

Literatur

Fachliteratur

Wenn verfügbar mit DOI-Nummer zum schnelleren Auffinden im Internet.

DOI Nummer kopieren und in den Browser einfügen.

- (1) FOSSA SVEN A., ALF JACOB NIELSEN;
Das Korallenriff-Aquarium, Bd. I, Natur und Technik Verlag,
Münster, 2010.
- (2) STÜBER D.;
Riffbildende Steinkorallen im Meerwasseraquarium, Verlag Stark,
1. Aufl., 1994.
- (3) DELLBECK J.C. und J. SPRUNG;
Das Riffaquarium, Bd.1 (erste deutsche Auflage), Ricordea
Publishing Inc., 4016 El Prado Florida, 1996.
- (4) MERTZ W.;
The essential trace elements, Science, 18 Sep. 1981, Vol. 213,
issue 4514, PP 1332-1338.
- (5) ECKHARD U.;
Dissertation, Untersuchungen zur Eisenassimilation in Pflanzen,
Humboldt-Universität Berlin, 2000.
- (6) BAKER A.J.M. and P.L. WALKER;
Physiological responses of plants to heavy metals and the
qualification of tolerance and toxicity, in Chemical Speciation and
Bioavailability, Taylor and Francis Group, 1989.
- (7) EISLER R.;
Compendium of trace metals and marine biota, Vol. 1 + 2,
Elsevier BV, Oxford (Great Britain), 2010.
- (8) HALL J.L.;
Cellular mechanisms for heavy metal detoxification and tolerance,
Journal of Experimental Botany, Vol. 53, No. 366, pp 1-11, January
2002.
- (9) SHUKLAR Y., K. SHARMA and A. SHUKLAR;
Molecular mechanismen of nutrient uptake in plants; Int. J. Curr.
Res. Aca. Rev., 2014, 2(12), 142-154.
- (10) GUERINOT M.L.;
The ZIP-Family of Metall Transporters, ELSEVIER, Biochimica et
Biophysica Acta, 1465 (2000), pp 190-198.
- (11) FABER B. et al.;

**California Master Gardener Handbook, University of California,
Division of Agriculture and Natural Resources, Publication 3338,
Oakland , CA, copyright 2009.**

- (12) BRULAND U.W. and M.L. LOHAN;
**Controls of Trace Elements in Seawater, Treatise on
Geochemistry, Vol. 6, pp 23-47, Elsevier 2003.**
- (13) GRAHAM R.D., J.C.R. STANGOULIS (2003);
**Trace Element uptake and Distribution in plants, Journal of Plant
Nutrition, Vol. 133, p 1502-1506.**
- (14) METIAN M. et al (2015);
**Metal bioconcentration in the scleractinian coral *Stylopora
pistillata*, investigating the role of different components using
radiotracers, Environ Monit Assess., 2015 Apr, 187(4):178.
[doi:10.1007/s10661-015-4383-z](https://doi.org/10.1007/s10661-015-4383-z)**
- (15) FERRIER-PAGES C., F. HOULBREQUE, E. WYSE, et al.;
**Bioaccumulation of zinc in the scleractinium coral *Stylopora
pistillata*, Coral Reefs (2005), 24: 636.
[doi:10.1007/s00338-005-0045-x](https://doi.org/10.1007/s00338-005-0045-x)**
- (16) PFANNHAUSER W. (1988);
**Essentielle Spurenelemente in der Ernährung, Springer-Verlag,
Berlin.**
- (17) BALLING H.W., M. JANSE, P.J. SONDERVAN (2008);
**Trace elements, functions, sinks, and replenishment in reef
aquaria, Advances in Coral Husbandry in Public Aquariums. Public
Aquarium Husbandry Series, Vol. 2, R.J. Lewis and M. Janse, pp
143-156, 2008 Burgers' Zoo, Arnheim, the Netherlands.**
- (18) REICHELT-BRUSHETT A.J., G. MCORIST;
**Trace metals in the living and nonliving components of
scleractinian corals, Mar Pollut Bull., 2003 Dec, 46(12):1573-82.
[DOI:10.1016/S0025-326X\(03\)00323-0](https://doi.org/10.1016/S0025-326X(03)00323-0)**
- (19) HEDOUIN L. et al (2016);
**Bioaccumulation of (63)Ni in the scleractinian coral *Stylophora
pistillata* and isolated *Symbiodinium* using radiotracer techniques.
Chemosphere, 2016 Aug, 156:420-7.
[DOI:10.1016/j.chemosphere.2016.04.097](https://doi.org/10.1016/j.chemosphere.2016.04.097)**
- (20) HOULBREQUE F., R. RODOLFO-METALPA, R. JEFFREE, et al.
(2012);
**Effects of increased pCO₂ on zinc uptake and calcification in the
tropical coral *Stylophora pistillata*, Coral Reefs, (2012) 31: 101.
[doi:10.1007/s00338-011-0819-2](https://doi.org/10.1007/s00338-011-0819-2)**
- (21) ABDEL-AZIZ, AHMED MOHAMMED, T. DAR (2010);

