

СПИСЪК НА ЦИТИРАНИТЕ НАУЧНИ ТРУДОВЕ ОТ ДИСЕРТАЦИОННИЯ ТРУД

1.- Dolashka-Angelova, P., Angelova, M., Genova, L., Stoeva, S., Voelter, W.. Novel Cu,Zn superoxide dismutase from the fungal strain *Humicola lutea* 110: Isolation and physico-chemical characterization. Spectrochim Acta A Mol Biomol Spectrosc. 55, 1999a, 2249-2260 - [Линк](#).

Цитирани са:

1. E. Ivanova, B. Ivanov. "Mechanisms of the extracellular antioxidant defend." Experimental Pathology and Parasitology 4, 49–59, 2000.
 2. G.F. Drevon, J. Hartleib, E. Scharff, H. Ruterjans, A.J. Russell. "Thermoinactivation of diisopropyl fluorophosphatase-containing polyurethane polymers." Biomacrom. 2 (3), 664-671, 2001.
 3. Z. Wang, Z. He, Q. Shen, Y. Gu, S. Li, Q. Yuan. "Purification and partial characterization of recombinant Cu, Zn containing superoxide dismutase of *Cordyceps militaris* in *E. coli*." J. Chromat. B 826 (1-2), 114-121, 2005.
 4. Z. Wang, Z. He, S. Li, Q. Yuan. "Purification and partial characterization of Cu, Zn containing superoxide dismutase from entomogenous fungal species *Cordyceps militaris*." Enzyme Microb. Tech. 36 (7), 862-869, 2005.
 5. S.H. Brown, O.Yarden, N. Gollop, S. Chen, A. Zveibel, E. Belausov, S. Freeman. "Differential protein expression in *Colletotrichum acutatum*: changes associated with reactive oxygen species and nitrogen starvation implicated in pathogenicity on strawberry." Molec. Plant Pathol. 9 (2), 171-190, 2008.
 6. S. Wang, B. Shao, S. Liu, Pingfan R. "Purification and characterization of Cu, Zn-superoxide dismutase from Black Soybean." Food Research International 47 (2), 374-379, 2012.
 7. G.Y. Cheng, J. Liu, M. X. Tao, C. M. Lu, G. Rong Wu. "Activity, thermostability and isozymes of superoxide dismutase in 17 edible mushrooms." J.Food Compos.and Analysis 26, 136-143, 2012.
 8. W. Moon-ai, P. Niyomploy, R. Boonsombat, P. Sangvanich, A. Karnchanatat. "A Superoxide Dismutase Purified from the Rhizome of *Curcuma aeruginosa* Roxb. as Inhibitor of Nitric Oxide Production in the Macrophage-like RAW 264.7 Cell Line" Applied biochemistry and biotechnology 166(8), 2138-55, 2012.
 9. M. Kanteev, M. Goldfeder, M. Chojnacki, N. Adir, A. Fishman."The mechanism of copper uptake by tyrosinase from *Bacillus megaterium*." J. of Biol. Inorg. Chemistry 8, 895-903, 2013.
1. **Dolashka-Angelova, P., Genova, L., Stoeva, S., Stefanov, B., Angelova, M., Hristova, R., Pashova, S., Voelter, W.. Isolation and characterization of a superoxide dismutase from fungal strain *Humicola lutea* 110. The J. Peptide Res., 54, 4, 1999b, 279-289 - [Линк](#)**

Цитирани са:

1. Ślesak, Z. Miszalski. "Superoxide dismutase-like protein from roots of the intermediate C3-CAM plant *Mesembryanthemum crystallinum* L. in *in vitro* culture." Plant Science 164 (4), 497-505, 2003.
2. E. Frealle, C. Noel, E. Viscogliosi, D. Camus, E. Dei-Cas, L. Delhaes. "Manganese superoxide dismutase in pathogenic fungi: An issue with pathophysiological and phylogenetic involvements FEMS." Immunology and Medical Microbiology 45 (3), 411-422, 2005.
3. S.H. Brown, O. Yarden, N. Gollop, S. Chen, A. Zveibil, E. Belausov, S. Freeman. "Differential protein expression in *Colletotrichum acutatum*: Changes associated with reactive oxygen species and nitrogen starvation implicated in pathogenicity on strawberry" Mol. Plant Path. 9 (2), 171-190, 2008.
4. S. Wang, B. Shao, S. Liu, Pingfan R. "Purification and characterization of Cu, Zn-superoxide dismutase from Black Soybean." Food Research International 47 (2), 374-379, 2012.

5. F.S. Chambergo, E. Y. Valencia, J. R. Ferreira-Júnior, C. M. Camilo, P. T. Campana. "Conformational stability of recombinant manganese superoxide dismutase from the filamentous fungus *Trichoderma reesei*." *Int. J. of Biological Macromolecules* 50 (1), 19-24, 2012.
6. G.Y. Cheng, J. Liu, M.X. Tao, C.M. Lu, G.R. Wu. "Activity, thermostability and isozymes of superoxide dismutase in 17 edible mushrooms." *Journal of Food Composition and Analysis*, 26(1), 136-143, 2012.

3. Dolashka-Angelova, P., Hristova, R., Stoeva, S., Voelter, W. Spectroscopic properties of *Carcinus aestuarii* hemocyanin and its structural subunits. *Spectrochim Acta A Mol Biomol Spectrosc.*, 55A, 14, 1999c, 2927-2934 - [Линк](#)

Цитира се в:

1. A.W.J.W. Tepper, L. Bubacco, G.W. Canters. "Stopped-flow Fluorescence Studies of Inhibitor Binding to Tyrosinase from *Streptomyces antibioticus*." *J. Biol. Chem.* 279 (14), 13425-13434, 2004.
2. B. Tang, Y. Wang, D. Zhang, H. Zhang. "Fluorescence properties and conformational stability of the hemocyanin from Chinese mitten crab *Eriocheir japonica sinensis* (Decapoda, Grapsidae)." *J. of Mol. Structure* 920 (1-3), 454-458, 2009.
3. N. Fujieda, A. Yakiyama, S. Itoh. "Five monomeric hemocyanin subunits from *Portunus trituberculatus*: Purification, spectroscopic characterization, and quantitative evaluation of phenol monooxygenase activity." *BBA1804* (11), 2128-2135, 2010.
4. H. Zhang, B. Tang, Y. Wang, D. Zhang, H. Zhang. "Studies of the Interaction Between Ciprofloxacin and the Hemocyanin From Chinese Mitten Crab *Eriocheir Japonica Sinensis*." *Analytical Letters* 14 (12), 2094-2106, 2011.
5. N.H. Andersen, G. Zoppellaro, L. Bubacco, L. Casella, K.K. Andersson. "Raman, UV-vis, and CD Spectroscopic Studies of Dodecameric Oxyhemocyanin from *Carcinus aestuarii*." *Chemistry Letters* 40 (12), 1360-1362, 2011.
6. M. Khalil, Z. Boubegtiten-Fezoua, N. Hellmann, P. Hellwig. "Extraordinary stability of hemocyanins from *L. polyphemus* and *E. californicum* studied using infrared spectroscopy from 294 to 20 K." *Phys Chem Chem Phys.* 18 (41), 28732-28739, 2016.

4. Dolashka-Angelova, P., Hristova, R., Schuetz, J., Stoeva, S., Schwarz, H., Voelter, W. Structural and spectroscopic studies of the native hemocyanin from *Maia squinado* and its structural subunits. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 56, 10, 2000a, 1985-1999. [Линк](#)

Цитира се в:

1. T. Szymańska, L. Ossowski, Łankiewicz. "Synthesis and photophysical properties of L-Nε-(9,10-dioxo-9,10-dihydroanthracen-1-yl)-lysine, dabcyf-like chromophore for peptide studies". *Letters in Peptide Science* 9 (4-5), 193-196, 2002.
 2. A.W.J.W. Tepper, L. Bubacco, G.W. Canters. "Stopped-flow Fluorescence Studies of Inhibitor Binding to Tyrosinase from *Streptomyces antibioticus*" *J. Biol. Chem.* 279 (14), 13425-13434, 2004.
 3. Q.-Y. Shi, Y.-C. Zheng, J.-S. Ren, X.-G. Qu. "Expression, Purification and Spectral Characterization of p21Waf1/Cip1." *Chemical Research in Chinese Universities* 24 (2), 192-195, 2008.
 4. B.Tang, Y. Wang, D.Zhang, H. Zhang. "Fluorescence properties and conformational stability of the hemocyanin from Chinese mitten crab *Eriocheir japonica sinensis* (Decapoda, Grapsidae)". *J. Mol. Struct.* 920 (28), 454-458, 2009.
- 5. Dolashka, P., Schick, M., Stoeva, S., Voelter, W.** Isolation and partial characterization of the N-terminal functional unit of subunit Rth1 from *Rapana thomasiana* grosse hemocyanin. *International Journal of Biochemistry & Cell Biology*, 32, 1, 2000b, 529-538 - [Линк](#).

Цитира се в:

1. R. Hristova. "Структура на артроподни хемоцианини." Химия и индустрия том 72 (1-2), 9-19, 2001.
2. A.W.J.W. Tepper, L. Bubacco, G.W. Canters. "Stopped-flow Fluorescence Studies of Inhibitor Binding to Tyrosinase from *Streptomyces antibioticus*." J.of Biol. Chem. 279 (14), 13425-13434, 2004.
3. Q.-Y. Shi, Y.-C. Zheng, J.-S. Ren, X.-G. Qu. "Expression, Purification and Spectral Characterization of 21WafI/Cipl." Chemical Research in Chinese Universities 24 (2), 192-195, 2008.
4. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states." Amino Acids. 39 (3), 899-910, 2010.

6. Ali, S. A., Abbasi, A., Stoeva, S., Kayed, R., Dolashka-Angelova, P., Schwarz, H., Voelter, W.. Oxygen transport proteins: III. Structural studies of the scorpion (*Buthus indicus*) hemocyanin, partial primary structure of its subunit Bsin1. Comparative Biochemistry and Physiology - Biochemistry and Molecular Biology, 126, 2000, 361-376 - [Линк](#).

Цитира се в:

1. R. Hristova. "Структура на артроподни хемоцианини." Химия и индустрия 72 (1-2), 9-19, 2001.
2. L.I. Sapunova, A.G. Lobanok, I.O. Kazakevich, E.A. Shlyakhotko, A.N. Evtushenkov. "Biosynthetic features and properties of xylose isomerases from *Arthrobacter nicotianae*, *Escherichia coli*, and *Erwinia carotovora* subsp. *Atroseptica*." Applied Bioch. and Microb. 42 (3), 246-251, 2006.

7. Dolashka-Angelova, P., Beltramini, M., Dolashki, A., Salvato, B., Voelter, V. Carbohydrate composition of *Carcinus aestuarii* hemocyanin. Archives of Biochemistry and Biophysics, 389, 2, 2001, 153-158- [Линк](#).

Цитира се в:

1. H.-Y. Chen. "Study on biochemical characteristics of hemocyanins in mud crab *Scylla olivacea*." etd-0810106-100344, 2006.
2. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: period 2001 -2002." Mass Spectrom. Rev. 27 (2), 125-201, 2008.
3. T. Fan, Y. Zhang, L. Yang, X. Yang, G. Jiang, M. Yu, R. Cong. "Identification and characterization of a hemocyanin-derived phenoloxidase from the crab *Charybdis japonica*." Compar. Bioch. Physiol., Part B 152 (2), 144-149, 2009.
4. Y.L. Zhang, L.G. Xing, F. Yan, X.W. Huang, Z.H. Du, J. Qiao, Z.Y. Lin, Y.Y. Li. "Comparative analyses of five hemocyanin isomers from shrimp *Litopenaeus vannamei*." Chinese J. of Bioch. and Mol. Biology 25 (7), 655-661, 2009.
5. V. Matozza, C. Gallo, M. Monari and M. G. Marin. "Cellular and biochemical parameters in the crab *Carcinus aestuarii* after experimentally-induced stress: Effects of bacterial injection, leg ablation and bacterial injection/leg ablation combination." J. Experimen. Mar. Biol. 398 (1-2), 18-25, 2011.
6. V. Matozza, A. Boscolo, M. G. Marin. "Seasonal and gender-related differences in morphometric features and cellular and biochemical parameters of *Carcinus aestuarii* from the Lagoon of Venice." Marine Environm. Research 89, 21-28, 2013.
7. E.I. Solomon, D.E. Heppner, E.M. Johnston, J.W. Ginsbach, J. Cirera, M. Qayyum, M.T. Kieber-Emmons, C.H. Kjaergaard, R.G. Hadt, L. Tian. "Copper Active Sites in Biology." Chem. Reviews 114(7), 3659-853, 2014.
8. V. Leignel, J.H. Stillman, S. Baringou, R. Thabet, I. Metais. "Overview on the European green crab *Carcinus* spp. (Portunidae, Decapoda), one of the most famous marine invaders and ecotoxicological models." Envir. Sci. Pollut. Res. 21, 9129-9144, 2014.
9. E. D'Agaro, V. Sabbioni, M. Messina, F. Tulli, G. Lippe, M. Stecchini. "Effect of confinement and starvation on stress parameters in the (*Homarus americanus*)". Italian Journal of Animal Science 13 (4), 891-896, 2014.

10. H. Chen, M. Cao, Q. Cai, R. Gao, L. Zhang, M. Zhu, G. Liu. "Identification and characterization of hemocyanin, a novel allergen of *Procambarus clarkii*." *Journal of Chinese Institute of Food Science and Technology* 14 (2), 240-247, 2014.
11. P. Pinnow, A. Fabrizius, C. Pick, T. Burmester. "Identification and characterisation of hemocyanin of the fish louse *Argulus* (Crustacea: Branchiura)." *Journal of Comparative Physiology B* 10, 1-8, 2015.
12. E. Staudacher. "Mucin-Type O-Glycosylation in Invertebrates." *Molecules* 20 (6), 10622-10640, 2015.

8. Angelova, M., Dolashka-Angelova, P., Ivanova, E., Serkedjieva, J., Slokoska L., Pashova, S., Toshkova, R., Vassilev, S., Simeonov, I., Hartmann, H.-J, Stoeva, S., Weser, U., Voelter, W.. A novel glycosylated Cu/Zn-containing superoxide dismutase: Production and potential therapeutic effect. *Microbiology*, 147, 6, 2001, 1641-1650 - [Линк](#).

Цитира се в:

1. T. Amo, H. Atomi, T. Imanaka. "Biochemical Properties and Regulated Gene Expression of the Superoxide Dismutase from the Facultatively Aerobic Hyperthermophile *Pyrobaculum calidifontis*." *Journal of Bacteriology* 185 (21), 6340-6347, 2003.
2. D.-C. Li, J. Gao, Y.-L. Li, J. Lu. "A thermostable manganese-containing superoxide dismutase from the thermophilic fungus *Thermomyces lanuginosus*." *Extremophiles* 9 (1), 1-6, 2005.
3. Z. Wang, Z. He, S. Li, & Q. Yuan. "Purification and partial characterization of Cu, Zn containing superoxide dismutase from entomogenous fungal species *Cordyceps militaris*." *Enzyme and microbial technology*, 36(7), 862-869, 2005.
4. Z. Wang, Z. He, Q. Shen, Y. Gu, S. Li, Q. Yuan. "Purification and partial characterization of recombinant Cu Zn containing superoxide dismutase of *Cordyceps militaris* in *E. coli*." *J. of Chroma B* 826 (1-2), 114-121, 2005.
5. A. Karmali. Sección biotecnología. *Agaricus blazei*: "Nuevos Desarrollos en la Nutrición con Hongos." *Mycology News. Versión. Española Noticias de micología* 1, 11, 2005.
6. M. Isobe, H. Kai, T. Kurahashi, S., Suwan, S. Pitchayawasin-Thapphasaraphong, T. Franz, N. Tani, H. Nishida. "The molecular mechanism of the termination of insect diapause, part 1: A timer protein, TIME-EA4, in the diapause eggs of the silkworm *Bombyx mori* is a metallo-glycoprotein." *ChemBioChem* 7 (10), 1590-1598, 2006.
7. C. Dellomonaco, A. Amaretti, S. Zanoni, A. Pompei, D. Matteuzzi, M. Rossi. "Fermentative production of superoxide dismutase with *Kluyveromyces marxianus*" *J. of Industr. Microb. Biotechn.* 34 (1), 27-34, 2007.
8. F.X. Guo, S.J. E, S.A. Liu, J. Chen, D.C. Li. "Purification and characterization of a thermostable MnSOD from the thermophilic fungus *Chaetomium thermophilum*." *Mycologia* 100 (3), 375-380, 2008.
9. V. Calabrese, C. Cornelius, M. Cavallaro, M. Cambria, M.A. Toscano. "La Nutrición con Hongos como Objetivo para Nuevas Estrategias Terapéuticas: Relevancia de los Enfoques Nutricionales y de la Modulación Antioxidante de Tipo Redox en la Medicina Anti envejecimiento." *Revista Clínica de Micología* 2, 3-4, 2009.
10. V. Calabrese, C. Cornelius, M. Cavallaro, M. Cambria, M.A. Toscano. "Mushroom Nutrition as a Target for Novel Therapeutic Strategies: Relevance to Nutritional Approaches and Antioxidant Redox Modulation in Antiaging Medicine." *Clinical J. of Micology* 3 (1), 2-5, 2009.
11. E. Chorukova. "Fed-batch Process Optimisation for the Intracellular Enzyme Superoxide Dismutase Production." *Bioautomation* 12, 13-20, 2009.
12. N.N. Song, Y. Zheng, S.J. E, D.C. Li. "Cloning, expression, and characterization of thermostable Manganese superoxide dismutase from *Thermoascus aurantiacus* var. *Levisporus*." *J. Microbiol.* 47 (1), 123-130, 2009.

