Snezana Agatonovic-Kustrin

List of Publications by Citations

103 papers	2,552 citations	27 h-index	47 g-index
113 ext. papers	3,008 ext. citations	3.4 avg, IF	5.36 L-index

#	Paper	IF	Citations
103	Basic concepts of artificial neural network (ANN) modeling and its application in pharmaceutical research. *Journal of Pharmaceutical and Biomedical Analysis*, **2000**, 22, 717-27	3.5	681
102	A molecular approach in drug development for Alzheimer's disease. *Biomedicine and Pharmacotherapy*, **2018**, 106, 553-565	7.5	106
101	Effects of alcohols and diols on the phase behaviour of quaternary systems. *International Journal of Pharmaceutics*, **2000**, 196, 141-5	6.5	97
100	Molecular aspects of phytoestrogen selective binding at estrogen receptors. *Journal of Pharmaceutical Sciences*, **2007**, 96, 1879-85	3.9	87
99	Theoretically-derived molecular descriptors important in human intestinal absorption. *Journal of Pharmaceutical and Biomedical Analysis*, **2001**, 25, 227-37	3.5	64
98	Application of neural networks for response surface modeling in HPLC optimization. *Analytica Chimica Acta*, **1998**, 364, 265-273	6.6	56
97	Determination of polymorphic forms of ranitidine-HCl by DRIFTS and XRPD. *Journal of Pharmaceutical and Biomedical Analysis*, **2001**, 25, 741-50	3.5	54
96	Bioavailability prediction based on molecular structure for a diverse series of drugs. *Pharmaceutical Research*, **2004**, 21, 68-82	4.5	51
95	Molecular descriptors that influence the amount of drugs transfer into human breast milk. *Journal of Pharmaceutical and Biomedical Analysis*, **2002**, 29, 103-19	3.5	48
94	Prediction of drug transfer into human milk from theoretically derived descriptors. *Analytica Chimica Acta*, **2000**, 418, 181-195	6.6	48
93	Application of the artificial neural network in quantitative structure-gradient elution retention relationship of phenylthiocarbamyl amino acids derivatives. *Journal of Pharmaceutical and Biomedical Analysis*, **2002**, 28, 581-90	3.5	45
92	Prediction of drug bioavailability based on molecular structure. *Analytica Chimica Acta*, **2003**, 485, 89-102	6.6	42
91	Rapid evaluation and comparison of natural products and antioxidant activity in calendula, feverfew, and German chamomile extracts. *Journal of Chromatography A*, **2015**, 1385, 103-10	4.5	40
90	Prediction of drug absorption based on immobilized artificial membrane (IAM) chromatography separation and calculated molecular descriptors. *Journal of Pharmaceutical and Biomedical Analysis*, **2005**, 38, 472-8	3.5	38
89	Prediction of a stable microemulsion formulation for the oral delivery of a combination of antitubercular drugs using ANN methodology. *Pharmaceutical Research*, **2003**, 20, 1760-5	4.5	36
88	Powder diffractometric assay of two polymorphic forms of ranitidine hydrochloride. *International Journal of Pharmaceutics*, **1999**, 184, 107-14	6.5	36
87	Spectrophotometric study of diclofenac-Fe(III) complex. *Journal of Pharmaceutical and Biomedical Analysis*, **1997**, 16, 147-53	3.5	33

