## Mladen Franko

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6606398/publications.pdf

Version: 2024-02-01

186265 214800 2,571 87 28 47 h-index citations g-index papers 88 88 88 2426 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Analytical thermal lens instrumentation. Review of Scientific Instruments, 1996, 67, 1-18.	1.3	350
2	Multi-residue method for determination of selected neonicotinoid insecticides in honey using optimized dispersive liquid–liquid microextraction combined with liquid chromatography-tandem mass spectrometry. Talanta, 2013, 111, 125-133.	5.5	117
3	Detection of organophosphate and carbamate pesticides in vegetable samples by a photothermal biosensor. Biosensors and Bioelectronics, 2003, 18, 1-9.	10.1	104
4	Chitosan-cellulose composite materials: Preparation, Characterization and application for removal of microcystin. Journal of Hazardous Materials, 2013, 252-253, 355-366.	12.4	99
5	Bilirubin is an Endogenous Antioxidant in Human Vascular Endothelial Cells. Scientific Reports, 2016, 6, 29240.	3.3	99
6	Determination of organophosphate and carbamate pesticides in spiked samples of tap water and fruit juices by a biosensor with photothermal detection. Biosensors and Bioelectronics, 1999, 14, 569-578.	10.1	82
7	Development of multiresidue DLLME and QuEChERS based LC–MS/MS method for determination of selected neonicotinoid insecticides in honey liqueur. Food Research International, 2014, 55, 11-19.	6.2	78
8	Development of HPLC-DAD method for determination of neonicotinoids in honey. Journal of Food Composition and Analysis, 2015, 40, 106-113.	3.9	76
9	Thermal lens effect in electrolyte and surfactant media. The Journal of Physical Chemistry, 1991, 95, 6688-6696.	2.9	57
10	Uptake of bilirubin into HepG2 cells assayed by thermal lens spectroscopy. Function of bilitranslocase. FEBS Journal, 2005, 272, 5522-5535.	4.7	54
11	One-Pot Synthesis of Biocompatible Silver Nanoparticle Composites from Cellulose and Keratin: Characterization and Antimicrobial Activity. ACS Applied Materials & Samp; Interfaces, 2016, 8, 34791-34801.	8.0	54
12	Determination of selected neonicotinoid insecticides by liquid chromatography with thermal lens spectrometric detection. Environmental Chemistry Letters, 2007, 5, 203-208.	16.2	50
13	Thermal Lens Spectrometric Detection in Flow Injection Analysis and Separation Techniques. Applied Spectroscopy Reviews, 2008, 43, 358-388.	6.7	48
14	Facile synthesis, structure, biocompatibility and antimicrobial property of gold nanoparticle composites from cellulose and keratin. Journal of Colloid and Interface Science, 2018, 510, 237-245.	9.4	46
15	Synthesis, structure and antimicrobial property of green composites from cellulose, wool, hair and chicken feather. Carbohydrate Polymers, 2016, 151, 1269-1276.	10.2	44
16	On-line thermal lens spectrometric detection of Cr(III) and Cr(VI) after separation by ion chromatography. Journal of Chromatography A, 1995, 706, 121-126.	3.7	43
17	Inhibition of AChE by malathion and some structurally similar compounds. Journal of Enzyme Inhibition and Medicinal Chemistry, 2008, 23, 562-573.	5.2	43
18	Application of high-performance liquid chromatography combined with ultra-sensitive thermal lens spectrometric detection for simultaneous biliverdin and bilirubin assessment at trace levels in human serum. Talanta, 2016, 154, 92-98.	5 <b>.</b> 5	41

