

Svatopluk CiviÅ¡

List of Publications by Year in descending order

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185
papers

2,852
citations

201575

27
h-index

289141

40
g-index

195
all docs

195
docs citations

195
times ranked

2144
citing authors

#	ARTICLE	IF	CITATIONS
1	High-energy chemistry of formamide: A unified mechanism of nucleobase formation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 657-662.	3.3	159
2	Formation of nucleobases in a Miller-Urey reducing atmosphere. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4306-4311.	3.3	120
3	High-Energy Chemistry of Formamide: A Simpler Way for Nucleobase Formation. Journal of Physical Chemistry A, 2014, 118, 719-736.	1.1	73
4	High Energy Radical Chemistry Formation of HCN-rich Atmospheres on early Earth. Scientific Reports, 2017, 7, 6275.	1.6	70
5	On the Road from Formamide Ices to Nucleobases: IR-Spectroscopic Observation of a Direct Reaction between Cyano Radicals and Formamide in a High-Energy Impact Event. Journal of the American Chemical Society, 2012, 134, 20788-20796.	6.6	58
6	A study of thermal decomposition and combustion products of disposable polyethylene terephthalate (PET) plastic using high resolution fourier transform infrared spectroscopy, selected ion flow tube mass spectrometry and gas chromatography mass spectrometry. Molecular Physics, 2008, 106, 1205-1214.	0.8	50
7	Laser Ablation of FOX-7: Proposed Mechanism of Decomposition. Analytical Chemistry, 2011, 83, 1069-1077.	3.2	50
8	Microwave Spectrum up to 900 GHz of SO Created in Highly Excited States by Electric Discharge and UV-Laser Photolysis. Journal of Molecular Spectroscopy, 1997, 182, 85-97.	0.4	49
9	Prebiotic synthesis of nucleic acids and their building blocks at the atomic level – merging models and mechanisms from advanced computations and experiments. Physical Chemistry Chemical Physics, 2016, 18, 20047-20066.	1.3	48
10	Oxygen-isotope labeled titania: Ti18O2. Physical Chemistry Chemical Physics, 2011, 13, 11583.	1.3	46
11	Amino acid formation induced by high-power laser in CO2/CO-N2-H2O gas mixtures. Chemical Physics Letters, 2004, 386, 169-173.	1.2	41
12	A study of the composition of the products of laser-induced breakdown of hexogen, octogen, pentrite and trinitrotoluene using selected ion flow tube mass spectrometry and UV-Vis spectrometry. Analyst, The, 2010, 135, 1106.	1.7	41
13	Laser Spark Formamide Decomposition Studied by FT-IR Spectroscopy. Journal of Physical Chemistry A, 2011, 115, 12132-12141.	1.1	38
14	Photochemistry and Gas-Phase FTIR Spectroscopy of Formic Acid Interaction with Anatase TiO2 Nanoparticles. Journal of Physical Chemistry C, 2012, 116, 11200-11205.	1.5	38
15	Electrochemical conversion of dinitrogen to ammonia mediated by a complex of fullerene C60 and β -cyclodextrin. Chemical Communications, 2007, , 2270-2272.	2.2	36
16	HNC/HCN Ratio in Acetonitrile, Formamide, and BrCN Discharge. Journal of Physical Chemistry A, 2011, 115, 1885-1899.	1.1	35
17	Oxygen-Isotope Exchange between CO2 and Solid Ti18O2. Journal of Physical Chemistry C, 2011, 115, 11156-11162.	1.5	35
18	Prebiotic synthesis initiated in formaldehyde by laser plasma simulating high-velocity impacts. Astronomy and Astrophysics, 2019, 626, A52.	2.1	35