13. S. Wakadkar, L.-Q. Zhang, D.C. Li, T. Haikarainen, P. Dhavala, A. C. Papageorgiou. "Expression, purification and crystallization of *Chaetomium thermophilum* Cu, Zn superoxide dismutase." *Acta Crystallogr Sect F Struct Biol Cryst Commun.* 66, 1089-1092, 2010.
14. S. Raimondi, D. Uccelletti, A. Amaretti, A. Leonardi, C. Palleschi, M. Rossi. "Secretion of *Kluyveromyces lactis* Cu/Zn SOD: Strategies for enhanced production." *Applied Microbiol. Biotechnol.* 86 (3), 871-878, 2010.
15. X.-Q. Xie, S.-H. Ying, M.-G. Feng. "Characterization of a new Cu/Zn-superoxide dismutase from *Beauveria bassiana* and two site-directed mutations crucial to its antioxidation activity without chaperon." *Enzyme Microb. Tech.* 46, 5 217-222, 2010.
16. H. Korekane, A. Korekane, Y. Yamaguchi, M. Kato, Y. Miyamoto, A. Matsumoto, T. Hasegawa, K. Suzuki, N. Taniguchi, T. Ookawara. "N-Glycosylation profiling of recombinant mouse extracellular superoxide dismutase produced in Chinese hamster ovary cells." *Glycocong. J.* 28 (3-4), 183-196, 2011.
17. S. Bafana, Dutt, S. Kumar, P.S. Ahuja. "Superoxide dismutase: An industrial perspective." *Crit. Rev. Biotech.* 31 (1), 65-76, 2011.
18. S. Areekit, P.Kanjanavas, P. Khawsak, A. Pakpitchareon, K. Potivejkul, G. Chansiri, K. Chansiri. "Cloning, expression, and characterization of thermotolerant manganese superoxide dismutase from *Bacillus* sp. MHS47." *Int. J. Mol. Sci.* 12, 844-856, 2011.
19. L.-Q. Zhang, F.-X. Guo, H.-Q. Xian, X.-J. Wang, A.-N. Li, D.-C. Li. "Expression of a novel thermostable Cu, Zn-superoxidedismutase from *Chaetomium thermophilum* in *Pichia pastoris* and its antioxidant properties." *Biotechnol Lett* 33 (6), 1127-1132, 2011.
20. X. Qin, M. Zhang, J. Qin, S. Yuan, Y. Hou, J. Liu. "Two-step purification of Cu, Zn-superoxide dismutase from pumpkin (*Cucurbita moschata*) pulp." *Sep. Purif. Technol.* 87, 79-83, 2012.
21. Q. Xiaorong, Z. Mingjin, Q. Jian, Y. Shiwei, H. Yali, L. Jianzhong. "Two-step purification of Cu, Zn-superoxide dismutase from pumpkin (*Cucurbita moschata*) pulp." *Separation and purification technology* 87, 79-83, 1383-5866, 2012.
22. C. Cornelius, M. Cornelius, Cavallaro, M. Scuto, V. Calabrese. "Rationale for Mushroom Nutrition Supplementa-tion in Neurodegenerative Conditions" *Positive Health* 208, 1, **2013**.
23. Y. Zhu, G. Wang, H. Ni, A. Xiao, Huinong C. "Cloning and characterization of a new manganese superoxide dismutase from deep-sea thermophile *Geobacillus* sp. EPT3." *World J. of Microb. and Biotechnol.* 30 (4), 1347-1357, 2013.
24. Z. Karahalioglu, M. Demirbilek, M. Şam, M. Erol-Demirbilek, N. Sağlam, E.B. Denkbaş. "Plasma polymerization-modified bacterial polyhydroxybutyrate nanofibrillar scaffolds." *J.of Appl. Polymer Science* 128 (3), 1904-1912, 2013.
25. W. Wang, T. Ma, B. Zhang, N. Yao, M. Li, L. Cui, G. Li, Z. Ma, J. Cheng. "A novel mechanism of protein thermostability: A unique N-terminal domain confers heat resistance to Fe/Mn-SODs." *Science reports* 4, 7284, 2014.
26. B.Q. Li, X. Dong, N. Li, J.Y. Gao, Q. Yuan, S.H. Fang, F.S Wang. "In vitro enzyme-mimic activity and in vivo therapeutic potential of HSJ-0017, a novel Mn porphyrin-based antioxidant enzyme mimic." *Experimental Biology and Medicine*, 239(10), 1366-1379, 2014.
27. Y. Zhu, H.Li, H. Ni, J. Liu, A. Xiao. "Purification and biochemical characterization of manganese-containing superoxide dismutase from deep-sea thermophile *Geobacillus* sp. EPT3", *Acta Oceanologica Sinica* 33, 163–169, 2014.
28. N. Tuteja, P. Mishra, S. Yadav, M. Tajrishi, S. Baral, S.C. Sabat. "Heterologous expression and biochemical characterization of a highly active and stable chloroplastic CuZn-superoxide dismutase from *Pisum sativum*." *BMC Biotechnology* 15, 3, 2015.
29. G.M. Montero-Morán, J.G. Sampedro, G. Saab-Rincón, M.A. Cervantes-González, J.Á. Huerta-Ocampo, A. De León-Rodríguez, A.P. Barba de la Rosa. "Biochemical and Molecular Characterization of a Novel Cu/Zn Superoxide Dismutase from *Amaranthus hypochondriacus* L.: an Intrinsically Disordered Protein." *Appl Biochem Biotechnol.* 176(8), 2328-45, 2015.

30. M. Li, L. Zhu, W. Wang. "Improving the thermostability and stress tolerance of an archaeon hyperthermophilic superoxide dismutase by fusion with a unique N-terminal domain." Springerplus. 5, 241, 2016.
31. N.C.N. Perera, G.I. Godahewa, J. Lee. "Copper-zinc-superoxide dismutase (CuZnSOD), an antioxidant gene from seahorse (*Hippocampus abdominalis*); molecular cloning, sequence characterization, antioxidant activity and potential peroxidation function of its recombinant protein." Fish & Shellfish Immunology 57, 386-399, 2016.
32. R.K. Gopal, S. Elumalai. "Industrial Production of Superoxide Dismutase (SOD): A Mini Review." J Prob Health 5, 3, 2017.

9 Schütz, J., Dolashka-Angelova, P., Abrashev, R., Nicolov, P., Voelter, W. Isolation and spectroscopic characterization of the structural subunits of keyhole limpet hemocyanin. Biochimica et Biophysica Acta - Protein Structure and Molecular Enzymology, 1546, 2, 2001, 325-326 - [Линк](#).

Цитира се в:

1. R. Hristova. "Структура на артроподни хемоцианини." Химия и индустрия 72 (1-2), 9-19 (2001).
2. B.A. de Noya, C Colmenares, O. Noya. "Comunidad Antigénica y Reactividad Cruzada: Su repercusión en el Diagnóstico y Tratamiento de Enfermedades Parasitarias. Especial referencia a Esquistosomiasis." Archivos Venezolanos de Farmacología y Terapéutica 20, 163-171 (2001).
3. R. Favilla, M. Goldoni, A. Mazzini, P. Di Muro, B. Salvato, M. Beltramini. "Guanidinium chloride induced unfolding of a hemocyanin subunit from *Carcinus aestuarii*: I. Apo form." BBA 1597 (1), 42-50, 2002.
4. A.W.J.W. Tepper, L. Bubacco, G.W. Canters. "Stopped-flow Fluorescence Studies of Inhibitor Binding to Tyrosinase from *Streptomyces antibioticus*." J. Biol.Chem. 279 (14), 13425-13434, 2004.
5. B. Huang, J. Zhang, J. Xiang. "Purification and primary identification of haemocyanin in the Chinese shrimp, Fenneropenaeus chinensis (Decapoda, Penaeoidea)" Crustaceana 81 (7), 769-780, 2008.
6. Y. Mizutani, S. Tsuge, K. Shiogama, R. Shimomura, S. Kamoshida, K. Inada, Y. Tsutsumi. "The enzyme-labeled antigen method. Histochemical detection of antigen-specific antibody-producing cells in tissue sections of rats immunized with horseradish peroxidase, ovalbumin or keyhole limpet hemocyanin." JHC express 57 (2), 101-11, 2009.
7. S.A. Ali, Z. Ayub, A. Bano, H. Fatima "Biochemical Studies on Siphonaria (Gastropoda: Pulmonata) From the Karachi Coast of North Arabian Sea." Pakistan J. Zool, 43 (6), 1085-1093, 2011.
8. X. Tu, J. Wang, K. Hao, D.W. Whitman, Y. Fan, G. Cao, Z. Zhang. "Transcriptomic and proteomic analysis of pre-diapause and non-diapause eggs of migratory locust, *Locusta migratoria* L. (Orthoptera: Acridoidea)." Scientific Reports 5, 19, 11402, 2015.
9. Y. Fan, H. Chen, G. Zeng, J. Liu, J. Xue, Y. Wu, Xun Li. "Spectroscopic Investigation on the Interaction of Pb(II) with Keyhole Limpet Hemocyanin." Med chem (Los Angeles) 6, 395-398, 2016.

10. Dolashka-Angelova, P., Schwarz, H., Dolashki, A., Stevanovic, S., Fecker, M., Saeed, M., Voelter, W. Oligomeric stability of *Rapana venosa* hemocyanin (RvH) and its structural subunits. Biochimica et Biophysica Acta - Proteins and Proteomics, 1646(1-2) 2003a, 77-85 - [Линк](#).

Цитира се в:

1. B. Lieb, V. Boisguérin, W. Gebauer, J. Markl. "c-DNA sequence, protein structure, and evolution of the single hemocyanin from *Aplysia californica*, an opisthobranch gastropod." J. Mol. Evol. 59 (4), 536-545, 2004.

2. P. De Ioannes, B. Moltedo, H. Oliva, R. Pacheco, F. Faunes, A.E. De Ioannes, M.I. Becker. "Hemocyanin of the molluscan *Concholepas concholepas* exhibits an unusual heterodecameric array of subunits." *J. of Biol. Chem.* 279 (25), 26134-26142, 2004.
3. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states". *Amino acid* 39 (3), 899-910, 2010.
4. F. Spinozzi, P. Mariani, I. Mičetić, C. Ferrero, D. Pontoni, M. Beltramini. "Quaternary Structure Heterogeneity of Oligomeric Proteins: A SAXS and SANS Study of the Dissociation Products of *Octopus vulgaris* Hemocyanin." *PLOS ONE* | www.plosone.org 11 (7), e49644, 2012.
5. C.J. Bolton, R. Bayer, R. Bushway, S. Collins, B. Perkins, "Analytical and Semipreparative HPLC Analysis and Isolation of Hemocyanin from the American Lobster *Homarus americanus*." *J. of Shellfish Research* 33, 11-17, 2014.
6. N.T. Zanjania, A.L. Cunningham, F. Dehghani, M.M. Saksen. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Current Medicinal Chemistry* 24, 2017.

11. Dolashka-Angelova, P., Beck, A., Dolashki, A., Beltramini, M., Stevanovic, S., Salvato, B., Veolter, W. Characterization of the carbohydrate moieties of the functional unit RvH1-a of *Rapana venosa* haemocyanin using HPLC/electrospray ionization MS and glycosidase digestion. *Biochemical Journal*, 374, 1, 2003b, 185-192 - [Линк](#)

Цитира се в:

1. J. Wiley & Sons, "Current Awareness Current literature in mass spectrometry." *Int. J. Mass Spectrom.* 39 (1), 99-108, 2004.
2. K. Idakieva, S. Stoeva, W. Voelter, C. Gielens. "Glycosylation of *Rapana thomasiana* hemocyanin. Comparison with other prosobranch (gastropod) hemocyanins." *Comp. Biochem. Phys. B* 138, 221–228, 2004.
3. M. Gutternigg, K. Ahrer, H. Grabher-Meier, S. Burgmayr, E. Staudacher. "Neutral N-glycans of the gastropod *Arion lusitanicus*." *Eur. J. Biochem.* 271 (7), 1348-1356, 2004.
4. C. Gielens, K. Idakieva, V. Van den Bergh, N.I. Siddiqui, K. Parvanova, F. Compennolle. "Mass spectral evidence for N-glycans with branching on fucose in a molluscan hemocyanin." *Biochem. Biophys. Res. Co.* 331 (2), 562-570, 2005.
5. M. Gutternigg, S. Burgmayr, G. Poltl, J. Rudolf, E. Staudacher. "Neutral N-glycan patterns of the gastropods *Limax maximus*, *Cepaea hortensis*, *Planorbarius corneus*, *Arianta arbustorum* and *Achatina fulica*." *Glycoconjugate J.* 24 (8), 475-489, 2007.
6. N.I. Siddiqui, K. Idakieva, B. Demarsin, L. Dumanova, F. Compennolle, C. Gielens. "Involvement of glycan chains in the antigenicity of *Rapana thomasiana* hemocyanin." *Biochem. Biophys. Res. Co.* 361 (3), 705-711, 2007.
7. D.J. Harvey. "Analysis of Carbohydrates and Glycoconjugates by Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry: 2003–2004." *Mass Spectrom. Rev.* 28, 273-361, 2008.
8. E. Staudacher, H. Stepan, M. Gutternigg. "Protein N-Glycosylation of Gastropods." *Curr Top Biochem Res.* 11 (2), 29–39, 2009.
9. M. Pattky, C. Huhn. "Protein glycosylation analysis with capillary-based electromigrative separation techniques." *Bioanalytical Reviews* 2, 115-155, 2010.
10. H. Stepan, Ch. Bleckmann, H. Geyer, R. Geyer and E. Staudacher. "Determination of 3-O- and 4-O-methylated monosaccharide constituents in snail glycans." *Carbohydr. Res.* 345 (10), 1504-1507, 2010.
11. A.M. Martin, G. G. Martin, R. Butler, S. K. Goffredi. "Synthesis of keyhole limpet hemocyanin by the rhogocytes of *Megathura crenulata*." *Invert. Biol* 130 (4), 302–312, 2011.
12. O. Levy-Ontman, S. Arad, D.J. Harvey, T.B. Parsons, A. Fairbanks, Y. Tekoah. "Unique N-glycan moieties of the 66-kDa cell wall glycoprotein from the red microalga *Porphyridium* sp." *J. Biol. Chem.* 286 (24), 21340-21352, 2011.

13. B. Schiller, A. Hykollari, S. Yan, K. Paschinger, I.B.H. Wilson. "Complicated N-linked glycans in simple organisms." *Biological Chemistry* 393 (8), 661-673, 2012.
14. E. Staudacher. "Methylation-an uncommon modification of glycans." *Biological Chemistry* 393 (8), 675-685, 2012.
15. S. Arancibia, F. Salazar, M. I. Becker. "Hemocyanins in the Immunotherapy of Superficial. Bladder Cancer." *Bladder Cancer – From Basic Science to Robotic Surgery*. 221-243, 2012.
16. S. Kurz, J. Chunsheng, A. Hykollari, D. Gregorich, B. Giomarelli, R. Vasta, I. B. H. Wilson, K. P. Gerardo. "Haemocytes and plasma of the eastern oyster (*Crassostrea virginica*) display a diverse repertoire of sulphated and blood group A-modified N-glycans *Glycobiology and Extracellular Matrices*." *J. Biol. Chem.* 288 (34), 24410-24428, 2013.
17. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Curr Med Chem.* 25 (20), 2292-2303, 2018

12 Dolashka-Angelova, P., Stevanovic, S., Dolashki, A., Angelova, M., Serkedjieva, J., Krumova, E., Pashova, S., Zacharieva, S., Voelter, W. Structural and functional analysis of glycosylated Cu/Zn-superoxide dismutase from the fungal strain *Humicola lutea* 103. *Biochem. Biophys. Res. Commun.*, 317, 4, 2004a, 1006-1016 - [Линк](#)

Цитира се в:

1. Z. Wang, Z. He, Q. Shen, Y. Gu, S. Li, Q. Yuan. "Purification and partial characterization of recombinant Cu, Zn containing superoxide dismutase of *Cordyceps militaris* in *E. coli*." *J. Chromat. B. Analyt. Technol. Biomed. Life Sci.* 826 (1-2), 114-121, 2005.
2. Z. Wang, Z. He, S. Li, Q. Yuan. "Purification and partial characterization of Cu, Zn containing superoxide dismutase from entomogenous fungal species *Cordyceps militaris*". *Enz. Microb. Technol.* 36 (7), 862-869, 2005.
3. M. Isobe, H. Kai, T. Kurahashi, S. Suwan, S. Pitchayawasin-Thapphasaraphong, T. Franz, N. Tani, H. Nishida. "The molecular mechanism of the termination of insect diapause, part 1: A timer protein, TIME-EA4, in the diapause eggs of the silkworm *Bombyx mori* is a metallo-glycoprotein." *Chem. Bio. Chem.* 7 (10), 1590-1598, 2006.
4. Z.S. Wang, Y.X. Gu, Q.S. Yuan. "Effect of nutrition factors on the synthesis of superoxide dismutase, catalase, and membrane lipid peroxide levels in *Cordyceps militaris* mycelium." *Current Microbiol.* 52 (1), 74-79, 2006.
5. Z.S. Wang, Z.J. He, S.X. Li, Q.S. Yuan. "Preparation of superoxide dismutase from *Cordyceps militaris* Mycelium." *Chin. Pharma. J.* 41 (22), 1753-1756, 2006.
6. O.C. Lima, G. Larcher, P. Vandeputte, A. Lebouil, D. Chabasse, P. Simoneau, J-P. Bouchara. "Molecular cloning and biochemical characterization of a Cu, Zn-superoxide dismutase from *Scedosporium apiospermum*." *Microbes Infect.* 9, 558-565, 2007.
7. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: period 2003–2004." *Mass Spect. Rev.* 28, 273– 361, 2009.
8. S.A.G. Echaury, M. Gidekel, A.G. Moraga, L.G. Ordonez, J.A.R. Contreras, A.P. Barba de la Rosa, A. De Leon Rodriguez. "Heterologous expression of a novel psychrophilic Cu/Zn superoxide dismutase from *Deschampsia antarctica*." *Process Biochem.* 44 (9), 969-974, 2009.
9. H.H. Xu, H. Ma, B.-Q. Hu, D.B. Lowrie, X.-Y. Fan, C-G. Wen. "Molecular cloning, identification and functional characterization of a novel intracellular Cu-Zn superoxide dismutase from the freshwater mussel *Cristaria plicata*." *Fish & Shellfish Immunol.* 29 (4), 615-622, 2010.
10. S. Ali, Z. Huang, Sh. Ren. "Stress Response of Entomopathogenic Fungus *Isaria fumosorosea* to Copper." *Biol. Trace Element Research* 143 (1), 600, 2011.
11. H. Korekane, A. Korekane, Y. Yamaguchi, M. Kato, Y. Miyamoto, A. Matsumoto, T. Hasegawa, K. Suzuki, N. Taniguchi, T. Ookawara. "N-Glycosylation profiling of recombinant mouse extracellular superoxide dismutase produced in Chinese hamster ovary cells." *Glycoconjugate J.* 28 (3-4), 183-196, 2011.

12. S. Ali, Z. Wang, S. Ren, Z. Huang. "Superoxide dismutase production by *Isaria fumosorosea* on metals and its role in stress tolerance and fungal virulence." *Biocontrol Sci. Technol.* 21 (12), 1457-1469, 2011.
13. X. Qin, M. Zhang, J. Qin, S. Yuan, Y. Hou, J. Liu. "Two-step purification of Cu, Zn-superoxide dismutase from pumpkin (*Cucurbita moschata*) pulp." *Sep. Purif. Technol.* 87, 79-83, 2012.

13 Dolashka-Angelova, P., Beck, A., Dolashki, A., Beltramini, M., Salvato, B., Hristova, R., Velkova, L., Voelter, W.. Carbohydrate moieties of molluscan *Rapana venosa* hemocyanin. *Micron*, 35, 1-2, 2004b, 101-104 - [Линк](#)

Цитира се е:

1. R.B. King. "Encyclopedia of inorganic chemistry." 9, 11173, 2005.
2. H. Decker. "Copper Proteins with Dinuclear Active Sites." *Encyclopedia of Inorganic Chemistry* 2. Aufl. (Hrsg. R. B. King), Wiley, New York, 1159–1173, 2006.
3. M. Gutternigg, S. Burgmayr, G. Poltl, J. Rudolf, E. Staudacher. "Neutral N-glycan patterns of the gastropods *Limax maximus*, *Cepaea hortensis*, *Planorbarius corneus*, *Arianta arbustorum* and *Achatina fulica*." *Glycoconj. J.* 24 (8), 475-489, 2007.
4. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: 2003–2004." *Mass Spect. Rev.* 28, 273– 361, 2008.
5. D. Guo, H. Wang, D. Zeng, X. Li, X. Fan, Y. Li. "Vaccine potential of hemocyanin from *Oncomelania hupensis* against *Schistosoma Japonicum*." *Parasit. Internat.* 60 (3), 242-246, 2011.
6. J. Markl. "Evolution of Molluscan Hemocyanin Structures." *BBA* 1834 (9), 1840-1852, 2013.