86	Analysing the crystal purity of mebendazole raw material and its stability in a suspension formulation. *International Journal of Pharmaceutics*, **2008**, 361, 245-50	6.5	32
85	Qualitative and quantitative high performance thin layer chromatography analysis of Calendula officinalis using high resolution plate imaging and artificial neural network data modelling. *Analytica Chimica Acta*, **2013**, 798, 103-8	6.6	31
84	Experimental design applied to a spectrophotometric study of a diclofenac sodium-copper(II) complex. *Analyst, The*, **1991**, 116, 753-756	5	31
83	High performance thin layer chromatography (HPTLC) and high performance liquid chromatography (HPLC) for the qualitative and quantitative analysis of Calendula officinalis-advantages and limitations. *Journal of Pharmaceutical and Biomedical Analysis*, **2014**, 98, 52-9	3.5	29
82	ANN modeling of the penetration across a polydimethylsiloxane membrane from theoretically derived molecular descriptors. *Journal of Pharmaceutical and Biomedical Analysis*, **2001**, 26, 241-54	3.5	29
81	Essential oils and functional herbs for healthy aging. *Neural Regeneration Research*, **2019**, 14, 441-445	4.5	29
80	Assessment of antioxidant activity in Victorian marine algal extracts using high performance thin-layer chromatography and multivariate analysis. *Journal of Chromatography A*, **2016**, 1468, 228-235	4.5	29
79	Analysis of phenolics in wine by high performance thin-layer chromatography with gradient elution and high resolution plate imaging. *Journal of Pharmaceutical and Biomedical Analysis*, **2015**, 102, 93-9	3.5	27
78	Application of artificial neural networks in HPLC method development. *Journal of Pharmaceutical and Biomedical Analysis*, **1998**, 17, 69-76	3.5	27
77	Optimization of a stability-indicating HPLC method for the simultaneous determination of rifampicin, isoniazid, and pyrazinamide in a fixed-dose combination using artificial neural networks. *Journal of Chromatographic Science*, **2007**, 45, 38-44	1.4	27
76	Role of genetic algorithms and artificial neural networks in predicting the phase behavior of colloidal delivery systems. *Pharmaceutical Research*, **2001**, 18, 1049-55	4.5	26
75	Ranitidine hydrochloride X-ray assay using a neural network. *Journal of Pharmaceutical and Biomedical Analysis*, **2000**, 22, 985-92	3.5	26
74	Use of artificial neural networks to predict quaternery phase systems from limited experimental data. *Journal of Pharmaceutical and Biomedical Analysis*, **1999**, 19, 443-52	3.5	26
73	High-Performance Thin-Layer Chromatography Hyphenated with Microchemical and Biochemical Derivatizations in Bioactivity Profiling of Marine Species. *Marine Drugs*, **2019**, 17,	6	25
72	The use of a response surface methodology on HPLC analysis of methyldopa, amiloride and hydrochlorothiazide in tablets. *Journal of Pharmaceutical and Biomedical Analysis*, **2001**, 24, 1019-25	3.5	25
71	High-performance thin-layer chromatography HPTLC-direct bioautography as a method of choice for alpha-amylase and antioxidant activity evaluation in marine algae. *Journal of Chromatography A*, **2017**, 1530, 197-203	4.5	24
70	Use of ANN modelling in structure--retention relationships of diuretics in RP-HPLC. *Journal of Pharmaceutical and Biomedical Analysis*, **1999**, 21, 95-103	3.5	24
69	Phenolic acids contribution to antioxidant activities and comparative assessment of phenolic content in mango pulp and peel. *South African Journal of Botany*, **2018**, 116, 158-163	2.9	20

| 68 | Compatibility studies between mannitol and omeprazole sodium isomers. *Journal of Pharmaceutical and Biomedical Analysis*, **2008**, 48, 356-60 | 3.5 | 20 |

| 67 | Solid state assay of ranitidine HCl as a bulk drug and as active ingredient in tablets using DRIFT spectroscopy with artificial neural networks. *Pharmaceutical Research*, **1999**, 16, 1477-82 | 4.5 | 19 |

| 66 | Essential Oil Quality and Purity Evaluation via FT-IR Spectroscopy and Pattern Recognition Techniques. *Applied Sciences (Switzerland)*, **2020**, 10, 7294 | 2.6 | 18 |

| 65 | Molecular structural characteristics as determinants of estrogen receptor selectivity. *Journal of Pharmaceutical and Biomedical Analysis*, **2008**, 48, 369-75 | 3.5 | 17 |

| 64 | Multiple pharmacokinetic parameter prediction for a series of cephalosporins. *Journal of Pharmaceutical Sciences*, **2003**, 92, 552-9 | 3.9 | 16 |