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19	HNCO-based synthesis of formamide in planetary atmospheres. <i>Astronomy and Astrophysics</i> , 2018, 616, A150.	2.1	34
20	Preparation and some physical properties of Bi ₂ xIn _x Se ₃ single crystals. <i>Journal of Materials Science</i> , 1990, 25, 277-282.	1.7	32
21	Mechanism of Oxygen Exchange between CO ₂ and TiO ₂ (101) Anatase. <i>Journal of Physical Chemistry C</i> , 2014, 118, 1628-1639.	1.5	31
22	TiO ₂ -catalyzed synthesis of sugars from formaldehyde in extraterrestrial impacts on the early Earth. <i>Scientific Reports</i> , 2016, 6, 23199.	1.6	31
23	Sub-Millimeter-Wave Spectroscopy of the ArH ⁺ and ArD ⁺ Ionic Complexes. <i>Journal of Molecular Spectroscopy</i> , 1998, 190, 130-139.	0.4	29
24	Submillimeter-wave spectral lines of negative ions (SH ⁻ and SD ⁻) identified by their Doppler shift. <i>Journal of Chemical Physics</i> , 1998, 108, 8369-8373.	1.2	29
25	Degradation of pyrene by UV radiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2000, 132, 33-36.	2.0	29
26	Investigation of laser-plasma chemistry in CO-N ₂ -H ₂ O mixtures using 18O labeled water. <i>Chemical Physics Letters</i> , 2009, 472, 14-18.	1.2	29
27	Infrared emission spectra of C ₃ : the Renner effect in the $\lambda^3\Sigma^+_{g,u}$ electronic states. <i>Journal of Chemical Physics</i> , 1995, 103, 3928-3941.	1.2	28
28	Application of InAsSb/InAsSbP and lead chalcogenide infrared diode lasers for photoacoustic detection in the 3.2 and 5 $\frac{1}{4}$ μ m region. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 3063-3074.	2.0	27
29	Optical and X-ray Emission Spectroscopy of High-Power Laser-Induced Dielectric Breakdown in Molecular Gases and Their Mixtures. <i>Journal of Physical Chemistry A</i> , 2006, 110, 12113-12120.	1.1	27
30	The origin of methane and biomolecules from a CO ₂ cycle on terrestrial planets. <i>Nature Astronomy</i> , 2017, 1, 721-726.	4.2	27
31	Vibration-rotational interactions in the states $v_2 = 1$ and $v_5 = 1$ of H ₃ CF. <i>Journal of Molecular Spectroscopy</i> , 1992, 153, 145-166.	0.4	26
32	Chemical consequences of laser-induced breakdown in molecular gases. <i>Progress in Quantum Electronics</i> , 2006, 30, 75-88.	3.5	26
33	Potassium spectra in the 700-7000 cm^{-1} domain: Transitions involving f-, g-, and h-states. <i>Astronomy and Astrophysics</i> , 2012, 541, A125.	2.1	26
34	Resonances and Dissociative Electron Attachment in HNCO. <i>Physical Review Letters</i> , 2018, 121, 143402.	2.9	25
35	Identifiable Acetylene Features Predicted for Young Earth-like Exoplanets with Reducing Atmospheres Undergoing Heavy Bombardment. <i>Astrophysical Journal</i> , 2020, 888, 21.	1.6	25
36	Spectroscopic Investigations of High-Power Laser-Induced Dielectric Breakdown in Gas Mixtures Containing Carbon Monoxide. <i>Journal of Physical Chemistry A</i> , 2008, 112, 7162-7169.	1.1	24

