

# Zbynek Hrkal

## List of Publications by Year in descending order

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Version: 2024-02-01

88  
papers

1,896  
citations

257101

24  
h-index

288905

40  
g-index

89  
all docs

89  
docs citations

89  
times ranked

1817  
citing authors

| #  | ARTICLE                                                                                                                                                                                                    | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | VÃ½zkum vÃ½znamnÃ½ch zdrojÅ™ Äesko-saskÃ½ch pÅ™eshraniÃ½ch podzemnÃ½ch vod. VodohospodÃ½skÃ½ Informace, 2020, 62, 10.                                                                                      | 0,0 | 0         |
| 2  | Socioeconomic impacts of the pharmaceuticals detection and activated carbon treatment technology in water management – an example from the Czech Republic. Water and Environment Journal, 2019, 33, 67-76. | 1.0 | 4         |
| 3  | Artificial recharge of a shallow hard rock aquifer as a climate change mitigation method: model solution from the Czech Republic. Modeling Earth Systems and Environment, 2019, 5, 605-612.                | 1.9 | 3         |
| 4  | PPCP Monitoring in Drinking Water Supply Systems: The Example of KÃ½ranÃ½ Waterworks in Central Bohemia. Water (Switzerland), 2018, 10, 1852.                                                              | 1.2 | 9         |
| 5  | Occurrence of Pharmaceuticals in Wastewater and Their Interaction with Shallow Aquifers: A Case Study of HornÃ½-BeÃ½kovice, Czech Republic. Water (Switzerland), 2017, 9, 218.                             | 1.2 | 28        |
| 6  | Pharmaceuticals in groundwaters: a case study of the psychiatric hospital at HornÃ½-BeÃ½kovice, Czech Republic. Environmental Earth Sciences, 2015, 73, 3775-3784.                                         | 1.3 | 12        |
| 7  | Artificial infiltration as an integrated water resources management tool. WIT Transactions on Ecology and the Environment, 2014, , .                                                                       | 0.0 | 2         |
| 8  | Impacts of heavy groundwater pumping on hydrogeological conditions in Libya: Past and present development and future prognosis on a regional scale. Acta Geologica Polonica, 2013, 63, 283-296.            | 0.9 | 0         |
| 9  | To what extent can atmospheric deposition influence the natural background of metals in ground waters? A case study in the Czech Republic. Journal of Atmospheric Chemistry, 2011, 68, 127-138.            | 1.4 | 5         |
| 10 | ã¹æ¬šæ²æ±éí“ã«æ°ã±,ã¸æ°ä,æ°èìç»™æ¼ä»¼çš,,è®è†. Hydrogeology Journal, 2011, 19, 1545-1562.                                                                                                                  | 0.9 | 41        |
| 11 | Geothermal assessment of the deep aquifers of the northwestern part of the Bohemian Cretaceous basin, Czech Republic. Geothermics, 2011, 40, 112-124.                                                      | 1.5 | 4         |
| 12 | Groundwater resources use and management in the Amu Darya River Basin (Central Asia). Environmental Earth Sciences, 2010, 59, 1183-1193.                                                                   | 1.3 | 61        |
| 13 | Development of a tool for managing groundwater resources in semi-arid hard rock regions: application to a rural watershed in South India. Hydrological Processes, 2010, 24, 2784-2797.                     | 1.1 | 63        |
| 14 | Suberoylanilide hydroxamic acid (SAHA) at subtoxic concentrations increases the adhesivity of human leukemic cells to fibronectin. Journal of Cellular Biochemistry, 2010, 109, 184-195.                   | 1.2 | 17        |
| 15 | Changes in cell adhesivity and cytoskeleton-related proteins during imatinib-induced apoptosis of leukemic JURL-MK1 cells. Journal of Cellular Biochemistry, 2010, 111, 1413-1425.                         | 1.2 | 10        |
| 16 | Determination of the natural background content of metals in ground waters of the Czech Republic. Applied Geochemistry, 2010, 25, 755-762.                                                                 | 1.4 | 9         |
| 17 | Carbon isotopes to constrain the origin and circulation pattern of groundwater in the north-western part of the Bohemian Cretaceous Basin (Czech Republic). Applied Geochemistry, 2010, 25, 1265-1279.     | 1.4 | 33        |
| 18 | Palaeorecharge conditions of the deep aquifers of the Northern Aquitaine region (France). Journal of Hydrology, 2009, 368, 1-16.                                                                           | 2.3 | 24        |

