Miroslav Pohanka

List of Publications by Citations

260 papers	4,597 citations	34 h-index	54 g-index
306 ext. papers	5,284 ext. citations	2.7 avg, IF	6.88 L-index

#	Paper	IF	Citations
260	Cholinesterases, a target of pharmacology and toxicology. *Biomedical Papers of the Medical Faculty of the University Palacký, Olomouc, Czechoslovakia*, **2011**, 155, 219-29	1.7	214
259	Electrochemical biosensors - principles and applications. *Journal of Applied Biomedicine*, **2008**, 6, 57-64	0.6	184
258	Alzheimer□s disease and oxidative stress: a review. *Current Medicinal Chemistry*, **2014**, 21, 356-64	4.3	148
257	Overview of Piezoelectric Biosensors, Immunosensors and DNA Sensors and Their Applications. *Materials*, **2018**, 11,	3.5	130
256	Inhibitors of acetylcholinesterase and butyrylcholinesterase meet immunity. *International Journal of Molecular Sciences*, **2014**, 15, 9809-25	6.3	128
255	Alpha7 nicotinic acetylcholine receptor is a target in pharmacology and toxicology. *International Journal of Molecular Sciences*, **2012**, 13, 2219-38	6.3	106
254	Acetylcholinesterase inhibitors: a patent review (2008 - present). *Expert Opinion on Therapeutic Patents*, **2012**, 22, 871-86	6.8	105
253	Assessment of acetylcholinesterase activity using indoxylacetate and comparison with the standard Ellman's method. *International Journal of Molecular Sciences*, **2011**, 12, 2631-40	6.3	88
252	Role of oxidative stress in infectious diseases. A review. *Folia Microbiologica*, **2013**, 58, 503-13	2.8	85
251	A resurrection of 7-MEOTA: a comparison with tacrine. *Current Alzheimer Research*, **2013**, 10, 893-906	3	76
250	The Piezoelectric Biosensors: Principles and Applications, a Review. *International Journal of Electrochemical Science*, **2017**, 496-506	2.2	74
249	Caffeine inhibits acetylcholinesterase, but not butyrylcholinesterase. *International Journal of Molecular Sciences*, **2013**, 14, 9873-82	6.3	58
248	Synthesis and in vitro evaluation of N-alkyl-7-methoxytacrine hydrochlorides as potential cholinesterase inhibitors in Alzheimer disease. *Bioorganic and Medicinal Chemistry Letters*, **2010**, 20, 6093-5	2.9	57
247	Colorimetric dipstick for assay of organophosphate pesticides and nerve agents represented by paraoxon, sarin and VX. *Talanta*, **2010**, 81, 621-4	6.2	55
246	Iron Oxide Nanoparticles: Innovative Tool in Cancer Diagnosis and Therapy. *Advanced Healthcare Materials*, **2018**, 7, 1700932	10.1	55
245	Progress of biosensors based on cholinesterase inhibition. *Current Medicinal Chemistry*, **2009**, 16, 1790-8	4.3	54
244	Caffeine and cardiovascular diseases: critical review of current research. *European Journal of Nutrition*, **2016**, 55, 1331-43	5.2	50

243	Improvement of acetylcholinesterase-based assay for organophosphates in way of identification by reactivators. *Talanta*, **2008**, 77, 451-4	6.2	50
242	Mycotoxin assays using biosensor technology: a review. *Drug and Chemical Toxicology*, **2007**, 30, 253-61	2.3	49
241	Cholinesterases in Biorecognition and Biosensors Construction: A Review. *Analytical Letters*, **2013**, 46, 1849-1868	2.2	47
240	Piezoelectric biosensor for the determination of Tumor Necrosis Factor Alpha. *Talanta*, **2018**, 178, 970-973	6.2	44
239	Alzheimer's disease and related neurodegenerative disorders: implication and counteracting of melatonin. *Journal of Applied Biomedicine*, **2011**, 9, 185-196	0.6	41
