

# Vassilia Zorba

## List of Publications by Year in descending order

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74  
papers

3,732  
citations

156536

32  
h-index

145109

60  
g-index

76  
all docs

76  
docs citations

76  
times ranked

4795  
citing authors

#	ARTICLE	IF	CITATIONS
1	Combination of high-resolution laser-induced breakdown spectroscopy and least square method for reducing soil carbon overestimation due to iron interference. <i>Geoderma</i> , 2021, 385, 114881.	2.3	3
2	Remote isotope detection and quantification using femtosecond filament-laser ablation molecular isotopic spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2021, 179, 106117.	1.5	8
3	Temporal and spatial study of differently charged ions emitted by ns-laser-produced tungsten plasmas using time-of-flight mass spectrometry. <i>Plasma Science and Technology</i> , 2021, 23, 095505.	0.7	4
4	Spatio-temporal ablation dynamics and plasma chemistry of aluminum induced by temporally modulated ytterbium fiber laser. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	5
5	Calcium fluoride as a dominating matrix for quantitative analysis by laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS): A feasibility study. <i>Analytica Chimica Acta</i> , 2020, 1129, 24-30.	2.6	2
6	Dynamic characteristics of multi-charged ions emitted from nanosecond laser produced molybdenum plasmas. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 767-775.	1.6	15
7	Detection of E. coli labeled with metal-conjugated antibodies using lateral-flow assay and laser-induced breakdown spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 1291-1301.	1.9	13
8	A comprehensive analysis of sialolith proteins and the clinical implications. <i>Clinical Proteomics</i> , 2020, 17, 12.	1.1	7
9	Elemental Mapping of Lithium Diffusion in Doped Plant Leaves Using Laser-Induced Breakdown Spectrometry (LIBS). <i>Applied Spectroscopy</i> , 2019, 73, 387-394.	1.2	14
10	Elemental Analysis of Asphaltenes Using Simultaneous Laser-Induced Breakdown Spectrometry (LIBS) and Laser Ablation Inductively Coupled Plasma Optical Emission Spectrometry (LA-ICP-OES). <i>Applied Spectroscopy</i> , 2019, 73, 540-549.	1.2	10
11	Multivariate nonlinear spectral fitting for uranium isotopic analysis with laser-induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 150, 67-76.	1.5	25
12	Characteristics of plasma plume in ultrafast laser ablation with a weakly ionized air channel. <i>Optics Express</i> , 2018, 26, 13425.	1.7	21
13	Spatial and temporal distribution of metal atoms and their diatomic oxide molecules in femtosecond laser-induced plasmas. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 1875-1883.	1.6	12
14	Internal mixing dynamics of Cu/Sn-Pb plasmas produced by femtosecond laser ablation. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 148, 92-98.	1.5	11
15	Analysis of Plant Leaves Using Laser Ablation Inductively Coupled Plasma Optical Emission Spectrometry: Use of Carbon to Compensate for Matrix Effects. <i>Applied Spectroscopy</i> , 2017, 71, 709-720.	1.2	8
16	Laser-Ablation Sampling for Accurate Analysis of Sulfur in Edible Salts. <i>Applied Spectroscopy</i> , 2017, 71, 651-658.	1.2	11
17	Combination of atomic lines and molecular bands for uranium optical isotopic analysis in laser induced plasma spectrometry. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 312, 121-131.	0.7	42
18	Spectroscopic investigation of wheat grains ( <i>Triticum aestivum</i> ) infected by wheat seed gall nematodes ( <i>Anguina tritici</i> ). <i>Biocatalysis and Agricultural Biotechnology</i> , 2017, 9, 58-66.	1.5	15