14 Stefanov, R., Angelova, M., Stefanova, T., Subev, M., Dolashka, P., Voelter, W., Zachariev, Z. Cu/Zn-superoxide dismutase from the fungal strain *Humicola lutea* 103 improves ram spermatozoa functions *in vitro*. *Andrologia*, 36, 2, 2004, 51-56 - [Линк](#)

Цитира се е:

1. Z. Wang, Z. He, Q. Shen, Y. Gu, S. Li, Q. Yuan. "Purification and partial characterization of recombinant Cu, Zn containing superoxide dismutase of *Cordyceps militaris* in *E. coli*." *J. Chromatography B* 826 (1-2), 114-121, 2005.
2. Z. Wang, Z. He, S. Li, Q. Yuan. "Purification and partial characterization of Cu, Zn containing superoxide dismutase from entomogenous fungal species *Cordyceps militaris*." *Enzyme and Microb. Technol.* 36, 862–869, 2005.
3. V.S.N. La Falci, A.E. Yrjö-Koskinen, A. Fazeli, W.V. Holt, P.F. Watson. "Antioxidant combinations are no more beneficial than individual components in combating ram sperm oxidative stress during storage at 5 C." *Animal reproduction science*, 129(3), 180-187, 2011.
4. S.V. Silva, A.T. Soares, A.M. Batista, F.C. Almeida, J.F. Nunes, C.A. Peixoto, M.M. P. Guerra. "In Vitro and In Vivo Evaluation of Ram Sperm Frozen in Tris Egg-yolk and Supplemented with Superoxide Dismutase and Reduced Glutathione." *Reprod. Domest. Anim.* 46 (5), 874-881, 2011.
5. S.V. Silva, M.M.P. Guerra. "Efeitos da criopreservação sobre as células espermáticas e alternativas para redução das crioinjúrias. Cryopreservation effects on sperm cells and alternatives for crioinjury reduction." *Rev. Bras. Reprod. Anim.* 35 (4), 370-384, 2011.
6. M.M. Pessoa Guerra, D. Ribeiro Câmara, E.C. Bento da Silva, S.V. Silva. "Uso de antioxidantes no sêmen ovino." *Ciência Animal*, 22 (1), 354-364, 2012.
7. F. Soltanpour, G. Moghaddam, R. Asadpour, S.A. Rafat. "Effect of Antioxidant combinations on sperm quality of cross breed rams during liquid storage." *Intern. J. of Advanced Biol. and Biom. Research* 3, 732-740, 2014.
8. A. Santiani, S. Evangelista, N. Sepúlveda, J. Risopatrón, J. Villegas, R. Sánchez. "Addition of superoxide dismutase mimics during cooling process prevents oxidative stress and improves semen quality parameters in frozen/thawed ram spermatozoa." *Theriogenology* 82(6), 884-889, 2014.

9. L. Allaia, X. Druartc, M. Öztürkd, A. BenMoulaa, B. Nasserb, B. El Amiria. "Protective effects of *Opuntia ficus-indica* extract on ram sperm quality, lipid peroxidation and DNA fragmentation during liquid storage." *Animal Reproduction Science*, 175, 1-9, 2016.
10. S. Evangelista-Vargas, A. Santiani. "Detection of intracellular reactive oxygen species (superoxide anion and hydrogen peroxide) and lipid peroxidation during cryopreservation of alpaca spermatozoa." *Reproduction in Domestic Animals* 52 (5), 819-824, 2017.

15 Dolashka-Angelova, P., Dolashki, A., Stevanovic, S., Hristova, R., Atanasov, B., Nicolov, P., Voelter, W. Structure and stability of arthropodan hemocyanin *Limulus polyphemus*. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 61, 6, 2005a, 1207-1217 -

[Линк](#)

Цитира се в:

1. A.G. Martin, F. Depoix, M. Stohr, U. Meissner, S. Hagner-Holler, K. Hammouti, T. Burmester, J. Markl. "Limulus polyphemus Hemocyanin: 10 A Cryo-EM Structure, Sequence Analysis, Molecular Modelling and Rigid-body Fitting Reveal the Interfaces Between the Eight Hexamers." *J. Mol. Biol.* 366 (4), 1332-1350, 2007.
2. B. Huang, J. Zhang, J. Xiang. "Purification and primary identification of haemocyanin in the Chinese shrimp, *Fenneropenaeus chinensis* (Decapoda, Penaeoidea)." *Crustaceana* 81 (7), 769-780, 2008.
3. T. Fan, Y. Zhang, L. Yang 1, X. Yang, G. Jiang, M. Yu, R. Cong. "Identification and characterization of a hemocyanin-derived phenoloxidase from the crab *Charybdis japonica*." *Comp. Biochem. Physiol. Part B* 152 (2), 144-149, 2009.
4. B. Tang, Y. Wang, D. Zhang, H. Zhang. "Fluorescence properties and conformational stability of the hemocyanin from Chinese mitten crab *Eriocheir japonica sinensis* (Decapoda, Grapsidae)." *J. Mol. Struct.* 920 (28), 454-458, 2009.
5. B. Mindykowski, E. Jaenicke, S. Tenzer, S. Cirak, Th. Schweikardt, H. Schild, H. Decker. "Cockroach allergens Per a 3 are oligomers." *Developmental and Comparative* 34 (7), 722-733, 2010.
6. A. Doyen, L. Beaulieu, L. Saucier, Y. Pouliot, L. Bazinet. "Demonstration of in vitro anticancer properties of peptide fractions from a snow crab by-products hydrolysate after separation by electro dialysis with ultrafiltration membranes." *Separ. Purif. Tech.* 78, 321-329, 2011.
7. K. Idakieva, Y. Raynova, F. Meersman, C. Gielens. "Phenoloxidase activity and thermostability of Cancer pagurus and Limulus polyphemus hemocyanin." *Comp. Bioch. Phys. B* 164 (3), 201-209, 2013.
8. J.C. Bolton, R. Bayer, R. Bushway, S. Collins, B. Perkins. "Analytical and Semipreparative HPLC Analysis and Isolation of Hemocyanin from the American Lobster *Homarus americanus*." *J. of Shellfish Research* 33, 11-17, 2014.
9. G. Marshall, P. Valtchev, F. Dehghani, V.G. Gomes. "Thermal denaturation and protein stability analysis of *Haliotis rubra* hemocyanin." *Journal of Thermal Analysis and Calorimetry* 123, 2499-2505, 2016.
10. M. Velayutham, S. K. Kamanuri, K. Saravanan, A. Munusamy. "Cation metals specific hemocyanin exhibits differential antibacterial property in mud crab, *Scylla serrate*." *Biologia* 71(2), 176-183, 2016.
11. M. Khalil, Z. Boubegtiten-Fezoua, N. Hellmann, P. Hellwig. "Extraordinary stability of hemocyanins from *L. polyphemus* and *E. californicum* studied using infrared spectroscopy from 294 to 20 K." *Physical Chemistry Chemical Physics* 18 (41), 28732-28739, 2016.

16. Dolashka-Angelova, P., Dolashki, A., Savvides, S. N., Hristova, R., Van Beeumen, J., Voelter, W., Devreese, B., Weser, U., Di Muro, P., Salvato, B., Stevanovic, S.. Structure of hemocyanin subunit CaESS2 of the crustacean Mediterranean crab *Carcinus aestuarii*. Journal of Biochemistry, 138, 3, 2005b, 303-312 - [Линк](#)

Цитира се е:

1. M. Tralalon, C. Carapito, F. Voinot, J.-M. Martrette, A. Van Dorsselaer, C. Gilbert, Bertile. "Differences in *Brachypelma albopilosa* (theraphosidae) hemolymph proteome between subadult and adult females." *J. Exper. Zoology Part A*, 313 (10), 651-659, 2010.
2. I. Mičetić, C. Losasso, P.D. Muro, G. Tognon, P. Benedetti, M. Beltramini. "Solution structures of 2x6-meric and 4x6-meric hemocyanins of crustaceans *Carcinus aestuarii*, *Squilla mantis* and *Upogebia pusilla*." *J. of Structural Biology* 171 (1), 1-10, 2010.
3. F. Yan, Y. Zhang, R. Jiang, M. Zhong, Hu Z, H. Du, J. Lun, J. Chen, Y. Li. "Identification and Agglutination Properties of Hemocyanin from the Mud Crab (*Scylla serrata*)."
Fish Shellfish Immunol. 30 (1), 354-60, 2011.
4. N.H. Andersen, G. Zoppellaro, L. Bubacco, L. Casella and K. K. Andersson. "Raman, UV-vis, and CD Spectroscopic Studies of Dodecameric Oxyhemocyanin from *Carcinus aestuarii*." *Chemistry Letters* 40 (12), 1360-1362, 2011.
5. C.F. Garcia, A. Laino, M. Cunningham. "Lipoproteins of spiders: Structure and function." Chapter. *Spiders: Morphology, Behavior and Geographic Distribution*. Editor: M. Santerre, 71-93, 2013.
6. P. Pinnow, A. Fabrizius, C. Pick, T. Burmester. "Identification and characterisation of hemocyanin of the fish louse *Argulus* (Crustacea: Branchiura)." *J of Comp. Physiology B* 10, 1-8, 2015.
7. M. Velayutham, S. Kumar Kamanuri, K. Saravanan, A. "Munusamy Cation metals specific hemocyanin exhibits differential antibacterial property in mud crab, *Scylla serrata*." *Biologia* 71, 2, 176-183, 2016.
8. Z. Zhang, F. Wang, C. Chen, Z. Zheng, J.J. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." *Immunol Lett.* 192, 42-47, 2017.

17 Abrashev, R., Dolashka-Angelova, P., Hristova, R., Stefanova, L., Angelova, M. Role of antioxidant enzymes in survival of conidiospores of *Aspergillus niger* 26 under conditions of temperature stress. *Journal of Applied Microbiology*, 99, 4, 2005, 902-909 - [Линк](#)

Цитира се е:

1. A. Erkan, U. Bakir, G. Karakas. "Photocatalytic microbial inactivation over Pd doped SnO₂ and TiO₂ thin films." *J. Photoch. Photobio. A: Chem.* 184 (3), 313-321, 2006.
2. S. Nandagopal, B.D.R. Kumari. "Enhancement of Inulinase Production from Chicory and Fenugreek Rhizosphere Soil." *American-Eurasian J. Agric. & Environ. Sci.* 1 (3), 225-228, 2006.
3. H.L. Chen, C.C. Yen, T.C. Tsai, C.H. Yu, Y.J. Liou, Y.W. Lai, M.L. Wang, C.M. Chen. "Production and characterization of human extracellular superoxide dismutase in the methylotrophic yeast *Pichia pastoris*." *J. Agricult. Food Chem.* 54 (21), 8041-8047, 2006.
4. S. Inouye, K. Uchida, Y. Nishiyama, Y. Hasumi, H. Yamaguchi, S. Abe. "Combined effect of heat, essential oils and salt on the fungicidal activity against Trichophyton mentagrophytes in foot bath." *Japan. J. Med. Mycol.* 48 (1), 27-36, 2007.
5. G.V. Smirnova, N.G. Muzyka, O.N. Oktyabrsky. "Enhanced resistance to peroxide stress in *Escherichia coli* grown outside their niche temperatures." *J. Therm. Biol.* 32 (6), 321-327, 2007.
6. H. Hisada, M. Sano, Y. Hata, Y. Abe, M. Machida. "Deletion analysis of the catalase-encoding gene (*catB*) promoter from *Aspergillus oryzae*." *Biosci. Biotech. Biochem.* 72 (1), 48-53 2008.
7. Q. Li, LM Harvey, B. McNeil. "The effects of elevated process temperature on the protein carbonyls in the filamentous fungus, *Aspergillus niger* B1-D." *Proc. Biochem.* 43 (8), 877-881, 2008.
8. D. Todorova, D. Nedeva, R. Abrashev, & K. Tsekova, "Cd (II) stress response during the growth of *Aspergillus niger* B 77." *Journal of applied microbiology*, 104 (1), 178-184, 2008.
9. Q. Li, L. M. Harvey, and B. McNeil. "Review article. Oxidative stress in industrial fungi." *Critic. Rev. in Biotechn.* 29 (3), 199-213, 2009.
10. K. Lambou, C. Lamarre, R. Beau, N. Dufour, J.-P. Latge. "Functional analysis of the superoxide dismutase family in *Aspergillus fumigatus*." *Molecular Microb.* 75 (4), 910-923, 2010.

11. S. Kumar, G.T. Kalyanasundaram, S.N. Gummadi. "Differential Response of the Catalase, Superoxide Dismutase and Glycerol-3-phosphate Dehydrogenase to Different Environmental Stresses in *Debaryomyces nepalensis* NCYC 3413." *Curr. Microbio.* 62 (2), 382-387, 2011.
12. S-H. Ying, M-G. Feng. "Integration of *Escherichia coli* thioredoxin (*trxA*) into *Beauveria bassiana* enhances the fungal tolerance to the stresses of oxidation, heat and UV-B irradiation." *Biol. Cont.* 59 (2), 255-260, 2011.
13. N. Talebian, M.R. Nilforoushan, E.B. Zargar. "Enhanced antibacterial performance of hybrid semiconductor nanomaterials: ZnO/SnO₂ nanocomposite thin films." *Appl.Surf.Sci.* 258, 547-555, 2011.
14. D.A. Delgado, A. de Souza Sant'ana, P.R. de Massaguer. "Occurrence of molds on laminated paperboard for aseptic packaging, selection of the most hydrogen peroxide- and heat-resistant isolates and determination of their thermal death kinetics in sterile distilled water." *World J Microbiol Biotechnol* 28 (7), 2609-2614, 2012.
15. J. Chang, Y. Zhang. "Catalytic degradation of amygdalin by extracellular enzymes from *Aspergillus niger*." *Process Biochemistry* 47 (2), 195-200, 2012.
16. R. Sharma, M. Katoch, N. Govindappa, P.S. Srivastava, K.N. Sastry, GN. Qazi. "Evaluation of the Catalase promoter for expressing the alkaline xylanase gene (*alx*) in *Aspergillus niger*." *FEMS Microbiology Letters* 327 (1), 33-40, 2012.
17. K.S. Shin, H.S. Park, Y.H. Kim, J.H. Yu. "Comparative proteomic analyses reveal that *FibA* down-regulates *gliT* expression and SOD activity in *Aspergillus fumigatus*." *J. of Proteomic* 7, 40-52, 2013.
18. M.A.C. Luna, C.C.S. Cordiero, E.R. Vieira, M.H.M.E. Alves, J.H.E.S. Freitas, K. Okada, G.Maria, C. Takaki, A.E. Nascimento. "Mechanisms of Adaptation and Tolerance in *Aspergillus niger* UCP/WFCC 1261 by Copper-induced to Oxidative Response." *Int.J. Mol. Sc.*, 14, 2-27. 2013.
19. M.A.C. Luna, E.R. Vieira, K. Okada, G.M. Campos-Takaki, A. E. do Nascimento. "Copper-induced adaptation, oxidative stress and its tolerance in *Aspergillus niger* UCP1261." *Electronic Journal of Biotechnology* 18, 418–427, 2015.
20. T. Roukas. "The role of oxidative stress on carotene production by *Blakeslea trispora* in submerged fermentation." *Crit. Reviwe of Biotechn*, 36 (3), 424-33, 2016.
21. X.F. Zhang, W. Shen, S. Gurunathan. "Biologically Synthesized Gold Nanoparticles Ameliorate Cold and Heat Stress-Induced Oxidative Stress in *Escherichia coli*." *Molecules* 21 (6), 7312016, 2016.
22. A. Mukherjee. *Role of Aspergillus in Bioremediation Process* (Book Chapter). "New and Future Developments in Microbial Biotechnology and Bioengineering: *Aspergillus* System Properties and Application." 209-214, 2016.
23. D. Das, A. Chakraborty, S.C. Santra. "Characteristics of Metabolic Changes and Antioxidative Response in a Potential Zinc Tolerant Fungal Strain, *Aspergillus terreus*." *Proceedings of the National Academy of Sciences, India - Section B: Biological Sciences* 87 (2), 571–578, 2017.
24. C. Paulussen, J.E. Hallsworth, S. Alvarez-Perez, W.C. Nierman, P.G. Hamill, D. Blain, B. Lievens. "Ecology of aspergillosis: insights into the pathogenic potency of *Aspergillus fumigatus* and some other *Aspergillus* species." *Microbial biotechnology*, 10 (2), 296-322, 2017.
25. J.H. Mares, K.P. Gramacho, E.C. Santos, F.C. Alvim, C.P. Pirovani. "Proteomic analysis during of spore germination of *Moniliophthora perniciosa*, the causal agent of witches' broom disease in cacao." *BMC Microbiology* 17(1), 176, 2017.
26. Y. Yuan, L. Ji, Y. Hu, J. Gao, Y. Zhou. "High yield preparation of ganglioside GM1 using recombinant sialidase from *Cellulosimicrobium cellulans*." *Process Biochemistry* 58, 92-97, 2017.

18 Beck, A., Hillen, N., Dolashki, A., Stevanovic, S., Salvato, B., Voelter, W., Dolashka – Angelova, P. Oligosaccharide structure of a functional unit RvH1-b of *Rapana venosa* hemocyanin using HPLC/electrospray ionization mass spectrometry. *Biochimie*, 89, 8, 2007, 938-949 - [Линк](#)
[Цитира се е:](#)

1. C. Gielens, K. Idakieva, V. Van den Bergh, N. I. Siddiqui, K. Parvanova, F. Compennolle. "Mass spectral evidence for N-glycans with branching on fucose in a molluscan hemocyanin." *Biochem. Biophys. Res. Commun.* 331, 562–570, 2005.
2. Y.-F. Zhang, S.-L. Ji. "Applications of biological mass spectrometry in the analysis of glycoproteomics." *J. Chin. Pharma. J.* 43 (15), 1125-1129, 2008.
3. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states." *Amino Acids.* 39(3), 899-910, 2010.
4. Z. Zhang, F. Wang, C. Chen, Z. Zheng, JJ. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." *Immunol Lett.* 192, 42-47, 2017.
5. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Current Medicinal Chemistry* 25 (20), 2292-2303, 2018.

19 Dolashka, P., Stefanovic, S., Dolashki, A., Devreese, B., Tzvetkova, B., Voelter, W., Beeumen, J., Salvato, B. A challenging insight on the structural unit 1 of molluscan *Rapana venosa* hemocyanin. *Archive Biochem. Biophys*, 459, 1, 2007, 50-58 - [Линк](#)

Цитира се в:

1. C. Gatsogiannis, A. Moeller, F. Depoix, U. Meissner, J. Markl. "Nautilus pompilius Hemocyanin: 9 A cryo-EM structure and molecular model reveal the subunit pathway and the interfaces between the 70 functional units." *J. Mol. Biol.* 374 (2), 465-486, 2007.
2. S. Campello, M. Beltramini, G. Giordano, P. Di Muro, S.M. Marino, L. Bubacco. "Role of the tertiary structure in the diphenol oxidase activity of Octopus vulgaris hemocyanin". *Arch. Biochem. Biophys.* 471 (2), 159-167, 2008.
3. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states". *Amino Acids.* 39 (3), 899-910, 2010.
4. A. Manubens, F. Salazar, D. Haussmann, J. Figueroa, M. Del Campo, J. Martínez Pinto, L. Huaquín A. Venegas, M. Inés Becker. "Concholepas hemocyanin biosynthesis takes place in the hepatopancreas, with hemocytes being involved in its metabolism." *Cell Tissue Res* 342 (3), 423-435, 2010.
5. M. Palacios, R. Tampe, M. Del Campo, Ta-Ying Zhong, M. N. López, F. Salazar-Onfray, M.I. Becker. "Antitumor activity and carrier properties of novel hemocyanins coupled to a mimotope of GD2 ganglioside." *European Journal of Medicinal Chemistry* 150, 74-86, 2018.
6. J.J. Mora Román, M. Del Campo, J. Villar, F. Paolini, G. Curzio, A. Venuti, L. Jara, J. Ferreira, P. Murgas, A. Lladser, A. Manubens, M. Inés Becker. "Immunotherapeutic Potential of Mollusk Hemocyanins in Combination with Human Vaccine Adjuvants in Murine Models of Oral Cancer." *J. of Immun. Research*, 2019 (2), 1-19, 2019.