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37	Na ⁺ spectra in the 1.4–14 micron range: transitions and oscillator strengths involving f-, g-, and h-states. <i>Astronomy and Astrophysics</i> , 2012, 542, A35.	2.1	24
38	Calibration-free quantitative elemental analysis of meteor plasma using reference laser-induced breakdown spectroscopy of meteorite samples. <i>Astronomy and Astrophysics</i> , 2018, 610, A73.	2.1	24
39	Formation of Methane and (Per)Chlorates on Mars. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 221-232.	1.2	24
40	One-Pot Hydrogen Cyanide-Based Prebiotic Synthesis of Canonical Nucleobases and Glycine Initiated by High-Velocity Impacts on Early Earth. <i>Astrobiology</i> , 2020, 20, 1476-1488.	1.5	24
41	Transformation of fullerene peapods to double-walled carbon nanotubes induced by UV radiation. <i>Carbon</i> , 2005, 43, 1610-1616.	5.4	23
42	Laser diode photoacoustic detection in the infrared and near infrared spectral ranges. <i>Analyst, The</i> , 2005, 130, 1148.	1.7	23
43	Time-resolved Fourier transform emission spectroscopy of A ² Σ^+ infrared transition of the CN radical. <i>Journal of Molecular Spectroscopy</i> , 2008, 250, 20-26.	0.4	23
44	Preparation and some physical properties of Sb ₂ Te ₃ single crystals. <i>Journal of Crystal Growth</i> , 1989, 94, 656-662.	0.7	22
45	Diode laser spectra and potential energy curve for the molecular ion HeH ⁺ . <i>Journal of Molecular Spectroscopy</i> , 1992, 153, 701-709.	0.4	22
46	InAsSbP/InAs lasers (2.9 μ m) for spectroscopy of ammonia: low temperature investigations. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1998, 54, 821-829.	2.0	22
47	The Infrared Spectrum of CN in Its Ground Electronic State. <i>Collection of Czechoslovak Chemical Communications</i> , 2004, 69, 73-89.	1.0	22
48	Laser diode photoacoustic and FTIR laser spectroscopy of formaldehyde in the 2.3 μ m and 3.5 μ m spectral range. <i>Journal of Molecular Spectroscopy</i> , 2009, 256, 68-74.	0.4	22
49	Li ⁺ spectra in the 4.65–8.33 micron range: high- <i>L</i> states and oscillator strengths. <i>Astronomy and Astrophysics</i> , 2012, 545, A61.	2.1	22
50	The vibration-rotational bands ν_2 , $2\nu_2 - \nu_2$, and $\nu_2 + \nu_6 \approx \nu_6$ of H ₃ 12CF. <i>Journal of Molecular Spectroscopy</i> , 1991, 149, 109-124.	0.4	21
51	High-K(σ -propeller TM) states in the infrared spectrum of the Ar-CO complex. <i>Molecular Physics</i> , 1996, 87, 1071-1082.	0.8	21
52	High-resolution Fourier transform and submillimeter-wave study of the ν_6 band of 12CH ₃ F. <i>Journal of Molecular Spectroscopy</i> , 1991, 147, 279-299.	0.4	20
53	Laser photoacoustic spectrometry and its application for simulation of air pollution in a wind tunnel. <i>Analyst, The</i> , 1999, 124, 1205-1209.	1.7	20
54	Time-resolved Fourier transform infrared emission spectroscopy of laser ablation products. <i>Chemical Physics Letters</i> , 2008, 463, 38-41.	1.2	20

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55	The application of high-resolution IR spectroscopy and isotope labeling for detailed investigation of TiO ₂ /gas interface reactions. <i>Optical Materials</i> , 2013, 36, 159-162.	1.7	20
56	Meteorite-catalyzed synthesis of nucleosides and other prebiotic compounds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 7109-7110.	3.3	20
57	Infrared transitions and oscillator strengths of Ca and Mg. <i>Astronomy and Astrophysics</i> , 2013, 554, A24.	2.1	19
58	Laser ablation of CsI: time-resolved Fourier-transform infrared spectra of atomic cesium in the 8000-18000 cm ⁻¹ range. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2012, 29, 1112.0.9		18
59	Time-Resolved Fourier Transform Emission Spectroscopy of He/CH ₄ in a Positive Column Discharge. <i>Journal of Physical Chemistry A</i> , 2012, 116, 3137-3147.	1.1	18
60	Spontaneous and Photoinduced Conversion of CO ₂ on TiO ₂ Anatase (001)/(101) Surfaces. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26845-26850.	1.5	18
61	Oxygen Atom Exchange between Gaseous CO ₂ and TiO ₂ Nanoclusters. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3605-3612.	1.5	18
62	Photocatalytic transformation of CO ₂ to CH ₄ and CO on acidic surface of TiO ₂ anatase. <i>Optical Materials</i> , 2016, 56, 80-83.	1.7	18
63	Diode laser infrared spectra and potential energy curve for SH ⁺ . <i>Journal of Molecular Spectroscopy</i> , 1989, 138, 69-78.	0.4	17
64	Time-resolved Fourier transform infrared emission spectroscopy of H ₃ ⁺ molecular ion. <i>Chemical Physics Letters</i> , 2006, 418, 448-453.	1.2	17
65	Time-resolved Fourier-transform infrared emission spectroscopy of Au in the 1800-4000 cm ⁻¹ region. <i>Physical Review A</i> , 2010, 81, 013402.		17
66	GaSb based lasers operating near 2.3 μm for high resolution absorption spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 3066-3069.	2.0	16
67	Millimeter wave spectrum of bromomethyl radical, CH ₂ Br. <i>Journal of Chemical Physics</i> , 2005, 122, 134302.	1.2	16
68	Low-excited f-, g- and h-states in Au, Ag and Cu observed by Fourier-transform infrared spectroscopy in the 1000-7500 cm ⁻¹ region. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011, 44, 105002.	0.6	16
69	Main spectral features of meteors studied using a terawatt-class high-power laser. <i>Astronomy and Astrophysics</i> , 2019, 630, A127.	2.1	16
70	Diode laser application for research of molecular ions. <i>Infrared Physics and Technology</i> , 1995, 36, 537-543.	1.3	15
71	Time-resolved Fourier-transform infrared emission spectroscopy of Ag in the (1300-3600)-cm ⁻¹ region. <i>Physical Review A</i> , 2010, 81, 013402.		15
72	Formic Acid, a Ubiquitous but Overlooked Component of the Early Earth Atmosphere. <i>Chemistry - A European Journal</i> , 2020, 26, 12075-12080.	1.7	15