Ability of corals to accumulate heavy metals, Northern Red Sea, Egypt, Environmental Earth Sciences, February 2010, Volume 59, Issue 7, pp 1525–1534.

DOI:10.1007/s12665-009-0138-x.

- (22) **CHAN I. et al. (2012);**
An Experimental Study of the Response of the Gorgonian Coral Subergorgia suberosa to Polluted Seawater from a Former Coastal, Mining Site in Taiwan, Zoological Studies, 51(1): 27-37 (2012).
- (23) **VRASPIR J.M. and A. BUTLER (2009);**
Chemistry of Marine Ligands and Siderophores. Annual review of marine science, 1:43-63.
doi:10.1146/annurev.marine.010908.163712
- (24) **AGOSTINI S. et al. (2009);**
Coral symbiotic complex: Hypothesis through vitamin B12 for a new evaluation, Galaxea, Journal of Coral Reef Studies, 11: 1-11.
http://doi.org/10.3755/galaxea.11.1
- (25) **R. R. L. GUILLARD and J. H. RYTHEW;**
"Studies of Marine Planktonic Diatoms. I. Cyclotella Nana Hustedt and Detonula Confervacea (Cleve) Gran," Canadian Journal of Microbiology, Vol. 8, No. 2, 1962, pp. 229-239.
doi:10.1139/m62-029
- (26) **RAO CH.K.; S. CHINNARAJ, S.N. INAMDAR, A.G. UNTAWALE;**
Arsenic content in certain marine brown algae and mangroves from Goa coast, Indian Journal of Marine Sciences, Vol.20; 283-285p., 1991.
- (27) **MUKHOPADHYAYA RITA, BARRY P. ROSENA, L. T. PHUNGB, SIMON SILVERB;**
Microbial arsenic: from geocycles to genes and enzymes, Microbiology Reviews26 (2002), 311-325.
DOI: http://dx.doi.org/10.1111/j.1574-6976.2002.tb00617.x
- (28) **LANE T., M.A. SAITO, G.N. GEORGE, I.J. PICKERING, R.C. PRINCE.; F. F. M. MOREL;**
Isolation and Preliminary Characterization of a Cadmium Carbonic Anhydrase from a Marine Diatom, Nature, 2005, 435, 42.
- (29) **EXLEY C.;**
Aluminium in Biological Systems in: KREISINGER, UVERSKY, PERMYAKOV; Encyclopedia of Metalloproteins, Springer Verlag, 2013, pp 33-34.
- (30) **MACIASZCZYK-DZIUBINSKA E., D. WAWRZYCKA, R. WYSOCKI;**
Arsenic and Antimony Transporters in Eukaryotes. International Journal of Molecular Sciences, 2012, 13(3):3527-3548.
doi:10.3390/ijms13033527.

