northern Israel. J. Afr. Earth Sci. **30** (4): 865-886.
- WHO (1993): WHO's Guidelines for Drinking-water Quality. Geneva.
- Wood S.A. (1990): The aqueous geochemistry of the rare-earth elements and yttrium: 1. Review of available low-temperature data for inorganic complexes and the inorganic REE speciation of natural waters. Chem. Geol. **82**: 159-186.
- Wood S.A., Shannon W.M. & Baker L. (2005): The aqueous geochemistry of the rare earth elements and yttrium. Part 13: REE geochemistry of mine drainage from pine creek area, Coeur D'Alene River Valley, Idaho, USA. S. 89-110. *In*: Johannesson K.H. [ed.]: Rare earth elements in groundwater flow systems. Water Sci Techn. Libr. Vol. 51. Springer, Dordrecht.
- Woods M., Kovacs Z. & Sherry A.D. (2002): Targeted complexes of lanthanide(III) ions as therapeutic and diagnostic pharmaceuticals. J Supramolecular Chemistry. **2**: 1-15.
- Yaalon D.H. & Katz A. (1962): The chemical composition of precipitation in Israel. S. 189-190. *In*: Proceeding of the 4th Congress of the Israel Association for the Advancement of Israel: Rehovoth, Weizmann Science Press.
- Yanagisawa F. & Sakai H. (1983): Thermal decomposition of barium sulphate – vanadium pentoxide – silica glass mixtures for preparation of sulfur dioxide in sulfur isotope ratio measurements. Anal. Chem. **55**: 985–987.
- Yaron F. & Heitner M. (1952): The chloride-bromide ratio of water sources of eastern Emek Israel and Beit Shean Valley. Bull. Res. Council, Israel, 2.
- Yecheili Y. & Wood W.W. (2002): Hydrogeologic processes in saline systems: playas, sabkhas and saline lakes. Earth-Sci. Rev. **58**: 343-365.
- Zinder S.H. (1984): Microbiology of anaerobic conversion of organic wastes to methane: recent developments. Am. Soc. Microbiol. News. **50**: 294-298.
- Zhong S. & Mucci A. (1995): Partitioning of rare earth elements (REEs) between calcite and seawater solutions at 25°C and 1 atm, and high dissolved REE concentrations. Geochim. Cosmochim. Acta. **59** (3): 443-453.
- Kartenbasis:**
- Survey of Israel [Hrsg.] (1996-2001): Topographical Maps 1:50.000. Sheets: 2-2; 2-2E; 2-3; 2-4; 2-4E; 4-1; 4-2; 4-2E; 4-3; 4-4; 6-1; 6-2. Jerusalem.
- Sneh A., Bartov Y. & Rosensaft M. (1998): Geological Map of Israel 1:200.000. Sheet 1. *In*: State of Israel, Ministry of National Infrastructures [Hrsg.]: Geological Map of Israel 1:200.000 (4 Sheets). Jerusalem.
- GSI, Ben-Avraham Z., Amit G., Golan A. & Begin Z.B. (1990): Sea of Galilee - The bathymetric map. 1: 50.000. Geological Survey of Israel [Hrsg.] 30 Malkhei Israel St., 95501 Jerusalem.