238	Cold deep subduction recorded by remnants of a Paleoproterozoic carbonated slab. *Nature Communications*, **2018**, 9, 2790	17.4	40
237	Bacillus anthracis, Francisella tularensis and Yersinia pestis. The most important bacterial warfare agents - review. *Folia Microbiologica*, **2009**, 54, 263-72	2.8	40
236	The progress in the cholinesterase quantification methods. *Expert Opinion on Drug Discovery*, **2012**, 7, 1207-23	6.2	38
235	Mono-oxime bisquaternary acetylcholinesterase reactivators with prop-1,3-diyl linkage-Preparation, in vitro screening and molecular docking. *Bioorganic and Medicinal Chemistry*, **2011**, 19, 754-62	3.4	38
234	Oxidative Stress and Heavy Metals in Plants. *Reviews of Environmental Contamination and Toxicology*, **2018**, 245, 129-156	3.5	37
233	Amperometric Biosensors for Real Time Assays of Organophosphates. *Sensors*, **2008**, 8, 5303-5312	3.8	37
232	Oxidative stress after sulfur mustard intoxication and its reduction by melatonin: efficacy of antioxidant therapy during serious intoxication. *Drug and Chemical Toxicology*, **2011**, 34, 85-91	2.3	36
231	Passive diffusion of acetylcholinesterase oxime reactivators through the blood-brain barrier: influence of molecular structure. *Toxicology in Vitro*, **2010**, 24, 1838-44	3.6	35
230	Main streams in the Construction of Biosensors and Their Applications. *International Journal of Electrochemical Science*, **2017**, 7386-7403	2.2	34
229	Monooxime-monocarbamoyl Bispyridinium Xylene-Linked Reactivators of Acetylcholinesterase-Synthesis, In vitro and Toxicity Evaluation, and Docking Studies. *ChemMedChem*, **2010**, 5, 247-54	3.7	34
228	Diagnosis of tularemia using piezoelectric biosensor technology. *Talanta*, **2007**, 71, 981-5	6.2	34
227	Biosensors for Biological Warfare Agent Detection. *Defence Science Journal*, **2007**, 57, 185-193	1.4	34
226	Biosensors for Blood Glucose and Diabetes Diagnosis: Evolution, Construction, and Current Status. *Analytical Letters*, **2015**, 48, 2509-2532	2.2	33

225	The Spectrum of Differences between Childhood and Adulthood Celiac Disease. *Nutrients*, **2015**, 7, 8733-51	4.7	33
224	D-Lactic Acid as a Metabolite: Toxicology, Diagnosis, and Detection. *BioMed Research International*, **2020**, 2020, 3419034	3	32
223	Biosensors and Bioassays Based on Lipases, Principles and Applications, a Review. *Molecules*, **2019**, 24,	4.8	32
222	Oxidative stress in Alzheimer disease as a target for therapy. *Bratislava Medical Journal*, **2018**, 119, 535-543	1.7	32
221	Novel tacrine/acridine anticholinesterase inhibitors with piperazine and thiourea linkers. *International Journal of Biological Macromolecules*, **2014**, 70, 435-9	7.9	31
220	Butyrylcholinesterase as a biochemical marker. *Bratislava Medical Journal*, **2013**, 114, 726-34	1.7	30
219	Preparation of the pyridinium salts differing in the length of the N-alkyl substituent. *Molecules*, **2010**, 15, 1967-72	4.8	30
218	Sulfur mustard induced oxidative stress and its alteration by epigallocatechin gallate. *Toxicology Letters*, **2011**, 201, 105-9	4.4	29
217	Ferric reducing antioxidant power and square wave voltammetry for assay of low molecular weight antioxidants in blood plasma: performance and comparison of methods. *Sensors*, **2009**, 9, 9094-103	3.8	29
216	Cholinesterase biosensor construction - a review. *Protein and Peptide Letters*, **2008**, 15, 795-8	1.9	29
215	An acetylcholinesterase-based chronoamperometric biosensor for fast and reliable assay of nerve agents. *Sensors*, **2013**, 13, 11498-506	3.8	28
