

# Vladimir I Feldman

## List of Publications by Year in descending order

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166  
papers

2,424  
citations

218381

26  
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315357

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169  
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169  
docs citations

169  
times ranked

995  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental Evidence for the Formation of HXeCCH: The First Hydrocarbon with an Inserted Rare-Gas Atom. <i>Journal of the American Chemical Society</i> , 2003, 125, 4698-4699.	6.6	142
2	Further evidence for formation of xenon dihydride from neutral hydrogen atoms: a comparison of ESR and IR spectroscopic results. <i>Chemical Physics Letters</i> , 1997, 280, 507-512.	1.2	85
3	Formation and decay of transient xenon dihydride resulting from hydrocarbon radiolysis in a xenon matrix. <i>Chemical Physics Letters</i> , 1996, 255, 425-430.	1.2	72
4	Isotopic effect on thermal mobility of atomic hydrogen in solid xenon. <i>Journal of Chemical Physics</i> , 2002, 116, 5708-5716.	1.2	61
5	Radiation-induced transformations of isolated organic molecules in solid rare gas matrices. <i>Radiation Physics and Chemistry</i> , 1999, 55, 565-571.	1.4	59
6	On photochemistry of water in solid Xe: Thermal and light-induced decomposition of HXeOH and HXeH and formation of H <sub>2</sub> O <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2002, 116, 5649-5656.	1.2	54
7	Matrix-Isolation Studies on the Radiation-Induced Chemistry in H <sub>2</sub> O/CO <sub>2</sub> Systems: Reactions of Oxygen Atoms and Formation of HOCO Radical. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2578-2586.	1.1	51
8	Structure and Properties of Hydrocarbon Radical Cations in Low-Temperature Matrices as Studied by a Combination of EPR and IR Spectroscopy. <i>Acta Chemica Scandinavica</i> , 1997, 51, 181-192.	0.7	42
9	Infrared absorption and electron paramagnetic resonance studies of vinyl radical in noble-gas matrices. <i>Journal of Chemical Physics</i> , 2005, 123, 064318.	1.2	41
10	Radiation sterilisation of doxorubicin bound to poly(butyl cyanoacrylate) nanoparticles. <i>International Journal of Pharmaceutics</i> , 2008, 356, 325-332.	2.6	40
11	Stabilisation and reactions of aliphatic radical cations produced by fast electron irradiation in solid argon matrices. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 1769-1774.	1.3	39
12	From triple interpolyelectrolyte-metal complexes to polymer-metal nanocomposites. <i>Advances in Colloid and Interface Science</i> , 2010, 158, 84-93.	7.0	39
13	Radiation-induced transformations of methanol molecules in low-temperature solids: a matrix isolation study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 32503-32513.	1.3	36
14	Matrix isolation model studies on the radiation-induced transformations of small molecules of astrochemical and atmospheric interest. <i>Radiation Physics and Chemistry</i> , 2016, 124, 7-13.	1.4	36
15	Matrix-isolation and ab initio study of HXeCCH complexed with acetylene. <i>Chemical Physics Letters</i> , 2009, 481, 83-87.	1.2	32
16	Radiation chemistry of polymers. <i>High Energy Chemistry</i> , 2009, 43, 1-18.	0.2	32
17	Effect of Matrix Electronic Characteristics on Trapping and Degradation of Organic Radical Cations in Solid Rare Gases: A Case Study of Methylal Radical Cation. <i>Journal of Physical Chemistry A</i> , 2000, 104, 3792-3799.	1.1	31
18	Effect of matrix and substituent on the electronic structure of trapped benzene radical cations. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 29-35.	1.3	31

