

S Z Bathaie

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3606634/publications.pdf>

Version: 2024-02-01

117
papers

3,787
citations

101496

36
h-index

143943

57
g-index

127
all docs

127
docs citations

127
times ranked

4703
citing authors

#	ARTICLE	IF	CITATIONS
1	New Applications and Mechanisms of Action of Saffron and its Important Ingredients. <i>Critical Reviews in Food Science and Nutrition</i> , 2010, 50, 761-786.	5.4	219
2	Electrochemical aptamer/antibody based sandwich immunosensor for the detection of EGFR, a cancer biomarker, using gold nanoparticles as a signaling probe. <i>Biosensors and Bioelectronics</i> , 2015, 74, 491-497.	5.3	155
3	Saffron and natural carotenoids: Biochemical activities and anti-tumor effects. <i>Biochimica Et Biophysica Acta: Reviews on Cancer</i> , 2014, 1845, 20-30.	3.3	146
4	Crocins Triggers the Apoptosis Through Increasing the Bax/Bcl-2 Ratio and Caspase Activation in Human Gastric Adenocarcinoma, <i>AGS, Cells. DNA and Cell Biology</i> , 2013, 32, 50-57.	0.9	140
5	Electrochemically fabricated polypyrrole nanofiber-modified electrode as a new electrochemical DNA biosensor. <i>Biosensors and Bioelectronics</i> , 2008, 23, 1825-1831.	5.3	137
6	Effect of Crocin on the Insulin Resistance and Lipid Profile of Streptozotocin-Induced Diabetic Rats. <i>Phytotherapy Research</i> , 2013, 27, 1042-1047.	2.8	135
7	Mevalonate Pathway and Human Cancers. <i>Current Molecular Pharmacology</i> , 2017, 10, 77-85.	0.7	103
8	Interaction of Saffron Carotenoids as Anticancer Compounds with ctDNA, Oligo (dG.dC) ₁₅ , and Oligo (dA.dT) ₁₅ . <i>DNA and Cell Biology</i> , 2007, 26, 533-540.	0.9	97
9	Anticancer effects of crocetin in both human adenocarcinoma gastric cancer cells and rat model of gastric cancer. <i>Biochemistry and Cell Biology</i> , 2013, 91, 397-403.	0.9	97
10	Effect of exposure parameters on cavitation induced by low-level dual-frequency ultrasound. <i>Ultrasonics Sonochemistry</i> , 2007, 14, 783-789.	3.8	90
11	A review of the chemistry and uses of crocins and crocetin, the carotenoid natural dyes in saffron, with particular emphasis on applications as colorants including their use as biological stains. <i>Biotechnic and Histochemistry</i> , 2014, 89, 401-411.	0.7	89
12	Energetic and binding properties of DNA upon interaction with dodecyl trimethylammonium bromide. <i>Nucleic Acids Research</i> , 1999, 27, 1001-1005.	6.5	73
13	Electrocatalytic oxidation of glucose at a Ni-curcumin modified glassy carbon electrode. <i>Journal of Solid State Electrochemistry</i> , 2006, 11, 273-282.	1.2	73
14	Retinoids and their biological effects against cancer. <i>International Immunopharmacology</i> , 2014, 18, 43-49.	1.7	70
15	The protective effect of crocin on the amyloid fibril formation of A β 242 peptide in vitro. <i>Cellular and Molecular Biology Letters</i> , 2013, 18, 328-39.	2.7	66
16	Microcalorimetry, energetics and binding studies of DNA-dimethyltin dichloride complexes. <i>Thermochimica Acta</i> , 2004, 414, 233-241.	1.2	64
17	Recent progress in the study of the Rheb family GTPases. <i>Cellular Signalling</i> , 2014, 26, 1950-1957.	1.7	64
18	Aptamer-functionalized Fe ₃ O ₄ @MOF nanocarrier for targeted drug delivery and fluorescence imaging of the triple-negative MDA-MB-231 breast cancer cells. <i>Journal of Solid State Chemistry</i> , 2020, 292, 121680.	1.4	62