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73	The Perpendicular C-H Stretching Band and the Torsional Potential of Dimethylacetylene. <i>Journal of Molecular Spectroscopy</i> , 1996, 180, 15-25.	0.4	14
74	A High-Power Laser-Driven Source of Sub-nanosecond Soft X-Ray Pulses for Single-Shot Radiobiology Experiments. <i>Radiation Research</i> , 2007, 168, 382-387.	0.7	14
75	Time-resolved FTIR emission spectroscopy of Cu in the 1800-3800 cm ⁻¹ region: transitions involving f and g states and oscillator strengths. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011, 44, 025002.	0.6	14
76	Comparative SIFT-MS, GC-MS and FTIR analysis of methane fuel produced in biogas stations and in artificial photosynthesis over acidic anatase TiO ₂ and montmorillonite. <i>Journal of Molecular Spectroscopy</i> , 2018, 348, 152-160.	0.4	14
77	Quantitative analysis of trace mixtures of toluene and xylenes by CO ₂ laser photoacoustic spectrometry. <i>Analytica Chimica Acta</i> , 2000, 422, 179-185.	2.6	13
78	First application of multilayer graphene cantilever for laser photoacoustic detection. <i>Measurement: Journal of the International Measurement Confederation</i> , 2017, 101, 9-14.	2.5	13
79	Prebiotic synthesis at impact craters: the role of Fe-clays and iron meteorites. <i>Chemical Communications</i> , 2019, 55, 10563-10566.	2.2	13
80	Room-temperature diode laser photoacoustic spectroscopy near 2.3 μm. <i>Applied Physics B: Lasers and Optics</i> , 2005, 81, 857-861.	1.1	12
81	Silicon micro-levers and a multilayer graphene membrane studied via laser photoacoustic detection. <i>Journal of Sensors and Sensor Systems</i> , 2015, 4, 103-109.	0.6	12
82	Prediction of the inversional energy levels of the phosphine, arsine, and stibine molecules. <i>Journal of Molecular Spectroscopy</i> , 1986, 119, 426-432.	0.4	11
83	Infrared diode laser study of ArH ⁺ and ArD ⁺ ions in the positive column of an ac glow discharge. <i>Chemical Physics</i> , 1994, 186, 63-76.	0.9	11
84	Extended measurements of the millimeter wave spectrum of H ₂ COH ⁺ . <i>Chemical Physics Letters</i> , 1995, 244, 145-148.	1.2	11
85	Experimental transition dipole moment for the four lowest v=1 bands of ArH ⁺ in the 1 ¹ Σ ⁺ fundamental state. <i>Journal of Chemical Physics</i> , 2000, 113, 2134-2138.	1.2	11
86	New rotation-vibration band and potential energy function of NeH ⁺ in the ground electronic state. <i>Journal of Molecular Structure</i> , 2004, 695-696, 5-11.	1.8	11
87	Time-resolved Fourier transform infrared emission spectroscopy of He ₂ produced by a pulsed discharge. <i>Chemical Physics Letters</i> , 2004, 383, 256-260.	1.2	11
88	Allan variance for optimal signal averaging monitoring by diode laser and CO ₂ laser photo-acoustic spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2009, 256, 99-101.	0.4	11
89	Zn I spectra in the 1300-6500 cm ⁻¹ range. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 134, 64-73.	1.1	11
90	Langmuir probe measurement of the bismuth plasma plume formed by an extreme-ultraviolet pulsed laser. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 405205.	1.3	11