20 Krumova, E., Dolashka-Angelova, P., Pashova, S., Stefanova, I., Van Beeumen, J., Vassilev, S., Angelova, M. Improved production by fed-batch cultivation and some properties of Cu/Zn-superoxide dismutase from the fungal strain *Humicola lutea* 103. *Enzyme and Microbial Technology*, 40, 4, 2007, 524-532 - [Линк](#)

Цитира се в:

1. Y. Bao, L. Li, F. Xu, G. Zhang. "Intracellular copper/zinc superoxide dismutase from bay scallop *Argopecten irradians*: Its gene structure, mRNA expression and recombinant protein." *Fish and Shellfish Immunol.* 27 (2), 210-220, 2009.

2. S.A. Garcia Echauri, M. Gidekel, A.G. Moraga, L.G. Ordonez, J.A. Rojas Contreras, A.P. Barba de la Rosa, A. De Leon Rodriguez. "Heterologous expression of a novel psychrophilic Cu/Zn superoxide dismutase from *Deschampsia Antarctica*." *Proc. Biochem.* 44 (9), 969-974, 2009.
3. X.-Q. Xie, S.-H. Ying, M.-G. Feng. "Characterization of a new Cu/Zn-superoxide dismutase from *Beauveria bassiana* and two site-directed mutations crucial to its antioxidation activity without chaperon." *Enz. Microb. Technol.* 46 (5), 217-222, 2010.
4. I. Vangelov, J. Dineva, K. Todorova, S. Hayrabedian and M.D. Ivanova. "Trends in Immunolabelled and Related Techniques." *Ovarian Biomarkers in Infertility*. Edited by Dr. Eltayb Abuelzein 8, 102-132, 2012.
5. A.E. Ünlü, S. Takaç. "Investigation of the simultaneous production of superoxide dismutase and catalase enzymes from *Rhodotorula glutinis* under different culture conditions." *Artif Cells Blood Substit Immobil Biotechnol.* 40 (5), 338-344, 2012.
6. X. Gao, C. He, H. Liu, H. Li, D. Zhu, S. Cai, Y. Xia, Y. Wang, Z. Yu. "Intracellular Cu/Zn superoxide dismutase (Cu/Zn-SOD) from hard clam *Meretrix meretrix*: its cDNA cloning, mRNA expression and enzyme activity." *Mol Biol Rep.* 39, 10713-10722, 2012.
7. A. Ezgi Ünlü, S. Takaç. "Improvement of superoxide dismutase activity using experimental design and radical promoters." *Biotechnology & Biotechnological Equipment* 31 (5), 1046–1054, 2017.
8. K. Bhatia, G. Mal, R. Bhar, C. Attri, A. Seth. Purification and characterization of thermostable superoxide dismutase from *Anoxybacillus gonensis* KA 55 MTCC 12684. *International Journal of Biological Macromolecules* 117, 1133-1139, 2018

21. Sandra, K., Dolashka, P., Devreese, B., Van Beeumen, J. New insights in *Rapana venosa* hemocyanin N-glycosylation resulting from on-line mass spectrometric analyses. *Glycobiology*, 17, 2, 2007, 141-156 - [Линк](#)

Цитира се е:

1. Y. Park, Z. Zhang, T.N. Laremore, B. Li, J.-S. Sim, A.-R. Im, M.Y. Ahn, Y.S. Kim, R.J. Linhardt. "Variation of acharan sulfate and monosaccharide composition and analysis of neutral N-glycans in African giant snail (*Achatina fulica*)." *Glycoconj. J.* 25 (9), 863-877, 2008.
2. S. Amon, A.D. Zamfir, A. Rizzi. "Glycosylation analysis of glycoproteins and proteoglycans using capillary electrophoresis-mass spectrometry strategies." *Electrophor.* 29 (12), 2485-2507, 2008.
3. E. Staudacher, H. Stepan and M. Gutternigg. "Protein N-Glycosylation of Gastropods." *Curr Top Biochem Res.* 11 (2), 29–39, 2009.
4. W. Bragg, S. A. Shamsi. "Capillary Electrophoresis Mass Spectrometry: Theory and Instrumentation." *Encyclopedia of Analytical Chemistry* 15 SEP, 2010.
5. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states." *Amino Acids* 39 (3), 899-910, 2010.
6. T.F. Gesteira, V.J. Coulson-Thomas, F.T. Ogata, E.H.C. Farias, R.P. Cavalheiro, M.A. de Lima, G.L.A. Cunha, E.S. Nakayasu, I.C. Almeida, L. Toma, H.B. Nader. "A novel approach for the characterisation of proteoglycans and biosynthetic enzymes in a snail model." *BBA* 1814 (12), 1862-1869, 2011.
7. M. Nakano, K. Kakehi, N. Taniguchi and A. Kondo. "Capillary Electrophoresis and Capillary Electrophoresis–Mass Spectrometry for Structural Analysis of N-Glycans Derived from Glycoproteins." *Capill. Electroph. Carbohyd.* Chapter 9, 205-235, 2011.
8. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2007-2008." *Mass Spectrometry Reviews* 31 (2), 183-311, 2012.
9. N. Liu, L. Zhao, C. He, Z. Cai. "Advances in technologies and biological applications of ¹⁸O labeling strategies in LC-MS based proteomics (Review)." *Current Anal. Chem.* 8 (1), 22-34, 2012.

10. S. Mittermayr, J. Bone, A. Guttman. "Unraveling the Glyco-Puzzle: Glycan Structure Identification by Capillary Electrophoresis." *Anal. Chem.*, 85 (9), 4228–4238, 2013.
11. B. Eckmair, C. Jin, D. Abed-Nava. K. Paschinger. "Multi-step fractionation and mass spectrometry reveals zwitterionic and anionic modifications of the N-and O-glycans of a marine snail." *Mol Cell Proteomics*. 15(2), 573-97, 2016.
12. M. Palacios, R. Tampe, M. Del Campo, Ta-Ying Zhong, M. N. López, F.Salazar-Onfray, M. I. Becker. "Antitumor activity and carrier properties of novel hemocyanins coupled to a mimotope of GD2 ganglioside." *European Journal of Medicinal Chemistry* 150, 74-86, 2018.

22. Hristova, R., Dolashki, A., Voelter, W., Stevanovic, S., Dolashka, P. O-diphenol oxidase activity of molluscan hemocyanins. *Comp. Biochem Physiol*. 149, 3, 2008, 439-446 - [ЛИНК](#)

Цумура се е:

1. T. Fan, Y. Zhang, L. Yang 1, X. Yang, G. Jiang, M. Yu, R. Cong. "Identification and characterization of a hemocyanin-derived phenoloxidase from the crab *Charybdis japonica*." *Compar. Biochem. Physiol. B* 152 (2), 144-149, 2009.
2. Y. Guo, D. Zhang, H. Zeng, X. Wang, Y. Li, X Fan, Liand. "Functional Properties of Hemocyanin from *Oncomelania hupensis*, the Intermediate Host of *Schistosoma japonicum*." *Experim. Parasit.* 123 (3), 277-281, 2009.
3. K. Idakieva, N.I. Siddiqui, F. Meersman, M. De Maeyer, I. Chakarska, C. Gielens. "Influence of limited proteolysis, detergent treatment and lyophilization on the phenoloxidase activity of *Rapana thomasiana* hemocyanin." *Int J Biol Macromol.* 45 (2), 181-187, 2009.
4. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states." *Amino Acids* 39 (3), 899-910, 2010.
5. N. Fujieda, A. Yakiyama and S. Itoh. "Catalytic oxygenation of phenols by arthropod hemocyanin, an oxygen carrier protein, from *Portunus trituberculatus*." *Dalton Trans.* 39, 3083–3092, 2010.
6. N. Fujieda, A. Yakiyama, S. Itoh. "Five monomeric hemocyanin subunits from *Portunus trituberculatus*: Purification, spectroscopic characterization, and quantitative evaluation of phenol monooxygenase activity." *BBA* 1804 (11), 2128-2135, 2010.
7. J. Alpuche, A. Pereyra, G. Mendoza-Hernández, C. Agundis, C. Rosas, E. Zenteno. "Purification and partial characterization of an agglutinin from *Octopus maya* serum." *Comp Biochem Physiol B Biochem Mol Biol.* 156 (1), 1-5, 2010.
8. D. Guo, H. Pan, D. Zeng, Y. Li, X. Li, X. Fan. "Inactivating hemocyanin from *Oncomelania hupensis* with 4-(chloroacetyl) catechol and its application in snail control." *Pesticide Biochemistry and Physiology* 102 (3), 233–236, 2012.
9. Z. Zhou, D. Ni, M. Wang, L. Wang, L. Wang, X. Shi, F. Yue, R. Liu, L. Song. "The phenoloxidase activity and antibacterial function of a tyrosinase from scallop *Chlamys farreri*." *Fish & Shellfish Immunol.* 33 (2), 375-81, 2012.
10. F. Aguilera, C. McDougall, B. M Degnan1. "Origin, evolution and classification of type-3 copper proteins: lineage-specific gene expansions and losses across the Metazoa." *BMC Evolutionary Biology* 13, 96-98, 2013.
11. E. Scheil, S. Hilsmann, R. Triebkorn, Heinz. "Shell colour polymorphism, injuries and immune defense in three helioid snail species, *Cepaea hortensis*, *Theba pisana* and *Cornu aspersum maximum*." *Results in Immunol.* 3, 73–78, 2013.
12. Y. Raynova, L. Doumanova, K.N. Idakieva. "Phenoloxidase Activity of *Helix aspersa* Maxima (Garden Snail, Gastropod) Hemocyanin." *The Protein J.* 32, 609-618, 2013.
13. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." *Dev. Comp. Immunol.* 45 (1), 43–55, 2014.
14. J. Zhuang, C.J. Coates, H. Zhu, P. Zhu, Z. Wu, L. Xie "Identification of candidate antimicrobial peptides derived from abalone haemocyanin." *Developm.Comp. Immun.* 49, 96–102, 2015.

15. N. Fujieda, S. Itoh. "Controlling Dicopper Protein Functions." Bulletin of the Chemical Society of Japan 89, 733-742, 2016.
16. K. Suwannatrai, A. Suwannatrai, P. Tabsripair, J.U. Welb, S. Tangkawattana, C. Cantacessi, J. Mulvenna, S. Tesana, A. Loukas, J. Sotillo. Differential Protein Expression in the Hemolymph of *Bithynia siamensis goniomphalos* Infected with *Opisthorchis viverrini*." PLoS Neglected Tropical Diseases 10 (11), e0005104, 2016.
17. C.J. Coates, H. Decker. "Immunological properties of oxygen-transport proteins: hemoglobin, hemocyanin and hemerythrin." Cell. Mol. Life Sci. 74, 2, 293-317, 2017.
18. L. Wang, Y. Ye, V. Lykourinou, J. Yang, A. Angerhofer, Y. Zhao, L.-J. Ming. "Catalytic Cooperativity, Nuclearity, and O₂/H₂O₂ Specificity of Multi-Copper (II) Complexes of Cyclen-Tethered Cyclotriphosphazene Ligands in Aqueous Media." Europ. J. of Inorg. Chem. 42, 4899-4908, 2017.
19. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins. Current Medicinal Chemistry." Current Medicinal Chemistry 25 (20), 2292-2303, 2018.

23. Krumova, E., Dolashki, A., Pashova, S., Dolashka, P., Stevanovic, S., Hristova, R., Stefanova, L., Voelter, W., Angelova, M.. Unusual location and characterization of Cu/Zn-containing superoxide dismutase from filamentous fungus *Humicola lutea*. *Humicola lutea*. Arch. Microbiol., 189, 2, 2008, 121-130 - [Линк](#)

Цитира се в:

1. M. Graz, A. Jarosz-Wilkolazka, B. Pawlikowska-Pawlga. "Abortiporus biennis tolerance to insoluble metal oxides: Oxalate secretion, oxalate oxidase activity, and mycelia morphology." BioMetals 22 (3), 401-410, 2009.
2. Q. Li, L.M. Harvey, B. McNeil. Review. "Oxidative stress in industrial fungi." Crit. Rev. Biotech. 29 (3), 199-213, 2009.
3. A. Bodył, P. Mackiewicz, R. Milanowski. "Did Trypanosomatid Parasites Contain a Eukaryotic Alga-Derived Plastid in Their Evolutionary Past?" J. Parasitol. 96 (2), 465-475, 2010.
4. J. Liu, Y.-Y. Gao, X.-Z. Jiang, R.-Y. Mao, B.-Y. Tian, C.-R. Ke, S.-G. Wu, J.-Z. Huang. "Effects on docosahexaenoic acid biosynthesis and expression of superoxide dismutase in *Schizochytrium* at low temperature." Pharmac. Biotechn. 17 (1), 50-55, 2010.
5. A. Bafana, S. Dutt, S. Kumar, P.S. Ahuja. "Superoxide dismutase: An industrial perspective." Critic. Rev. Biotechnol. 31 (1), 65-76, 2011.
6. H. Li, J. Wang, J. Wang, G. Geng, H. Ju. "Protein extraction methods for the two-dimensional gel electrophoresis analysis of the slow growing fungus *Undifilum oxytropis*." African J. of Microbiology 6 (4), 757-763, 2012.
7. X. Qin, M. Zhang, J. Qin, S. Yuan, Y. Hou, J. Liu. "Two-step purification of Cu, Zn-superoxide dismutase from pumpkin (*Cucurbita moschata*) pulp." Sep. Purif. Technol. 87, 79-83, 2012.
8. M. Sturini, C. Girometta, F. Maraschi, E. Savino, A. Profumo, "A Preliminary Investigation on Metal Bioaccumulation by *Perenniporia fraxinea*." Bull Environ Contam Toxicol. 98 (4), 508-512, 2017.
9. C. Paulussen, J.E. Hallsworth, S. Álvarez-Pérez, W.C. Nierman, P.G. Hamill, D. Blain, H. Rediers, B. Lievens "Ecology of aspergillosis: insights into the pathogenic potency of *Aspergillus fumigatus* and some other *Aspergillus* species." Microbial Biotechnology 10 (2), 296-322, 2017.

24. Abrashev, R., Pashova, S., Stefanova, L., Vassilev, S., Dolashka-Angelova, P., Angelova, M. Heat-shock-induced oxidative stress and antioxidant response in *Aspergillus niger* 26. Canadian Journal of Microbiology, 54, 12, 2008, 977-983 - [Линк](#)

Цитира се в:

1. Q. Li, L.M. Harvey, B. McNeil. Review article. "Oxidative stress in industrial fungi." Critic. Rev. Biotech. 29 (3), 199-213, 2009.

2. C.-G. Zou, Y.-F. Xu, W.-J. Liu, W. Zhou, N. Tao, H.-H. Tu, X.-W. Huang, J.-K. Yang, K.-Q. Zhang. "Expression of a serine protease gene *prCl*s up-regulated by oxidative stress in the fungus *clonostachys rosea*: Implications for fungal survival." *PLoS One* 5 (10), 2010.
3. I. Boyadzhieva, E. Emanuilova. "Induction of superoxide dismutase production in *Bacillus licheniformis* M20 by heat shock and oxidative stress." *Comptes Rendus de L'Acad. Bulgare des Sci.* 63 (11), 1571-1576, 2010.
4. S. Buranajitpakorn, A. Piwkam, N. Charoenlap, P. Vattanaviboon, S. Mongkolsuk. "Genes for hydrogenperoxide detoxification and adaptation contribute to protection against heat shock in *Xanthomonas campestris* pv. *campestris*." *FEMS Microbiol. Lett.* 317 (1), 60-66, 2011.
5. S.-H. Ying and M.-G. Feng. "Integration of *Escherichia coli* thioredoxin (*trxA*) into *Beauveria bassiana* enhances the fungal tolerance to the stresses of oxidation, heat and UV-B irradiation." *Biol. Contol* 59 (2), 255-260, 2011.
6. J. Chang, Y. Zhang. "Catalytic degradation of amygdalin by extracellular enzymes from *Aspergillus niger*." *Process Biochemistry* 47 (2), 195-200, 2011.
7. P. Chuaybamroong, C. Thunyasirion, S. Supothina, P. Sribenjalux, C.-Y. Wu. "Performance of photocatalytic lamps on reduction of culturable airborne microorganism concentration." *Chemosphere* 83 (5), 730-735, 2011.
8. J. Liu, Y. Sui, M. Wisniewski. "Effect of heat treatment on inhibition of *Monilinia fructicola* and induction of disease resistance in peach fruit." *Postharvest Biol. Tec.* 65, 61-68, 2012.
9. A.K. Pavlychenko, N.N. Zhdanova. "Resistance of fungal conidia from indoors of the object «ukritye» (Chernobyl Aes) to different concentrations of H₂O₂." *Mikologiya I Fitopatologiya* 46 (1), 75-80, 2012.
10. P.M. Garza-Lo'pez, M. Konigsberg, L.E. Go'mez-Quiroz, O. Loera. "Physiological and antioxidant response by *Beauveria bassiana* Bals to different oxygen concentrations." *World J. Microbiol. Biotechnol.* 28, 353-359, 2012.
11. A.A. Ordaz, E.A. Favela, M.B. Meneses, G.C. Mendoza, O. Loera. "Hyphal morphology modification in thermal adaptation by the white-rot fungus *Fomes* sp.EUM1." *J.Basic Microbiol.* 52 (2), 167-174, 2012.
12. W. Zhao, M. Wisniewski, W. Wang, J. Liu, Y. Liu. "Heat-induced oxidative injury contributes to inhibition of *Botrytis cinerea* spore germination and growth". *World J. Microb. and Biotechn.* 30 (3), 951-957, 2013.
13. D.J. Liu, M. Copland. "Myeloid Cells Expressing VEGF and Arginase-1 Following Uptake of Damaged Retinal Pigment Epithelium Suggests Potential Mechanism That Drives the Onset of Choroidal Angiogenesis in Mice." *PloS One* 8 (8), e72935, 2013.
14. A. Krastanov, Z. Alexieva, H. Yemendzhiev. "Microbial degradation of phenol and phenolic derivatives (Review)." *Engineering in Life Sciences* 13 (1), 76-87, 2013.
15. K-S. Shin, H-S Park, Y-H Kim, J-H Yu. "Comparative proteomic analyses reveal that FlbA down-regulates *gliT* expression and SOD activity in *Aspergillus fumigatus*." *J. of Proteomics* 11 (87), 40-52, 2013.
16. F. Shirazi, M.A. Pontikos, T.J. Walsh, N.A. Russell, E. Lewis, D.P. Kontoyiannis. "Hyperthermia Sensitizes *Rhizopus oryzae* To Posaconazole And Itraconazole Action." *Through Apoptosis. AAC* 57 (9), 4360-4368, 2013.
17. L. Liu, L-K Long Yang, J.Y.X. Xu, C-H Hu, G. Liu. "The thioredoxin reductase-encoding gene *ActrxR1* is involved in the cephalosporin C production of *Acremonium chrysogenum* in methionine-supplemented medium." *Appl Microbiol Biotechnol* 97, 2551-2562, 2013.
18. W-D. Liang, Y-T. Bi, H-Y. Wang, S. Dong, K-S. Li, J-S. Li. "Gene Expression Profiling of *Clostridium botulinum* under Heat Shock Stress." *BioMed Research Internat*, 2013.
19. M.A.C. Luna, C.C.S. Cordeiro, E.R. Vieira, M.H.M.E. Alves, J.H.E.S. Freitas, K. Okada, G.M.C. Takaki, A.E. do Nascimento. "Mechanisms of Adaptation and Tolerance in *Aspergillus niger* UCP/WFCC 1261 by Copper-induced to Oxidative Response." *Int. J. Mol. Sci.* 14, 2-27, 2013.