#	Article	IF	CITATIONS
19	Real-time quantitative investigation of photochemical reaction using thermal lens measurements: Theory and experiment. Journal of Applied Physics, 2006, 100, 044906.	2.5	38
20	Ultrasensitive determination of $\hat{l}^2$ -carotene in fish oil-based supplementary drugs by HPLC-TLS. Journal of Pharmaceutical and Biomedical Analysis, 1999, 21, 901-909.	2.8	36
21	Direct determination of free bilirubin in serum at sub-nanomolar levels. Analytica Chimica Acta, 2014, 809, 174-182.	5.4	35
22	Determination of iron in complex matrices by ion chromatography with UV–Vis, thermal lens and amperometric detection using post-column reagents. Journal of Chromatography A, 1998, 829, 167-174.	3.7	34
23	Effect of organic solvents in the on-line thermal lens spectrometric detection of chromium(III) and chromium(VI) after ion chromatographic separation. Journal of Chromatography A, 2001, 920, 119-125.	3.7	34
24	Development of a double-beam, dual-wavelength thermal-lens spectrometer for simultaneous measurement of absorption at two different wavelengths. Analytical Chemistry, 1988, 60, 1925-1928.	6.5	33
25	Application of thermal lens spectrometric detection to the determination of heavy metals by ion chromatography. Journal of Chromatography A, 1996, 739, 111-117.	3.7	33
26	lonic Liquids as an Attractive Alternative Solvent for Thermal Lens Measurements. Analytical Chemistry, 2005, 77, 7442-7447.	6.5	30
27	Oxidation of organophosphorus pesticides with chloroperoxidase enzyme in the presence of an ionic liquid as co-solvent. Environmental Chemistry Letters, 2009, 7, 267-270.	16.2	30
28	Thermal Lens Spectrometry: Still a Technique on the Horizon?. International Journal of Thermophysics, 2016, 37, 1.	2.1	30
29	Comparison of spectrophotometric and HPLC methods for determination of carotenoids in foods. Food Chemistry, 2013, 140, 390-397.	8.2	29
30	Progress in Thermal Lens Spectrometry and Its Applications in Microscale Analytical Devices. Critical Reviews in Analytical Chemistry, 2014, 44, 328-353.	3.5	29
31	Determination of trans- $\hat{l}^2$ -carotene and other carotenoids in blood plasma using high-performance liquid chromatography and thermal lens detection. Biomedical Applications, 1998, 718, 47-54.	1.7	28
32	A combination of interdisciplinary analytical tools for evaluation of multi-layered coatings on medical grade stainless steel for biomedical applications. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 128, 230-246.	4.3	28
33	Ultrasensitive assays of trans- and cis-β-carotenes in vegetable oils by high-performance liquid chromatography–thermal lens detection. Analytica Chimica Acta, 2002, 460, 193-200.	5.4	27
34	Microfluidic droplet-based liquid–liquid extraction: online model validation. Lab on A Chip, 2015, 15, 2233-2239.	6.0	26
35	Trace detection and photothermal spectral characterization by a tuneable thermal lens spectrometer with white-light excitation. Talanta, 2018, 183, 158-163.	5.5	26
36	Thermal lens spectrometric determination of hexavalent chromium. Analytica Chimica Acta, 1996, 330, 245-250.	5.4	25