#	ARTICLE	IF	CITATIONS
19	The effect of carotenoids obtained from saffron on histone H1 structure and H1â€“DNA interaction. <i>International Journal of Biological Macromolecules</i> , 2005, 36, 246-252.	3.6	56
20	Electrochemical investigation of neutral red binding to DNA at the surface. <i>Electrochemistry Communications</i> , 2004, 6, 1114-1118.	2.3	54
21	Saffron Aqueous Extract Prevents Metabolic Syndrome in Patients with Schizophrenia on Olanzapine Treatment: A Randomized Triple Blind Placebo Controlled Study. <i>Pharmacopsychiatry</i> , 2014, 47, 156-161.	1.7	53
22	Saffron Aqueous Extract Inhibits the Chemically-induced Gastric Cancer Progression in the Wistar Albino Rat. <i>Iranian Journal of Basic Medical Sciences</i> , 2013, 16, 27-38.	1.0	52
23	Immunosuppressive activity of a molecule isolated from <i>Artemisia annua</i> on DTH responses compared with cyclosporin A. <i>International Immunopharmacology</i> , 2004, 4, 1301-1306.	1.7	51
24	The improvement effect of L-lys as a chemical chaperone on STZ-induced diabetic rats, protein structure and function. <i>Diabetes/Metabolism Research and Reviews</i> , 2008, 24, 64-73.	1.7	51
25	Effect of Crocin on Cell Cycle Regulators in Nitroso-N-Methylurea-Induced Breast Cancer in Rats. <i>DNA and Cell Biology</i> , 2015, 34, 684-691.	0.9	48
26	Glycine therapy inhibits the progression of cataract in streptozotocin-induced diabetic rats. <i>Molecular Vision</i> , 2012, 18, 439-48.	1.1	47
27	A novel potentiometric sensor for selective determination of theophylline: Theoretical and practical investigations. <i>Analytica Chimica Acta</i> , 2005, 548, 192-198.	2.6	46
28	DNA immobilization on a polypyrrole nanofiber modified electrode and its interaction with salicylic acid/aspirin. <i>Analytical Biochemistry</i> , 2011, 411, 176-184.	1.1	45
29	Enhancement and control of acoustic cavitation yield by low-level dual frequency sonication: A subharmonic analysis. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 394-400.	3.8	44
30	Electrochemical DNA nano-biosensor for the study of spermidineâ€“DNA interaction. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2009, 49, 587-593.	1.4	43
31	Studies of thermostability in <i>Camelus bactrianus</i> (Bactrian camel) single-domain antibody specific for the mutant epidermal-growth-factor receptor expressed by <i>Pichia</i> . <i>Biotechnology and Applied Biochemistry</i> , 2007, 46, 41.	1.4	42
32	Electrochemical studies of DNA immobilization onto the azide-terminated monolayers and its interaction with taxol. <i>Analytical Biochemistry</i> , 2008, 375, 331-338.	1.1	42
33	Crocin improved locomotor function and mechanical behavior in the rat model of contused spinal cord injury through decreasing calcitonin gene related peptide (CGRP). <i>Phytomedicine</i> , 2013, 21, 62-67.	2.3	42
34	Effects of crocin and saffron aqueous extract on gene expression of SIRT1, AMPK, LOX1, NF- κ B, and MCP-1 in patients with coronary artery disease: A randomized placebo-controlled clinical trial. <i>Phytotherapy Research</i> , 2020, 34, 1114-1122.	2.8	41
35	Cadmium nanoclusters in a protein matrix: Synthesis, characterization, and application in targeted drug delivery and cellular imaging. <i>Nano Research</i> , 2016, 9, 3229-3246.	5.8	40
36	Studies on mechanism of 8-methoxypsoralenâ€“DNA interaction in the dark. <i>International Journal of Pharmaceutics</i> , 2002, 237, 47-55.	2.6	38