- (31) DENNISTON K.;
Just the facts 101, Textbook, 8th Edition, Content Technologies Inc., 2017.
- (32) AGOSTINI S., Y. SUZUKI, B. CASARETO; Y. NAKANO, M. HIDAKA and N. BADRUN N.;
Coral symbiotic complex: Hypothesis through vitamin B12 for a new evaluation. Galaxea, Jornal of Coral Reef Studies, 11: 1-11, (2009).
- (33) UNIVERSITY OF WATERLOO FACULTY OF SCIENCE;
Tiny oceanorganisms are big B12 producers, Sience News, September 11, 2014.
- (34) HICKEY H.;
Vitamin water: Measuring essential nutrients in the ocean, University of Washington, February 24, 2014.
- (35) PURICH D.L.;
Enzyme Kinetics, catalysis & control, Academic Press, London 2010, p100-102.
- (36) CHELLAN P, P.J. SADLER (2015);
The elements of life and medicines. Phil. Trans., R. Soc., A 373: 20140182.
<http://dx.doi.org/10.1098/rsta.2014.0182>
- (37) SHOKOLNIK M.YA.;
Development in crop science (6), Trace Elements in Plants, Elsevier, Amsterdam, S.250, 1984.
- (38) HERNANDEZ J.A., S.J. GEORGE, L.M. RUBIDO;
Molybdenum Trafficking for Nitrogen Fixation. Biochemistry, 2009; 48(41):9711-9721.
<doi:10.1021/bi901217p>.
- (39) WANG D.;
Redox chemistry of molybdenum in natural waters and its involvement in biological evolution. Frontiers in Microbiology, 2012; 3:427.
<doi:10.3389/fmicb.2012.00427>.
- (40) RAGSDALE S.W.;
Nickel-based enzyme systems, The Journal of Biological Chemistry, Vol. 284, No. 28, pp18571-18575, July 10, 2009.
- (41) FRIEDEN E.;
Biochemistry of the essential Ultratrace Elements III, Plenum Ress New York, London, 2012.
- (42) SANCHEZ-GONZALEZ C, C. LOPEZ-CHAVES, L. RIVAS-GARCIAL, et al;

- Accumulation of Scandium in Plasma in Patients with Chronic Renal Failure, The Scientific World Journal, 2013:782745.**
doi:10.1155/2013/782745
- (43) **RAHMANTO A.S., DAVIES M.J.;**
Selenium-containing amino acids as direct and indirect antioxidant; IUBMB Life, 2012, NOV, 64 (11): 683-71.
Doi: 10.1002/iub.1084
- (44) **ZOU HUIHIN;**
Characterization of selenium containing proteins in the coral acropora millepora, PhD Thesis, James Cook University Australia, 2011.
<http://eprints.jcu.edu.au/29162/>
- (45) **BEHRA R, L. SIGG, MJD CLIFT, et al.;**
Bioavailability of silver nanoparticles and ions: from a chemical and biochemical perspective. Journal of the Royal Society Interface, 2013; 10(87):20130396.
doi:10.1098/rsif.2013.0396.
- (46) **WINTER JACLYN M. and BRADLEY S. MOORE.;**
Exploring the chemistry and Biology of Vanadium-dependent Haloperoxidases, J. Biol. Chem. 2009, 284: 18577-18581.
Doi:10.1074/jbc.R109.001602
- (47) **EIDE D.J.;**
Zinc transporters and the cellular trafficking of Zinc. Biochmica et Biophysics Acta, 1763 (2006), 711-722.
- (48) **CHELLAN P., P.J. SADLER;**
The elements of life and medicines.
Philosophical transactions Series A, Mathematical, physical, and engineering sciences, 2015; 373(2037):20140182.
doi:10.1098/rsta.2014.0182.
- (49) **CHEN, X., G. WEI, W. DENG, Y. LIU, Y. SUN, T. ZENG, and L. XIE (2015), Decadal variations in trace metal concentrations on a coral reef: Evidence from a 159 year record of Mn, Cu, and V in a Porites coral from the northern South China Sea, J. Geophys. Res. Oceans, 120, 405–416.**
doi:10.1002/2014JC010390.
- (50) **KRISHNAKUMARA S., S. RAMASAMYA, N.S. MAGESHB, N. HANDRASEKARB, T. SIMON PETER;**
Metal concentrations in the growth bands of Porites sp.: A baseline record on the history of marine pollution in the Gulf of Mannar, India; Marine Pollution Bulletin, 101 (2015), 409–416.
- (51) **KATHRYN L., E. BERRY, JANINA SEEMANN, OLAF DELLWIG, ULRICH STRUCK, CHRISTIAN WILD, REINHOLD R. LEINFELDER;**

Sources and spatial distribution of heavy metals in scleractinian coral tissues and sediments from the Bocas del Toro Archipelago, Panama, Environ. Monit. Assess. (2013), 185(11)9089–9099.
DOI:10.1007/s10661-013-3238-8.