| 63 | Statistical optimization of a reversed-phase liquid chromatographic method for the analysis of amiloride and hydrochlorothiazide in tablets. *Journal of Pharmaceutical and Biomedical Analysis*, **2000**, 22, 1-6 | 3.5 | 16 |

| 62 | High-performance thin-layer chromatography linked with (bio)assays and FTIR-ATR spectroscopy as a method for discovery and quantification of bioactive components in native Australian plants. *Journal of Pharmaceutical and Biomedical Analysis*, **2020**, 184, 113208 | 3.5 | 15 |

| 61 | Bioassay-guided identification of ɑ-amylase inhibitors in herbal extracts. *Journal of Chromatography A*, **2020**, 1620, 460970 | 4.5 | 14 |

| 60 | Spectrophotometric determination of furosemide and its palladium(II) complex. *Journal of Pharmaceutical and Biomedical Analysis*, **1990**, 8, 983-6 | 3.5 | 14 |

| 59 | The Use of Fourier Transform Infrared (FTIR) Spectroscopy and Artificial Neural Networks (ANNs) to Assess Wine Quality. *Modern Chemistry & Applications*, **2013**, 01, | | 14 |

| 58 | Development and validation of a simple high performance thin layer chromatography method combined with direct 1,1-diphenyl-2-picrylhydrazyl assay to quantify free radical scavenging activity in wine. *Food Chemistry*, **2016**, 197, 285-90 | 8.5 | 13 |

| 57 | Chemometric characterization of wines according to their HPTLC fingerprints. *European Food Research and Technology*, **2017**, 243, 659-667 | 3.4 | 13 |

| 56 | Application of diffuse reflectance infrared Fourier transform spectroscopy combined with artificial neural networks in analysing enantiomeric purity of terbutaline sulphate bulk drug. *Analytica Chimica Acta*, **2001**, 449, 157-165 | 6.6 | 13 |

| 55 | Spectrophotometric determination of furosemide as its Fe(III) complex in pharmaceutical preparations. *Mikrochimica Acta*, **1990**, 100, 49-54 | 5.8 | 13 |

| 54 | Comparison of high-performance and thin-layer chromatographic methods for the assay of lidocaine. *Journal of Pharmaceutical and Biomedical Analysis*, **1996**, 14, 1229-32 | 3.5 | 12 |

| 53 | Models for skin and brain penetration of major components from essential oils used in aromatherapy for dementia patients. *Journal of Biomolecular Structure and Dynamics*, **2020**, 38, 2402-2411 | 3.6 | 12 |

| 52 | Quantification of polyphenolic antioxidants and free radical scavengers in marine algae. *Journal of Applied Phycology*, **2018**, 30, 113-120 | 3.2 | 11 |

| 51 | Artificial neural networks to optimize formulation components of a fixed-dose combination of rifampicin, isoniazid and pyrazinamide in a microemulsion. *Current Drug Discovery Technologies*, **2005**, 2, 195-201 | 1.5 | 11 |