214	Sulfur mustard causes oxidative stress and depletion of antioxidants in muscles, livers, and kidneys of Wistar rats. *Drug and Chemical Toxicology*, **2013**, 36, 270-6	2.3	28
213	Ascorbic acid: an old player with a broad impact on body physiology including oxidative stress suppression and immunomodulation: a review. *Mini-Reviews in Medicinal Chemistry*, **2012**, 12, 35-43	3.2	28
212	Photography by Cameras Integrated in Smartphones as a Tool for Analytical Chemistry Represented by an Butyrylcholinesterase Activity Assay. *Sensors*, **2015**, 15, 13752-62	3.8	27
211	Flavonoid profile of Saskatoon berries (Amelanchier alnifolia Nutt.) and their health promoting effects. *Molecules*, **2013**, 18, 12571-86	4.8	27
210	Preparation and in vitro screening of symmetrical bis-isoquinolinium cholinesterase inhibitors bearing various connecting linkage--implications for early Myasthenia gravis treatment. *European Journal of Medicinal Chemistry*, **2011**, 46, 811-8	6.8	27
209	Antioxidants countermeasures against sulfur mustard. *Mini-Reviews in Medicinal Chemistry*, **2012**, 12, 742-8	3.2	27
208	Preparation and in vitro screening of symmetrical bispyridinium cholinesterase inhibitors bearing different connecting linkage-initial study for Myasthenia gravis implications. *Bioorganic and Medicinal Chemistry Letters*, **2010**, 20, 1763-6	2.9	27

207	Acetylcholinesterase Based Dipsticks with Indoxylacetate as a Substrate for Assay of Organophosphates and Carbamates. *Analytical Letters*, **2012**, 45, 367-374	2.2	26
206	Toxicology and the biological role of methanol and ethanol: Current view. *Biomedical Papers of the Medical Faculty of the University Palacký, Olomouc, Czechoslovakia*, **2016**, 160, 54-63	1.7	26
205	Lead toxicosis of captive vultures: case description and responses to chelation therapy. *BMC Veterinary Research*, **2013**, 9, 11	2.7	25
204	Chromogenic detection of Sarin by discolouring decomplexation of a metal coordination complex. *Chemical Communications*, **2013**, 49, 8946-8	5.8	25
203	Spectrophotometric methods based on 2,6-dichloroindophenol acetate and indoxylacetate for butyrylcholinesterase activity assay in plasma. *Talanta*, **2013**, 106, 281-5	6.2	25
202	Mycoplasma gallisepticum infection in the grey partridge Perdix perdix: outbreak description, histopathology, biochemistry and antioxidant parameters. *BMC Veterinary Research*, **2011**, 7, 34	2.7	25
201	Diagnosis of Intoxication by the Organophosphate VX: Comparison Between an Electrochemical Sensor and Ellman's Photometric Method. *Sensors*, **2008**, 8, 5229-5237	3.8	25
200	Monoclonal and polyclonal antibodies production - preparation of potent biorecognition element. *Journal of Applied Biomedicine*, **2009**, 7, 115-121	0.6	25
199	Recovery of an oxidized majorite inclusion from Earth's deep asthenosphere. *Science Advances*, **2017**, 3, e1601589	14.3	24
198	Current Trends in the Biosensors for Biological Warfare Agents Assay. *Materials*, **2019**, 12,	3.5	24
197	Piezoelectric immunosensor for the direct and rapid detection of Francisella tularensis. *Folia Microbiologica*, **2007**, 52, 325-30	2.8	24
196	Could oxime HI-6 really be considered as "broad-spectrum" antidote?. *Journal of Applied Biomedicine*, **2009**, 7, 143-149	0.6	24
195	Copper, aluminum, iron and calcium inhibit human acetylcholinesterase in vitro. *Environmental Toxicology and Pharmacology*, **2014**, 37, 455-9	5.8	23