#	Article	ΙF	Citations
37	Water as a unique medium for thermal lens measurements. Analytical Chemistry, 1989, 61, 1660-1666.	6.5	23
38	Fast Screening Techniques for Neurotoxigenic Substances and Other Toxicants and Pollutants Based on Thermal Lensing and Microfluidic Chips. Analytical Sciences, 2016, 32, 23-30.	1.6	22
39	Photodegradation of pesticides and application of bioanalytical methods for their detection. Pure and Applied Chemistry, 2005, 77, 1727-1736.	1.9	21
40	Thermal lens technique for sensitive kinetic determination of fast chemical reactions. Part II. Experiment. Review of Scientific Instruments, 1991, 62, 2438-2442.	1.3	20
41	A multi-thermal-lens approach to evaluation of multi-pass probe beam configuration in thermal lens spectrometry. Analytica Chimica Acta, 2020, 1100, 182-190.	5.4	19
42	Flow injection method for the determination of silver concentration in drinking water for spacecrafts. Analytica Chimica Acta, 2010, 665, 69-73.	5.4	18
43	Theoretical description of thermal lens spectrometry in micro space. Journal of Applied Physics, 2012, 111, .	2.5	18
44	Thermal lens technique for sensitive kinetic determinations of fast chemical reactions. Part I. Theory. Review of Scientific Instruments, 1991, 62, 2430-2437.	1.3	17
45	The effects of eluent mixing on TLS detection in gradient elution HPLC. Analytical and Bioanalytical Chemistry, 2002, 374, 323-328.	3.7	17
46	Carotenes in processed tomato after thermal treatment. Food Control, 2015, 48, 67-74.	5.5	17
47	Simultaneous Determination of Two-Component Mixtures and pHs by Dual-Wavelength Thermal Lens Spectrometry. Applied Spectroscopy, 1989, 43, 661-668.	2.2	16
48	The Effect of Cerium Ions on the Structure, Porosity and Electrochemical Properties of Si/Zr-Based Hybrid Sol-Gel Coatings Deposited on Aluminum. Metals, 2018, 8, 248.	2.3	16
49	Thermal Lens Spectrometric Determination of Colloidal and Ionic Silver in Water. International Journal of Thermophysics, 2011, 32, 818-827.	2.1	15
50	Optimization of a Thermal Lens Microscope for Detection in a Microfluidic Chip. International Journal of Thermophysics, 2014, 35, 2011-2022.	2.1	15
51	Hyphenated high performance liquid chromatography-thermal lens spectrometry technique as a tool for investigations of xanthophyll cycle pigments in different taxonomic groups of marine phytoplankton. Review of Scientific Instruments, 2003, 74, 776-778.	1.3	14
52	Mode-mismatched confocal thermal-lens microscope with collimated probe beam. Review of Scientific Instruments, 2015, 86, 053701.	1.3	14
53	Microfluidic flow-injection thermal-lens microscopy for high-throughput and sensitive analysis of sub-νL samples. Analytical Methods, 2016, 8, 5053-5060.	2.7	14
54	Fast quality screening of vegetable oils by HPLC-thermal lens spectrometric detection. JAOCS, Journal of the American Oil Chemists' Society, 2002, 79, 1027-1031.	1.9	13

#	Article	IF	Citations
55	An incoherent light source excited thermal lens microscope. Applied Physics Letters, 2012, 100, .	3.3	13
56	Thermal lens spectrometry under excitation of a divergent pump beam. Applied Physics B: Lasers and Optics, 2014, 115, 269-277.	2.2	13
57	Dual-wavelength thermal-lens spectrometry as a sensitive and selective method for trace gas analysis. Journal of Physics E: Scientific Instruments, 1989, 22, 586-589.	0.7	12
58	Temperature effect on photothermal lens phenomena in water: Photothermal defocusing and focusing. Chemical Physics Letters, 1989, 158, 31-36.	2.6	12
59	Influences of Detection Pinhole and Sample Flow on Thermal Lens Detection in Microfluidic Systems. International Journal of Thermophysics, 2014, 35, 2178-2186.	2.1	12
60	Photothermal Deflection Experiments: Comparison of Existing Theoretical Models and Their Applications to Characterization of $\$$ mathrm{TiO}_{2}\$\$ TiO 2 -Based Thin Films. International Journal of Thermophysics, 2014, 35, 2352-2362.	2.1	12
61	Nanobody-Dependent Detection of Microcystis aeruginosa by ELISA and Thermal Lens Spectrometry. Applied Biochemistry and Biotechnology, 2021, 193, 2729-2741.	2.9	11
62	Separation and Direct Detection of Long Chain Fatty Acids and their Methylesters by the Nonâ€Aqueous Reversed Phase HPLC and Silver Ion Chromatography, Combined with CO Laser Pumped Thermal Lens Spectrometry. Instrumentation Science and Technology, 2006, 34, 129-150.	1.8	10
63	Thermal Properties of Surface-Modified $\$ upalpha $\$ î± - and $\$ upvarepsilon $\$ îµ -Fe $\$ 2}hbox {O}_{3}\$\$ 2 O 3 Photocatalysts Determined by Beam Deflection Spectroscopy. International Journal of Thermophysics, 2014, 35, 2107-2114.	2.1	9
64	Determination of thermooptical and transport parameters of $\hat{l}\mu$ iron(III) oxide-based nanocomposites by beam deflection spectroscopy. Optical Materials, 2015, 42, 370-375.	3.6	9
65	Microfluidic Flow Injection Analysis with Thermal Lens Microscopic Detection for Determination of NGAL. International Journal of Thermophysics, 2015, 36, 932-939.	2.1	9
66	Hemichrome Determination by Thermal Lensing with Polyethylene Glycols for Signal Enhancement in Aqueous Solutions. Analytical Letters, 2018, 51, 1743-1762.	1.8	9
67	Photodegradation mechanisms of reactive blue 19 dye under UV and simulated solar light irradiation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 252, 119481.	3.9	9
68	Thermo-Optical Characterization of Cu- and Zr-Modified TiO2 Photocatalysts by Beam Deflection Spectrometry. Applied Sciences (Switzerland), 2021, 11, 10937.	2.5	9
69	Differential Thermal Lens Spectrometry in the Infrared. Israel Journal of Chemistry, 1998, 38, 175-179.	2.3	8
70	Dual-Beam Thermal Lens Measurement of Condensed-Phase Sample at CO <sub>2</sub> Laser Wavelengths: Detection of Octadecanoic Acid in Carbon Tetrachloride. Applied Spectroscopy, 1994, 48, 1457-1460.	2.2	7
71	Laser-Induced Degradation of Organophosphates and Monitoring of Their Toxicity by Cholinesterase Biosensors. Critical Reviews in Analytical Chemistry, 2003, 33, 285-290.	3 <b>.</b> 5	5
72	Double Dual Beam Thermal Lens Spectrometer for Monitoring of Phytoplankton Cell Lysis. Instrumentation Science and Technology, 2006, 34, 23-31.	1.8	5