50	Analytical Strategies in Lipidomics for Discovery of Functional Biomarkers from Human Saliva. *Disease Markers*, **2019**, 2019, 6741518	3.2	11
49	In Silico Prediction of Oral Bioavailability **2007**, 699-724		10
48	Determination of enantiomeric composition of ibuprofen in solid state mixtures of the two by DRIFT spectroscopy. *Analytica Chimica Acta*, **2000**, 417, 31-39	6.6	10
47	HPTLC - Bioautographic methods for selective detection of the antioxidant and α-amylase inhibitory activity in plant extracts. *MethodsX*, **2018**, 5, 797-802	1.9	9
46	High-performance thin-layer chromatographic methods in the evaluation of the antioxidant and anti-hyperglycemic activity of Myrmecodia platytyrea as a promising opportunity in diabetes treatment. *Journal of Chromatography A*, **2017**, 1530, 192-196	4.5	9
45	Artificial neural network (ANN) based modelling for D1 like and D2 like dopamine receptor affinity and selectivity. *Medicinal Chemistry*, **2010**, 6, 259-70	1.8	9
44	Molecular structural characteristics of estrogen receptor modulators as determinants of estrogen receptor selectivity. *Mini-Reviews in Medicinal Chemistry*, **2008**, 8, 943-51	3.2	9
43	Anxiolytic Terpenoids and Aromatherapy for Anxiety and Depression. *Advances in Experimental Medicine and Biology*, **2020**, 1260, 283-296	3.6	9
42	HPTLC based approach for bioassay-guided evaluation of antidiabetic and neuroprotective effects of eight essential oils of the Lamiaceae family plants. *Journal of Pharmaceutical and Biomedical Analysis*, **2020**, 178, 112909	3.5	9
41	High-performance thin layer chromatography-based phytochemical and bioactivity characterisation of anticancer endophytic fungal extracts derived from marine plants. *Journal of Pharmaceutical and Biomedical Analysis*, **2021**, 193, 113702	3.5	9
40	Hybrid neural networks as tools for predicting the phase behavior of colloidal systems. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2012**, 415, 59-67	5.1	8
39	Quantification of phenylpropanoids in commercial Echinacea products using TLC with video densitometry as detection technique and ANN for data modelling. *Phytochemical Analysis*, **2013**, 24, 303-8	3.4	8
38	Investigation of the pindolol-Fe(III) complex and its use in the spectrophotometric determination of pindolol in bulk drug and tablets. *Journal of Pharmaceutical and Biomedical Analysis*, **1991**, 9, 861-4	3.5	8
37	A screening method for cardiovascular active compounds in marine algae. *Journal of Chromatography A*, **2018**, 1550, 57-62	4.5	7
36	The use of UV-visible reflectance spectroscopy as an objective tool to evaluate pearl quality. *Marine Drugs*, **2012**, 10, 1459-75	6	7
35	Probing into the Molecular Requirements for Antioxidant Activity in Plant Phenolic Compounds Utilizing a Combined Strategy of PCA and ANN. *Combinatorial Chemistry and High Throughput Screening*, **2017**, 20, 25-34	1.3	6
34	In vitro assessment of pediococci- and lactobacilli-induced cholesterol-lowering effect using digitally enhanced high-performance thin-layer chromatography and confocal microscopy. *Analytical and Bioanalytical Chemistry*, **2019**, 411, 1181-1192	4.4	5
33	The relationship between major polyphenolic acids and stigmasterol to antioxidant activity in different extracts of Myrmecodia platytyrea. *South African Journal of Botany*, **2018**, 115, 94-99	2.9	5

32	Migraine Headaches: Feverfew or Chamomile Leaves?. *Modern Chemistry & Applications*, **2015**, 03,		5
31	Validation of an HPLC method for the simultaneous determination of eletriptan and UK 120.413. *Journal of the Serbian Chemical Society*, **2006**, 71, 1195-1205	0.9	5
30	QSAR: an in silico approach for predicting the partitioning of pesticides into breast milk. *Combinatorial Chemistry and High Throughput Screening*, **2013**, 16, 223-32	1.3	5
29	An improved extraction protocol for therapeutic dabigatran monitoring using HPLC-MS/MS. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2019**, 1130-1131, 121808	3.2	4
28	Pesticides as estrogen disruptors: QSAR for selective ERa and ERb binding of pesticides. *Combinatorial Chemistry and High Throughput Screening*, **2011**, 14, 85-92	1.3	4
27	Molecular structural characteristics important in drug-HSA binding. *Combinatorial Chemistry and High Throughput Screening*, **2014**, 17, 879-90	1.3	4
26	Artificial Neural Network Modeling of Phytoestrogen Binding to Estrogen Receptors. *Letters in Drug Design and Discovery*, **2006**, 3, 436-442	0.8	4
25	HPTLC and ATR/FTIR Characterization of Antioxidants in Different Rosemary Extracts. *Molecules*, **2021**, 26,	4.8	4
24	A new integrated HPTLC - ATR/FTIR approach in marine algae bioprofiling. *Journal of Pharmaceutical and Biomedical Analysis*, **2020**, 189, 113488	3.5	4
23	A new high-performance thin-layer chromatographic method for determining bile salt hydrolase activity. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2018**, 1092, 145-151	3.2	3
22	Strategy for the development of a thermodynamically stable oral microemulsion. *Current Drug Discovery Technologies*, **2004**, 1, 165-71	1.5	3
21	Quantitative spectrophotometric assay of levodopa as its Pd(II) complex in water and dosage forms. *Journal of Pharmaceutical and Biomedical Analysis*, **1991**, 9, 1157-60	3.5	3
20	Statistical Optimisation Applied to Spectrophotometric Study of Indomethacin - Fe(III) Complex. *Analytical Letters*, **1992**, 25, 883-897	2.2	3
19	HPTLC and FTIR Fingerprinting of Olive Leaves Extracts and ATR-FTIR Characterisation of Major Flavonoids and Polyphenolics. *Molecules*, **2021**, 26,	4.8	3
18	In silico modelling of pesticide aquatic toxicity. *Combinatorial Chemistry and High Throughput Screening*, **2014**, 17, 808-18	1.3	3
17	The Power of HPTLC-ATR-FTIR Hyphenation in Bioactivity Analysis of Plant Extracts. *Applied Sciences (Switzerland)*, **2020**, 10, 8232	2.6	3
16	Determination of free phenolic acids in plant-derived foods by high-performance thin-layer chromatography with direct 2,2?-diphenyl-1-picrylhydrazyl assay. *Journal of Planar Chromatography - Modern TLC*, **2016**, 29, 121-126	0.9	3
15	The Current and Potential Therapeutic Uses of Parthenolide. *Studies in Natural Products Chemistry*, **2018**, 58, 61-91	1.5	3