20. R.A. Choudhury, N. McRoberts, W.D. Gubler. "Effects of punctuated heat stress on the grapevine powdery mildew pathogen, *Erysiphe necator*." *Phytopathologia Mediterranea* 53 (1), 14, 2014.
21. A.P. Del Vesco, E. Gasparino, D.O. Grieser, V. Zancanela, F.R.S. Gasparin, J. Constantin, A.R. Oliveira Neto. "Effects of methionine supplementation on the redox state of acute heat stress-exposed quails." *Journal of animal science*, 92(2), 806-815, 2014.
22. W. Zhao, M. Wisniewski, W. Wang, J. Liu, Y. Liu. "Heat-induced oxidative injury contributes to inhibition of *Botrytis cinerea* spore germination and growth". *World Journal of Microbiology and Biotechnology*, 30 (3), 951-957, 2014.
23. R.F. Azevedo, R.K. Souza, G.U. Braga, D.E. Rangel. "Rangel Responsiveness of entomopathogenic fungi to menadione-induced oxidative stress." *Fungal Biology* 118, 990-995, 2014.
24. N. Garcia-Ortiz, S. Tlecuil-Beristain, E. Favela-Torres, O. Loera. "Production and quality of conidia by *Metarhizium anisopliae* var. *lepidiotum*: critical oxygen level and period of mycelium competence." *Appl Microbiol Biotechnol.* 99 (6), 2783-2791, 2015.
25. T. Futagami, K. Mori, S. Wada, H. Ida, Y. Kajiwara, H. Takashita, M. Goto. "Transcriptomic analysis of temperature responses of *Aspergillus kawachii* during barley koji production." *Applied and environmental microbiology* 81 (4), 1353-1363, 2015.
26. J. Li, R.Y. Qin, H. Li, R.F. Xu, C.H. Qiu, Y.C. Sun, H. Ma, Y.C. Yang, D.H. Ni, L. Li, P.C. Wei, J.B. Yang. "Identification and analysis of the mechanism underlying heat-inducible expression of rice aconitase 1". *Plant Science* 233, 22-31, 2015.
27. X. Tianpei, Z. Mao, Y. Zhu, S. Li. "Expression of Rice Mature Carbonic Anhydrase Gene Increase *E. coli* Tolerance to Heat Stress." *Applied Biochemistry and Biotechnology* 176, 625-635, 2015.
28. M.A.C. Luna, E.R. Vieira, K. Okada, G.M. Campos-Takaki, A.E. do Nascimento. "Copper-induced adaptation, oxidative stress and its tolerance in *Aspergillus niger* UCP1261." *Electronic Journal of Biotechnology* 18(6), 418-427, 2015.
29. T. Roukas. "The role of oxidative stress on carotene production by *Blakeslea trispora* in submerged fermentation." *Crit Rev Biotechnol.* 36(3), 424-33, 2016.
30. Y. Sui, M. Wisniewski, S. Droby, J. Norelli, J. Liu. "Recent advances and current status of the use of heat treatments in postharvest disease management systems: Is it time to turn up the heat?" *Trends in Food Science & Technology* 51, 34-40, 2016.
31. F. Miranda-Hernández, P.M. Garza-López, O. Loera. "Cellular signaling in cross protection: An alternative to improve mycopesticides." *Biological Control*, 103, 196-203, 2016.
32. G. Li, H. Zhao, H. Wang, X. Guo, X. Guo, Q. Sun, B. Xu. "Characterization of a Decapentapletic Gene (*AccDpp*) from *Apis cerana cerana* and Its Possible Involvement in Development and Response to Oxidative Stress." *PLOS one*, 2016.
33. C. Paulussen, J.E. Hallsworth, S. Álvarez-Pérez, W.C. Nierman, P.G. Hamill, D. Blain, H. Rediers, B. Lievens. "Ecology of aspergillosis: insights into the pathogenic potency of *Aspergillus fumigatus* and some other *Aspergillus* species." *Microb Biotechnol.* 10(2), 296-322, 2017.
34. L.J. Zhang, J.L. Chen, B.L. Yang, D. Bourguet, G. Wu. "Thermotolerance, oxidative stress, apoptosis, heat-shock proteins and damages to reproductive cells of insecticide-susceptible and-resistant strains of the diamondback moth *Plutella xylostella*." *Bulletin of Entomological Research* 107(4), 513-526, 2017.
35. J. Liu, Y. Sui, M. Wisniewski, Z. Xie, Y. Liu, Y. You et al. "The Impact of the Postharvest Environment on the Viability and Virulence of Decay Fungi." *Crit Rev Food Sci Nutr.* 31, 1-7, 2017.
36. A.P. Del Vesco, E. Gasparino, V. Zancanela, et al. "Effects of selenium supplementation on the oxidative state of acute heat stress-exposed quails." *Journal of Animal Physiology and Animal Nutrition* 101 (1), 170-179, 2017.
37. E.A. Lilleskov. "How does temperature affect forest 'fungus breath'? Diurnal non-exponential temperature-respiration relationship, and possible longer-term acclimation in fungal sporocarps." *Fungal Ecology* 27, 24-35, 2017.

25. Dolashka-Angelova, P., Stefanova, T., Livaniou, E., Velkova, L., Klimentzou, P., Stevanovic, S., Salvato, B., Neychev, H., Voelter, W. Immunological potential of *Helix vulgaris* and *Rapana venosa* hemocyanins. Immunological Investigations, 37, 8, 2008, 822-840 - [Линк](#)

Цитира се в:

1. S. A. Zunino, C. E. Morales, M. Del Campo, M. I. Becker. "Exceptional Immunological and Anticancer Properties of a New Hemocyanin from Fissurella Latimarginata (FLH)." Journal of Immunotherapy 33 (8), 891-891, 2010.
2. S. Arancibia, M. Del Campo, E. Nova, F. Salazar, M. I. Becker. "Enhanced structural stability of Concholepas hemocyanin increases its immunogenicity and maintains its non-specific immunostimulatory effects." Eur. J. Immunology 42 (3), 688-99, 2012.
3. S. Arancibia, F. Salazar and M. I. Becker. "Hemocyanins in the Immunotherapy of Superficial." Bladder Cancer from Basic Science to Robotic Surgery 221-243, 2012.
4. A.E. Scheil, S. Hilsmann, R. Triebkorn, H.-R. Köhler. "Shell colour polymorphism, injuries and immune defense in three helicid snail species, *Cepaea hortensis*, *Theba pisana* and *Cornu aspersum maximum*." Results in Immunol. 3, 73-78, 2013.
5. N.T. Zanjani, F. Sairi, G. Marshall, M. Saksena, P. Valtchev, V. G. Gomes, A. L. Cunningham, Dehghani, F. "Formulation of Abalone Hemocyanin with High Antiviral Activity and Stability." Europ. J. of Pharmac. Sciences 53, 77-85, 2014.
6. S. Arancibia, C. Espinoza, F. Salazar, M. Del Campo, R. Tampe, Ta-Y. Zhong, P. De Ioannes, B. Moltedo, J. Ferreira, Ed. C. Lavelle, A. Manubens, A.E. De Ioannes, M. I. Becker. "A Novel Immunomodulatory Hemocyanin from the Limpet Fissurella latimarginata Promotes Potent Anti-Tumor Activity in Melanoma." Plos One 9 (1), 87240, 2014.
7. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." Dev Comp Immunol. 45, 43-55, 2014.
8. J.W. Chen, Q.H. Wu, D.C. Rowley, A.M. Al-Kareef, H. Wang. "Anticancer agent-based marine natural products and related compounds." Journal of Asian natural products research 17 (2), 199-216, 2015.
9. S.B. Natarajan, Y.S. Kim, J.W. Hwang, P.J. Park. "Immunomodulatory properties of shellfish derivatives associated with human health." RSC Advances, 6(31), 26163-26177, 2016.
10. J. Altaf, M.H. Rasool, S. Akhtar, M. Manzoor, T. Younas, B. Ansari, G. Ahmad, F. Jabeen, M. Ali, R. Munir. "Comparative evaluation of antibacterial activity of foot muscle extracts from genus *Physa* and genus *Ceciloides* (Mollusca: Gastropoda)." Pakistan Journal of Pharmaceutical Sciences 31, 1555-1563, 2018.
11. R. Ishwarya, B. Vaseeharan, R. Jayakumar, V. Ramasubramanian, M. Govindarajan, N.S. Alharbi, J.M. Khaled, M.N. Al-anbr, G. Benelli. "Bio-mining drugs from the sea: High antibiofilm properties of haemocyanin purified from the haemolymph of flower crab *Portunus pelagicus* (L.) (Decapoda: Portunidae)." Aquaculture 489, 130-140, 2018.

26. Dolashki, A., Abrashev, R., Stevanovic, S., Stefanova, L., Ali, S., Velkova, L., Hristova, R., Angelova, M., Voelter, W., Devreese, B., Van Beeumen, J., Dolashka-Angelova, P. Biochemical properties of Cu/Zn-superoxide dismutase from fungal strain *Aspergillus niger* 26. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 71, 3, 2008a, 975-983 - [Линк](#)

Цитира се в:

1. Y. Bao, L. Li, F. Xu, G. Zhang. "Intracellular copper/zinc superoxide dismutase from bay scallop *Argopecten irradians*: Its gene structure, mRNA expression and recombinant protein." Fish and Shellfish Immunol. 27 (2), 210-220, 2009.
2. J. Liu, Y.-Y. Gao, X.-Z. Jiang, R.-Y. Mao, B.-Y. Tian, C.-R. Ke, S.-G. Wu, J.-Z. Huang. "Effects on docosahexaenoic acid biosynthesis and expression of superoxide dismutase in *Schizochytrium* at low temperature." Pharmac. Biotechn. 17 (1), 50-55, 2010.

3. F. Yan, G. Yan, S. Lv, N. Shen, Y. Mu, T. Chen, P. Gong, Y. Xu, L. Lv, J. Liu, J. Shen, G. Luo. "A novel 65-mer peptide imitates the synergism of superoxide dismutase and glutathione peroxidase." Intern. J. of Biochem. and Cell Biology 43 (12), 1802-1811, 2011.
4. S. Silva, S. Martins, A. Karmali, E. Rosa. "Production, purification and characterisation of polysaccharides from *Pleurotus ostreatus* with antitumour activity." J. of the Science of Food and Agricult. 92 (9), 1826-1832, 2012.
5. X. Gao, C. He, H. Liu, H. Li, D. Zhu, S. Cai, Y. Xia, Y. Wang, Z. Yu. "Intracellular Cu/Zn superoxide dismutase (Cu/Zn-SOD) from hard clam *Meretrix meretrix*: its cDNA cloning, mRNA expression and enzyme activity." Mol. Biol. Rep. 39 (12), 10713-10722, 2012.
6. F. Spinozzi, P. Mariani, I. Mičetić, C. Ferrero, D. Pontoni, M. Beltramini. "Quaternary Structure Heterogeneity of Oligomeric Proteins: A SAXS and SANS Study of the Dissociation Products of *Octopus vulgaris* Hemocyanin." PLOS ONE 7 (11), e49644, 2012.
7. N. Umasuthan, S.D.N. K.Bathige, K.S. Revathy, Y. Lee, I. Whang, C.Y. Choi, H.-C. Park, J. Lee. "A manganese superoxide dismutase (MnSOD) from *Ruditapes philippinarum*: Comparative structural- and expressional-analysis with copper/zinc superoxide dismutase (Cu/ZnSOD) and biochemical analysis of its antioxidant activities." Fish & Shellfish Immunology 33 (4), 753-765, 2012.
8. I. Hornyák, K. Marosi, L. Kiss, P. Gróf, and Z. Lacza. "Increased stability of S-nitrosothiol solutions via pH modulations." Free Radical Research, 46 (2), 214-25, 2012.
9. N. Umasuthan, S.D. Bathige, W.S. Thulasitha, W. Qiang, B.S. Lim, J. Lee. "Characterization of rock bream (*Oplegnathus fasciatus*) cytosolic Cu/Zn superoxide dismutase in terms of molecular structure, genomic arrangement, stress-induced mRNA expression and antioxidant function." Comparative Biochemistry and Physiology B: Biochemistry and Molecular Biology 176, 18-33, 2014.
10. M. Montibus, L. Pinson-Gadais et al. "Coupling of transcriptional response to oxidative stress and secondary metabolism regulation in filamentous fungi." Journal Critical Reviews in Microbiology 41 (3), 295-308, 2015.
11. N.C.N. Perera, G.I. Godahewa, S. Lee, et al. "Manganese-superoxide dismutase (MnSOD), a role player in seahorse (*Hippocampus abdominalis*) antioxidant defense system and adaptive immune system." Fish and Shellfish Immunology 68, 435-442, 2017.
12. N.C.N. Perera, G.I. Godahewa, B.H. Nam, J.Y. Park, J. Lee. "Two metalloenzymes from rockfish (*Sebastes schligellii*): Deciphering their potential involvement in redox homeostasis against oxidative stress." Fish & Shellfish Immunology 80, 31-45, 2018.
13. D.M.K.P. Sirisena, N.C.N. Perera, G.I. Godahewa, H. Kwon, H. Yang, B.H. Nam, J. Lee. "A manganese superoxide dismutase (MnSOD) from red lip mullet, *Liza haematocheila*: Evaluation of molecular structure, immune response, and antioxidant function." Fish Shellfish Immunol. 84, 73-82, 2019.

27. Dolashki, A., Velkova, L., Atanasov, B., Voelter, W., Stevanovic, S., Schwarz, H., Di Muro, P., Dolashka-Angelova, P. Reversibility and "pH-T phase diagrams" of *Rapana venosa* hemocyanin and its structural subunits. *Biochimica et Biophysica Acta - Proteins and Proteomics*, 1784, 11, 2008b, 1617-1624 - [Линк](#)

Цитира се в:

1. B. Tang, Y. Wang, D. Zhang, H. Zhang. "Fluorescence properties and conformational stability of the hemocyanin from Chinese mitten crab *Eriocheir japonica sinensis* (Decapoda, Grapsidae)." J. of Molecul. Struct. 920 (28), 454-458, 2009.
2. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states." Amino Acids. 39 (3), 899-910, 2010.
3. K. Idakieva, F. Meersman, C. Gielens. "Reversible heat inactivation of copper sites precedes thermal unfolding of molluscan (*Rapana thomasiana*) hemocyanin." Biochim. et Bioph.Acta - Proteins and Proteomics 1824 (5), 731-738, 2012.

4. S. Schenk, J. Schmidt, U. Hoeger, H. Decker. "Lipoprotein-induced phenoloxidase-activity in tarantula hemocyanin." *Biochimica et Biophysica Acta* 1854 (8), 939-949, 2015.

28. Krumova, E., Pashova, S., Dolashka-Angelova, P., Stefanova, T., Angelova, M. Biomarkers of oxidative stress in the fungal strain *Humicola lutea* under copper exposure. *Process Biochemistry*, 44, 3, 2009, 288-295 - [Линк](#)

Цитира се в:

1. K. Paraszkiwicz, P. Bernat, M. Naliwajski, J. Długoński. "Lipid peroxidation in the fungus *Curvularia lunata* exposed to nickel." *Arch. Microbiol.* 192 (2), 135-141, 2010.
2. B-Y. Sun, S-H Kan, Y-Z. Zhang, S-H. Deng, J. Wu, H. Yuan, H. Qi, G. Yang, L. Li, X-H. Zhang, H. Xiao, Y-J. Wang, H. Peng, Y-W. Li. "Certain antioxidant enzymes and lipid peroxidation of radish (*Raphanus sativus* L) as early warning biomarkers of soil copper exposure." *J. Hazard. Mater.* 183 (1-3), 833-8, 2010.
3. L. Cerioni, S. I. Volentini, F. E. Prado, V. A. Rapisarda, L. Rodríguez-Montelongo. "Cellular damage induced by a sequential oxidative treatment on *Penicillium digitatum*." *J. of Applied Microbiol.* 109 (4), 1441-1449 (2010).
4. Y-C. Lin, E.M. Leañó, K-L. Pang. "Effects of Cu (II) and Zn (II) on growth and cell morphology of thraustochytrids isolated from fallen mangrove leaves in Taiwan." *Botan. Marina* 53 (6), 581-586, 2010.
5. D.J. Li, H-I. Li, H.Z. Ji-cheng, H. Wei-dong. "Effects of Cu~(2+) on the Growth of copper on wine yeast activity." *Liquor-Making Science & Technol.* 6, 2010. Не го намирам
6. S. Ali, Z. Huang and S. Ren. "Stress Response of Entomopathogenic Fungus *Isaria fumosorosea* to Copper." *Biol. Trace Element Research.* 143 (1), 600, 2011.
7. J. Du, H. Li, H-L Li, J-C Zhan, W. Huang. "Oxidative Stress of Wine yeast, Yeasts Under Copper Exposure." *Scientia Agricultura Sinica* 44 (2), 369-378, 2011.
8. M. Wangwang, Z. Lu, H. Min. "Responses of microorganisms to pollutants and its application in environmental risk assessment." *Ecotoxicology around the Globe. Chapters* 179-194, 2011.
9. Sh. Liao, J. Guo, F. Wang, Z. Song, R. Wang, S. Tang. "The physiological and biochemical responses of *P. americana* Linn. and *A. crenentus* L. to inoculation with *Burkholderia* sp. and its effect to Cs accumulation." *Acta Scientiae Circumstantiae* 1, 213-223, 2012.
10. F. Cen, Y. Hu, H. Xu. "Responses of antioxidant defenses in *Coprinus comatus* exposed to cadmium and mercury toxicity." *Asian Journal of Chemistry* 24 (10), 4679-4685, 2012.
11. P. Patra, S. Mitra, N. Debnath, A. Goswami. "Biochemical-, biophysical-, and microarray-based antifungal evaluation of the buffer-mediated synthesized nano zinc oxide: An in vivo and in vitro toxicity study." *Langmuir* 28 (49), 16966-16978, 2012.
12. O.M. Goma, K.S. Aza. "Biological indicators, genetic polymorphism and expression in *Aspergillus flavus* under copper mediated stress." *J. Research and Applied Sciences* 6, 49-55, 2013.
13. Y.H. Diao, T.Li, Z.W. Zhao. "Zinc Accumulation Characteristics of Two *Exophiala* Strains and Their Antioxidant Response to Zn²⁺ Stress". *J. of Environm. Protection* 4, 12-19, 2013.
14. F. Martins, J. A. Pereira, & P. Baptista. "Oxidative stress response of *Beauveria bassiana* to Bordeaux mixture and its influence on fungus growth and development." *Pest management science*, 70 (8), 1220-1227, 2014.
15. P. Patra, S. Roy, S.Sarkar, S. Mitra, S. Pradhan, N. Debnath, A. Goswami. "Damage of lipopolysaccharides in outer cell membrane and production of ROS-mediated stress within bacteria makes nano zinc oxide a bactericidal agent." *Applied Nanoscience* 5, 7, 857-866, 2015.
16. J. Wan, G. Zeng, D. Huang, C. Huang, C. Lai, N. Li, Z. Wei, P. Xu, X. He, M. Lai, Y. He. "The oxidative stress of *Phanerochaete chrysosporium* against lead toxicity." *Appl Biochem Biotechnol.* 175 (4), 1981-1991, 2015.

17. W. Zhao, J. Han, D. Long. "Effect of copper- induced oxidative stress on sclerotial differentiation, endogenous antioxidant contents, and antioxidative enzyme activities of *Penicillium thomii* PT95." *Annals of Microbiology*, 65, 3, 1505–1514, 2015.
18. M. Zhao, C Zhang, G. Zeng, D. Huang, P. Xu, M. Cheng. "Growth, metabolism of *Phanerochaete chrysosporium* and route of lignin degradation in response to cadmium stress in solid-state fermentation". *Chemosphere*, 138, 560-567, 2015.
19. C. Civardi, M. Schubert, A. Fey, P. Wick, F.W.M.R. Schwarze. "Micronized Copper Wood Preservatives: Efficacy of Ion, Nano, and Bulk Copper against the Brown Rot Fungus *Rhodonía placenta*." *Plos One*, 10, 11, 2015.
20. D.D. Long, R.R. Fu, J.R. Han. "Tolerance and stress response of sclerotigenic *Aspergillus oryzae* G15 to copper and lead." *Folia Microbiologica* 62 (4), 295-304, 2017.

