

# Maciej J J Nowak

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2726845/publications.pdf>

Version: 2024-02-01

122  
papers

4,538  
citations

76326

40  
h-index

118850

62  
g-index

122  
all docs

122  
docs citations

122  
times ranked

2351  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Distinct class of photoinduced hydrogen-atom-transfer processes: phototautomerizations in molecules with no intramolecular hydrogen bond in the structure. <i>International Reviews in Physical Chemistry</i> , 2022, 41, 1-47.                             | 2.3 | 3         |
| 2  | Effect of a Solid-Hydrogen Environment on UV-Induced Hydrogen-Atom Transfer in Matrix-Isolated Heterocyclic Thione Compounds. <i>Journal of Physical Chemistry A</i> , 2021, 125, 7437-7448.  | 2.5 | 3         |
| 3  | Photochemical transformations of 4,6-dihydropyrimidine and 2-methyl-4,6-dihydropyrimidine isolated in low-temperature Ar, Ne and H <sub>2</sub> matrices. <i>Chemical Physics Letters</i> , 2020, 745, 137263.  | 2.6 | 3         |
| 4  | Photochemical Generation of Benzoazetinone by UV Excitation of Matrix-Isolated Precursors: Isatin or Isatoic Anhydride. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4106-4114.  | 2.5 | 3         |
| 5  | Conformational Isomerizations by Rotation around C-C or C-N Bonds: A Comparative Study on Matrix-Isolated Glycolamide and N-Hydroxyurea Excited with Near-IR Laser Light. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3831-3839.                    | 2.5 | 5         |
| 6  | UV-promoted radical formation, and near-IR-induced and spontaneous conformational isomerization in monomeric 9-methylguanine isolated in low-temperature Ar matrices. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22857-22868.                   | 2.8 | 3         |
| 7  | UV-induced transformations of matrix-isolated 6-azacytosine. <i>Journal of Chemical Physics</i> , 2018, 149, 104301.  | 3.0 | 4         |
| 8  | Hydrogen-atom tunneling through a very high barrier; spontaneous thiol to thione conversion in thiourea isolated in low-temperature Ar, Ne, H <sub>2</sub> and D <sub>2</sub> matrices. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 13994-14002. | 2.8 | 22        |
| 9  | Solid H <sub>2</sub> versus solid noble-gas environment: Influence on photoinduced hydrogen-atom transfer in matrix-isolated 4(3H)-pyrimidinone. <i>Journal of Chemical Physics</i> , 2017, 146, .  | 3.0 | 17        |
| 10 | UV-induced hydrogen-atom transfer and hydrogen-atom detachment in monomeric 7-azaindole isolated in Ar and n-H <sub>2</sub> matrices. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11447-11454.   | 2.8 | 21        |
| 11 | UV-Induced Hydrogen-Atom-Transfer Processes in 3-Thio-1,2,4-triazole Isolated in Ar and H <sub>2</sub> Low-Temperature Matrixes. <i>Journal of Physical Chemistry A</i> , 2017, 121, 6932-6941.   | 2.5 | 11        |
| 12 | Photoinduced transformations of indole and 3-formylindole monomers isolated in low-temperature matrices. <i>Journal of Chemical Physics</i> , 2017, 147, 194304.  | 3.0 | 11        |
| 13 | Conformational Changes in Thiazole-2-carboxylic Acid Selectively Induced by Excitation with Narrowband Near-IR and UV Light. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2078-2088.   | 2.5 | 21        |
| 14 | Conformers of Kojic Acid and Their Near-IR-Induced Conversions: Long-Range Intramolecular Vibrational Energy Transfer. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2647-2656.   | 2.5 | 16        |
| 15 | Three Conformers of 2-Furoic Acid: Structure Changes Induced with Near-IR Laser Light. <i>Journal of Physical Chemistry A</i> , 2015, 119, 1037-1047.   | 2.5 | 40        |