| #  | ARTICLE                                                                                                                                                                                                                                                                               | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Isoform-specific cleavage of 14-3-3 proteins in apoptotic JURL-MK1 cells. <i>Journal of Cellular Biochemistry</i> , 2009, 106, 673-681.                                                                                                                                               | 1.2 | 18        |
| 20 | Climate change in Central Europe and the sensitivity of the hard rock aquifer in the Bohemian Massif to decline of recharge: case study from the Bohemian Massif. <i>Environmental Earth Sciences</i> , 2009, 59, 703-713.                                                            | 1.3 | 8         |
| 21 | Effects of groundwater exploitation on the Borjomi mineral water reservoir in Georgia. <i>Environmental Geology</i> , 2008, 54, 1301-1311.                                                                                                                                            | 1.2 | 5         |
| 22 | Rho-Signaling Pathways in Chronic Myelogenous Leukemia. <i>Cardiovascular &amp; Hematological Disorders Drug Targets</i> , 2008, 8, 261-267.                                                                                                                                          | 0.2 | 17        |
| 23 | Labeling of apoptotic JURL-MK1 cells by fluorescent caspase-3 inhibitor FAM-DEVD-fmk occurs mainly at site(s) different from caspase-3 active site. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2007, 71A, 605-611.                   | 1.1 | 30        |
| 24 | Protein Changes in HL60 Leukemia Cells Associated with 5-Aminolevulinic Acid-based Photodynamic Therapy. Early Effects on Endoplasmic Reticulum Chaperones Å¶. <i>Photochemistry and Photobiology</i> , 2007, 72, 16-22.                                                              | 1.3 | 2         |
| 25 | The proteomic study of sodium butyrate antiproliferative/cytodifferentiation effects on K562 cells. <i>Blood Cells, Molecules, and Diseases</i> , 2006, 37, 210-217.                                                                                                                  | 0.6 | 17        |
| 26 | Photodynamic treatment (ALA-PDT) suppresses the expression of the oncogenic Bcr-Abl kinase and affects the cytoskeleton organization in K562 cells. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2006, 83, 205-212.                                                 | 1.7 | 18        |
| 27 | Trends in impact of acidification on groundwater bodies in the Czech Republic; an estimation of atmospheric deposition at the horizon 2015. <i>Journal of Atmospheric Chemistry</i> , 2006, 53, 1-12.                                                                                 | 1.4 | 13        |
| 28 | To the intranucleolar translocation of AgNORs in leukemic early granulocytic and plasmacytic precursors. <i>Histochemistry and Cell Biology</i> , 2006, 125, 165-170.                                                                                                                 | 0.8 | 10        |
| 29 | Will the river Irtysh survive the year 2030? Impact of long-term unsuitable land use and water management of the upper stretch of the river catchment (North Kazakhstan). <i>Environmental Geology</i> , 2006, 50, 717-723.                                                           | 1.2 | 21        |
| 30 | Imatinib mesylate affects tyrosine kinase activity in both leukemic and normal primary mononuclear blood cells. <i>Journal of Applied Biomedicine</i> , 2006, 4, 95-104.                                                                                                              | 0.6 | 2         |
| 31 | Fast apoptosis and erythroid differentiation induced by imatinib mesylate in JURL-MK1 cells. <i>Journal of Cellular Biochemistry</i> , 2005, 95, 268-280.                                                                                                                             | 1.2 | 16        |
| 32 | A morphological and cytochemical note to the reversible intranucleolar translocation of AgNORs (silver stained nucleolus organizer regions) in early leukemic granulocytic progenitors represented by cultured K 562 cells. <i>Journal of Applied Biomedicine</i> , 2005, 3, 193-198. | 0.6 | 2         |
| 33 | Changes in Acid Atmospheric Deposition in kruÅ¡nÃ© Mts. and Åumava (Czech Republic) and Their Impact on Groundwater Quality. <i>Water, Air, and Soil Pollution</i> , 2004, 157, 163-178.                                                                                              | 1.1 | 10        |
| 34 | Early apoptotic features of K562 cell death induced by 5-aminolaevulinic acid-based photodynamic therapy. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2004, 73, 67-78.                                                                                             | 1.7 | 45        |
| 35 | Interferon-alpha suppresses proliferation of chronic myelogenous leukemia cells K562 by extending cell cycle S-phase without inducing apoptosis. <i>Blood Cells, Molecules, and Diseases</i> , 2004, 32, 262-269.                                                                     | 0.6 | 24        |
| 36 | A short note on the nucleolar size and density in apoptotic leukemic granulocytic precursors (HL-60) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5                                                                                                                                              |     |           |