29 Nedeва, T., Dolashka-Angelova, P., Moshtanska, V., Voelter, W., Petrova, V., Kujumdzieva, A. Purification and partial characterization of Cu/Zn superoxide dismutase from *Kluyveromyces marxianus* yeast. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, 877, 29, 2009, 3529-3536 - [Линк](#)

Цитира се е:

1. S. Raimondi, D. Uccelletti, A. Amaretti, A. Leonardi, C. Palleschi, M. Rossi. "Secretion of *Kluyveromyces lactis* Cu/Zn SOD: Strategies for enhanced production." *Appl. Microbiol. Biotech.* 86 (3), 871-878, 2010.
2. N. Jiang, X. Liu, J. Yang, Z. Li, J. Pan, X. Zhu. "Regulation of copper homeostasis by Cuf1 associates with its 7 subcellular localization in the pathogenic yeast *Cryptococcus neoformans* H99." *FEMS Yeast Research* 11 (5), 440-448, 2011.
3. C. Bing, K-C Lil, C. Bi-Lian, Y-X. Zhang, Y. Jun, Y. Su-Yu, P-L Liu, X. Rui. "Analysis of the superoxide dismutase from twenty-seven Agaves." *Science and Techn. of Food Ind.* 12, 123-125, 2011.
4. S. Wang, B. Shao, S. Liu, Pingfan R. "Purification and characterization of Cu, Zn-superoxide dismutase from Black Soybean." *Food Research Intern.* 47 (2), 374-379, 2012.
5. X. Qin M. Zhang, J. Qin, S. Yuan, Y. Hou, J. Liu. "Two-step purification of Cu, Zn-superoxide dismutase from pumpkin (*Cucurbita moschata*) pulp." *Sep. Purif. Technol.* 87, 79-83, 2012.
6. F. Shen, L. Peng, L. Lin, Y. Zhang, J. Wu, X. Zhang, S.Deng. "Bioethanol Fermentation Coupling with Superoxide Dismutase (SOD) Production from Condensed Sweet Sorghum Stalk Juice". *J. of Biobased Mater. Bioen.* 6 (5), 580-587 2012.
7. M.A. Ibrahim, M.M. Mohamed, A-H.M. Ghazy, H.M.M. Masoud. "Superoxide dismutases from larvae of the camel tick *Hyalomma dromedarii*." *Comp.Biochem.Physiol. B* 164 (3), 221-228, 2013.
8. J. Simental-Martínez, R.R. Vennapusa, J. Benavides, V. Ganeva, B. Galutzov, M. Rito-Palomares, M. Fernández-Lahore. "A novel process for the recovery of superoxide dismutase from yeast exploiting electroextraction coupled to direct sorption." *J. of Chemi. Technol. and Biotech.* 88 (8), 1498–1505, 2013.
9. P. Mishra, A. Dix, M. Ray, S. Chandra Sabat. "Mechanistic study of CuZn-SOD from *Ipomoea carnea* mutated at dimer interface: Enhancement of peroxidase activity upon monomerization". *Biochimie* 97, 181-193, 2014.
10. X.-L. Yao, S.-L. Xiong, X.-J. Zhang. "Extraction of superoxide dismutase from porcine blood by response surface methodology." *Modern Food Science and Technol.* 30, 2223-2278, 2014.
11. J. Simental-Martínez, M. Rito-Palomares, J. Benavides. "Potential application of aqueous two-phase systems and three-phase partitioning for the recovery of superoxide dismutase from a clarified homogenate of *Kluyveromyces marxianus*." *Biotechnology Progress*, 30 (6), 1326-34, 2014.
12. N. Tuteja, P. Mishra, S. Yadav, M. Tajrishi, S. Baral and S. Chandra Sabat. "Heterologous expression and biochemical characterization of a highly active and stable chloroplastic CuZn-superoxide dismutase from *Pisum sativum*." *BMC Biotechnol.* 15, 3, 2015.

13. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2011–2012." *Mass spectrometry reviews* 36, 3, 255–422, 2015.
14. V. Ganeva, D. Stefanova, B. Angelova, B. Galutzov, I. Velasco, M. Arévalo-Rodríguez. "Electroinduced release of recombinant β -galactosidase from *Saccharomyces cerevisiae*." *J. of Biotechnology* 211, 12-19, 2015.
15. A. Ceugniet, M. Turret, E. Dussert, F. Coucheney, B. Deracinois, P. Jacques, C. Flahaut, E. Heuson, D. Drider, J. Behra-Miellet. "Interactions between *Kluyveromyces marxianus* from cheese origin and the intestinal symbiont *Bacteroides thetaiotaomicron*: Impressive antioxidative effects." *LWT - Food Science and Technology* 81, 281-290, 2017.
16. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2011–2012." *Mass spectrometry reviews* 36, 3, 255–422, 2017.

30 Dolashka-Angelova, P., Lieb, B., Velkova, L., Heilen, N., Sandra, K., Nikolaeva-Glomb, L., Galabov, A. S., Van Beeumen, J., Stevanovic, S., Voelter, W., Devreese, B. Identification of glycosylated sites in *Rapana hemocyanin* by mass spectrometry and gene sequence, and their antiviral effect. *Bioconjugate Chemistry*, 20, 7, 2009, 1315-1322 - [Линк](#)

Цитира се в:

1. M. Trabalon, C. Carapito, F. Voinot, J.-M. Martrette, A. Van Dorsselaer, C. Gilbert, F., Bertile. "Differences in *Brachypelma albopilosa* (theraphosidae) hemolymph proteome between subadult and adult females." *J. of Exper. Zoo. Part A*, 313 (10), 651-659.
2. A. Manubens, F. Salazar, D. Hausmann, J. Figueroa, M. Del Campo, J.M. Pinto, L. Huaquín, A. Venegas, I.M. Becker. "Concholepas hemocyanin biosynthesis takes place in the hepatopancreas, with hemocytes being involved in its metabolism." *Cell Tissue Res.* 342 (3), 423-35, 2010.
3. A. Varshney, B. Ahmad, G. Rabbani, V. Kumar, S. Yadav, R.H. Khan. "Acid-induced unfolding of didecameric keyhole limpet hemocyanin: detection and characterizations of decameric and tetrameric intermediate states." *Amino Acids.* 39 (3), 899-910, 2010.
4. John Wiley & Sons, Inc. "Current literature in mass spectrometry." *Journal of Mass Spectrometry* 45 (1), 125–136, 2010.
5. M. Del Campo, S. Arancibia, E. Nova, F. Salazar, A. González, B. Moltedo, P. de Ioannes, J. Ferreira, A. Manubens, M.I. Becker. "Hemocyanins as immunostimulants." *Revista Medica de Chile* 139 (2), 236-246, 2011.
6. D. Guo, H. Wang, D. Zeng, X. Li, X. Fan, Y. Li. "Vaccine Potential of Hemocyanin from *Oncomelania Hupensis* against *Schistosoma Japonicum*." *Parasit. Internat.* 60 (3), 242-246, 2011.
7. A. Carlier, R., Michel, J.-P. Cadoret, A. Lejeune, N. Dufourmantel. "Production of high mannose glycosylated proteins stored in the plastid of microalgae." Patent WO2012089342A1, 2012.
8. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins". *Developm. and Compar. Immun.* 45, 43-55, 2014.
9. V.T. Dang, K. Benkendorff, T. Green, P. Speck. "Marine snails and slugs: a great place to look for antiviral drugs." *J. of Virology* 89 (16), 8114-8118, 2015.
10. J. Zhuang, C.J. Coates, H. Zhu, P. Zhu, Z. Wu, L. Xie. "Identification of candidate antimicrobial peptides derived from abalone hemocyanin." *Dev Comp Immunol.* 49, 96-102, **2015**
11. J. Wu, A.L. Cunningham, F. Dehghani, R.J. Diefenbach. "Comparison of *Haliotis rubra* hemocyanin isoforms 1 and 2." *Gene Reports* 4, 123-130, 2016.
12. N.T. Zanjani, M. Miranda-Saksena, P. Valtchev, R.J. Diefenbach, L. Hueston, E. Diefenbach, F. Sairi, V.G. Gomes, A.L. Cunningham, F. Dehghani. "Abalone hemocyanin blocks the entry of herpes simplex virus 1 into cells: A potential new antiviral strategy." *Antim. Agents and Chemoth.* 60, 2, 1003-1012, 2016.

13. A.R. de Toledo-Piza, C.A. Figueiredo, M.I. de Oliveira, G. Negri, G. Namiyama, M. Tonelotto, K. de Senna Villar, H.K. Rofatto, R.Z. Mendonça. "The antiviral effect of mollusk mucus on measles virus." *Antiviral Research* 134, 172-181, 2016.
14. V.A. Toptikov, V.M. Totsky, T.G. Aliksieieva, O.O. Kovtun. "Population genetic structure of veined rapa whelk communities in the northwestern Black Sea." *Cytology and Genetics* 51 (4), 253-262, 2017.
15. Z. Zhang, F. Wang, C. Chen, Z. Zheng, J. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." *Immunology Letters* 192, 42-47, 2017.
16. C.J. Coates, H. Decker. "Immunological properties of oxygen-transport proteins: hemoglobin, hemocyanin and hemerythrin." *Cellular and Molecular Life Sciences* 74 (2), 293–317, 2017.
17. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." 25 (20), 2292-2303, 2018.
18. Z. Zhang, R. Li, J.J. Aweya, F. Wang, M. Zhong, Y. Zhang. "Identification and characterization of glycosylation sites on *Litopenaeus vannamei* hemocyanin." *FEBS Lett.* 593 (8), 820-830, 2019.
19. T. Yao, M.M. Zhao, J. He, T. Han, W. Peng, H. Zhang, J.Y. Wang, J.Z. Jiang. "Gene expression and phenoloxidase activities of hemocyanin isoforms in response to pathogen infections in abalone *Haliotis diversicolor*." *Int J Biol Macromol.* 129, 538-551, 2019.
20. B.M. Khan, Y. Liu. "Marine Mollusks: Food with Benefits." *Reviews in Food Science and Food Safety* 18 (2), 2019.

31. Dolashka, P., Velkova, L., Shishkov, S., Kostova, K., Dimitrov, I., Dolashki, A., Atanasov, B., Devreese, B., Voelter, W., Van Beeumen, J. Glycan structures and antiviral effect of the structural subunit RvH2 of *Rapana* hemocyanin. *Carbohydrate Research*, 345, 16, 2010a, 2361-2367 - [ЛИНК](#)

Цумура се е:

1. Q. Ashton Acton, Book "Metalloproteins: Advances in Research and Application." A Scholarly Editions, Atlanta, Georgia 4, 2011.
2. D. Guo, H. Wang, D. Zeng, X. Li, X. Fan, Y. Li. "Vaccine Potential of hemocyanin from *Oncomelania hupensis* against *Schistosoma japonicum*." *Parasit. Internat.* 60 (3), 242-246, 2011.
3. J-P. Cadoret, A. Carlier, N. Dufourmantel, A. Lejeune, R. Michel. "Production of high mannose glycosylated proteins stored in the plastid of microalgae." WO 2012089342 A1. (05.07.2012).
4. S. Arancibia, F. Salazar and M. I. Becker. "Hemocyanins in the Immunotherapy of Superficial Bladder Cancer. *Bladder Cancer from Basic Science to Robotic Surgery.*" Chapter 11, 221-242, 2012. www.intechopen.com
5. Z. Xiao-Yu, L. Xiao-Min, Z. Yue-Ling, L. Qun-Shan, Z. Wen-Hui, L. Jing- Sheng. "Screening and identification of *Bacillus* to inhibit quorum sensing." *Acta hydrobiol. Sinica* 37 (6), 1059-1065, 2013.
6. X-Y. Zhang, X-M. Lin, Y-L. Zhang, Q-S. Lu, W-H. Zou and J-S. Lun. "Comparative analysis of hemolytic activity of hemocyanin isomers binding to different bacteria in shrimp *Litopenaeus vannamei*." *Acta Hydrobiol. Sinica* 37 (6), 1079-1084, 2013.
7. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." *Developm. and Compar. Immun.* 45, 43–55, 2014.
8. V. Sereanu, M. Mihai, I. Meghea. "Shell Morphology Of *Rapana Thomasiana* Sampled From The Romanian Black Sea Coast." 14th SGEM GeoConference on Water Resources. Forest, Marine And Ocean Ecosystems, 2(SGEM2014 Conference Proceedings, Book 3, Vol. 2, 531-538, 2014.
9. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2009–2010." *Mass Spectrometry Reviews*, 1-155, 2014.
10. V.T. Dang, K. Benkendorff, T. Green, P. Speck. "Marine Snails and Slugs: a Great Place To Look for Antiviral Drug." *J. of Virology* 89, 16, 8114-8118, 2015.

11. J. Zhuang, C.J. Coates, H. Zhu, P. Zhu, Z. Wu, L. Xie. "Identification of candidate antimicrobial peptides derived from abalone hemocyanin." *Developmental and Comparative Immunology* 49, 96-102, 2015.
 12. B. Eckmair, C. Jin, D. Abed-Nava. K. Paschinger. "Multi-step fractionation and mass spectrometry reveals zwitterionic and anionic modifications of the N-and O-glycans of a marine snail." *Molecular & Cellular*, 15 (2), 573-97, 2016.
 13. J. Wu, A.L. Cunningham, F. Dehghani, R.J. Diefenbach. "Comparison of *Haliotis rubra* hemocyanin isoforms 1 and 2." *Gene Reports* 4, 123-130, 2016.
 14. H. Song, H.-Y. Wang and T. Zhang. "Comprehensive and Quantitative Proteomic Analysis of Metamorphosis-Related Proteins in the Veined Rapa Whelk, *Rapana venosa* Intern." *Int. J. of Molec. Sciences*, 17 (6), 924, 2016.
 15. T.Y. Zhong, S. Arancibia, R. Born, R. Tampe, J. Villar, M. Del Campo, A. Manubens, M.I. Becker. "Hemocyanins Stimulate Innate Immunity by Inducing Different Temporal Patterns of Proinflammatory Cytokine Expression in Macrophages." *The Journal of Immunology* 196 (11), 4650-4662, 2016.
 16. R. Bayer. "Drug, bio-affecting and body treating compositions extract, body fluid, or cellular material of undetermined constitution derived from animal is active ingredient derived from arthropod (e.g., insect, spider, crustacea, etc.)" Patent, IPC8 Class: AA61K35612FI, Publication date: 2016-05-26, 2016.
 17. R. Bayer. "Methods of treatment viral diseases." (Orono, ME, US) Patent, Application Number: 14/948338 Publication Date: 05/26/2016.
 18. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption / ionization mass spectrometry: An update for 2011–2012." *Mass spectrometry reviews* 36 (3), 255–422, 2017.
 19. Z. Zhang, F. Wang, C. Chen, Z. Zheng, J.J. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." *Immunology Letters* 192, 42-47, 2017.
 20. V.A. Toptikov, V.M. Totsky, T.G. Alieksieieva, O.O. Kovtun. "Population genetic structure of veined rapa whelk communities in the northwestern Black Sea." *Cytology and Genetics* 51 (4), 253-262, 2017.
 21. F. Luo, R. Xing, X. Wang, Q. Peng, P. Li. "Proximate composition, amino acid and fatty acid profiles of marine snail *Rapana venosa* meat, visceral mass and operculum." *J Sci Food Agric.* 97 (15), 5361-5368, 2017.
 22. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Curr Med Chem.* 25 (20), 2292-2303, 2018.
 23. T. Sahin, S. Yilmaz, S.A. Ergun. "Potential Substitute to Fish Meal: The Veined Rapa Whelk, *Rapana Venosa*." *International Journal of Oceanography & Aquaculture* 2 (3), 2018.
 24. M. Palacios, R. Tampe, M. Del Campo, T.-Y. Zhong, M.N. López, F. Salazar-Onfray, M.I. Becker. "Antitumor activity and carrier properties of novel hemocyanins coupled to a mimotope of GD2 ganglioside." *European Journal of Medicinal Chemistry* 150, 74-86, 2018.
 25. I.D., Grice, G.L. Mariottini. "Glycans with Antiviral Activity from Marine Organisms". Chapter, *Marine Organisms as Model Systems in Biology and Medicine* 65, 439-475, 2018.
 26. B.M. Khan, Y. Liu. "Marine Mollusks: Food with Benefits." *Reviews in Food Science and Food Safety* 18, 2019.
- 32. Dolashka-Angelova, P., Moshtanska, V., Kujumdzieva, A., Atanasov, B., Petrova, V., Voelter, W., Van Beeumen, J. Structure of glycosylated Cu/Zn-superoxide dismutase from *Kluyveromyces yeast NBIMCC 1984*. *Journal Molecular Structure*, 980, 1-3, 2010b, 18-23 - [Линк](#)**

Цитира се е:

1. H. Korekane, A. Korekane, Y. Yamaguchi, M. Kato, Y. Miyamoto, A. Matsumoto, T. Hasegawa, K. Suzuki, N. Taniguchi, T. Ookawara. "N-Glycosylation profiling of recombinant mouse extracellular

superoxide dismutase produced in Chinese hamster ovary cells." *Glycoconjugate J.* 28 (3-4), 183-196, 2011.

2. U. Jabeen, A. Salim, A. Abbasi. "Prediction of Post Translational Modifications in *Avicennia marina* Cu-Zn Superoxide Dismutase: Implication of Glycation on the Enzyme." *Structure. J. Chem. Soc. of Pakistan* 34 (2), 404-414, 2012.
3. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2009–2010." *Mass Spectrometry Reviews*, 2014.
4. A.K. Gombert, J.V. Jr. Madeira, M.E. Cerdán, M.I. González-Siso." *Kluyveromyces marxianus* as a host for heterologous protein synthesis." *Mini-Review Applied Microb. and Biotechnology*, 100, 14, 6193-6208, 2016.