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19	Hydrogen atoms in solid xenon: Trapping site structure, distribution, and stability as revealed by EPR studies in monoisotopic and isotopically enriched xenon matrices. <i>Journal of Chemical Physics</i> , 2008, 128, 214511.	1.2	30
20	Direct visualization of the Hâ€“Xe bond in xenon hydrides: Xenon isotopic shift in the IR spectra. <i>Journal of Chemical Physics</i> , 2009, 131, 151101.	1.2	30
21	Photolabile xenon hydrides: A case study of HXeSH and HXeH. <i>Journal of Chemical Physics</i> , 2013, 139, 124315.	1.2	30
22	Conformational Switching of HOCO Radical: Selective Vibrational Excitation and Hydrogen-Atom Tunneling. <i>Journal of the American Chemical Society</i> , 2017, 139, 9551-9557.	6.6	30
23	An ESR study of benzene radical cation in an argon matrix: evidence for favourable stabilization of 2B1g rather than 2B2g state. <i>Chemical Physics Letters</i> , 1999, 300, 713-718.	1.2	27
24	X-ray Induced Formation of Metal Nanoparticles from Interpolyelectrolyte Complexes with Copper and Silver Ions: The Radiation-Chemical Contrast. <i>Journal of Physical Chemistry C</i> , 2013, 117, 7286-7293.	1.5	27
25	Radiation-induced transformations of matrix-isolated formic acid: evidence for the HCOOH â†’ HOCO + H channel. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 30648-30658.	1.3	27
26	VUV photochemistry of the H<sub>2</sub>Oâˆ“CO complex in noble-gas matrices: formation of the OHâˆ“CO complex and the HOCO radical. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 356-365.	1.3	27
27	Radiation-induced degradation of alkane molecules in solid rare gas matrices. <i>Radiation Physics and Chemistry</i> , 1996, 48, 261-269.	1.4	26
28	Reactions of H atoms produced by electron irradiation of benzene in solid xenon: IR spectrum of cyclohexadienyl radical and possible involvement of HXeC6H5. <i>Chemical Physics Letters</i> , 2007, 437, 207-211.	1.2	24
29	Reduction of copper(II) ions in polyacrylic acid-polyethyleneimine complexes using X-ray radiation. <i>High Energy Chemistry</i> , 2009, 43, 100-104.	0.2	23
30	Matrix isolation and <i>ab initio</i> study on HCN/CO <sub>2</sub> system and its radiation-induced transformations: Spectroscopic evidence for HCNâˆ“CO <sub>2</sub> and <i>trans</i> -HCNHâˆ“CO <sub>2</sub> complexes. <i>Journal of Chemical Physics</i> , 2016, 145, 214309.	1.2	23
31	Characterization of the HCNâˆ“CO complex and its radiation-induced transformation to HNCâˆ“CO in cold media: an experimental and theoretical investigation. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 24348-24356.	1.3	23
32	Structure and properties of the radiation-induced intermediates produced from HCN in noble gas matrices. <i>Radiation Physics and Chemistry</i> , 2016, 124, 30-37.	1.4	22
33	X-ray radiolysis of C <sub>2</sub> hydrocarbons in cryogenic media. <i>Radiation Physics and Chemistry</i> , 2018, 151, 253-260.	1.4	22
34	Controlled radiation-chemical synthesis of metal polymer nanocomposites in the films of interpolyelectrolyte complexes: Principles, prospects and implications. <i>Radiation Physics and Chemistry</i> , 2020, 169, 108076.	1.4	22
35	Radiation-induced transformations of isolated CH <sub>3</sub> CN molecules in noble gas matrices. <i>Radiation Physics and Chemistry</i> , 2017, 141, 363-368.	1.4	21
36	EPR and IR Spectroscopy of Free Radicals and Radical Ions Produced by Radiation in Solid Systems. , 2014, , 151-187.		21