| #  | ARTICLE                                                                                                                                                                                                                                             | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | A note on the decreased number and loss of fibrillar centres in nucleoli of apoptotic HL-60 leukaemic granulocytic precursors produced by 5-aminolaevulinic acid-based photodynamic treatment. <i>Folia Biologica</i> , 2004, 50, 15-20.            | 0.8 | 1         |
| 38 | The effect of 5-aminolevulinic acid-based photodynamic treatment (PDT) on nucleoli of leukemic granulocytic precursors represented by K562 blastic cells in vitro. <i>Medical Science Monitor</i> , 2004, 10, BR405-9.                              | 0.5 | 3         |
| 39 | Mitochondrial and endoplasmic reticulum stress-induced apoptotic pathways are activated by 5-aminolevulinic acid-based photodynamic therapy in HL60 leukemia cells. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2003, 69, 71-85. | 1.7 | 99        |
| 40 | Nucleoli in large (giant) bi- and multinucleate cells after apoptosis-inducing photodynamic treatment. <i>European Journal of Histochemistry</i> , 2003, 47, 39.                                                                                    | 0.6 | 10        |
| 41 | Nucleolar asynchrony observed in HL-60 leukemic granulocytic precursors resistant to 5-aminolaevulinic acid-based photodynamic treatment. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2002, 67, 201-203.                         | 1.7 | 1         |
| 42 | Vulnerability of groundwater to acid deposition, Jizerské Mountains, northern Czech Republic: construction and reliability of a GIS-based vulnerability map. <i>Hydrogeology Journal</i> , 2001, 9, 348-357.                                        | 0.9 | 26        |
| 43 | Contamination of groundwaters by heavy metals in the city of Ust Kamenogorsk, north-eastern Kazakhstan. <i>Environmental Geology</i> , 2001, 41, 174-182.                                                                                           | 1.2 | 5         |
| 44 | Involvement of HxuC Outer Membrane Protein in Utilization of Hemoglobin by <i>Haemophilus influenzae</i> . <i>Infection and Immunity</i> , 2001, 69, 2353-2363.                                                                                     | 1.0 | 31        |
| 45 | Identification of HL60 Proteins Affected by 5-Aminolevulinic Acid-Based Photodynamic Therapy Using Mass Spectrometric Approach. <i>Collection of Czechoslovak Chemical Communications</i> , 2001, 66, 1720-1728.                                    | 1.0 | 10        |
| 46 | The 5-aminolaevulinic acid-based photodynamic effects on nuclei and nucleoli of HL-60 leukemic granulocytic precursors. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2000, 59, 80-86.                                             | 1.7 | 19        |
| 47 | Detection of Phase Variation in Expression of Proteins Involved in Hemoglobin and Hemoglobin-Haptoglobin Binding by Nontypeable <i>Haemophilus influenzae</i> . <i>Infection and Immunity</i> , 2000, 68, 4092-4101.                                | 1.0 | 28        |
| 48 | Accumulation of protoporphyrin-IX (PpIX) in leukemic cell lines following induction by 5-aminolevulinic acid (ALA). <i>Comparative Biochemistry and Physiology C, Comparative Pharmacology and Toxicology</i> , 2000, 126, 245-252.                 | 0.5 | 15        |
| 49 | Protein Changes in HL60 Leukemia Cells Associated with 5-Aminolevulinic Acid-based Photodynamic Therapy. Early Effects on Endoplasmic Reticulum Chaperones. <i>Photochemistry and Photobiology</i> , 2000, 72, 16.                                  | 1.3 | 18        |
| 50 | The effects of heme-binding proteins on the peroxidative and catalatic activities of hemin. <i>Free Radical Biology and Medicine</i> , 1999, 27, 214-219.                                                                                           | 1.3 | 88        |
| 51 | Selective destruction of leukaemic cells by photo-activation of 5-aminolaevulinic acid-induced protoporphyrin-IX. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 1998, 47, 74-81.                                                   | 1.7 | 48        |
| 52 | Binding of Heme-Hemopexin Complexes by Soluble HxuA Protein Allows Utilization of This Complexed Heme by <i>Haemophilus influenzae</i> . <i>Infection and Immunity</i> , 1998, 66, 4511-4516.                                                       | 1.0 | 95        |
| 53 | Kinetics of heme interaction with heme-binding proteins: The effect of heme aggregation state. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1997, 1336, 497-501.                                                                       | 1.1 | 54        |
| 54 | Photodynamic effects of meso-tetra(4-sulfonatophenyl) porphine on human leukemia cells HEL and HL6, human lymphocytes and bone marrow progenitor cells. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 1997, 39, 269-278.           | 1.7 | 17        |