194	Piezoelectric Immunosensor for Francisella tularensis Detection Using Immunoglobulin M in a Limiting Dilution. *Analytical Letters*, **2005**, 38, 411-422	2.2	23
193	Copper and copper nanoparticles toxicity and their impact on basic functions in the body. *Bratislava Medical Journal*, **2019**, 120, 397-409	1.7	22
192	Oxime K027: novel low-toxic candidate for the universal reactivator of nerve agent- and pesticide-inhibited acetylcholinesterase. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2010**, 25, 509-12	5.6	22
191	Quantum Dots in the Therapy: Current Trends and Perspectives. *Mini-Reviews in Medicinal Chemistry*, **2017**, 17, 650-656	3.2	21
190	Glomalin an interesting protein part of the soil organic matter. *Soil and Water Research*, **2020**, 15, 67-74	2.5	20

189	Prophylaxis and post-exposure treatment of intoxications caused by nerve agents and organophosphorus pesticides. *Mini-Reviews in Medicinal Chemistry*, **2013**, 13, 2102-15	3.2	20
188	Three-Dimensional Printing in Analytical Chemistry: Principles and Applications. *Analytical Letters*, **2016**, 49, 2865-2882	2.2	20
187	Small camera as a handheld colorimetric tool in the analytical chemistry. *Chemical Papers*, **2017**, 71, 1553-1561	1.5	19
186	Therapeutical strategies for anxiety and anxiety-like disorders using plant-derived natural compounds and plant extracts. *Biomedicine and Pharmacotherapy*, **2017**, 95, 437-446	7.5	19
185	Nerve Agents Assay Using Cholinesterase Based Biosensor. *Electroanalysis*, **2009**, 21, 1177-1182	3	19
184	Amperometric Biosensor for Evaluation of Competitive Cholinesterase Inhibition by the Reactivator HI-6. *Analytical Letters*, **2007**, 40, 2351-2359	2.2	19
183	Inhibition of Acetylcholinesterase and Butyrylcholinesterase by a Plant Secondary Metabolite Boldine. *BioMed Research International*, **2018**, 2018, 9634349	3	18
182	Voltammetric assay of butyrylcholinesterase in plasma samples and its comparison to the standard spectrophotometric test. *Talanta*, **2014**, 119, 412-6	6.2	18
181	Serological Diagnosis of Tularemia in Mice Using the Amperometric Immunosensor. *Electroanalysis*, **2007**, 19, 2507-2512	3	18
180	Macrophage-assisted inflammation and pharmacological regulation of the cholinergic anti-inflammatory pathway. *Current Medicinal Chemistry*, **2011**, 18, 539-51	4.3	17
179	Tularemia induces different biochemical responses in BALB/c mice and common voles. *BMC Infectious Diseases*, **2009**, 9, 101	4	17
178	Rapid Characterization of Monoclonal Antibodies using the Piezoelectric Immunosensor. *Sensors*, **2007**, 7, 341-353	3.8	17
177	Chemical warfare agents. *Exs*, **2010**, 100, 543-58		17
176	Spectrophotomeric Assay of Aflatoxin B1 Using Acetylcholinesterase Immobilized on Standard Microplates. *Analytical Letters*, **2013**, 46, 1306-1315	2.2	16
175	Effect of five acetylcholinesterase reactivators on tabun-intoxicated rats: induction of oxidative stress versus reactivation efficacy. *Journal of Applied Toxicology*, **2009**, 29, 483-8	4.1	16
174	Preparation, in vitro screening and molecular modelling of symmetrical 4-tert-butylpyridinium cholinesterase inhibitors--analogues of SAD-128. *Bioorganic and Medicinal Chemistry Letters*, **2011**, 21, 150-4	2.9	16
173	Combined exposure to cyanobacterial biomass, lead and the Newcastle virus enhances avian toxicity. *Science of the Total Environment*, **2010**, 408, 4984-92	10.2	16