| 16 | Tunable Diode Lasers as a Tool for Conformational Control: The Case of Matrix-Isolated Oxamic Acid. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2203-2210.  | 2.5 | 19        |
| 17 | Intramolecular Vibrational Energy Redistribution in 2-Thiocytosine: SH Rotamerization Induced by Near-IR Selective Excitation of NH <sub>2</sub> Stretching Overtone. <i>Journal of Physical Chemistry A</i> , 2015, 119, 9262-9271.                        | 2.5 | 17        |
| 18 | Hydrogen atom transfer reactions in thiophenol: photogeneration of two new thione isomers. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 4888-4898.  | 2.8 | 30        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Near-IR-Induced, UV-Induced, and Spontaneous Isomerizations in 5-Methylcytosine and 5-Fluorocytosine. <i>Journal of Physical Chemistry B</i> , 2014, 118, 2831-2841.  | 2.6 | 33        |
| 20 | Near-Infrared Laser-Induced Generation of Three Rare Conformers of Glycolic Acid. <i>Journal of Physical Chemistry A</i> , 2014, 118, 5626-5635.  | 2.5 | 49        |
| 21 | Matrix isolation infrared spectroscopic and quantum chemical studies on the rotational isomers of orotic acid (6-carboxyuracil). <i>Vibrational Spectroscopy</i> , 2013, 64, 108-118.   | 2.2 | 8         |
| 22 | Conformational Transformation in Squaric Acid Induced by Near-IR Laser Light. <i>Journal of Physical Chemistry A</i> , 2013, 117, 5251-5259.  | 2.5 | 33        |
| 23 | Spontaneous tunneling and near-infrared-induced interconversion between the amino-hydroxy conformers of cytosine. <i>Journal of Chemical Physics</i> , 2012, 136, 064511.   | 3.0 | 55        |
| 24 | Photochemical Isomerizations of Thiosemicarbazide, a Matrix Isolation Study. <i>Journal of Physical Chemistry A</i> , 2012, 116, 9863-9871.   | 2.5 | 10        |
| 25 | UV-Induced Amino $\rightarrow$ Imino Hydrogen-Atom Transfer in 1-Methylcytosine. <i>Journal of Physical Chemistry B</i> , 2012, 116, 5703-5710.   | 2.6 | 30        |
| 26 | UV-Induced Hydrogen-Atom Transfer in 3,6-Dithiopyridazine and in Model Compounds 2-Thiopyridine and 3-Thiopyridazine. <i>Journal of Physical Chemistry A</i> , 2011, 115, 12142-12149.  | 2.5 | 16        |
| 27 | Five isomers of monomeric cytosine and their interconversions induced by tunable UV laser light. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 9676.   | 2.8 | 69        |
| 28 | Photochemical and thermal isomerizations of C <sub>2h</sub> and C <sub>2v</sub> forms of para-benzoquinone dioxime: A matrix-isolation study. <i>Journal of Molecular Structure</i> , 2010, 976, 181-189.                           | 3.6 | 3         |
| 29 | UV-induced transformations of matrix-isolated 1,3,4-thiadiazole-2-thiones. <i>Journal of Physical Organic Chemistry</i> , 2010, 23, 56-66.  | 1.9 | 22        |
| 30 | NIR-laser-induced selective rotamerization of hydroxy conformers of cytosine. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 9615.  | 2.8 | 57        |
| 31 | Positive Identification of UV-Generated, Non-Hydrogen-Bonded Isomers of <i>o</i> -Hydroxybenzaldehyde and <i>o</i> -Hydroxyacetophenone. <i>Journal of Physical Chemistry A</i> , 2010, 114, 5588-5595.                             | 2.5 | 21        |
| 32 | A Bistable Molecular Switch Driven by Photoinduced Hydrogen-Atom Transfer. <i>ChemPhysChem</i> , 2009, 10, 2290-2295.   | 2.1 | 53        |
| 33 | Analysis of the normal modes of molecules with D <sub>3h</sub> symmetry. <i>Vibrational Spectroscopy</i> , 2009, 49, 43-51.   | 2.2 | 108       |
| 34 | Photoinduced transformation of matrix-isolated methyl 2-pyrone-3-carboxylate into methyl 2-pyrone-5-carboxylate via intramolecular hydrogen shift in open-ring aldehyde-ketene. <i>Chemical Physics Letters</i> , 2008, 452, 20-28. | 2.6 | 13        |