| #  | ARTICLE                                                                                                                                                                                                                      | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Hyaluronan-binding properties of human serum hemopexin. FEBS Letters, 1996, 383, 72-74.                                                                                                                                      | 1.3 | 25        |
| 56 | Identification of an outer membrane protein involved in utilization of hemoglobin-haptoglobin complexes by nontypeable Haemophilus influenzae. Infection and Immunity, 1996, 64, 3703-3712.                                  | 1.0 | 53        |
| 57 | Differential expression of nuclear HMG1, HMG2 proteins and H10 histone in various blood cells. Cell Biochemistry and Function, 1995, 13, 125-133.                                                                            | 1.4 | 27        |
| 58 | Use of GIS for optimalization of human activity in a catchment area: An example of the Beauce region (France). Environmental Geology, 1994, 24, 22-27.                                                                       | 1.2 | 0         |
| 59 | Binding of meso-tetra(4-sulfonatophenyl)porphine to haemopexin and albumin studied by spectroscopy methods. International Journal of Biochemistry & Cell Biology, 1994, 26, 631-637.                                         | 0.8 | 17        |
| 60 | Roles of heme iron-coordinating histidine residues of human hemopexin expressed in baculovirus-infected insect cells.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 8423-8427. | 3.3 | 35        |
| 61 | Monoclonal antibodies against human hemopexin and their application. Journal of Immunological Methods, 1993, 161, 265-268.                                                                                                   | 0.6 | 0         |
| 62 | Isolation of human haemopexin in apo-form by chromatography on S-sepharose fast flow and blue sepharose CL-6B. Biomedical Chromatography, 1992, 6, 212-214.                                                                  | 0.8 | 17        |
| 63 | Monoclonal Antibodies Against Human Antithrombin III. Hybridoma, 1991, 10, 633-640.                                                                                                                                          | 0.9 | 1         |
| 64 | Separation of the Hageman factor fragment from human serum albumin by chromatography on Blue Sepharose CL-6B. Biomedical Chromatography, 1990, 4, 152-153.                                                                   | 0.8 | 1         |
| 65 | Purification and characterization of granulocyte-macrophage colony stimulating factor from human placenta. Biomedical Applications, 1987, 413, 242-246.                                                                      | 1.7 | 4         |
| 66 | The reactivity of the disulfide bonds of human serum haemopexin. International Journal of Biochemistry & Cell Biology, 1986, 18, 283-284.                                                                                    | 0.8 | 4         |
| 67 | Identification of leukemia cell-derived inhibitory activity (LIA) in conditioned media from human myeloid leukemic cell line ML-2. Blut, 1986, 52, 51-58.                                                                    | 1.2 | 11        |
| 68 | Bilirubin and haeme binding to human serum albumin studied by spectroscopy methods. International Journal of Biochemistry & Cell Biology, 1984, 16, 799-804.                                                                 | 0.8 | 17        |
| 69 | Kinetics of haem binding to human albumin and haemopexin: nonspecific interactions of haem with proteins. International Journal of Biological Macromolecules, 1983, 5, 194-198.                                              | 3.6 | 5         |
| 70 | Hydrophobic interaction chromatography of serum proteins on Phenyl-Sepharose CL-4B. Journal of Chromatography A, 1982, 242, 385-388.                                                                                         | 1.8 | 23        |
| 71 | Haeme binding to albumin and equilibria in the albumin-ferrihaemoglobin and albumin-haemopexin systems. International Journal of Biochemistry & Cell Biology, 1980, 12, 619-624.                                             | 0.8 | 22        |
| 72 | Haernea€”Sepharose 4B as chromatographic matrix for the isolation of haemopexin from human serum. Journal of Chromatography A, 1979, 169, 500-504.                                                                           | 1.8 | 15        |