#	ARTICLE	IF	CITATIONS
37	Saffron and crocin improved appetite, dietary intakes and body composition in patients with coronary artery disease. <i>Journal of Cardiovascular and Thoracic Research</i> , 2017, 9, 200-208.	0.3	38
38	Effect of spermine on lipid profile and HDL functionality in the streptozotocin-induced diabetic rat model. <i>Life Sciences</i> , 2008, 82, 301-307.	2.0	37
39	Treatment of Murine Tumors Using Dual-Frequency Ultrasound in an Experimental in Vivo Model. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, 756-763.	0.7	37
40	Cytosolic and mitochondrial ROS production resulted in apoptosis induction in breast cancer cells treated with Crocin: The role of FOXO3a, PTEN and AKT signaling. <i>Biochemical Pharmacology</i> , 2020, 177, 113999.	2.0	37
41	Effect of local dual frequency sonication on drug distribution from polymeric nanomicelles. <i>Ultrasonics Sonochemistry</i> , 2011, 18, 1165-1171.	3.8	34
42	Is There Any Interaction Between Telomeric DNA Structures, G-Quadruplex and I-Motif, with Saffron Active Metabolites?. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2012, 31, 801-812.	0.4	34
43	The effect of hot-tub therapy on serum Hsp70 level and its benefit on diabetic rats: A preliminary report. <i>International Journal of Hyperthermia</i> , 2010, 26, 577-585.	1.1	33
44	Investigation of the Mechanisms Involved in the High-Dose and Long-Term Acetyl Salicylic Acid Therapy of Type I Diabetic Rats. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2008, 324, 850-857.	1.3	31
45	Interaction of an Fe derivative of TMAP (Fe(TMAP)OAc) with DNA in comparison with free-base TMAP. <i>International Journal of Biological Macromolecules</i> , 2007, 41, 173-179.	3.6	28
46	Interaction of Safranal and Picrocrocin with ctDNA and Their Preferential Mechanisms of Binding to GC- and AT-Rich Oligonucleotides. <i>DNA and Cell Biology</i> , 2008, 27, 665-673.	0.9	28
47	An electrochemical study of neutral red-DNA interaction. <i>Electrochimica Acta</i> , 2005, 51, 1108-1116.	2.6	27
48	The dual behavior of heat shock protein 70 and asymmetric dimethylarginine in relation to serum CRP levels in type 2 diabetes. <i>Gene</i> , 2012, 498, 107-111.	1.0	27
49	The synergistic effect of antiglycating agents (MB-92) on inhibition of protein glycation, misfolding and diabetic complications in diabetic-atherosclerotic rat. <i>European Journal of Medicinal Chemistry</i> , 2016, 121, 892-902.	2.6	26
50	Mechanisms of the Effects of Crocin on Aggregation and Deposition of A β 1-40 Fibrils in Alzheimer's Disease. <i>International Journal of Peptide Research and Therapeutics</i> , 2012, 18, 347-351.	0.9	25
51	Inhibitory Effect of Crocin(s) on Lens α -Crystallin Glycation and Aggregation, Results in the Decrease of the Risk of Diabetic Cataract. <i>Molecules</i> , 2016, 21, 143.	1.7	25
52	Histone H1 Structural Changes and its Interaction with DNA in the Presence of High Glucose Concentration <i>In Vivo</i> and <i>In Vitro</i> . <i>Journal of Biomolecular Structure and Dynamics</i> , 2011, 28, 575-586.	2.0	24
53	Spectroscopic studies of the interaction of aspirin and its important metabolite, salicylate ion, with DNA, A \cdot T and G \cdot C rich sequences. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2010, 77, 1077-1083.	2.0	22
54	A new DNA-nanobiosensor based on G-quadruplex immobilized on carbon nanotubes modified glassy carbon electrode. <i>Electrochimica Acta</i> , 2012, 82, 143-151.	2.6	22