33. Velkova, L., Dimitrov, I., Schwarz, H., Stevanovic, S., Voelter, W., Salvato, B., Dolashka-Angelova, P. Structure of hemocyanin from garden snail *Helix lucorum*. *Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology*, 157, 1, 2010a, 16-25 - [Линк](#)

Цитира се е:

1. Q. Ashton Acton. Book "Metalloproteins: Advances in Research and Application": Edition: A Scholarly Editions, Atlanta, Georgia, 4, 2011.
2. S. Arancibia, F. Salazar and M. I. Becker. "Hemocyanins in the Immunotherapy of Superficial Bladder Cancer." *Bladder Cancer –From Basic Science to Robotic Surgery*. Chapter 11, 221-243, 2012. A.E. Canda, Ed., InTech, Croatia, Rijeka. www.intechopen.com
3. D.M. Whitacre. "Reviews of Environmental Contamination and Toxicology." *Reviews of Env. Cont. Toxic.* 225, 136, 2013.
4. J. Markl. "Evolution of Molluscan Hemocyanin Structures." *BBA* 1834 (9), 1840-1852, 2013.
5. Y. Raynova, L. Domanova, K. N. Idakieva. "Phenoloxidase Activity of *Helix aspersa* Maxima (Garden Snail, Gastropod) Hemocyanin." *The Protein Journal* 32, 609-618, 2013.
6. K. Świderek and P. Paneth. "Binding isotope effects". *Chem. Rev.* 113 (10), 7851–7879, 2013.
7. D.V. Nica, D-M. Bordean, A. B. Borozan, I. Gergen, M. Bura, I. Banatean-Dunea. "Use of Land Snails (Pulmonata) for Monitoring Copper Pollution in Terrestrial Ecosystems". *Reviews of Environ. Contamin. and Toxic.* 225, 95-137, 2013.
8. A.E. Scheil, S. Hilsmann, R. Triebkorn, H.-R. Köhler. "Shell colour polymorphism, injuries and immune defense in three helcid snail species, *Cepaea hortensis*, *Theba pisana* and *Cornu aspersum maximum*." *Results in Immun.* 3, 73–78, 2013.
9. H. Stewart, H.E. Westlake, L.R. Page. "Rhogocytes in gastropod larvae: developmental transformation from protonephridial terminal cells." *Invertebrate Biology* 133, 42-68, 2014.
10. R. Bayer. "Drug, bio-affecting and body treating compositions extract, body fluid, or cellular material of undetermined constitution derived from animal is active ingredient derived from arthropod (e.g., insect, spider, crustacea, etc.)." Patent IPC8 Class: AA61K35612FI, Publication date: 2016-05-26, 2016.
11. R. Bayer. "Methods of treatment viral diseases." (Orono, ME, US) US 2016/0143958 A1, 2016.
12. S. Todinova, Y. Raynova, K. Idakieva. "Calorimetric Study of *Helix aspersa* Maxima Hemocyanin Isoforms." *Journal of Analytical Methods in Chemistry* 2018(4), 1-8, 2018, 2018
13. G.G. Schäfer, V. Pedrini-Martha, R. Schnegg, R. Dallinger, D.J. Jackson, B. Lieb. "Hemocyanin genes as indicators of habitat shifts in Panpulmonata?" *Mol Phylogenet Evol.* 130, 99-103, 2019.
14. T. Yao, M.M. Zhao, J. He, T. Han, W. Peng, H. Zhang, J-Y. Wanga, J-Z. Jiang. "Gene expression and phenoloxidase activities of hemocyanin isoforms in response to pathogen infections in abalone *Haliotis diversicolor*." *International Journal of Biological Macromolecules* 129, 538-551, 2019.

34. Velkova, L., Dolashka, P., Dolashki, A., Voelter, W., Atanasov, B.. Structural analysis and molecular modeling of the RvH2-e functional unit of *Rapana venosa* hemocyanin. *Biochimica et Biophysica Acta - Proteins and Proteomics*, 1804, 12, 2010b, 2177-2182. -[Линк](#)

Цитира се е:

1. K. Idakieva, F. Meersman, C. Gielens. "Reversible heat inactivation of copper sites precedes thermal unfolding of molluscan (*Rapana thomasiana*) hemocyanin." *BBA* 1824, 731–738, 2012
2. J. Markl. "Evolution of Molluscan Hemocyanin Structures." *BBA* 1834 (9), 1840-1852, 2013.

35 Dolashka, P., Moshtanska, V., Dolashki, A., Velkova, L., Rao, G.S., Angelova, M., Betzel, C., Voelter, W., Atanasov, B.. Structural analysis and molecular modelling of the Cu/Zn-SOD from fungal strain *Humicola lutea* 103. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 83, 1, 2011a, 67-73 - [ЛИНК](#)

Цитира се е:

1. H. Korekane, A. Korekane, Y. Yamaguchi, M. Kato, Y. Iyamoto, A. Matsumoto, T. Hasegawa, K. Suzuki, N. Taniguchi, T. Ookawara. "N-Glycosylation profiling of recombinant mouse extracellular superoxide dismutase produced in Chinese hamster ovary cells." *Glycoconj. J.* 28 (3-4), 183-196, 2011.
2. Y. Ran, Li. Yin, Z. Zhifang, S. Guifang, P. Shenyuan. "Construction of Plant Expression Vector of Cu/Zn-SOD Gene and Its Expression in Tobacco." *Biotechnol. Bulletin* 11, 78-82, 2012.
3. L.-X. Jiao, C.-W. Hua, X.-X. Xu, J.-J. Wang, R.-X. Zhao. "Cloning and bioinformatics analysis of Fe-SOD gene in *alicyclobacillus acidoterrestris*." *Modern Food Science and Technology* 31 (3), 43-49, 2015.
4. G. Leoni, A. De Poli, M. Mardirossian, S. Gambato, F. Florian, P. Venier, D.N. Wilson, A. Tossi, A. Pallavicini and M. Gerdol. "Myticalins: A Novel Multigenic Family of Linear, Cationic Antimicrobial Peptides from Marine Mussels (*Mytilus* spp.)." *Marine Drugs — Open Access Journal* 15, 8, 2017.
5. T. Sahin, S. Yilmaz, S.A. Ergun. "A Potential Substitute to Fish Meal: The Veined Rapa Whelk, *Rapana Venosa*." *International Journal of Oceanography & Aquaculture* 2 (3), 2018

36 Dolashka, P., Velkova, L., Iliev, I., Beck, A., Dolashki, A., Yossifova, L., Toshkova, R., Voelter, W., Zacharieva, S. Antitumor activity of glycosylated molluscan hemocyanins via Guerin ascites tumor. *Immunological Investigations. Journal Immunological Investigations* 40, 2, 2011, 130-149.- [ЛИНК https://www.ncbi.nlm.nih.gov/pubmed/20923331](https://www.ncbi.nlm.nih.gov/pubmed/20923331)

Цитира се е:

1. X.-Y. Zhang, X.-M. Lin, Y.-L. Zhang, Q.-S. Lu, W.-H. Zou and J.-S. Lun. "Comparative analysis of hemolytic activity of hemocyanin isomers binding to different bacteria in shrimp *Litopenaeus vannamei*." *Acta Hydrobiol. Sinica* 37 (6), 1079-1084, 2013.
2. J. Stoyloff, S. Ivanov. "Affinity and carbohydrate-dependent adhesion of guerin tumor cell subpopulations on solid-phase immobilized glycoproteins of the extracellular matrix." *Comptes rendus de l'Académie bulgare des sciences: sciences mathématiques et naturelles* 67 (2), 223-230, 2014.
3. N.T. Zanjani, F. Sairi, G. Marshall, M.M. Saksena, P. Valtchev, V.G. Gomes, A.L. Cunningham, F. Dehghani, "Formulation of Abalone Hemocyanin with High Antiviral Activity and Stability." *European J. of Pharmac. Sciences* 12 (53), 77-85, 2014.
4. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." *Developm. and Compar. Immun.* 45, 43–55, 2014.
5. R.C. Bayer. "Lobster hemolymph as a utility for treatment of mammalian tissue lesions." *Patent US* 2014/0348877 A9, 2014.
6. X. Lu, H. Lu, L. Guo, Z. Zhang, X. Zhao, M. Zhong, S. Li, Y. Zhang. "Cloning and characterization of a novel hemocyanin variant LvHMCV4 from shrimp *Litopenaeus vannamei*." *Fish and Shellfish Immun.* 46, 2, 398-405, 2015.

7. R. Bayer. "Drug, bio-affecting and body treating compositions extract, body fluid, or cellular material of undetermined constitution derived from animal is active ingredient derived from arthropod (e.g., insect, spider, crustacea, etc.)." Patent IPC8 Class: AA61K35612FI, 2016.
8. R. Bayer. "Methods of treatment viral diseases" (Orono, ME, US) Application Number: 14/948338 Publication Date: 05/26/2016. United States Patent Application 20160143958, 2016..
9. Z. Zhang, F.Wang, C. Chen, Z. Zheng, J.J. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." *Immunology Letters* 192, 42-47, 2017.
10. A. Parmakelis, P. Kotsakiozi, C.K. Kontos, P.G. Adamopoulos, A. Scorilas. "The transcriptome of a "sleeping" invader: de novo assembly and annotation of the transcriptome of aestivating *Cornu aspersum*." *BMC Genomics* 18 (1), 491, 2017.
11. J. Altaf, M.H. Rasool, S. Akhtar, M. Manzoor, T. Younas, B. Ansari, G. Ahmad, F. Jabeen, M. Ali, R. Munir. "Comparative evaluation of antibacterial activity of foot muscle extracts from genus *Physa* and genus *Ceciloides* (Mollusca: Gastropoda)." *Pakistan Journal of Pharmaceutical Sciences* 31, 1555-1563, 2018.
12. R. Ishwarya, B. Vaseeharan, R. Jayakumar, V. Ramasubramanian, M. Govindarajan, N.S. Alharbi, J.M. Khaled, M.N. Al-anbr, G. Benelli. "Bio-mining drugs from the sea: High antibiofilm properties of haemocyanin purified from the haemolymph of flower crab *Portunus pelagicus* (L.) (Decapoda: Portunidae)." *Aquaculture* 489, 130-140, 2018.

37 De Smet, L., Dimitrov, I., Debyser, G., Dolashka-Angelova, P., Dolashki, A., Van Beeumen, J., Devreese, B.. The cDNA sequence of three hemocyanin subunits from the garden snail *Helix lucorum*. *Gene*, 487, 2, 2011, 118-128 - [Линк](#)

Цумура се е:

1. Z. Zhou, D. Ni, M. Wang, L. Wang, L. Wang, X. Shi, F. Yue, R. Liu, L. Song. "The phenoloxidase activity and antibacterial function of a tyrosinase from scallop *Chlamys farreri*." *Fish & Shellfish Immunol.* 33 (2), 375-381, 2012.
2. A.E. Scheil, S. Hilsmann, R. Triebkorn, H.-R. Köhler. "Shell colour polymorphism, injuries and immune defense in three helicid snail species, *Cepaea hortensis*, *Theba pisana* and *Cornu aspersum maximum*." *Results in Immunol.* 3, 73–78, 2013.
3. J. Markl. "Evolution of Molluscan Hemocyanin Structures." *BBA* 1834 (9), 1840-1852, 2013.
4. H. Stewart, H.E. Westlake, L.R. Page. "Rhogocytes in gastropod larvae: developmental transformation from protonephridial terminal cells." *Invertebrate Biology*, 133, 1, 42-68, 2014.
5. J. Wu, A.L. Cunningham, F. Dehghani, R.J. Diefenbach. "Comparison of *Haliotis rubra* hemocyanin isoforms 1 and 2." *Gene Reports* 4, 123-130, 2016.
6. M. Palacios, R. Tampe, M. Del Campo, T.-Y. Zhong, M.N. López, F. Salazar-Onfray, M.I. Becker "Antitumor activity and carrier properties of novel hemocyanins coupled to a mimotope of GD2 ganglioside." *European Journal of Medicinal Chemistry* 150, 74-86, 2018.
7. G.G. Schäfer, V. Pedrini-Martha, R. Schnegg, R. Dallinger, D.J. Jackson, B. Lieb. "Hemocyanin genes as indicators of habitat shifts in Panpulmonata?" *Mol Phylogenet Evol.* 130, 99-103, 2019

38 Dolashki, A., Voelter, W., Dolashka, P.. Phenoloxidase activity of intact and chemically modified functional unit RvH1-a from molluscan *Rapana venosa* hemocyanin.. *Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology*, 160, 1, 2011, 1-7 - [Линк](#)

Цумура се е:

1. Q. Wang, Z-H. Lin, Y-B. Bao, L-H. Huo, H-L. Gu. "Clone and analysis of hemoglobin Gene (Tg-HbIIA) and immune expression research in *tegillarca granosa*." *Ocean.limnol. sinica.* 43 (1), 88-94, 2012.

2. A.E. Scheil, S. Hilsmann, R. Triebkorn, Heinz. "Shell colour polymorphism, injuries and immune defense in three helioid snail species, *Cepaea hortensis*, *Theba pisana* and *Cornu aspersum maximum*." *Results in Immun.* 3, 73–78, 2013.
3. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." *Developm. and Compar. Immun.* 45, 43–55, 2014.
4. S. Schenk, J. Schmidt, U. Hoeger, H. Decker. "Lipoprotein-induced phenoloxidase-activity in tarantula hemocyanin." *Biochimica et Biophysica Acta* 1854, 8, 939-949, 2015.
5. J. Zhuang, C.J. Coates, H. Zhu, P. Zhu, Z. Wu, L. Xie. "Identification of candidate antimicrobial peptides derived from abalone haemocyanin." *Developmental & Comparative Immunology* 49, 96-102, 2015.
6. K.N. Naresh, A. Sreekumar, S.S. Rajan. "Structural insights into the interaction between molluscan hemocyanins and phenolic substrates: An in silico study using docking and molecular dynamic." *J of Molec Graphics and Modelling* 61, 22, 6578, 272- 280, 2015.
7. L. Wang, Y. Ye, V. Lykourinou, J. Yang, A. Angerhofer, Y. Zhao, L.-J. Ming. "Catalytic Cooperativity, Nuclearity, and O₂/H₂O₂ Specificity of Multi- Copper (II) Complexes of Cyclen-Tethered Cyclotriphosphazene Ligands in Aqueous Media." *Europ. J. of Inorg. Chem.* 42, 4899-4908, 2017.
8. C.J. Coates, H. Decker. "Immunological properties of oxygen-transport proteins: hemoglobin, hemocyanin and hemerythrin." *Cell. Mol. Life Sci.* 74, 2, 293- 317, 2017.
9. F. Luo, R. Xing, X. Wang, Q. Peng, P. Li. "Proximate composition, amino acid and fatty acid profiles of marine snail *Rapana venosa* meat, visceral mass and operculum." *J Sci Food Agric.* 97 (15), 5361-5368, 2017.
10. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Curr Med Chem.* 25 (20), 2292-2303, 2018.

39 Velkova, L., Dolashka, P., Lieb, B., Voelter, W., Dolashki, A., Van Beeumen, J., Devreese, B.. Glycan structures of the structural subunit (HtH1) of *Haliotis tuberculata* hemocyanin. *Glycoconjugate Journal*, 28, 6, 2011, 385-395 - [Линк](#)

Lumupa ce e:

1. Y. Fujii, N. Dohmae, K. Takio, S.M.A. Kawsar, R. Matsumoto, I. Hasan, Y. Koide, R.A. Kanaly, H. Yasumitsu, Y. Ogawa, S. Sugawara, M. Hosono, K. Nitta, J. Hamako, T. Matsui, Y. Ozeki. "A Lectin from the Mussel *Mytilus galloprovincialis* Has a Highly Novel Primary Structure and Induces Glycan-mediated Cytotoxicity of Globotriaosylceramide-Expressing Lymphoma Cells." *JBC* 287 (53), 44772-44783, 2012.
2. B. Schiller, A. Hykollari, S. Yan, K. Paschinger, I.B.H. Wilson. "Complicated N-linked glycans in simple organisms." *Biological Chemistry* 393 (8), 661-67, 2012.
3. S. Kurz, J. Chunsheng, A. Hykollari, D. Gregorich, B. Giomarelli, R. Vasta, I.B.H. Wilson, K.P. Gerardo. "Haemocytes and plasma of the eastern oyster (*Crassostrea virginica*) display a diverse repertoire of sulphated and blood group A-modified N-glycans." *Glycobiology and Extracellular Matrices.* *J. Biol. Chem.* 288 (34), 24410-28, 2013.
4. M.I. Becker, S. Arancibia, F. Salazar, M.D. Campo, A. De Ioannes. "Mollusk Hemocyanins as Natural Immunostimulants in Biomedical Applications. Immune Response Activation." Chapter 2, 45-72, 2014.
5. E.I. Solomon, D.E. Heppner, E.M. Johnston, J.W. Ginsbach, J. Cirera, M. Qayyum, M.T. Kieber-Emmons, C.H. Kjaergaard, R.G. Hadt, L. Tian. "Copper Active Sites in Biology." *Chem. Rev.* 114, 3659–3853, 2014.
6. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2011–2012." *Mass Spec Rev* 34, 268–422, 2015.
7. J. Zhuang, C.J. Coates, H. Zhu, P. Zhu, Z. Wu, L. Xie. "Identification of candidate antimicrobial peptides derived from abalone hemocyanin." *Dev. Comp. Immunol.* 49 (1), 96-102, 2015.

8. C. Gatsogiannis, O. Hofnagel, J. Markl, S. Raunser. "Structure of Mega-Hemocyanin Reveals Protein Origami in Snails." *Structure*. 23 (1), 93-103, 2015.
9. J. Wu, A.L. Cunningham, F. Dehghani, R.J. Diefenbach. "Comparison of Haliotis rubra hemocyanin isoforms 1 and 2." *Gene Reports* 4, 123-130, 2016.
10. T-Y. Zhong, S. Arancibia, R. Born, R. Tampe, J. Villar, M. Del Campo, A. Manubens and M. Ine's Becker. "Hemocyanins Stimulate Innate Immunity by Inducing Different Temporal Patterns of Proinflammatory Cytokine Expression in Macrophages." *J. Immunol.* 196 (11), 4650-62, 2016.
11. N.T. Zanjani, M. Miranda-Saksena, P. Valtchev, R.J. Diefenbach, L. Hueston, E. Diefenbach, F. Sairi, V.G. Gomes, A.L. Cunningham, F. Dehghani. "Abalone hemocyanin blocks the entry of herpes simplex virus 1 into cells: A potential new antiviral strategy." *Antim. Agents and Chemoth.* 60, 2, 1003-1012, 2016.
12. Z. Zhang, F. Wang, C. Chen, Z. Zheng, J. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." *Immunology Letters* 192, 42-47, 2017.
13. S. Schulze, E. Urzica, MJMF. Reijnders, H. van de Geest, S. Warris, L.V. Bakker, et al. "Identification of methylated GnTI-dependent N-glycans in *Botryococcus brauni*." *New Phytol.* 215 (4), 1361-1369, 2017.
14. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2011–2012." *Mass Spectrometry Reviews* 36 (3), 255-422, 2017.
15. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Curr Med Chem.* 25 (20), 2292-2303, 2018.
16. Z. Zhang, R. Li, J.J. Aweya, F. Wang, M. Zhong, Y. Zhang. "Identification and characterization of glycosylation sites on *Litopenaeus vannamei* hemocyanin." *FEBS Lett.* 593 (8), 820-830, 2019.

40. Dolashka, P., Franck, Z., Dolashki, A., Laura, M., Pietro, T., Salvato, B. ESI-MS and MALLS analysis of quaternary structure of molluscan and arthropodan hemocyanins. *Journal of Mass Spectrometry*, 47, 7, 2012a, 940-947. [Линк](#)

Цитира се в:

1. J. Ya-fang, Z. Yi-fang. "Progress in extraction, purification and characterization of hemocyanins." *Food and Drag* 15, 6, 436-438, 2013.
2. D. Zhenhuan, J. Jing. "Research Progress on Molecular Structure and Biological Functions of Hemocyanin." *Bioprocess* 5 (3), 30-37, 2015.
3. M. Velayutham, S. Kumar Kamanuri, K. Saravanan, A. Munusamy. "Cation metals specific hemocyanin exhibits differential antibacterial property in mud crab, *Scylla serrata*". *Biologia* 71 (2), 176–183, 2016.

41. Dolashka P. Tandem mass spectrometry - Applications and principles 2012. *Applications and Principles*. Edited by Jeevan K. Prasain., 2012b - [Линк](#)

Цитира се в:

1. D.J. Harvey. "Analysis of carbohydrates and glycoconjugates by matrix-assisted laser desorption/ionization mass spectrometry: An update for 2011–2012." *Mass Spectrometry Reviews* 36, 3, 255-422, 2017.

42. Dolashka, P., Voelter, W. Antiviral activity of hemocyanins. *Invertebrate Survival Journal* 10, 2013, 120-127 - [Линк](#)

Цитира се в:

1. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." *Developm. and Compar. Immun.* 45, 43–55, 2014.