| #  | ARTICLE                                                                                                                                                                 | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Chapter 6 Gel-Type Techniques. Journal of Chromatography Library, 1979, 18, 113-131.                                                                                    | 0.1 | 1         |
| 74 | Chapter 13 Preparative Electrophoresis in Gel Media. Journal of Chromatography Library, 1979, 18, 299-306.                                                              | 0.1 | 0         |
| 75 | Haeme binding to human serum albumin and to the three large cyanogen bromide albumin fragments. International Journal of Biochemistry & Cell Biology, 1978, 9, 349-355. | 0.8 | 25        |
| 76 | Affinity chromatography of serum haemopexin. Journal of Chromatography A, 1977, 131, 453-457.                                                                           | 1.8 | 26        |
| 77 | On the molecular conformation of human haemopexin. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1977, 495, 260-267.                                         | 1.7 | 5         |
| 78 | On the molecular conformation of human haemopexin. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1977, 495, 268-278.                                         | 1.7 | 9         |
| 79 | Isolation of serum albumin and immunoglobulins by chromatography on Con-A Sepharose and Sephadex G-150. Journal of Chromatography A, 1977, 135, 193-195.                | 1.8 | 10        |
| 80 | Transfer of Heme from Ferrihemoglobin and Ferrihemoglobin Isolated Chains to Hemopexin. FEBS Journal, 1974, 43, 73-78.                                                  | 0.2 | 208       |
| 81 | The properties of IgM-L pyroglobulin. Clinica Chimica Acta, 1972, 36, 363-368.                                                                                          | 0.5 | 3         |
| 82 | Reactivity of sulfhydryl groups of human globin. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1972, 257, 324-327.                                           | 1.7 | 5         |
| 83 | Isolation of the components of rat hemoglobin by zone electrophoresis. Analytical Biochemistry, 1972, 50, 639-641.                                                      | 1.1 | 4         |
| 84 | Purification of human serum hemopexin by chromatography on DEAE-cellulose. Journal of Chromatography A, 1972, 72, 198-201.                                              | 1.8 | 14        |
| 85 | Comparison of the Conformation of Mammalian Globins in Solution. FEBS Journal, 1972, 31, 296-299.                                                                       | 0.2 | 6         |
| 86 | Partial characterization of the heme-binding serum glycoproteins rabbit and human hemopexin. Biochemistry, 1971, 10, 1746-1750.                                         | 1.2 | 126       |
| 87 | Association-dissociation equilibria in human globin solutions. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1968, 160, 269-271.                             | 1.7 | 4         |
| 88 | A study of the conformation of human globin in solution by optical methods. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1967, 133, 527-534.                | 1.7 | 19        |