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37	EPR study of methyl and ethyl acrylate radical cations and their transformations in low-temperature matrices. Perkin Transactions II RSC, 2002, , 687-699.	1.1	20
38	Radical products of $\text{I}^{131}$ -radiolysis of 12-crown-4 at 77 K. High Energy Chemistry, 2007, 41, 65-70.	0.2	20
39	The peculiarities of formation of the metal nanoparticles in irradiated polymer metal complexes. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 334-338.	0.6	20
40	Radiation-induced synthesis of copper nanostructures in the films of interpolymer complexes. Radiation Physics and Chemistry, 2019, 158, 115-121.	1.4	20
41	Chemical reactions in the xenon-acetylene systems irradiated with fast electrons at 16 K: formation of xenon-containing molecules and radicals. Russian Chemical Bulletin, 2005, 54, 1458-1466.	0.4	19
42	Controlling the size and distribution of copper nanoparticles in double and triple polymer metal complexes by X-ray irradiation. Radiation Physics and Chemistry, 2014, 94, 62-65.	1.4	19
43	Efficient size control of copper nanoparticles generated in irradiated aqueous solutions of star-shaped polyelectrolyte containers. Physical Chemistry Chemical Physics, 2015, 17, 11490-11498.	1.3	19
44	Formation of metal-polymer hybrid nanostructures during radiation-induced reduction of metal ions in poly(acrylic acid)-poly(ethylenimine) complexes. Polymer Science - Series C, 2011, 53, 61-67.	0.8	18
45	Radiation-Induced Transformations of $\text{C}_6\text{H}_6$ Molecules in Solid Noble-Gas Matrices: Is Benzene Intrinsically Resistant in Condensed Media?. Journal of Physical Chemistry A, 2019, 123, 5199-5205.	1.1	18
46	The formation of metal nanoparticles in polyacrylic acid-polyethyleneimine complex upon reduction of copper(II) ions using X-ray irradiation. High Energy Chemistry, 2011, 45, 99-103.	0.2	17
47	Quantitative assessment of the absorbed dose in cryodeposited noble-gas films under X-ray irradiation: Simulation vs. experiment. Radiation Physics and Chemistry, 2020, 177, 109084.	1.4	17
48	Formation of radicals in the liquid and solid-phase radiolysis of esters studied by spin trapping. Journal of Radioanalytical and Nuclear Chemistry, 1986, 107, 129-146.	0.7	16
49	Stabilization and isomerization of radical cations generated by fast electron irradiation of unsaturated organic molecules in a solid argon matrix. Radiation Physics and Chemistry, 2006, 75, 106-114.	1.4	16
50	Diketone Radical Cations: Ketonic and Enolic Forms As Revealed by Matrix EPR Studies and DFT Calculations. Journal of Physical Chemistry A, 2007, 111, 3294-3301.	1.1	16
51	Spatial Organization of a Metal-Polymer Nanocomposite Obtained by the Radiation-Induced Reduction of Copper Ions in the Poly(Allylamine)-Poly(Acrylic Acid)- $\text{Cu}^{2+}$ System. Mendeleev Communications, 2012, 22, 211-212.	0.6	15
52	Kinetics and mechanism of the radiation-chemical synthesis of krypton hydrides in solid krypton matrices. Radiation Physics and Chemistry, 2015, 110, 17-23.	1.4	15
53	Experimental determination of the absolute infrared absorption intensities of formyl radical HCO. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 187, 39-42.	2.0	15
54	Communication: A hydrogen-bonded difluorocarbene complex: <i>Ab initio</i> and matrix isolation study. Journal of Chemical Physics, 2017, 147, 131102.	1.2	15

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55	Communication: Stabilization of radical anions with weakly bound electron in condensed media: A case study of diacetyl radical anion. <i>Journal of Chemical Physics</i> , 2011, 135, 101103.	1.2	14
56	Reversible photochemical transformations of cis- and trans-2,3-dimethyloxirane radical cations in freonic matrices at 77K. <i>Mendeleev Communications</i> , 2011, 21, 153-154.	0.6	14
57	Radiation-induced preparation of metal nanostructures in coatings of interpolyelectrolyte complexes. <i>Radiation Physics and Chemistry</i> , 2019, 162, 23-30.	1.4	14
58	Matrix isolation in laboratory astrochemistry: state-of-the-art, implications and perspective. <i>Russian Chemical Reviews</i> , 2021, 90, 1142-1165.	2.5	14
59	Title is missing!. <i>High Energy Chemistry</i> , 2002, 36, 309-315.	0.2	13
60	EPR Evidence for a Physically Trapped Excess Electron in a Glassy Ionic Liquid. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 2896-2899.	2.1	13
61	Radiation-induced preparation of bimetallic nanoparticles in the films of interpolyelectrolyte complexes. <i>Radiation Physics and Chemistry</i> , 2018, 142, 65-69.	1.4	13
62	Formation and interconversion of CCN and CNC radicals resulting from the radiation-induced decomposition of acetonitrile in solid noble gas matrices. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 13014-13021.	1.3	13
63	Selective localization of primary radiation-chemical events in solid aliphatic hydrocarbons and related polymers as evidenced by ESR. <i>Applied Radiation and Isotopes</i> , 1996, 47, 1497-1501.	0.7	12
64	EPR study of positive holes on phenylene vinylene chains: from dimer to polymer. <i>Chemical Physics Letters</i> , 2004, 389, 108-112.	1.2	12
65	Structure of Radical Cations of Saturated Heterocyclic Compounds with Two Heteroatoms As Studied by Electron Paramagnetic Resonance, Electron Nuclear Double Resonance, and Density Functional Theory Calculations. <i>Journal of Physical Chemistry A</i> , 2005, 109, 6166-6173.	1.1	12
66	The radiation-induced chemistry in solid xenon matrices. <i>Low Temperature Physics</i> , 2012, 38, 766-773.	0.2	12
67	Effect of molecular structure on fragmentation of isolated organic molecules in solid rare gas matrices. <i>Radiation Physics and Chemistry</i> , 2012, 81, 1434-1439.	1.4	12
68	Mechanisms of Radiation-Induced Degradation of CFC13 and CF2Cl2 in Noble-Gas Matrixes: An Evidence for "Hot" Ionic Channels in the Solid Phase. <i>Journal of Physical Chemistry A</i> , 2016, 120, 7847-7858.	1.1	12
69	Hafnium Oxide as a Nanoradiosensitizer under X-ray Irradiation of Aqueous Organic Systems: A Model Study Using the Spin-Trapping Technique and Monte Carlo Simulations. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27375-27384.	1.5	12
70	Radiation-induced synthesis of formic acid in the H2O-CO system: A matrix isolation study. <i>Chemical Physics Letters</i> , 2020, 753, 137540.	1.2	12
71	ESR and quantum chemical studies of the structures and thermal transformations of the radical cations of vinylcyclopropane in irradiated frozen Freon matrices. Simulation of radical processes in solids. <i>Russian Chemical Bulletin</i> , 1994, 43, 1-12.	0.4	11
72	Matrix effects in the reactions of organic radical cations in ground and excited states in solid phase. <i>High Energy Chemistry</i> , 2000, 34, 236-245.	0.2	11