172	Possibility of Acetylcholinesterase Overexpression in Alzheimer Disease Patients after Therapy with Acetylcholinesterase Inhibitors. *Acta Medica (Hradec Kralove)*, **2015**, 58, 37-42	0.8	16

171	Biosensors containing acetylcholinesterase and butyrylcholinesterase as recognition tools for detection of various compounds. *Chemical Papers*, **2015**, 69,	1.9	15
170	Novel bisquaternary oximes--reactivation of acetylcholinesterase and butyrylcholinesterase inhibited by paraoxon. *Molecules*, **2009**, 14, 4915-21	4.8	15
169	Effect of several new and currently available oxime cholinesterase reactivators on tabun-intoxicated rats. *International Journal of Molecular Sciences*, **2008**, 9, 2243-52	6.3	15
168	Piezoelectric Biosensor for a Simple Serological Diagnosis of Tularemia in Infected European Brown Hares (Lepus europaeus). *Sensors*, **2007**, 7, 2825-2834	3.8	15
167	Shift of oxidants and antioxidants levels in rats as a reaction to exposure to sulfur mustard. *Journal of Applied Toxicology*, **2009**, 29, 643-7	4.1	14
166	Colorimetric hand-held sensors and biosensors with a small digital camera as signal recorder, a review. *Reviews in Analytical Chemistry*, **2020**, 39, 20-30	2.3	14
165	Evaluation of antioxidant activity, polyphenolic compounds, amino acids and mineral elements of representative genotypes of Lonicera edulis. *Molecules*, **2014**, 19, 6504-23	4.8	13
164	Automated assay of the potency of natural antioxidants using pipetting robot and spectrophotometry. *Journal of Applied Biomedicine*, **2012**, 10, 155-167	0.6	13
163	Synthesis and In Vitro Evaluation of New Tacrine Derivates-Bis-Alkylene Linked 7-MEOTA. *Letters in Organic Chemistry*, **2010**, 7, 327-331	0.6	13
162	Cholinesterase based amperometric biosensors for assay of anticholinergic compounds. *Interdisciplinary Toxicology*, **2009**, 2, 52-4	2.3	13
161	Photometric microplate assay for estimation of the efficacy of paraoxon-inhibited acetylcholinesterase reactivation. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2008**, 23, 781-4	5.6	13
160	Label-free piezoelectric immunosensor for rapid assay of Escherichia coli. *Journal of Immunoassay and Immunochemistry*, **2008**, 29, 70-9	1.8	13
159	The perspective of caffeine and caffeine derived compounds in therapy. *Bratislava Medical Journal*, **2015**, 116, 520-30	1.7	12
158	Aflatoxin Assay Using an Amperometric Sensor Strip and Acetylcholinesterase as Recognition Element. *Sensor Letters*, **2008**, 6, 450-453	0.9	12
157	Biosensors Based on Semiconductors, a Review. *International Journal of Electrochemical Science*, **2017**, 6611-6621	2.2	11
156	TRPV currents and their role in the nociception and neuroplasticity. *Neuropeptides*, **2016**, 57, 1-8	3.3	11
155	Anti-Parkinson Drug Biperiden Inhibits Enzyme Acetylcholinesterase. *BioMed Research International* , **2017**, 2017, 2532764	3	11
154	Pharmacokinetics of acetylcholinesterase reactivator K203 and consequent evaluation of low molecular weight antioxidants/markers of oxidative stress. *Journal of Applied Biomedicine*, **2012**, 10, 71-78	0.6	11

153	Square wave voltammetry on screen printed electrodes: comparison to ferric reducing antioxidant power in plasma from model laboratory animal (Grey Partridge) and comparison to standard antioxidants. *Journal of Applied Biomedicine*, **2011**, 9, 103-109	0.6	11
152	Testicular toxicity of cyanobacterial biomass in Japanese quails. *Harmful Algae*, **2011**, 10, 612-618	5.3	11