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91	Spectroscopic investigations of high-energy-density plasma transformations in a simulated early reducing atmosphere containing methane, nitrogen and water. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 27317-27325.	1.3	11
92	Selected ion flow tube mass spectrometry analyses of laser decomposition products of a range of explosives and ballistic propellants. <i>Analytical Methods</i> , 2016, 8, 1145-1150.	1.3	11
93	Spontaneous Oxygen Isotope Exchange between Carbon Dioxide and Oxygen-Containing Minerals: Do the Minerals "Breathe" CO ₂ ?. <i>Journal of Physical Chemistry C</i> , 2016, 120, 508-516.	1.5	11
94	Absorption spectra of ammonia near 1 ¼m. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 203, 392-397.	1.1	11
95	FTIR Laboratory Measurement of O i Spectra in the 0.77-12.5 ¼m Spectral Range: Rydberg States and Oscillator Strengths. <i>Astrophysical Journal, Supplement Series</i> , 2018, 239, 11.	3.0	11
96	Application of a dielectric breakdown induced by high-power lasers for a laboratory simulation of meteor plasma. <i>Experimental Astronomy</i> , 2021, 51, 425-451.	1.6	11
97	Millimetre-wave laboratory detection of H ₂ COH ⁺ . <i>Canadian Journal of Physics</i> , 1994, 72, 1078-1081.	0.4	10
98	Fourier Transform Emission Spectroscopy of Triplet 13C3. <i>Journal of Molecular Spectroscopy</i> , 1995, 172, 543-551.	0.4	10
99	The spectral linewidth of tunable semiconductor InAsSb/InAsSbP lasers emitting at 3.2-3.6 ¼m (2800-3100 cm ⁻¹). <i>Review of Scientific Instruments</i> , 2001, 72, 1988-1992.	0.6	10
100	Dispersion of Light and Heavy Pollutants in Urban Scale Models: CO ₂ Laser Photoacoustic Studies. <i>Applied Spectroscopy</i> , 2009, 63, 430-436.	1.2	10
101	Simulation of Air Pollution in a Wind Tunnel. , 2001, , 275-299.		9
102	Search for C ₂ ⁺ in Diffuse Clouds. <i>Publication of the Astronomical Society of Japan</i> , 2005, 57, 605-609.	1.0	9
103	Time-resolved Fourier transform infrared spectra of Sr: h-, g-levels and oscillator strengths. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 129, 324-332.	1.1	9
104	Optical fiber interferometer array for scanless Fourier-transform spectroscopy. <i>Optics Letters</i> , 2013, 38, 2262.	1.7	9
105	Room temperature spontaneous conversion of OCS to CO ₂ on the anatase TiO ₂ surface. <i>Chemical Communications</i> , 2014, 50, 7712-7715.	2.2	9
106	Near-infrared wafer-fused vertical-cavity surface-emitting lasers for HF detection. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 147, 53-59.	1.1	9
107	The infrared spectrum of magnesium oxide: a diode laser study using the discharge-enhanced reaction between hot magnesium vapor and N ₂ O. <i>Chemical Physics Letters</i> , 1991, 176, 489-494.	1.2	8
108	Photodegradation of 1-nitropyrene in solution and in the adsorbed state. <i>Journal of Hazardous Materials</i> , 2002, 95, 175-184.	6.5	8