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73	Effect of phase condition on the low-temperature radiation-induced degradation of polycarbonate as studied by spectroscopic techniques. <i>Polymer</i> , 2001, 42, 1987-1993.	1.8	11
74	Radiolysis of aqueous DCH18C6 solutions at 77 K. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2009, 279, 647-653.	0.7	11
75	Mechanism of the radiation-induced transformations of fluoroform in solid noble gas matrixes. <i>Radiation Physics and Chemistry</i> , 2017, 138, 60-66.	1.4	11
76	Carbene-insertion noble gas compounds: FKrCF and FXeCF. <i>Chemical Physics Letters</i> , 2020, 744, 137211.	1.2	11
77	Reactions of the radical cations of aliphatic aldehydes in freon matrixes. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1985, 96, 137-151.	0.7	10
78	Reactions of radical cations of acetals: Evidence for unimolecular decomposition. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1988, 126, 39-51.	0.7	10
79	Title is missing!. <i>High Energy Chemistry</i> , 2001, 35, 319-327.	0.2	10
80	Radiation chemical synthesis of polyethylene oxide hydrogel containing DCH18C6 crown ether: A new approach. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2004, 261, 245-248.	0.7	10
81	Radiolysis of Aqueous Solutions of Poly(ethylene oxide) at 77 K. <i>High Energy Chemistry</i> , 2005, 39, 201-206.	0.2	10
82	Radiation-chemical synthesis of crown-containing poly(ethylene oxide) hydrogels. Swelling behavior and crown ether retention. <i>Radiation Physics and Chemistry</i> , 2008, 77, 23-28.	1.4	10
83	Radiation-induced transformations of HCN $\cdot$ C <sub>2</sub> H <sub>2</sub> , HCN $\cdot$ C <sub>2</sub> H <sub>4</sub> and HCN $\cdot$ C <sub>2</sub> H <sub>6</sub> complexes in noble gas matrixes: Synthesis of C <sub>3</sub> H <sub>x</sub> N molecules in cryogenic media. <i>Radiation Physics and Chemistry</i> , 2021, 180, 109232.	1.4	10
84	The nature and photochemistry of 2,2-dimethyloxirane radical cations in freonic matrixes at 77K. <i>Mendelevov Communications</i> , 2011, 21, 155-156.	0.6	9
85	Phototransformations of methylsubstituted oxiranes $\cdot$ radical cations. <i>High Energy Chemistry</i> , 2012, 46, 183-193.	0.2	9
86	Effect of Noncovalent Interactions on Vibronic Transitions: An Experimental and Theoretical Study of the C <sub>2</sub> H <sub>2</sub> $\cdot$ CO Complex. <i>ChemPhysChem</i> , 2017, 18, 949-958.	1.0	9
87	Spectroscopic characterization of the complex of vinyl radical and carbon dioxide: Matrix isolation and <i>ab initio</i> study. <i>Journal of Chemical Physics</i> , 2017, 147, 184301.	1.2	9
88	Matrix Isolation and Ab Initio Study on the CHF <sub>3</sub> $\cdot$ CO Complex. <i>Journal of Physical Chemistry A</i> , 2018, 122, 4042-4047.	1.1	9
89	A one-pot radiation-chemical synthesis of metal-polymeric nanohybrides in solutions of vinyltriazole containing gold ions. <i>Mendelevov Communications</i> , 2019, 29, 158-159.	0.6	9
90	CHF <sub>3</sub> $\cdot$ H <sub>2</sub> O complex revisited: a matrix isolation and <i>ab initio</i> study. <i>Structural Chemistry</i> , 2019, 30, 559-566.	1.0	9