List of Publications

14	Data Mining in Drug Discovery and Design **2016**, 181-193		2
13	Influence of sulfobutylether-beta-cyclodextrin on the stability of S- and R- omeprazole. *Current Drug Discovery Technologies*, **2007**, 4, 192-7	1.5	2
12	Investigation of penbutolol-iron (III) complex and its spectrophotometric determination in tablets. *Journal of Pharmaceutical and Biomedical Analysis*, **1990**, 8, 739-42	3.5	2
11	Isolation of Bioactive Pentacyclic Triterpenoid Acids from Olive Tree Leaves with Flash Chromatography. *Applied Sciences (Switzerland)*, **2022**, 12, 996	2.6	2
10	Modeling the effect of selected cyclodextrins on nifedipine solubility. *Current Drug Discovery Technologies*, **2011**, 8, 146-54	1.5	2
9	Chemical characterization of the photodegradation products of midazolam complexes with randomly methylated-β-cyclodextrin by HPLC and LC-MS/MS. *Journal of the Serbian Chemical Society*, **2016**, 81, 1037-1053	0.9	2
8	Characterisation of α-amylase inhibitors in marigold plants via bioassay-guided high-performance thin-layer chromatography and attenuated total reflectance-Fourier transform infrared spectroscopy. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2021**, 1173, 122676	3.2	2
7	The effect of extractive lacto-fermentation on the bioactivity and natural products content of Pittosporum angustifolium (gumbi gumbi) extracts. *Journal of Chromatography A*, **2021**, 1647, 462153	4.5	2
6	Quantitative structure-retention-pharmacokinetic relationship studies. *Drug Metabolism Letters*, **2008**, 2, 130-7	2.1	1
5	The assessment and characterisation of drug plasma protein binding in the body using QSAR. *Mini-Reviews in Medicinal Chemistry*, **2014**, 14, 484-93	3.2	1
4	Investigation of Fe(III) chloride as a colour reagent for the spectrophotometric determination of bumetanide in the pure form and in preparations. *Acta Poloniae Pharmaceutica*, **1992**, 49, 9-12	1.3	1
3	Thin-Layer Chromatography	Fingerprint Analysis of Plant Materials **2017**, 43-43		0
2	Structure-retention relationships of diuretics in reversed-phase liquid chromatography. *Biomedical Chromatography*, **2000**, 14, 41-3	1.7	
1	Evaluation of high-performance thin-layer chromatography for the quantification of phenylpropanoids in commercial Echinacea products. *Journal of Planar Chromatography - Modern TLC*, **2014**, 27, 260-266	0.9	