151	Biochemical responses and oxidative stress in Francisella tularensis infection: a European brown hare model. *Acta Veterinaria Scandinavica*, **2011**, 53, 2	2	11
150	Reactivation of human acetylcholinesterase and butyrylcholinesterase inhibited by leptophos-oxon with different oxime reactivators in vitro. *International Journal of Molecular Sciences*, **2010**, 11, 2856-63	6.3	11
149	Effect of seven newly synthesized and currently available oxime cholinesterase reactivators on cyclosarin-intoxicated rats. *International Journal of Molecular Sciences*, **2009**, 10, 3065-75	6.3	11
148	Investigation of oxidative stress in blood, brain, kidney, and liver after oxime antidote HI-6 application in a mouse experimental model. *Drug and Chemical Toxicology*, **2011**, 34, 255-60	2.3	11
147	Sensors Based on Molecularly Imprinted Polymers. *International Journal of Electrochemical Science*,8082-8094	2.2	11
146	Chemical warfare agents. *Exs*, **2010**, 543-558		11
145	Electrochemical Biosensors based on Acetylcholinesterase and Butyrylcholinesterase. A Review. *International Journal of Electrochemical Science*, **2016**, 7440-7452	2.2	11
144	Susceptibility of selected murine and microtine species to infection by a wild strain of Francisella tularensis subsp. holoarctica. *Veterinarni Medicina*, **2009**, 54, 64-74	0.7	10
143	Vaccination to Alzheimer Disease. Is it a Promising Tool or a Blind Way?. *Current Medicinal Chemistry* , **2016**, 23, 1432-41	4.3	10
142	Evaluation of Immunoglobulin Production during Tularaemia Infection in BALB/c Mouse Model. *Acta Veterinaria Brno*, **2007**, 76, 579-584	0.8	10
141	QCM immunosensor for the determination of Staphylococcus aureus antigen. *Chemical Papers*, **2020**, 74, 451-458	1.9	10
140	Digital camera-based lipase biosensor for the determination of paraoxon. *Sensors and Actuators B: Chemical*, **2018**, 273, 610-615	8.5	10
139	Changes in the oxidative stress/anti-oxidant system after exposure to sulfur mustard and antioxidant strategies in the therapy, a review. *Toxicology Mechanisms and Methods*, **2017**, 27, 408-416	3.6	9
138	Attenuation of radiation-induced gastrointestinal damage by epidermal growth factor and bone marrow transplantation in mice. *International Journal of Radiation Biology*, **2015**, 91, 703-14	2.9	9
137	Immunoassay of interferon gamma by quartz crystal microbalance biosensor. *Talanta*, **2020**, 218, 121167	6.2	9
136	Low molecular weight precursor applicable for Alzheimer disease drugs synthesis (AChE and BChE inhibition, BACE inhibition, antioxidant properties and in silico modulation). *Journal of Applied Biomedicine*, **2014**, 12, 285-290	0.6	9

135	Preparation and performance of a colorimetric biosensor using acetylcholinesterase and indoxylacetate for assay of nerve agents and drugs. *Interdisciplinary Toxicology*, **2014**, 7, 215-8	2.3	9
134	Construction of an Acetylcholinesterase Sensor Based on Synthesized Paramagnetic Nanoparticles, a Simple Tool for Neurotoxic Compounds Assay. *Sensors*, **2017**, 17,	3.8	9
133	Acute poisoning with sarin causes alteration in oxidative homeostasis and biochemical markers in Wistar rats. *Journal of Applied Biomedicine*, **2012**, 10, 187-193	0.6	9
132	Metrifonate alters antioxidant levels and caspase activity in cerebral cortex of Wistar rats. *Toxicology Mechanisms and Methods*, **2011**, 21, 585-90	3.6	9
131	The preparation, in vitro screening and molecular docking of symmetrical bisquaternary cholinesterase inhibitors containing a but-(2E)-en-1,4-diyl connecting linkage. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2011**, 26, 245-53	5.6	9