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91	ESR and quantum-chemical studies of the structure and thermal transformations of vinylcyclopropane radical cations in irradiated frozen Freon matrices. Simulation of radical processes in the gas phase. Russian Chemical Bulletin, 1995, 44, 203-227.	0.4	8
92	Radiation-induced processes in poly(alkylene terephthalates) and diethyl terephthalate: evidence for formation of cyclohexadienyl-type radicals. Polymer, 1997, 38, 3927-3930.	1.8	8
93	Radiation-chemical synthesis of poly(vinyl alcohol) hydrogel containing dicyclohexano-18-crown-6. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 356-361.	0.6	8
94	Delocalized methoxyacetone radical cation: structure and reactivity. Mendeleev Communications, 2008, 18, 69-70.	0.6	8
95	Structure and photochemistry of "bridged" bifunctional radical cations: Amidoesters vs. amides. Radiation Physics and Chemistry, 2008, 77, 416-427.	1.4	8
96	The HKrCCH <sup>-</sup> CO <sub>2</sub> complex: an ab initio and matrix-isolation study. Physical Chemistry Chemical Physics, 2019, 21, 3656-3661.	1.3	8
97	Direct evidence for a radiation-induced synthesis of acetonitrile and isoacetonitrile from a 1%:1% CH <sub>4</sub> :HCN complex at cryogenic temperatures: is it a missing link between inorganic and prebiotic astrochemistry?. Physical Chemistry Chemical Physics, 2021, 23, 18449-18460.	1.3	8
98	Radiation-induced transformations of acetaldehyde molecules at cryogenic temperatures: a matrix isolation study. Physical Chemistry Chemical Physics, 2021, 24, 419-432.	1.3	8
99	Ion-molecule reactions and thermal isomerization of tricyclo[4.3.0.0 <sup>3,7</sup> ]nona-4,8-diene radical cations to tricyclo[4.2.1.0 <sup>4,9</sup> ]nona-2,7-diene radical cations in a <sup>13</sup> Irradiated frozen Freon matrix. Radiation Physics and Chemistry, 1999, 55, 559-563.	1.4	7
100	High-resolution EPR spectroscopy of small radicals in a solid <sup>136</sup> Xe matrix. Mendeleev Communications, 2008, 18, 121-122.	0.6	7
101	Evidence for Indirect Action of Ionizing Radiation in 18-Crown-6 Complexes with Halogenous Salts of Strontium: Simulation of Radiation-Induced Transformations in Ionic Liquid/Crown Ether Compositions. Journal of Physical Chemistry B, 2018, 122, 1992-2000.	1.2	7
102	Radiation-induced chemistry in the C <sub>2</sub> H <sub>2</sub> :H <sub>2</sub> O system at cryogenic temperatures: a matrix isolation study. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	7
103	Generation of spatially ordered metal-polymer nanostructures in the irradiated dispersions of poly(acrylic acid)-poly(vinylimidazole)-Cu <sup>2+</sup> complexes. Colloid and Polymer Science, 2020, 298, 193-202.	1.0	7
104	A hydrogen-bonded CHF:HF complex: IR spectra and unusual photochemistry. Journal of Chemical Physics, 2021, 154, 104310.	1.2	7
105	Formation and Evolution of H <sub>2</sub> C <sub>3</sub> O <sup>+</sup> Radical Cations: A Computational and Matrix Isolation Study. Journal of the American Chemical Society, 2022, 144, 8115-8128.	6.6	7
106	The Radiation Chemistry of NH <sub>3</sub> :CO Complex in Cryogenic Media as Studied by Matrix Isolation. Journal of Physical Chemistry A, 2022, 126, 3893-3902.	1.1	7
107	Reactions of the radical cations of acetic acid and acetic anhydride in CCl <sub>3</sub> . Journal of Radioanalytical and Nuclear Chemistry, 1985, 96, 203-217.	0.7	6
108	Structural and chemical transformations in statistical multiblock-copolymers with soft and rigid blocks upon fluorine treatment. Reactive and Functional Polymers, 1995, 26, 167-175.	2.0	6