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109	Self-Assemblies of Cationic Porphyrins with Functionalized Water-Soluble Single-Walled Carbon Nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 5795-5802.	0.9	8
110	Fourier transform infrared emission spectra of atomic rubidium: g- and h-states. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2012, 45, 175002.	0.6	8
111	Excitation of helium Rydberg states and doubly excited resonances in strong extreme ultraviolet fields: Full-dimensional quantum dynamics using exponentially tempered Gaussian basis sets. <i>Journal of Chemical Physics</i> , 2013, 139, 104314.	1.2	8
112	Reduced double-minimum potential curves for XY ₃ pyramidal molecules. <i>Collection of Czechoslovak Chemical Communications</i> , 1985, 50, 1519-1536.	1.0	8
113	Preparation of superconductive YBaCuO layers formed by aggregates of released particles using laser deposition in air. <i>Applied Physics Letters</i> , 1992, 60, 1747-1749.	1.5	7
114	Electron-impact vibrational excitation of isocyanic acid HNCO. <i>Physical Review A</i> , 2020, 102, .	1.0	7
115	An ab initio investigation of the potential function of PH ₃ . <i>Journal of Molecular Spectroscopy</i> , 1986, 118, 88-95.	0.4	6
116	Two-mode diode-laser spectroscopy with a InAsSb/InAsSbP laser near 3.6 Åµm. <i>Semiconductors</i> , 1999, 33, 1322-1327.	0.2	6
117	A tunable single-mode 3.2 Åµm laser based on an InAsSb/InAsSbP double heterostructure with drive-current tuning range of 10 cm ⁻¹ . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2000, 56, 2125-2130.	2.0	6
118	Wind Tunnel Simulation of Air Pollution Dispersion in a Street Canyon. <i>Journal of AOAC INTERNATIONAL</i> , 2002, 85, 243-248.	0.7	6
119	Title is missing!. <i>European Physical Journal D</i> , 2003, 53, 171-177.	0.4	6
120	Atomic cesium 6h states observed by time-resolved FTIR spectroscopy. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011, 44, 225006.	0.6	6
121	Laser ablation of an indium target: time-resolved Fourier-transform infrared spectra of In I in the 700-7700 cm ⁻¹ range. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 2275-2283.	1.6	6
122	Acidic Hydrogen Enhanced Photocatalytic Reduction of CO ₂ on Planetary Surfaces. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1001-1009.	1.2	6
123	Velocity Modulation Diode Laser Spectroscopy of Deuterium Sulfide (SD ⁺). <i>Journal of Molecular Spectroscopy</i> , 1995, 171, 579-582.	0.4	5
124	Millimeter-Wave Spectra of H ₂ ¹³ COH ⁺ and D ₂ COH ⁺ . <i>Journal of Molecular Spectroscopy</i> , 1997, 183, 107-112.	0.4	5
125	CO ₂ -laser photoacoustic detection of gaseous n-pentylacetate. <i>Journal of Molecular Spectroscopy</i> , 2009, 256, 109-110.	0.4	5
126	FTIR laboratory measurement of Ne Rydberg states in 1.43-14.3 Åµm spectral range. <i>Astronomy and Astrophysics</i> , 2015, 582, A12.	2.1	5

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127	Primordial Radioactivity and Prebiotic Chemical Evolution: Effect of $\hat{1}^3$ Radiation on Formamide-Based Synthesis. Journal of Physical Chemistry B, 2020, 124, 8951-8959.	1.2	5
128	Nitrogen Oxide Production in Laser-Induced Breakdown Simulating Impacts on the Hadean Atmosphere. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	5
129	Diode laser spectroscopy using two modes of an InAsSb/InAsSbP laser near 3.6 $\hat{1}^4$ m. Applied Physics B: Lasers and Optics, 2000, 71, 481-485.	1.1	4
130	InAsSb/InAsSbP current-tunable laser with narrow spectral line width. Applied Physics B: Lasers and Optics, 2003, 76, 633-637.	1.1	4
131	High resolution emission Fourier transform infrared spectra of the 4p-5s and 5p-6s bands of ArH. Journal of Chemical Physics, 2005, 122, 114314.	1.2	4
132	Infrared diode laser spectroscopy. Opto-electronics Review, 2010, 18, .	2.4	4
133	Argon FTIR spectra between 800 and 2000 cm^{-1} : h- and i-levels and transition probabilities. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 182, 337-345.	1.1	4
134	Influence of photochemical processes on traffic-related airborne pollutants in urban street canyon. Journal of Atmospheric and Solar-Terrestrial Physics, 2016, 147, 1-10.	0.6	4
135	Time-resolved Fourier transform infrared emission spectroscopy of CO $\hat{1}^1$ and $\hat{1}^2$ extended bands in the ground $X^1\Sigma^+$ state produced by formamide glow discharge. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 262, 107521.	1.1	4
136	Vibrational spectra of La@ $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si54.svg" \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mtext} \rangle \text{C} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 60 \langle \text{mml:} \rangle \rangle \rangle \rangle$ and Ce@ $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si55.svg" \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mtext} \rangle \text{C} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 60 \langle \text{mml:} \rangle \rangle \rangle \rangle$ endohedral fullerenes: Influence of spin state mult. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 254, 119593.	2.0	4
137	ANN-LIBS analysis of mixture plasmas: detection of xenon. Journal of Analytical Atomic Spectrometry, 0, , .	1.6	4
138	80 K superconducting Bi-Sr-Ca-Cu-O layers prepared by laser ablation in the air. Superconductor Science and Technology, 1998, 11, 1341-1343.	1.8	3
139	Diagnostic and characterization of the VCSEL diodes based on $\hat{1}$ GaSb. Applied Physics B: Lasers and Optics, 2010, 99, 333-338.	1.1	3
140	Time-Resolved Fourier Transform Emission Spectroscopy of CF ₃ Br and CF ₃ CFHCF ₃ in a Pulsed Electrical Discharge. Plasma Chemistry and Plasma Processing, 2011, 31, 417-426.	1.1	3
141	Spontaneous oxygen isotope exchange between carbon dioxide and natural clays: Refined rate constants referenced to TiO ₂ (anatase/rutile). Applied Clay Science, 2017, 137, 6-10.	2.6	3
142	The Chemistry of CO ₂ and TiO ₂ . Springer Briefs in Molecular Science, 2019, , .	0.1	3
143	Micellar electrokinetic chromatography as a powerful analytical tool for research on prebiotic chemistry. Microchemical Journal, 2021, 167, 106022.	2.3	3
144	The Infrared Diode Laser Spectroscopy of the $\hat{1}^1/2^+$ $\hat{1}^1/2^5$ $\hat{1}^1/2$ Hot Band of Acetylene. Journal of Molecular Spectroscopy, 1998, 187, 82-88.	0.4	2