#	Article	IF	Citations
73	Determination of Fe(II) by Optimized Thermal Lens Microscope. International Journal of Thermophysics, 2015, 36, 2434-2440.	2.1	4
74	Validation of different commercially available cholinesterases for pesticide toxicity test. Annali Di Chimica, 2002, 92, 93-101.	0.6	4
75	Laser-induced degradation of organophosphorus compounds. International Journal of Photoenergy, 2002, 4, 41-44.	2.5	3
76	New approach in studies of microalgal cell lysis. Open Life Sciences, 2009, 4, 313-320.	1.4	3
77	Comparison of CIM discs and CPG glass as solid supports for bioanalytical columns used in allergen detection. Analytical and Bioanalytical Chemistry, 2010, 398, 555-562.	3.7	3
78	Determination of colloid silver in drinking water by flow injection analysis with TLS spectrometric UV detection. Journal of Physics: Conference Series, 2010, 214, 012119.	0.4	3
79	Thermal Effusivity Investigations of Solid Thermoelectrics Using the Front Photopyroelectric Detection. International Journal of Thermophysics, 2020, 41, 1.	2.1	3
80	Study of saturated triglycerides in oil based on the c.w. transverse CO2 laser excited photothermal deflection signals. Infrared Physics and Technology, 1995, 36, 617-622.	2.9	2
81	Application of chromogenic reagents in surface plasmon resonance (SPR). Biosensors and Bioelectronics, 2007, 22, 1163-1167.	10.1	2
82	Implementation of high performance liquid chromatography coupled to thermal lens spectrometry (HPLC-TLS) for quantification of pyranoanthocyanins during fermentation of Pinot Noir grapes. SN Applied Sciences, 2020, 2, 1.	2.9	2
83	Experimental considerations of simultaneous thermal lens and beam deflection phenomena. Applied Optics, 1999, 38, 3329.	2.1	1
84	Theoretical Analysis for Sensitivity Enhancement in Broad-Band Thermal Lens Microscope. Advanced Materials Research, 0, 503-504, 1480-1483.	0.3	1
85	Thermal lens spectrometric determination of ammonium in water samples based on indophenol formation with sodium salicylate. International Journal of Environment and Health, 2014, 7, 101.	0.3	1
86	Recent progress in agricultural, food and environmental applications of thermal lens spectrometry. , 1999, , .		0
87	Thermal Lens Microscopy: Characterization and Optimization. Applied Mechanics and Materials, 0, 624, 317-321.	0.2	O