| 35 | Photoinduced oxidation of triphenylphosphine isolated in a low-temperature oxygen matrix. <i>Chemical Physics Letters</i> , 2008, 467, 97-100.  | 2.6 | 12        |
| 36 | Matrix-Isolated Diglycolic Anhydride: Vibrational Spectra and Photochemical Reactivity. <i>Journal of Physical Chemistry A</i> , 2008, 112, 11178-11189.  | 2.5 | 13        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Dimer formation in nicotinamide and picolinamide in the gas and condensed phases probed by infrared spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 7010.   | 2.8 | 46        |
| 38 | A Computational Study on the Mechanism of Intramolecular Oxo $\rightleftharpoons$ Hydroxy Phototautomerism Driven by Repulsive $\tilde{\nu}_1^*$ State. <i>Journal of Physical Chemistry A</i> , 2008, 112, 13655-13661.                     | 2.5 | 70        |
| 39 | Thioperoxy Derivative Generated by UV-Induced Transformation of <i>N</i> -Hydroxypyridine-2(1 <i>H</i> )-thione Isolated in Low-Temperature Matrixes. <i>Journal of Physical Chemistry A</i> , 2008, 112, 238-248.                           | 2.5 | 8         |
| 40 | Systematic Effect of Benzo-Annulation on Oxo $\rightleftharpoons$ Hydroxy Tautomerism of Heterocyclic Compounds. Experimental Matrix-Isolation and Theoretical Study. <i>Journal of Physical Chemistry A</i> , 2007, 111, 4934-4943.         | 2.5 | 59        |
| 41 | Photochemical syn-anti Isomerization Reactions in <i>N</i> 2-Hydroxyisocytosines-An Experimental Matrix Isolation and Theoretical Study. <i>Photochemistry and Photobiology</i> , 2007, 77, 243-252.   | 2.5 | 0         |
| 42 | UV-induced generation of rare tautomers of allopurinol and 9-methylhypoxanthine – A matrix isolation FTIR study. <i>Biophysical Chemistry</i> , 2006, 122, 123-135.  | 2.8 | 19        |
| 43 | UV-Induced Oxo $\rightleftharpoons$ Hydroxy Unimolecular Proton-Transfer Reactions in Hypoxanthine. <i>Journal of Physical Chemistry A</i> , 2006, 110, 10236-10244.   | 2.5 | 15        |
| 44 | Photoisomerizations of <i>N</i> 4-Hydroxycytosines. <i>Journal of Physical Chemistry A</i> , 2006, 110, 5038-5046.   | 2.5 | 6         |
| 45 | UV-induced photochemistry of methyl coumalate (methyl 2-pyrone-5-carboxylate) isolated in low-temperature inert matrices. <i>Chemical Physics Letters</i> , 2006, 429, 382-388.  | 2.6 | 13        |
| 46 | Infrared spectra of pyrazine, pyrimidine and pyridazine in solid argon. <i>Journal of Molecular Structure</i> , 2006, 786, 193-206.  | 3.6 | 104       |
| 47 | Unimolecular proton-transfer photoreactions in 2,4-dithiouracil and 6-aza-2,4-dithiouracil: A matrix isolation study. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 184, 322-330.                                   | 3.9 | 6         |
| 48 | Probing ab initio MP2 approach towards the prediction of vibrational infrared spectra of DNA base pairs. <i>Journal of Molecular Structure</i> , 2005, 744-747, 19-34.   | 3.6 | 10        |
| 49 | Unimolecular Photochemistry of 4-Thiouracils. <i>Photochemistry and Photobiology</i> , 2005, 81, 1205.   | 2.5 | 12        |
| 50 | UV-Induced Trithione $\rightleftharpoons$ Trithiol Triple Proton Transfer in Trithiocyanuric Acid Isolated in Low-Temperature Matrixes. <i>Journal of Physical Chemistry A</i> , 2005, 109, 2160-2166.                                       | 2.5 | 22        |
| 51 | UV-Induced Generation of Rare Tautomers of 2-Thiouracils: A Matrix Isolation Study. <i>Journal of Physical Chemistry A</i> , 2005, 109, 7700-7707.   | 2.5 | 33        |
| 52 | Preferred Conformers and Photochemical ( $\lambda > 200$ nm) Reactivity of Serine and 3,3-Dideutero-Serine In the Neutral Form. <i>Journal of Physical Chemistry A</i> , 2005, 109, 5689-5707.   | 2.5 | 43        |