2. J.C. Bolton, R. Bayer, R. Bushway, S. Collins, B. Perkins. "Analytical and Semipreparative HPLC Analysis and Isolation of Hemocyanin from the American Lobster *Homarus americanus*." *J. of Shellfish Research* 33, 1, 11-17, 2014.
3. K. Benkendorff, D. Rudd, B.D. Nongmaithem, L. Liu, F. Young, V. Edwards, C. Avila, C. Abbott. "Are the traditional medical uses of Muricidae molluscs substantiated by their pharmacological properties and bioactive compounds?" *Marine Drugs* 13 (8), 5237-5275, 2015.
4. V.T. Dang, K. Benkendorff, T. Green, P. Speck. "Marine snails and slugs: a great place to look for antiviral drugs." *J. of Virology* 89 (16), 8114-8118, 2015.
5. N. Talaei Zanjani, M. Saksenab, P. Valtchev, R. Diefenbach, L. Hueston, E. Diefenbach, F. Sairi, V. Gomes, A. Cunningham, F. Dehghani. "Abalone Hemocyanin Blocks the Entry of HSV-1 into Cells: a Potential New Antiviral Strategy." *Antimicrob. Agent and Chemoter*, 60 (2), 1003-12, 2015.
6. R. Bayer. "Drug, bio-affecting and body treating compositions extract, body fluid, or cellular material of undetermined constitution derived from animal is active ingredient derived from arthropod (e.g., insect, spider, crustacea, etc.)." Patent, IPC8 Class: AA61K35612FI, Publication date: 2016-05-26.
7. R. Bayer. "Methods of treatment viral diseases (Orono, ME, US)" US Patent App. 14/948,338, 2016. Publication Date: 05/26/2016.
8. C.J. Coates, H. Decker. "Immunological properties of oxygen-transport proteins: hemoglobin, hemocyanin and hemerythrin." *Cell Mol Life Sci.* 74 (2), 293-317, 2017.
9. K. Bux, S. A. Ali, S.T. Moin. "Hydration facilitates oxygenation of hemocyanin: perspectives from molecular dynamics simulations." *European Biophysics Journal* 47, 1-14, 2018.
10. D.K. Hasegawa, W. Chen, Y. Zheng, N. Kaur, W.M. Wintermantel, A.M. Simmons, Z. Fei, K.-S. Ling. "Comparative transcriptome analysis reveals networks of genes activated in the whitefly, *Bemisia tabaci* when fed on tomato plants infected with Tomato yellow leaf curl virus." *Virology* 513, 52-64, 2018.

43. Kostadinova, E., Dolashka, P., Velkova, L., Dolashki, A., Stevanovic, S., Voelter, W. Positions of the glycans in molluscan hemocyanin, determined by fluorescence spectroscopy. *Journal of Fluorescence*, 23, 4, 2013, 753-760 - [Линк](#)

Цитира се е:

1. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." *Developm. and Compar. Immun.* 45, 43–55, 2014.
2. Z. Du, J. Jing. "Research Progress on Molecular Structure and Biological Functions of Hemocyanin." *Bioprocess* 5 (3), 30-37, 2015.

44. Abrashev, R., Stoitsova, S., Pashova, S., Paunova-Krasteva, T., Vassilev, S., Dolashka, P., Angelova, M. Temperature-stress tolerance of the fungal strain *Aspergillus niger* 26: physiological and ultrastructural changes. *World Journal of Microbiology and Biotechnology*, 30, 5, 2014, 1661-1668 - [Линк](#)

Цитира се е:

1. K. Pietrzak, S. Glińska, M. Gapińska, T. Ruman, A. Nowak, E. Aydin, B. Gutarowska. "Silver nanoparticles: a mechanism of action on moulds." *Metallomics*, 8 (12), 1294-1302, 2016.
2. M. Tegelaar, H.A.B. Wösten, "Functional distinction of hyphal compartments." *Sci Rep.* 7(1), 6039, 2017.
3. M. Rubio-Texeira, G. Van Zeebroeck, J.M. Thevelein. "10 Trehalose Metabolism: Enzymatic Pathways and Physiological Functions." In book: *Biochemistry and Molecular Biology* 191-277, 2017.
4. X. Zhang, B. Zhang, R. Miao, J. Zhou, L. Ye, D. Jia, W. Peng, L. Yan, X. Zhang, W. Tan, X. Li, "Influence of Temperature on the Bacterial Community in Substrate and Extracellular Enzyme Activity of *Auricularia cornea*." *Mycobiology*, 46 (3), 224–235, 2018.
5. A. Koziróg, A. Otlewska, M. Gapinska, S. Michlewska. "Influence of Gemini Surfactants on Biochemical Profile and Ultrastructure of *Aspergillus brasiliensis*." *Appl. Sci.*, 9, 245, 2019.

45 Dolashki, A., Radkova, M., Todorovska, E., Ivanov, M., Stevanovic, S., Molin, L., Traldi, P., Voelter, W., Dolashka, P. Structure and characterization of *Eriphia verrucosa* hemocyanin. *Marine Biotechnology*, 17, 6, 2015, 743-752 [Линк](#)

Цитира се в:

1. M. Velayutham, S. K. Kamanuri, K. Saravanan, A. Munusamy. "Cation metals specific hemocyanin exhibits differential antibacterial property in mud crab, *Scylla serrata*." *Biologia* 71, 2 (2016)
2. M. Khalil, Z. Boubegiten-Fezoua, N. Hellmann and P. Hellwig. "Extraordinary stability of hemocyanins from *L. polyphemus* and *E. californicum* studied using infrared spectroscopy from 294 to 20 K." *Phys Chem Chem Phys*. 18(41), 28732-28739 (2016). .

46 Dolashka, P., Dolashki, A., Velkova, L., Stevanovic, S., Molin, L., Traldi, P., Velikova, R., Voelter, W. Bioactive compounds isolated from garden snails. *J. BioSci. Biotechnol.*, 2015b, 147-155 - [Линк](#)

Цитира се в:

1. V. Schneider, F.-K. Lücke, M. Birringer. "In vitro-Untersuchung einer möglichen fungistatischen Wirkung des Sekrets der Weinbergschnecke (*Helix pomatia*, *Helix aspersa*) auf *Botrytis cinerea*". *Gesunde Pflanzen* 68, 2, 89–97.
2. P. Kumar, S. Kumar, S. K. Nayak. "Bioactivity of intertidal blood clam *Cardita antiquata* (Lam.) from north west coast of India at with special reference to feeding behavior." *The Bioscan* 12(1), 149-153, 2017.
3. M. Matusiewicz, I. Kosieradzka, T. Niemiec, M. Grodzik, H. Antushevich, B. Strojny, M. Gołębiewska. "In Vitro Influence of Extracts from Snail *Helix aspersa* Müller on the Colon Cancer Cell Line Caco-2." *Int J Mol Sci*. 19 (4), 1064, 2018.
4. G. Cilia, F. Fratini. "Antimicrobial properties of terrestrial snail and slug mucus." *Developmental and Comparative Immunology* 86, 47-51, 2018.

47 Dolashka, P., Dolashki, A., Van Beeumen, J., Floetenmeyer, M., Velkova, L., Stevanovic, S., Voelter, W. Antimicrobial activity of molluscan hemocyanins from *Helix* and *Rapana* snails. *Current Pharm. Biotechnol* 17, 3, 2016, 263-270 - [Линк](#)

Цитира се в:

1. K. Suwannatrai, A. Suwannatrai, P. Tabsripair, J.U. Welb, S. Tangkawattana, C. Cantacessi, J. Mulvenna, S. Tesana, A. Loukas, J. Sotillo. "Differential Protein Expression in the Hemolymph of *Bithynia siamensis* goniomphalos Infected with *Opisthorchis viverrini*." *PLoS Neglected Tropical Diseases* 10 (11), 1-20, 2016.
2. M. Velayutham, S.K. Kamanuri, K. Saravanan, A. Munusamy. "Cation metals specific hemocyanin exhibits differential antibacterial property in mud crab *Scylla serrata*." *Biologia* 71, 2, 2016.
3. B. Dubief, F.L. Nunes, O. Basuyaux, C. Paillard. "Immune priming and portal of entry effectors improve response to vibrio infection in a resistant population of the European abalone." *Fish Shellfish Immunol*. 60, 255–264, 2017.
4. L. Lagos, J.I. Tandberg, M.I. Becker, H.C Winther-Larsen. "Immunomodulatory properties of *Concholepas concholepas* hemocyanin against francisellosis in a zebrafish model." *Fish Shellfish Immunol*. 67, 571-574, 2017.
5. N.T. Zanjani, M.M.Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Curr Med Chem*. 24, 2017.
6. C.J. Coates, H. Decker. "Immunological properties of oxygen-transport proteins: hemoglobin, hemocyanin and hemerythrin." *Cell. Mol. Life Sci*. 74, 2, 293-317.
7. G. Cilia, F. Fratini. "Antimicrobial properties of terrestrial snail and slug mucus". *Journal of Complementary and Integrative Medicine* 15 (3), 20170168, 2018.

8. Y. López, V. Cepas, S.M. Soto. "The Marine Ecosystem as a Source of Antibiotics." Chapter 1, Grand Challenges in Marine Biotechnology, P.H. Rampelotto, A. Trincone (eds.), Springer International Publishing AG, part of Springer Nature, 2018.
9. N.T. Zanjani, M.M. Saksena, F. Dehghani, A.L. Cunningham. "From Ocean to Bedside: the Therapeutic Potential of Molluscan Hemocyanins." *Curr Med Chem.* 25 (20), 2292-2303, 2018.
10. T. Sahin, S. Yilmaz, S.A. Ergun. "A Potential Substitute to Fish Meal: The Veined Rapa Whelk, *Rapana Venosa*." *International Journal of Oceanography & Aquaculture* 2 (3), 2018
11. P.H. Rampelotto, A. Trincone. "Grand Challenges in Biology and Biotechnology. Reviews exhaustively recent advances in marine biotechnology and identifies challenges in realizing its potential." Series Ed.: Rampelotto, Pabulo H., 2367-1017, 2018.
12. S. Ulagesan, J.H. Kim. "Antibacterial and Antifungal Activities of Proteins Extracted from Seven Different Snails." *Applied Sciences*, 8 (8), 1362, 2018.
13. B. Houyvet, B. Zanuttini, E. Corre, G. Le Corguillé, J. Henry, C. Zatylny-Gaudin. "Design of antimicrobial peptides from a cuttlefish database." *Amino Acids*, 50 (11), 1573-1582, 2018.
14. C.J. Coates, J. Talbot, "Hemocyanin-derived phenoloxidase reaction products display anti-infective properties." *Developmental & Comparative Immunology* 86, 47-51, 2018

48 Stenzl, A., Dolashki, A., Stevanovic, S., Voelter, W., Aicher, W., Dolashka, P. Cytotoxic effects of *Rapana venosa* hemocyanin on bladder cancer permanent cell lines. *Journal of US-China Medical Science*, 13, 2016, 179-188 - [ЛИНК](#)

Цитира се е:

1. F. Luo, X. Wang, R. Xing, P. Li. "Proximate composition, amino acid and fatty acid profiles of marine snail *Rapana venosa* meat, visceral mass and operculum." *Journal of the Science of Food and Agriculture* 97(15), 2017.
2. T. Sahin, S. Yilmaz, S. Ergun. "Potential Substitute to Fish Meal: The Veined Rapa Whelk, *Rapana Venosa*." *International Journal of Oceanography & Aquaculture* 2 (3), 2018.
3. M. Palacios, R. Tampe, M. Del Campo, T-Y. Zhong, M.N. López, F. Salazar-Onfray, M.I. Becker. "Antitumor activity and carrier properties of novel hemocyanins coupled to a mimotope of GD2 ganglioside." *European Journal of Medicinal Chemistry* 150, 74-86, 2018
4. J.J. Mora Román, M. Del Campo, J. Villar, F. Paolini, G. Curzio, A. Venuti, L. Jara, J. Ferreira, P. Murgas, A. Lladser, A. Manubens, M.I. Becker. "Immunotherapeutic Potential of Mollusk Hemocyanins in Combination with Human Vaccine Adjuvants in Murine Models of Oral Cancer." *J. of Immun. Research* 2019 (2), 1-19, 2019.

49. Velkova, L., Dolashka, P., Van Beeumen, J., Devreese, B. N-glycan structures of b-HIH subunit of *Helix lucorum* hemocyanin. *Carbohydrate Research*, 449, 2017, 1-10 - [ЛИНК](#)

Цитира се е:

1. M. Palacios, R. Tampe, M. Del Campo, T.Y. Zhong, M.N. López, F. Salazar-Onfray, M.I. Becker. "Antitumor activity and carrier properties of novel hemocyanins coupled to a mimotope of GD2 ganglioside." *Eur J Med Chem.* 150, 74-86, 2018.
2. Z. Zhang, R. Li, J.J. Aweya, F. Wang M. Zhong, Y. Zhang. "Identification and characterization of glycosylation sites on *Litopenaeus vannamei* hemocyanin." *FEBS Letter* 593 (8), 820-830, 2019.

50. Dolashki, A., Dolashka, P., Stenzl, A., Stevanovic, S., Aicher, WK., Velkova, L., Velikova, R., Voelter, W. Antitumor activity of *Helix* hemocyanin against bladder carcinoma permanent cell lines. *Biotechnology & Biotechnol. Equipment.* (2019)

Цитира се е:

КРАТКИ СЪОБЩЕНИЯ

1A. Velkova, L., Dolashki, A., and Dolashka, P. Analysis of a glycopeptide from structural subunit (β -HIH) of *Helix lucorum* hemocyanin by mass spectrometry. Proceedings of the Thirty-Third European Peptide Symposium – Sofia, Bulgari, 288-289, 2014.

Цитира се в:

1. M. Palacios, R. Tampe, M. Del Campo, T.Y. Zhong, M.N. López, F. Salazar-Onfray, M.I. Becker. "Antitumor activity and carrier properties of novel hemocyanins coupled to a mimotope of GD2 ganglioside." Eur J Med Chem. 150, 74-86, 2018

2A. Velkova, L., Nikolaeva-Glomb, L., Mukova, L., Dolashki, A., Dolashka, P., Galabov, A.. Antiviral Effect of Molluscan Haemocyanines. Antiviral Research, 90, 2, 2011, A47-A48.

Цитира се в:

- 1 C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." Developm. and Compar. Immun. 45, 43–55, 2014.
- 2 T. Yao, M.-M. Zhao, J. He. T. Han, W. Peng, H. Zhang, J-Y. Wang, J.-Z. Jiang. "Gene expression and phenoloxidase activities of hemocyanin isoforms in response to pathogen infections in abalone *Haliotis diversicolor*." Int J Biol Macromol. 129, 538-551, 2019.

3A. Zagorodnya, S., Dolashka, P., Baranova, G. Golovan, A., Nesterova, N., Anti-EBV Activity of Hemocyanin Isolated from *Helix lucorum*. Antiviral Research, 90, 2, 2011, A66.

Цитира се в:

1. N. T. Zanjani, F. Sairi, G. Marshall, M. M. Saksena, P. Valtchev, V. G. Gomes, A. L. Cunningham, F. Dehghani. "Formulation of Abalone Hemocyanin with High Antiviral Activity and Stability." European J. of Pharmac.Sciences 12 (53), 77-85 (2014).
2. X-Y Zhang, X-M Lin, Y-L Zhang, Q-S Lu, W-H Zou and J-S Lun. "Comparative analysis of hemolytic activity of hemocyanin isomers binding to different bacteria in shrimp *Litopenaeus vannamei*." Acta Hydrobiol. Sinica 37 (6) 1079-1084 (2013).
3. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." Developm. and Compar. Immun. 45, 43–55 (2014).
4. V.T. Dang, K. Benkendorff, T. Green, P. Speck. "Marine Snails and Slugs: a Great Place To Look for Antiviral Drugs." J. of Virology 89 (16), 8114-8118, 2015.
5. X. Lu, H. Lu, L. Guo, Z. Zhang, X. Zhao, M. Zhong, S. Li, Y. Zhang. "Cloning and characterization of a novel hemocyanin variant LvHMCV4 from shrimp *Litopenaeus vannamei*." Fish and Shellfish Immun. 46, 2, 398-405 (2015).
6. T.J. Green, D. Raftos, P. Speck, C. Montagnani. "Antiviral immunity in marine molluscs." J.of General Virology 96, 2471–2482, 2015.
7. S. Liu, L. Zheng, J.J. Aweya, Z. Zheng, M. Zhong, J. Chen, F. Wang, Y. Zhang. "Litopenaeus vannamei hemocyanin exhibits antitumor activity in S180 mouse model in vivo." PLoS ONE 12(8), e0183783, 2017.
8. Z. Zhang, F. Wang, C. Chen, Z. Zheng, J.J. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." Immunology Letters 192, 42-47, 2017.

4A. Nesterova, N, Zagorodnya, S, Moshtanska, V, Dolashka, P., Baranova, G., Golovan, A., Antiviral Activity of Hemocyanin Isolated from Marine Snail *Rapana venosa*. Antiviral Research, 90, 2, 2011, A38-A38.

Цитирани са:

1. X.-Y. Zhang, X.-M. Lin, Y.-L. Zhang, Q.-S. Lu, W.-H. Zou, J.-S. Lun. "Comparative analysis of hemolytic activity of hemocyanin isomers binding to different bacteria in shrimp *Litopenaeus vannamei*." *Acta Hydrobiol. Sinica* 37 (6), 1079-1084, 2013.
2. N.T. Zanjani, F. Sairi, G Marshall, M.M. Saksena, P. Valtchev, V.G. Gomes, A.L. Cunningham, F. Dehghani. "Formulation of Abalone Hemocyanin with High Antiviral Activity and Stability." *Eur J Pharm Sci.* 12(53), 77-85, 2014.
3. C.J. Coates, J. Nairn. "Diverse immune functions of hemocyanins." *Developm. and Compar. Immun.* 45, 43–55, 2014.
4. V.T. Dang, K. Benkendorff, T. Green, P. Speck. "Marine Snails and Slugs: a Great Place To Look for Antiviral Drugs." *J. of Virology* 89, 16, 8114-8118, 2015.
5. X. Lu, H. Lu, L. Guo, Z. Zhang, X. Zhao, M. Zhong, S. Li, Y. Zhang. "Cloning and characterization of a novel hemocyanin variant LvHMCV4 from shrimp *Litopenaeus vannamei*." *Fish and Shellfish Immun.* 46, 2, 398-405, 2015.
6. T.J. Green, D. Raftos, P. Speck and C. Montagnani. "Antiviral immunity in marine molluscs." *J. of General Virology* 96, 2471– 2482, 2015.
7. S. Liu, L. Zheng, J.J. Aweya, Z. Zheng, M. Zhong, J. Chen, F. Wang, Y. Zhang. "Litopenaeus vannamei hemocyanin exhibits antitumor activity in S180 mouse model in vivo." *PLoS ONE* 12(8), e0183783, 2017.
8. Z. Zhang, F. Wang, C. Chen, Z. Zheng, J.J. Aweya, Y. Zhang. "Glycosylation of hemocyanin in *Litopenaeus vannamei* is an antibacterial response feature." *Immunology Letters* 192, 42-47, 2017.
9. V.A. Toptikov, V.M. Totsky, T.G. Alekseeva, O.O. Kovtun. "Population genetic structure of veined rapa whelk communities in the northwestern Black Sea." *Cytology and Genetics* 51 (4), 253-262, 2017.
10. I.D., Grice, G.L. Mariottini. "Glycans with Antiviral Activity from Marine Organisms." Chapter, *Marine Organisms as Model Systems in Biology and Medicine* 65, 439-475, 2018.
11. B.M. Khan, Y. Liu. "Marine Mollusks: Food with Benefits." *Reviews in Food Science and Food Safety* 18 (2), 2019.

КРАТКИ СЪОБЩЕНИЯ, ЦИТАТИ: 22

ОБЩО ЦИТАТИ ; 527