130	Detection of Aflatoxins in Capsicum Spice Using an Electrochemical Immunosensor. *Analytical Letters*, **2008**, 41, 2344-2353	2.2	9
129	Current and emerging assays for Francisella tularensis detection: a review. *Veterinarni Medicina*, **2008**, 53, 585-594	0.7	9
128	The effects of caffeine on the cholinergic system. *Mini-Reviews in Medicinal Chemistry*, **2014**, 14, 543-9	3.2	9
127	Electrochemical Methods for Study of Influence of Selenium Nanoparticles on Antioxidant Status of Rats. *International Journal of Electrochemical Science*, **2016**, 2799-2824	2.2	9
126	Evaluation of the benefit of the bispyridinium compound MB327 for the antidotal treatment of nerve agent-poisoned mice. *Toxicology Mechanisms and Methods*, **2016**, 26, 334-9	3.6	9
125	Piezoelectric Immunosensor for the Determination of C- Reactive Protein. *International Journal of Electrochemical Science*, **2019**, 8470-8478	2.2	8
124	Evaluation of 2,6-dichlorophenolindophenol acetate as a substrate for acetylcholinesterase activity assay. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2015**, 30, 796-9	5.6	8
123	Oxidative stress and liver damage in birds exposed to diclofenac and lead. *Acta Veterinaria Brno*, **2014**, 83, 299-304	0.8	8
122	Investigating the influence of taurine on thiol antioxidant status in Wistar rats with a multi-analytical approach. *Journal of Applied Biomedicine*, **2014**, 12, 97-110	0.6	8
121	Toxicological scoring of Alzheimer's disease drug huperzine in a guinea pig model. *Toxicology Mechanisms and Methods*, **2012**, 22, 231-5	3.6	8
120	Tularemia progression accompanied with oxidative stress and antioxidant alteration in spleen and liver of BALB/c mice. *Journal of Microbiology*, **2012**, 50, 401-8	3	8
119	In Vitro Screening of Blood-Brain Barrier Penetration of Monoquaternary Acetylcholinesterase Reactivators. *Analytical Letters*, **2010**, 43, 1516-1524	2.2	8
118	Evaluation of cholinesterase activities during in vivo intoxication using an electrochemical sensor strip - correlation with intoxication symptoms. *Sensors*, **2009**, 9, 3627-34	3.8	8

117	Sarin Assay using Acetylcholinesterases and Electrochemical Sensor Strip. *Defence Science Journal*, **2009**, 59, 300-304	1.4	8
116	Point-of-Care Diagnoses and Assays Based on Lateral Flow Test. *International Journal of Analytical Chemistry*, **2021**, 2021, 1-9	1.4	8
115	New performance of biosensor technology for Alzheimer's disease drugs: in vitro comparison of tacrine and 7-methoxytacrine. *Neuroendocrinology Letters*, **2008**, 29, 755-8	0.3	8
114	Pralidoxime--the gold standard of acetylcholinesterase reactivators--reactivation in vitro efficacy. *Bratislava Medical Journal*, **2010**, 111, 502-4	1.7	8
113	Assay of Glomalin Using a Quartz Crystal Microbalance Biosensor. *Electroanalysis*, **2018**, 30, 453-458	3	7
112	Acetylcholinesterase Inhibitors Assay Using Colorimetric pH Sensitive Strips and Image Analysis by a Smartphone. *International Journal of Analytical Chemistry*, **2017**, 2017, 3712384	1.4	7
111	Acetylcholinesterase based assay of eleven organophosphorus pesticides: finding of assay limitations. *International Journal of Environmental Analytical Chemistry*, **2012**, 92, 125-132	1.8	7
110	Sulfur mustard induced oxidative stress and its alteration using asoxime (HI-6). *Interdisciplinary Toxicology*, **2013**, 6, 198-202	2.3	7