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19	Enhanced lithium ion transport in garnet-type solid state electrolytes. <i>Journal of Electroceramics</i> , 2017, 38, 168-175.	0.8	22
20	Laser Ablation Molecular Isotopic Spectrometry for Molecules Formation Chemistry in Femtosecond-Laser Ablated Plasmas. <i>Analytical Chemistry</i> , 2017, 89, 7750-7757.	3.2	27
21	Solid matrix transformation and tracer addition using molten ammonium bifluoride salt as a sample preparation method for laser ablation inductively coupled plasma mass spectrometry. <i>Analyst</i> , The, 2017, 142, 3333-3340.	1.7	10
22	Femtosecond Filament-Laser Ablation Molecular Isotopic Spectrometry (F2-LAMIS) for Remote Isotope Analysis. , 2017, , .		0
23	Isotopic determination of uranium in soil by laser induced breakdown spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 122, 31-39.	1.5	35
24	Nanoparticle Enhanced Laser Induced Breakdown Spectroscopy for Improving the Detection of Molecular Bands. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 125, 11-17.	1.5	42
25	Reduction of spectral interferences and noise effects in laser ablation molecular isotopic spectrometry with partial least square regression – a computer simulation study. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 122, 75-84.	1.5	7
26	Three-dimensional elemental imaging of Li-ion solid-state electrolytes using fs-laser induced breakdown spectroscopy (LIBS). <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 2295-2302.	1.6	73
27	Double-pulse laser ablation sampling: Enhancement of analyte emission by a second laser pulse at 213 nm. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 110, 51-55.	1.5	20
28	Femtosecond Laser Ablation Molecular Isotopic Spectrometry for Zirconium Isotope Analysis. <i>Analytical Chemistry</i> , 2015, 87, 4788-4796.	3.2	31
29	Femtosecond filament-laser ablation molecular isotopic spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 113, 113-118.	1.5	39
30	Femtosecond laser induced breakdown spectroscopy of Cu at the micron/sub-micron scale. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2015, 113, 37-42.	1.5	37
31	Effects of crystallinity and impurities on the electrical conductivity of Li-La-Zr-O thin films. <i>Thin Solid Films</i> , 2015, 576, 55-60.	0.8	61
32	3D chemical imaging of Li-ion batteries using femtosecond laser plasma spectroscopy. , 2014, , .		0
33	Effect of microstructure and surface impurity segregation on the electrical and electrochemical properties of dense Al-substituted $\text{Li}_{0.7}\text{La}_{0.3}\text{Zr}_{0.2}\text{O}_{12}$ . <i>Journal of Materials Chemistry A</i> , 2014, 2, 172-181.	5.2	170
34	The origin of high electrolyte-electrode interfacial resistances in lithium cells containing garnet type solid electrolytes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 18294-18300.	1.3	431
35	Simultaneous 3-dimensional elemental imaging with LIBS and LA-ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 1292-1298.	1.6	72
36	UV fs double-pulse laser induced breakdown spectroscopy for high spatial resolution chemical analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2013, 28, 743.	1.6	80

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37	Laser Ablation in Analytical Chemistry. <i>Analytical Chemistry</i> , 2013, 85, 6162-6177.	3.2	239
38	Ultrafast Laser Spectroscopy of Electrode/Electrolyte Interfaces. <i>ECS Transactions</i> , 2013, 50, 39-48.	0.3	1
39	Ultrafast laser induced breakdown spectroscopy of electrode/electrolyte interfaces. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	48
40	Properties of Silicon and Metal Oxide Electrowetting Systems. <i>Journal of Adhesion Science and Technology</i> , 2012, 26, 2143-2163.	1.4	8
41	Laser-induced nanostructure interactions for ion production. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 8453.	1.3	97
42	Laser plasma spectrochemistry. <i>Journal of Analytical Atomic Spectrometry</i> , 2011, 26, 1596.	1.6	58
43	Ultrafast laser induced breakdown spectroscopy for high spatial resolution chemical analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2011, 66, 189-192.	1.5	69
44	Optical far- and near-field femtosecond laser ablation of Si for nanoscale chemical analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 173-180.	1.9	33
45	Electrowetting Properties of Micro/Nanostructured Black Silicon. <i>Langmuir</i> , 2010, 26, 13007-13014.	1.6	80
46	Superhydrophilic TiO <sub>2</sub> surface without photocatalytic activation. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	64
47	Metal coated silicon spike cold-electron emitters show improvement of performance with operation. <i>Applied Physics Letters</i> , 2010, 96, 033501.	1.5	3
48	Laser structured biomimetic artificial surfaces that quantitatively reproduce the water repellency of a Lotus leaf. , 2009, , .		0
49	Multifunctional and responsive surfaces based on fs laser micro/nano structuring of silicon. , 2009, , .		0
50	Femtosecond laser writing of nanostructures on bulk Al via its ablation in air and liquids. <i>Applied Surface Science</i> , 2009, 255, 5346-5350.	3.1	73
51	Reversible wettability of ZnO nanostructured thin films prepared by pulsed laser deposition. <i>Thin Solid Films</i> , 2009, 518, 1267-1270.	0.8	62
52	Bio-inspired water repellent surfaces produced by ultrafast laser structuring of silicon. <i>Applied Surface Science</i> , 2009, 255, 5425-5429.	3.1	126
53	Laser writing of nanostructures on bulk Al via its ablation in liquids. <i>Nanotechnology</i> , 2009, 20, 105303.	1.3	78
54	Reversible Photoinduced Wettability Transition of Hierarchical ZnO Structures. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2891-2895.	1.5	124