#	ARTICLE	IF	CITATIONS
55	A mechanistic study of the histone H1-DNA complex dissociation by sodium dodecyl sulfate. <i>Colloids and Surfaces B: Biointerfaces</i> , 2003, 28, 17-25.	2.5	21
56	Evaluation of correlation between chemical dosimetry and subharmonic spectrum analysis to examine the acoustic cavitation. <i>Ultrasonics Sonochemistry</i> , 2010, 17, 863-869.	3.8	21
57	Effects of Saffron Aqueous Extract and Its Main Constituent, Crocin, on Health-Related Quality of Life, Depression, and Sexual Desire in Coronary Artery Disease Patients: A Double-Blind, Placebo-Controlled, Randomized Clinical Trial. <i>Iranian Red Crescent Medical Journal</i> , 2017, 19, .	0.5	21
58	Bioinformatic prediction and experimental validation of a PE38-based recombinant immunotoxin targeting the Fn14 receptor in cancer cells. <i>Immunotherapy</i> , 2017, 9, 387-400.	1.0	20
59	Effect of Chemical Chaperones on Glucose-Induced Lysozyme Modifications. <i>Protein Journal</i> , 2011, 30, 480-489.	0.7	18
60	Chemo-immunotherapy using saffron and its ingredients followed by E7-NT (gp96) DNA vaccine generates different anti-tumor effects against tumors expressing the E7 protein of human papillomavirus. <i>Archives of Virology</i> , 2015, 160, 499-508.	0.9	18
61	Different Pain States of Trigeminal Neuralgia Make Significant Changes in the Plasma Proteome and Some Biochemical Parameters: a Preliminary Cohort Study. <i>Journal of Molecular Neuroscience</i> , 2018, 66, 524-534.	1.1	18
62	Saffron carotenoids change the superoxide dismutase activity in breast cancer: In vitro, in vivo and in silico studies. <i>International Journal of Biological Macromolecules</i> , 2020, 158, 845-853.	3.6	18
63	Investigation of the mechanism(s) involved in decreasing increased fibrinogen activity in hyperglycemic conditions using L-lysine supplementation. <i>Thrombosis Research</i> , 2012, 130, e13-e19.	0.8	17
64	Anticancer Effect and Molecular Targets of Saffron Carotenoids. <i>The Enzymes</i> , 2014, 36, 57-86.	0.7	17
65	Saffron carotenoids (crocin and crocetin) binding to human serum albumin as investigated by different spectroscopic methods and molecular docking. <i>Journal of Biomolecular Structure and Dynamics</i> , 2018, 36, 1681-1690.	2.0	16
66	The effect of crocetin supplementation on markers of atherogenic risk in patients with coronary artery disease: a pilot, randomized, double-blind, placebo-controlled clinical trial. <i>Food and Function</i> , 2019, 10, 7461-7475.	2.1	16
67	Comparative Study on The Preventive Effect of Saffron Carotenoids, Crocin and Crocetin, in NMU-Induced Breast Cancer in Rats. <i>Cell Journal</i> , 2017, 19, 94-101.	0.2	16
68	L-cysteine is a potent inhibitor of protein glycation on both albumin and LDL, and prevents the diabetic complications in diabetic atherosclerotic rat. <i>Food Research International</i> , 2014, 62, 909-916.	2.9	15
69	Novel imidazolyl derivatives of 1,8-acridinedione as potential DNA-intercalating agents. <i>Journal of the Iranian Chemical Society</i> , 2011, 8, 1098-1112.	1.2	14
70	Structural study on immunoglobulin G solution after pasteurization with and without stabilizer. <i>Transfusion Medicine</i> , 2008, 18, 62-70.	0.5	13
71	Preparation of a new nanobiosensor for the determination of some biogenic polyamines and investigation of their interaction with DNA. <i>Biosensors and Bioelectronics</i> , 2016, 77, 767-773.	5.3	13
72	Prevention of β -crystallin glycation and aggregation using L-lysine results in the inhibition of in vitro catalase heat-induced-aggregation and suppression of cataract formation in the diabetic rat. <i>International Journal of Biological Macromolecules</i> , 2019, 132, 1200-1207.	3.6	13