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145	Rovibrational intensities in the $\hat{1}/4$ band of ammonia. Journal of Molecular Structure, 1999, 482-483, 305-309.	1.8	2
146	Combining Fourier transform nuclear quadrupole resonance (FT-NQR) spectroscopy and mass spectrometry (MS) to study the electronic structure of titanocene dichlorides. Analyst, The, 2012, 137, 1338.	1.7	2
147	Kr I spectra in the $5\hat{e}14\hat{A}\mu\text{m}$ range. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 249, 106985.	1.1	2
148	FTIR laboratory measurement of He I spectra in the $6.5\hat{e}14\hat{A}\mu\text{m}$ spectral range: Transitions involving $\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si158.svg"}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:mi}\rangle\langle\text{mml:mi}\rangle\langle\text{mml:mo}\rangle,\langle\text{mml:mo}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:math}\rangle$	1.1	2
149	Abiotic Formation of Methane and Prebiotic Molecules on Mars and Other Planets. ACS Earth and Space Chemistry, 2021, 5, 1172-1179.	1.2	2
150	Thermal Decomposition of Cocaine and Methamphetamine Investigated by Infrared Spectroscopy and Quantum Chemical Simulations. ACS Omega, 2021, 6, 14447-14457.	1.6	2
151	The spectrum of ammonia near $0.793\hat{A}\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si32.svg"}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:mi mathvariant="normal"}\rangle\hat{1}/4\langle\text{mml:mi}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:math}\rangle\text{m}$. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 273, 107838.	1.1	2
152	Morphology of Meteorite Surfaces Ablated by High-Power Lasers: Review and Applications. Applied Sciences (Switzerland), 2022, 12, 4869.	1.3	2
153	Formamide-Based Post-impact Thermal Prebiotic Synthesis in Simulated Craters: Intermediates, Products and Mechanism. Frontiers in Astronomy and Space Sciences, 2022, 9, .	1.1	2
154	Single-mode InAsSb/InAsSbP laser ($\hat{1}\hat{e}3.2\hat{1}/4\text{m}$) Tunable over 100 \hat{A} ... Semiconductors, 2000, 34, 237-242.	0.2	1
155	Diode laser photoacoustic detection of automobile exhaust emissions. , 0, , .		1
156	Observational Studies Relating To Diffuse Interstellar Bands. AIP Conference Proceedings, 2006, , .	0.3	1
157	Thin graphite membranes for laser photoacoustic spectroscopy. , 2015, , .		1
158	Recording and evaluation of high resolution optical meteor spectra and comparative laboratory measurements using laser ablation of solid meteorite specimens. , 2017, , .		1
159	Ariel \hat{e} a window to the origin of life on early earth?. Experimental Astronomy, 2020, , 1.	1.6	1
160	Prebiotic Route to Thymine from Formamide \hat{e} A Combined Experimental \hat{e} Theoretical Study. Molecules, 2021, 26, 2248.	1.7	1
161	High-resolution emission FT spectra of sodium in a microwave discharge: Intensity variation of the $D\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si5.svg"}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:msub}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:mn}\rangle 1\langle\text{mml:mn}\rangle\langle\text{mml:msub}\rangle\langle\text{mml:math}\rangle/D\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"}\rangle\langle\text{mml:mrow}\rangle\langle\text{mml:mn}\rangle 2\langle\text{mml:mn}\rangle\langle\text{mml:msub}\rangle\langle\text{mml:math}\rangle$ lines in exoplanetary atmospheres. Journal of Quant	1.1	1
162	Wind tunnel simulation of air pollution dispersion in a street canyon. Journal of AOAC INTERNATIONAL, 2002, 85, 243-8.	0.7	1