| 53 | Double-Proton-Transfer Processes in Dithioxamide: UV-Induced Dithione $\rightleftharpoons$ Dithiol Reaction and Ground-State Dithiol $\rightleftharpoons$ Dithione Tunneling. <i>Journal of Physical Chemistry A</i> , 2004, 108, 5551-5558. | 2.5 | 24        |
| 54 | Photochemical syn $\rightleftharpoons$ anti isomerization reactions in <i>N</i> 4-methoxycytosines. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004, 163, 489-495.   | 3.9 | 8         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Vibrational spectra of 1-methylthymine: matrix isolation, solid state and theoretical studies. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 2113-2123.  | 3.9 | 27        |
| 56 | Proton transfer processes in selenourea: UV-induced selenoneâ€™selenol photoreaction and ground state selenolâ€™selenone proton tunneling. <i>Chemical Physics</i> , 2004, 298, 223-232.  | 1.9 | 14        |
| 57 | Photochemical Double-Proton-Transfer Reactions in 2,6-Dithiopurine. A Matrix Isolation Study. <i>Journal of Physical Chemistry A</i> , 2003, 107, 804-809.  | 2.5 | 22        |
| 58 | Photochemical Ring-Opening Reaction in 2(1H)-Pyrimidinones:â€‰ A Matrix Isolation Study. <i>Journal of Physical Chemistry A</i> , 2003, 107, 5913-5919.   | 2.5 | 23        |
| 59 | Proton-Transfer Processes in Thiourea:â€‰ UV Induced Thione â€™ Thiol Reaction and Ground State Thiol â€™ Thione Tunneling. <i>Journal of Physical Chemistry A</i> , 2003, 107, 6373-6380.  | 2.5 | 56        |
| 60 | UV induced proton transfer in thioacetamide: first observation of thiol form of simple thioamide. Electronic supplementary information (ESI): Tables S1 and S2 provide internal coordinates used in the normal mode analysis for the thione and thiol tautomers of thioacetamide. Atom numbering is given in Scheme S1. Infrared spectra of thioacetamide isolated in N2 and Ar matrices are compared in Figs. S1 and S2 with the spectra theoretically predicted at the DFT level. Table S3 provides the assignment of the bands. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 1524-1529. | 2.8 | 29        |
| 61 | Photoisomerization reactions of 4-methoxy- and 4-hydroxy-6-methyl-1H-pyrones: An experimental matrix isolation and theoretical density functional theory study. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 4527-4532.  | 2.8 | 19        |
| 62 | Photochemical synâ€™anti Isomerization Reactions in N2-Hydroxyisocytosinesâ€™ An Experimental Matrix Isolation and Theoretical Study. <i>Photochemistry and Photobiology</i> , 2003, 77, 243.   | 2.5 | 4         |
| 63 | Vibrational spectra of 5,6-dihydrouracil. An experimental matrix isolation, solid state and theoretical study. Electronic supplementary information available: geometrical parameters and theoretical results (Tables 1Sâ€™3S). See <a href="http://www.rsc.org/suppdata/cp/b1/b108702a/">http://www.rsc.org/suppdata/cp/b1/b108702a/</a> . <i>Physical Chemistry Chemical Physics</i> , 2002,...   | 2.8 | 0         |
| 64 | Normal mode analysis of the vibrational spectrum of tropolone-A molecule with seven-membered ring. <i>International Journal of Quantum Chemistry</i> , 2002, 90, 1163-1173.   | 2.0 | 18        |
| 65 | IR spectral and theoretical characterization of intramolecular hydrogen bonds closing five-membered rings. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 3012-3017.   | 2.8 | 32        |
| 66 | Vibrational spectroscopy of cyclohexylaminoglutethimide in low-temperature matrices, solutions and the solid state. <i>Journal of Molecular Structure</i> , 2001, 560, 137-149.   | 3.6 | 3         |