#	ARTICLE	IF	CITATIONS
73	Interaction of saffron carotenoids with catalase: <i>in vitro</i> , <i>in vivo</i> and molecular docking studies. <i>Journal of Biomolecular Structure and Dynamics</i> , 2020, 38, 3916-3926.	2.0	13
74	How Phytochemicals Prevent Chemical Carcinogens and/or Suppress Tumor Growth?. <i>The Enzymes</i> , 2015, 37, 1-42.	0.7	12
75	Isolation and characterization of the primary epithelial breast cancer cells and the adjacent normal epithelial cells from Iranian women's breast cancer tumors. <i>Cytotechnology</i> , 2018, 70, 625-639.	0.7	12
76	The Preventive Effect of L-Lysine on Lysozyme Glycation in Type 2 Diabetes. <i>Acta Medica Iranica</i> , 2016, 54, 24-31.	0.8	12
77	L-lysine protects C2C12 myotubes and 3T3-L1 adipocytes against high glucose damages and stresses. <i>PLoS ONE</i> , 2019, 14, e0225912.	1.1	11
78	The Role of BiP and the IRE1 α -XBP1 Axis in Rhabdomyosarcoma Pathology. <i>Cancers</i> , 2021, 13, 4927.	1.7	11
79	Design and characterization of a chimeric multiepitope construct containing <sc>C</sc>fa<sc>B</sc>, heat-stable toxoid, <sc>C</sc>ss<sc>A</sc>, <sc>C</sc>ss<sc>B</sc>, and heat-labile toxin subunit <sc>B</sc> of enterotoxigenic <sc>E</sc>scherichia coli: a bioinformatic approach. <i>Biotechnology and Applied Biochemistry</i> , 2014, 61, 517-527.	1.4	10
80	Comparison of the Chaperoning Action of Glycerol and β -Casein on Aggregation of Proteins in the Presence of Crowding Agent. <i>International Journal of Peptide Research and Therapeutics</i> , 2011, 17, 101-111.	0.9	9
81	Preparation, purification and virus inactivation of intravenous immunoglobulin from human plasma. <i>Human Antibodies</i> , 2010, 19, 1-6.	0.6	8
82	A Noninvasive Method for Early Detection of MNNG-Induced Gastric Cancer of Male Wistar rat: Ultrasonic Study. <i>Ultrasound in Medicine and Biology</i> , 2011, 37, 780-787.	0.7	8
83	Interaction Between DNA and Some Salicylic Acid Derivatives and Characterization of Their DNA Targets. <i>Electroanalysis</i> , 2013, 25, 2547-2556.	1.5	8
84	BSA-templated Pb Nanocluster as a Biocompatible Signaling Probe for Electrochemical EGFR Immunosensing. <i>Electroanalysis</i> , 2017, 29, 861-872.	1.5	8
85	Homogenate Extraction of Crocins from Saffron Optimized by Response Surface Methodology. <i>Journal of Chemistry</i> , 2018, 2018, 1-6.	0.9	8
86	Crocetin ameliorates non-alcoholic fatty liver disease by modulating mitochondrial dysfunction in L02 cells and zebrafish model. <i>Journal of Ethnopharmacology</i> , 2022, 285, 114873.	2.0	8
87	The effect of post-burn local hyperthermia on the reducing burn injury: The possible role of opioids. <i>International Journal of Hyperthermia</i> , 2006, 22, 421-431.	1.1	7
88	In Situ Synthesis of a Novel Quinone Imine Self-Assembled Monolayer and Consideration of Its Reactivity with <sc>L</sc>-arginine. <i>Electroanalysis</i> , 2012, 24, 1362-1373.	1.5	7
89	Probing redox reaction of azurin protein immobilized on hydroxyl-terminated self-assembled monolayers with different lengths. <i>Journal of Electroanalytical Chemistry</i> , 2015, 755, 27-38.	1.9	7
90	L-lysine supplementation improved glycemic control, decreased protein glycation, and insulin resistance in type 2 diabetic patients. <i>International Journal of Diabetes in Developing Countries</i> , 2021, 41, 634-643.	0.3	7