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109	Formation and reactions of paramagnetic species in irradiated microheterogeneous copolymer systems with different electronic characteristics of components. <i>Radiation Physics and Chemistry</i> , 2002, 63, 75-80.	1.4	6
110	An ESR study of radiation-chemical transformation of 4,4'-di-(tert-butylcyclohexano)-18-crown-6 and its solution in 1-octanol at 77K. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2010, 284, 641-645.	0.7	6
111	Fragmentation of the primary radical cations of methoxyacetone and acetylacetone in a solid argon matrix. <i>High Energy Chemistry</i> , 2011, 45, 351-352.	0.2	6
112	Radiation-induced radicals in different polymorphic modifications of d-mannitol: Structure, conformations and dosimetric implications. <i>Radiation Physics and Chemistry</i> , 2015, 117, 178-183.	1.4	6
113	Radiation-induced transformations of isolated toluene molecules in low-temperature matrices: Towards better understanding of molecular radiation chemistry in condensed phases. <i>Radiation Physics and Chemistry</i> , 2020, 176, 109022.	1.4	6
114	Radiation-Induced Transformation of $\text{CHF}_3 \cdot \hat{\text{A}} \cdot \hat{\text{A}} \cdot \text{CO}$ to the $\text{CF}_3 \cdot \hat{\text{A}} \cdot \hat{\text{A}} \cdot \text{CO}$ Complex: Matrix Isolation and Ab Initio Study. <i>Journal of Physical Chemistry A</i> , 2020, 124, 1954-1958.	1.1	6
115	$\text{C}_2\text{H}_2 \cdot \hat{\text{A}} \cdot \hat{\text{A}} \cdot \text{CO}$ complex and its radiation-induced transformations: a building block for cold synthetic astrochemistry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 506, 3499-3510.	1.6	6
116	Spectroscopy and radiation-induced chemistry of an atmospherically relevant $\text{CH}_2\text{F}_2 \cdot \hat{\text{A}} \cdot \text{H}_2\text{O}$ complex: Evidence for the formation of $\text{CF}_2 \cdot \hat{\text{A}} \cdot \text{H}_2\text{O}$ complex as revealed by FTIR matrix isolation and ab initio study. <i>Chemosphere</i> , 2022, 291, 132967.	4.2	6
117	The radiation-induced preparation of ultrasmall gold nanoparticles in Au(III) complexes with units of poly(1-vinyl-1,2,4-triazole) and poly(1-vinyl-1,2,4-triazole) - poly(acrylic acid). <i>Colloids and Interface Science Communications</i> , 2022, 47, 100602.	2.0	6
118	Title is missing!. <i>High Energy Chemistry</i> , 2001, 35, 399-403.	0.2	5
119	An EPR study of positive hole transfer and trapping in irradiated frozen solutions containing aromatic traps. <i>Radiation Physics and Chemistry</i> , 2003, 67, 231-235.	1.4	5
120	A "magic bridge"™: effect of methylene chain length on the photochemistry of radical cations produced from bifunctional $\text{X}-(\text{CH}_2)_n-\text{Y}$ molecules. <i>Mendeleev Communications</i> , 2009, 19, 268-269.	0.6	5
121	Radiolysis of aqueous solutions of poly(vinyl alcohol) at 77K. <i>Radiation Physics and Chemistry</i> , 2010, 79, 876-879.	1.4	5
122	Structure and photochemical rearrangement of the 3,3-dimethylbut-1-yne radical cation. <i>Mendeleev Communications</i> , 2010, 20, 205-206.	0.6	5
123	Localization of radiation damages in X-rays irradiated cis-syn-cis-dicyclohexano-18-crown-6 and its inclusion complex with $\text{BaCl}_2$ . <i>Radiation Physics and Chemistry</i> , 2013, 87, 40-45.	1.4	5
124	The low temperature radiolysis of cis-syn-cis-dicyclohexano-18-crown-6 complexes with alkaline earth metal nitrates: An evidence for energy transfer to the macrocyclic ligand. <i>Radiation Physics and Chemistry</i> , 2015, 115, 183-188.	1.4	5
125	Ion-radical intermediates of the radiation-chemical transformations of organic carbonates. <i>Radiation Physics and Chemistry</i> , 2016, 124, 19-25.	1.4	5
126	Photochemistry of the $\text{H}_2\text{O}/\text{CO}$ System Revisited: The $\text{HXeOH} \cdot \hat{\text{A}} \cdot \hat{\text{A}} \cdot \text{CO}$ Complex in a Xenon Matrix. <i>Journal of Physical Chemistry A</i> , 2018, 122, 159-166.	1.1	5