| 67 | Infrared spectra of syn and anti isomers of benzaldoxime and pyridine-4-aldoxime: an experimental matrix isolation and theoretical density functional theory study. <i>Vibrational Spectroscopy</i> , 2001, 26, 65-82.  | 2.2 | 31        |
| 68 | Tautomerism and infrared spectra of 2-thiopurine: an experimental matrix isolation and theoretical ab initio and density functional theory study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2001, 57, 375-383.   | 3.9 | 15        |
| 69 | Photochemical synâ€™anti Isomerization Reaction in N4-Hydroxycytosine. An Experimental Matrix Isolation and Theoretical Study. <i>Photochemistry and Photobiology</i> , 2001, 74, 253.  | 2.5 | 6         |
| 70 | Photochemical syn-anti Isomerization Reaction in N4-Hydroxycytosine. An Experimental Matrix Isolation and Theoretical Study. <i>Photochemistry and Photobiology</i> , 2001, 74, 253-260.  | 2.5 | 0         |
| 71 | Photochemical Synâ€™Anti Isomerization Reaction in 1-Methyl-N4-hydroxycytosine. An Experimental Matrix Isolation and Theoretical Density Functional Theory Study. <i>Journal of Physical Chemistry A</i> , 2000, 104, 9459-9466.  | 2.5 | 12        |
| 72 | Phototautomeric Reaction, Tautomerism, and Infrared Spectra of 6-Thiopurine. Experimental Matrix Isolation and Quantum-Mechanical (Conventional ab Initio and Density-Functional Theory) Studies. <i>Journal of Physical Chemistry A</i> , 1999, 103, 280-288.  | 2.5 | 43        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Spectroscopic identification of 2,4-pyrimidinedithiol; an experimental matrix isolation and ab initio Hartree-Fock and density functional theory study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1998, 54, 685-693.                    | 3.9 | 29        |
| 74 | Molecular structure and infrared spectra of 2-hydroxy-1,4-naphthoquinone; Experimental matrix isolation and theoretical Hartree-Fock and post Hartree-Fock study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1998, 54, 1091-1103.        | 3.9 | 42        |
| 75 | Theoretical study of the O-H stretching band in 3-hydroxy-2-methyl-4-pyrone. <i>Journal of Chemical Physics</i> , 1998, 108, 9685-9693.  | 3.0 | 16        |
| 76 | Out-of-plane vibrations of NH <sub>2</sub> in 2-aminopyrimidine and formamide. <i>Journal of Chemical Physics</i> , 1998, 108, 10116-10128.  | 3.0 | 31        |
| 77 | Molecular Structure and Infrared Spectra of the DNA Bases and Their Derivatives: Theory and Experiment. <i>Computational Chemistry - Reviews of Current Trends</i> , 1997, , 140-216.  | 0.4 | 30        |
| 78 | Matrix-Isolation FTIR Studies and Theoretical Calculations of Hydrogen-Bonded Complexes of Imidazole. A Comparison between Experimental Results and Different Calculation Methods. <i>Journal of Physical Chemistry A</i> , 1997, 101, 2397-2413.                            | 2.5 | 90        |
| 79 | Infrared Matrix Isolation and Theoretical Studies on Glutarimide. <i>Journal of Physical Chemistry A</i> , 1997, 101, 7834-7841.   | 2.5 | 63        |
| 80 | Infrared matrix isolation spectra of 1-methyluracil. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 855-865.   | 3.9 | 56        |
| 81 | Molecular structure and infrared spectra of 3,4-dihydroxy-3-cyclobutene-1,2-dione; experimental matrix isolation and theoretical Hartree-Fock and post Hartree-Fock study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 959-968. | 3.9 | 15        |
| 82 | Molecular Structure and Infrared Spectra of Adenine. Experimental Matrix Isolation and Density Functional Theory Study of Adenine <sup>15</sup> N Isotopomers. <i>The Journal of Physical Chemistry</i> , 1996, 100, 3527-3534.  | 2.9 | 187       |