#	ARTICLE	IF	CITATIONS
91	Spectroscopic studies of STZ-induced methylated-DNA in both in vivo and in vitro conditions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 71, 803-808.	2.0	6
92	Comparative study of the interaction of meso-tetrakis (N-para-trimethyl-anilium) porphyrin (TMAP) in its free base and Fe derivative form with oligo(dA.dT) ₁₅ and oligo(dG.dC) ₁₅ . Journal of Biomolecular Structure and Dynamics, 2015, 33, 1598-1611.	2.0	6
93	The <i>in silico</i> mechanism of hVKOR interaction with acetaminophen and its metabolite, as well as N-acetyl cysteine: caution on application in COVID-19 patients. Journal of Biomolecular Structure and Dynamics, 2022, 40, 8274-8285.	2.0	6
94	Semi-empirical quantum chemical study of the interactions between lysine, arginine and histidine with a homologue set of n-alkyl sulfates in the gas phase and aqueous solution. Computational and Theoretical Chemistry, 2004, 678, 163-169.	1.5	5
95	OUP accepted manuscript. Protein Engineering, Design and Selection, 2017, 30, 39-45.	1.0	5
96	Theoretical investigation on the binding of lysine-containing peptides with dodecyl sulfate ion using semi-empirical calculations. Computational and Theoretical Chemistry, 2007, 806, 205-211.	1.5	4
97	Inactivation of virus in intravenous immunoglobulin G using solvent/detergent treatment and pasteurization. Human Antibodies, 2008, 17, 79-84.	0.6	4
98	Dual-frequency ultrasound activation of nanomicellar doxorubicin in targeted tumor chemotherapy. Journal of Medical Ultrasonics (2001), 2014, 41, 139-150.	0.6	4
99	Saffron as a functional food and a nutraceutical using saffron and its constituents as the nutraceuticals to protect against chronic diseases. Acta Horticulturae, 2018, , 201-204.	0.1	4
100	Possible role of WNT10B in increased proliferation and tubule formation of human umbilical vein endothelial cell cultures treated with hypoxic conditioned medium from human adipocytes. Biotechnic and Histochemistry, 2022, 97, 168-179.	0.7	4
101	Effect of crocin and crocetin on EDA activity in NMU-induced breast cancer in rat. Clinical Biochemistry, 2011, 44, S27.	0.8	3
102	Role of Amino Acids on Prevention of Nonenzymatic Glycation of Lens Proteins in Senile and Diabetic Cataract. , 2014, , 141-155.		3
103	Effect of fractionation on treatment outcome in local dual-frequency sonication and Dox-encapsulated nanomicelles. Journal of Medical Ultrasonics (2001), 2013, 40, 303-308.	0.6	2
104	Comparison of the proteome patterns of adipose-derived stem cells with those treated with selegiline using a two dimensional gel electrophoresis analysis. Biotechnic and Histochemistry, 2020, 95, 176-185.	0.7	2
105	DNA as an enzyme. Clinical Biochemistry, 2003, 36, 353-358.	0.8	1
106	Mechanism of the effect of various saffron constituents in different cancer types, in both in vivo and in vitro studies. Clinical Biochemistry, 2011, 44, S41.	0.8	0
107	Comparative study on the effects of crocin, crocetin and picrocrocin on NMU-induced breast cancer in female rats. Clinical Biochemistry, 2011, 44, S150.	0.8	0
108	Effect of crocin on the ordered and disordered aggregation of proteins. Clinical Biochemistry, 2011, 44, S256.	0.8	0

#	ARTICLE	IF	CITATIONS
109	Introduction. The Enzymes, 2014, 36, 1-6.	0.7	0
110	Preface. The Enzymes, 2015, 37, xiii.	0.7	0
111	Role of Amino Acids on Prevention of Lens Proteins Nonenzymatic Glycation In Vitro, in Senile, and Diabetic Cataract. , 2019, , 245-270.		0
112	L-lysine protects C2C12 myotubes and 3T3-L1 adipocytes against high glucose damages and stresses. , 2019, 14, e0225912.		0
113	L-lysine protects C2C12 myotubes and 3T3-L1 adipocytes against high glucose damages and stresses. , 2019, 14, e0225912.		0
114	L-lysine protects C2C12 myotubes and 3T3-L1 adipocytes against high glucose damages and stresses. , 2019, 14, e0225912.		0
115	L-lysine protects C2C12 myotubes and 3T3-L1 adipocytes against high glucose damages and stresses. , 2019, 14, e0225912.		0
116	L-lysine protects C2C12 myotubes and 3T3-L1 adipocytes against high glucose damages and stresses. , 2019, 14, e0225912.		0
117	L-lysine protects C2C12 myotubes and 3T3-L1 adipocytes against high glucose damages and stresses. , 2019, 14, e0225912.		0