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127	Conformational insight into radiation-chemical transformations of dicyclohexano-18-crown-6 complexes with alkaline earth metal chlorides: Effect of cation size. <i>Radiation Physics and Chemistry</i> , 2019, 164, 108368.	1.4	5
128	Radiation-induced transformations of difluoromethane in noble gas matrices. <i>Radiation Physics and Chemistry</i> , 2021, 189, 109672.	1.4	5
129	Fragmentation and Ion-Molecule Reactions of Radical Cations of Diethylmercury as Studied by EPR and UV Spectroscopy.. <i>Acta Chemica Scandinavica</i> , 1998, 52, 903-910.	0.7	5
130	Title is missing!. <i>High Energy Chemistry</i> , 2001, 35, 224-228.	0.2	4
131	Reactions of excess electrons with $\alpha$ -amidoesters in low-temperature matrices. <i>Radiation Physics and Chemistry</i> , 2013, 85, 147-151.	1.4	4
132	Changes in the radiothermoluminescence curve of crystalline regions of polyethylene during storage of its irradiated samples in liquid nitrogen. <i>High Energy Chemistry</i> , 2014, 48, 17-23.	0.2	4
133	Role of anions in radiation-induced transformations of 18-crown-6 complexes with barium salts: simulating the effects of extraction mechanism on radiation stability of macrocyclic extractants. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2018, 318, 1901-1911.	0.7	4
134	Stability of dry Phage Lambda DNA irradiated with swift heavy ions. <i>Radiation Physics and Chemistry</i> , 2019, 162, 194-198.	1.4	4
135	Direct evidence for a single-step radiation-induced assembling of benzene ring from acetylene trimer at cryogenic temperatures. <i>Radiation Physics and Chemistry</i> , 2021, 183, 109417.	1.4	4
136	Organic Radical Cations and Neutral Radicals Produced by Radiation in Low-Temperature Matrices. <i>Progress in Theoretical Chemistry and Physics</i> , 2003, , 363-405.	0.2	4
137	Title is missing!. <i>High Energy Chemistry</i> , 2001, 35, 204-206.	0.2	3
138	Photochemistry of 1,3-Dioxolane Radical Cations in Sulfur Hexafluoride and Freonic Matrices at 77 K. <i>High Energy Chemistry</i> , 2002, 36, 103-111.	0.2	3
139	The role of stable free radicals in the radiation-induced conductivity of low-density polyethylene. <i>High Energy Chemistry</i> , 2011, 45, 48-51.	0.2	3
140	Phototransformations of methylsubstituted oxiranes <sup>TM</sup> radical cations in freonic matrices at 77 K. <i>Moscow University Chemistry Bulletin</i> , 2012, 67, 59-71.	0.2	3
141	Organic Radical Cations and Neutral Radicals Produced by Radiation in Low-Temperature Matrices. <i>Progress in Theoretical Chemistry and Physics</i> , 2012, , 25-69.	0.2	3
142	Structure and Reactions of Aliphatic Bridged Bifunctional Radical Ions: Exploring Fine-Tuning in Radiation Chemistry. <i>Israel Journal of Chemistry</i> , 2014, 54, 284-291.	1.0	3
143	Stereoisomeric effect in low temperature radiolysis of dicyclohexano-18-crown-6 complexes with BaCl <sub>2</sub> . <i>Radiation Physics and Chemistry</i> , 2017, 130, 379-384.	1.4	3
144	A hydrogen-bonded CH <sub>2</sub> F <sup>-</sup> CO complex: ab initio and matrix isolation study. <i>Journal of Molecular Structure</i> , 2020, 1221, 128784.	1.8	3