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55	Laser wavelength effects in ultrafast near-field laser nanostructuring of Si. Applied Physics Letters, 2009, 95, .	1.5	30
56	Surface nanotexturing of tantalum by laser ablation in water. Quantum Electronics, 2009, 39, 89-93.	0.3	50
57	Tailoring the wetting response of silicon surfaces via fs laser structuring. Applied Physics A: Materials Science and Processing, 2008, 93, 819.	1.1	93
58	Ultraviolet laser structuring of silicon carbide for cold cathode applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3309-3313.	0.8	5
59	Biomimetic Artificial Surfaces Quantitatively Reproduce the Water Repellency of a Lotus Leaf. Advanced Materials, 2008, 20, 4049-4054.	11.1	461
60	Applications of ultrafast lasers in materials processing: fabrication on self-cleaning surfaces and scaffolds for tissue engineering. , 2008, , .		0
61	Ultraviolet femtosecond, picosecond and nanosecond laser microstructuring of silicon: structural and optical properties. Applied Optics, 2008, 47, 1846.	2.1	70
62	Novel Aspects of Materials Processing by Ultrafast Lasers: From Electronic to Biological and Cultural Heritage Applications. Journal of Physics: Conference Series, 2007, 59, 266-272.	0.3	5
63	Replica molding of picosecond laser fabricated Si microstructures. Applied Physics A: Materials Science and Processing, 2007, 87, 673-677.	1.1	11
64	Silicon electron emitters fabricated by ultraviolet laser pulses. Applied Physics Letters, 2006, 88, 081103.	1.5	67
65	Making silicon hydrophobic: wettability control by two-lengthscale simultaneous patterning with femtosecond laser irradiation. Nanotechnology, 2006, 17, 3234-3238.	1.3	242
66	Ultraviolet laser microstructuring of silicon and the effect of laser pulse duration on the surface morphology. Applied Surface Science, 2006, 252, 4462-4466.	3.1	29
67	Construction of micron three-dimensional structures employing multi-photon polymerization. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2005, 219, 165-168.	0.1	3
68	Surface Morphology Studies of Sub-Ps Pulsed-Laser-Deposited AlN Thin Films. Journal of Materials Research, 2004, 19, 820-826.	1.2	5
69	Laser microstructuring of Si surfaces for low-threshold field-electron emission. Thin Solid Films, 2004, 453-454, 492-495.	0.8	47
70	Effects of pulse laser duration and ambient nitrogen pressure in PLD of AlN. Applied Physics A: Materials Science and Processing, 2004, 79, 927-929.	1.1	5
71	Surface particularities in pulsed laser ablation/deposition of the ferromagnetic alloy NiMnSb. Applied Surface Science, 2003, 212-213, 78-84.	3.1	10
72	<title>Stoichiometry issues in pulsed laser deposition of the ferromagnetic alloy NiMnSb</title>. , 2002, , .		0

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73	Low-temperature growth of NiMnSb thin films by pulsed-laser deposition. Applied Physics Letters, 2002, 80, 2716-2718.	1.5	38
74	Pulsed-laser deposition of NiMnSb thin films at moderate temperatures. Applied Surface Science, 2002, 197-198, 421-425.	3.1	13