109	Asoxime (HI-6) impact on dogs after one and tenfold therapeutic doses: assessment of adverse effects, distribution, and oxidative stress. *Environmental Toxicology and Pharmacology*, **2011**, 32, 75-81	5.8	7
108	Reactivation of VX-inhibited AChE by novel oximes having two oxygen atoms in the linker. *Environmental Toxicology and Pharmacology*, **2010**, 30, 85-7	5.8	7
107	Changes of rat plasma total low molecular weight antioxidant level after tabun exposure and consequent treatment by acetylcholinesterase reactivators. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2011**, 26, 93-7	5.6	7
106	Reactivation of human brain homogenate cholinesterases inhibited by Tabun using newly developed oximes K117 and K127. *Basic and Clinical Pharmacology and Toxicology*, **2009**, 105, 207-10	3.1	7
105	In vitro identification of novel acetylcholinesterase reactivators. *Toxin Reviews*, **2009**, 28, 238-244	2.3	7
104	Evaluation of aflatoxin B1--acetylcholinesterase dissociation kinetic using the amperometric biosensor technology: prospect for toxicity mechanism. *Protein and Peptide Letters*, **2010**, 17, 340-2	1.9	7
103	Sensor System Based on Acetylcholinesterase in Homogenous Phase for Analysis of Paraoxon. *Analytical Letters*, **2008**, 41, 2214-2223	2.2	7
102	Adsorption of Copper in Soil and its Dependence on Physical and Chemical Properties. *Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, **2018**, 66, 219-224	0.5	7
101	Inhibitors of Cholinesterases in Pharmacology: the Current Trends. *Mini-Reviews in Medicinal Chemistry*, **2020**, 20, 1532-1542	3.2	7
100	Oxidative stress response of rainbow trout (Oncorhynchus mykiss) to multiple stressors. *Acta Veterinaria Brno*, **2018**, 87, 55-64	0.8	7

99	Glycated Hemoglobin and Methods for Its Point of Care Testing. *Biosensors*, **2021**, 11,	5.9	7
98	Color Change of Phenol Red by Integrated Smart Phone Camera as a Tool for the Determination of Neurotoxic Compounds. *Sensors*, **2016**, 16,	3.8	7
97	Colorimetric Glucose Assay Based on Magnetic Particles Having Pseudo-peroxidase Activity and Immobilized Glucose Oxidase. *Molecular Biotechnology*, **2016**, 58, 373-80	3	7
96	Colorimetric sensor based on bubble wrap and camera phone for glucose determination. *Journal of Applied Biomedicine*, **2016**, 14, 315-319	0.6	6
95	Colorimetric sol gel based biosensor platform for determination of reduced glutathione. *Sensors and Actuators B: Chemical*, **2016**, 236, 442-449	8.5	6
94	Effect of selenium in organic and inorganic form on liver, kidney, brain and muscle of Wistar rats. *Open Chemistry*, **2012**, 10, 1442-1451	1.6	6
93	Impact of melatonin on immunity: a review. *Open Medicine (Poland)*, **2013**, 8, 369-376	2.2	6
92	Screen Printed Electrodes in Biosensors and Bioassays. A Review. *International Journal of Electrochemical Science*,11024-11035	2.2	6
91	Biological warfare agents. *Exs*, **2010**, 559-578		6
90	Electrochemical Determination of Activity of Acetylcholinesterase Immobilized on Magnetic Particles. *International Journal of Electrochemical Science*, **2016**, 4840-4849	2.2	6
89	The effect of HI-6 on cholinesterases and on the cholinergic system of the rat bladder. *Neuroendocrinology Letters*, **2008**, 29, 759-62	0.3	6
88	Fast and simple glucose assay based on filter paper as enzymes carrier using phone camera detection. *Chemical Papers*, **2018**, 72, 2719-2728	1.9	5
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