#	ARTICLE	IF	CITATIONS
163	New physical insights: Formamide discharge decomposition and the role of fragments in the formation of large biomolecules. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 278, 121322.	2.0	1
164	Probing Plasma Physics and Elemental Composition of a Leonid Meteor by Fitting Complex Plasma Radiation Model Parameters. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	1
165	Time-resolved emission spectra of plasma produced by excimer laser ablation of Pb-Bi-Sr-Ca-Cu-O. European Physical Journal D, 1999, 49, 1005-1008.	0.4	0
166	Application of Inverse Laplace Transformation Method for Analysis of Plasma Emission Formed by Laser Ablation of Pb-Bi-Sr-Ca-Cu-O. Contributions To Plasma Physics, 2001, 41, 417-424.	0.5	0
167	MQW laser diode photoacoustic detection of formaldehyde in 2.3 μm spectral range. , 2007, , .		0
168	High-power laser-plasma chemistry in planetary atmospheres. Proceedings of the International Astronomical Union, 2008, 4, 473-474.	0.0	0
169	Can be diode laser emission characterized by high resolution FT spectrometry?. , 2009, , .		0
170	Diagnostic and characterization of the VCSEL diodes based on GaSb. , 2009, , .		0
171	Characterization of GaSb based VCSE and MQW lasers for 2.3 μm sensing application. , 2009, , .		0
172	Optical characterization of the VCSEL diodes based on GaSb. , 2010, , .		0
173	Oxygen isotope exchange between carbon dioxide and solid TiO_2 . , 2011, , .		0
174	Formation of metal nanoparticles studied by high resolution time-resolved Fourier-transform infrared spectroscopy. , 2012, , .		0
175	Optical absorption spectroscopy with 1310 nm wavelength wafer-fused vertical-cavity surface-emitting lasers. , 2014, , .		0
176	Spontaneous and photoinduced conversion of CO_2 on TiO_2 anatase. , 2015, , .		0
177	The argon spectrum in the range of 1200–2000 cm^{-1} . Optics and Spectroscopy (English Translation of) Tj ETQq _{0,12} 1 0.784314 rgBT		0
178	Spontaneous oxygen isotope exchange between carbon dioxide and oxygen containing minerals (Do) Tj ETQq _{0 0 0} rgBT /Overlock 10 TF		0
179	Additional Views on Prebiotic Molecules. Springer Briefs in Molecular Science, 2019, , 69-76.	0.1	0
180	Oxygen Atoms Exchange Between Carbon Dioxide and TiO_2 (Light Induced and Spontaneous). Springer Briefs in Molecular Science, 2019, , 9-39.	0.1	0

#	ARTICLE	IF	CITATIONS
181	Carbon Dioxide and the Effects on Climate. Springer Briefs in Molecular Science, 2019, , 1-7.	0.1	0
182	Photochemical Reduction of CO2 on Terrestrial Planets. , 2019, , .		0
183	Time-resolved Fourier transform infrared spectroscopy and updated system of neutral oxygen (O I) levels. , 2018, , .		0
184	Experimental Setup and Spectral Analysis. Springer Series in Chemical Physics, 2020, , 3-7.	0.2	0
185	Spectra. Springer Series in Chemical Physics, 2020, , 9-144.	0.2	0