#	ARTICLE	IF	CITATIONS
145	Radiation-induced closure of the second aromatic ring: Possible way to PAH starting from a styrene-acetylene complex. <i>Radiation Physics and Chemistry</i> , 2022, 191, 109847.	1.4	3
146	Formation and reactions of monomeric and dimeric radical cations of aliphatic ketones in freon matrices. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1986, 107, 81-93.	0.7	2
147	Kinetics of Radical Decay and Molecular Dynamics in Oriented High Modulus Polyethylene. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 1993, 22, 185-190.	1.8	2
148	Title is missing!. <i>Doklady Chemistry</i> , 2003, 390, 158-161.	0.2	2
149	Effect of the Degree of Crystallinity on the Formation of Radical Ions in Irradiated Isotactic Polystyrene. <i>Doklady Chemistry</i> , 2004, 394, 26-30.	0.2	2
150	Experimental and theoretical study on the structure and reactions of 1-methoxypropane radical cations. <i>High Energy Chemistry</i> , 2005, 39, 77-85.	0.2	2
151	Radiothermoluminescence of surface layers of n-tetracosane crystals. <i>High Energy Chemistry</i> , 2014, 48, 244-247.	0.2	2
152	Radiation-induced intermediates in irradiated glassy ionic liquids at low temperature. <i>Radiation Physics and Chemistry</i> , 2016, 124, 26-29.	1.4	2
153	Reactions of radiation-induced electrons with carbon dioxide in inert cryogenic films: matrix tuning of the excess electron interactions in solids. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 14155-14161.	1.3	2
154	Radiation-induced macrocycle cleavage in crown ether complexes with Sr(II) and Y(III) chlorides: A comparative study. <i>Radiation Physics and Chemistry</i> , 2020, 176, 109023.	1.4	2
155	On the mechanism of radiation sensitization by gold nanoparticles under X-ray irradiation of oxygen-free aqueous organic solutions: A spin trapping study. <i>Radiation Physics and Chemistry</i> , 2022, 193, 109998.	1.4	2
156	Positive hole transfer between organic molecules of different classes in freon matrices. <i>High Energy Chemistry</i> , 2007, 41, 409-414.	0.2	1
157	Radical intermediates of low temperature radiolysis of di- <i>tert</i> -butylcyclohexano-18-crown-6/1-octanol extractant. <i>Radiochimica Acta</i> , 2013, 101, 51-56.	0.5	1
158	Effect of irradiation on poly(acrylic acid)-polyethyleneimine interpolyelectrolyte complexes: An electron paramagnetic resonance study. <i>Radiation Physics and Chemistry</i> , 2022, 197, 110198.	1.4	1
159	State of the Art and Prospects for the Future of Radiation Chemistry Research as Highlighted by International Conferences in 1998â€“2002. <i>High Energy Chemistry</i> , 2003, 37, 428-433.	0.2	0
160	Organic Radical Cations and Neutral Radicals Produced by Radiation in Low-Temperature Matrices. <i>ChemInform</i> , 2004, 35, no.	0.1	0
161	The structure and photochemical transformation of cyclopropylacetylene radical cation as revealed by matrix EPR and quantum chemical study. <i>Chemical Physics Letters</i> , 2012, 536, 68-71.	1.2	0
162	IR-spectroscopic manifestation of the diacetyl radical anion produced by irradiation of diacetyl in a dimethyl ether matrix at 7K. <i>Mendeleev Communications</i> , 2015, 25, 267-268.	0.6	0

#	ARTICLE	IF	CITATIONS
163	Radiothermoluminescence of n-eicosane mixtures with n-tetracosane: Effect of mixture composition. High Energy Chemistry, 2016, 50, 184-188.	0.2	0
164	Multiplicity of radiothermoluminescence curves of n-tetracosane. High Energy Chemistry, 2016, 50, 245-248.	0.2	0
165	Radiothermoluminescence of linear polyethylene with extended-chain crystals. High Energy Chemistry, 2016, 50, 16-20.	0.2	0
166	Evidence for effect of macrocycle symmetry on radiation-induced ring opening in 18-crown-6 complexes with alkali-earth metal halogenides. Radiation Physics and Chemistry, 2022, 196, 110135.	1.4	0