| 83 | Infrared spectra of 6-azathiouracils: an experimental matrix isolation and theoretical ab initio SCF/6-311G <sup>++</sup> study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1996, 52, 645-659.   | 3.9 | 10        |
| 84 | Infrared spectra of thiouracils: experimental matrix isolation and ab initio Hartree-Fock, post-Hartree-Fock and density functional theory studies. <i>Vibrational Spectroscopy</i> , 1996, 13, 23-40.   | 2.2 | 39        |
| 85 | Tautomerism, phototautomerism and infrared spectra of matrix-isolated 2-quinolinethione. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1995, 51, 1809-1826.   | 3.9 | 31        |
| 86 | Comparison of ab initio HF/6-31G <sup>++</sup> , HF/6-31++G <sup>++</sup> and MP2/6-31G <sup>++</sup> calculated infrared spectra of 4(3H)-pyrimidinone and 4-hydroxypyrimidine with matrix isolation spectra. <i>Vibrational Spectroscopy</i> , 1995, 8, 331-342.           | 2.2 | 19        |
| 87 | Anharmonic contributions to the inversion vibration in 2-aminopyrimidine. <i>Journal of Chemical Physics</i> , 1995, 103, 656-662.   | 3.0 | 15        |
| 88 | Experimental matrix isolation and theoretical ab initio HF/6-31G(d, p) studies of infrared spectra of purine, adenine and 2-chloroadenine. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1994, 50, 1081-1094.  | 0.1 | 94        |
| 89 | Infrared spectra and tautomerism of isocytosine; an ab initio and matrix isolation study. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1994, 50, 875-889.   | 0.1 | 64        |
| 90 | Concerted biprotonic tautomerism of 2-hydroxypyridine. <i>Computational and Theoretical Chemistry</i> , 1994, 312, 157-166.  | 1.5 | 6         |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 91  | Tautomerism N(9)H .dblharw. N(7)H of Purine, Adenine, and 2-Chloroadenine: Combined Experimental IR Matrix Isolation and Ab Initio Quantum Mechanical Studies. <i>The Journal of Physical Chemistry</i> , 1994, 98, 2813-2816. | 2.9  | 112       |
| 92  | Ab Initio Calculations of IR Spectra in Identification of Products of Matrix Isolation Photochemistry: Dewar Form of 4(3H)-Pyrimidinone. <i>Journal of the American Chemical Society</i> , 1994, 116, 1461-1467.               | 13.7 | 37        |
| 93  | Theoretical and matrix-isolation experimental studies on 2-thiocytosine and 5-fluoro-2-thiocytosine. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1993, 1172, 239-246.                                    | 2.4  | 15        |
| 94  | Infrared spectra of 2-thiocytosine and 5-fluoro-2-thiocytosine; experimental and ab initio studies. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1993, 49, 551-565.   | 0.1  | 45        |
| 95  | Relation between structure and tautomerism in diazinones and diazinethiones: an experimental matrix isolation and theoretical ab initio study. <i>The Journal of Physical Chemistry</i> , 1992, 96, 6250-6254.                 | 2.9  | 40        |
| 96  | Matrix isolation IR spectroscopy of tautomeric systems and its theoretical interpretation: 2-hydroxypyridine/2(1H)-pyridinone. <i>The Journal of Physical Chemistry</i> , 1992, 96, 1562-1569.                                 | 2.9  | 182       |
| 97  | A new theoretical prediction of the infrared spectra of cytosine tautomers. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1992, 48, 811-818.   | 0.1  | 66        |
| 98  | The infrared spectra of matrix isolated uracil and thymine: An assignment based on new theoretical calculations. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1992, 48, 1385-1395.                              | 0.1  | 117       |
| 99  | Theoretical interpretation of the gas phase equilibrium of 2-hydroxypyridine/2(1H)-pyridinone. <i>Computational and Theoretical Chemistry</i> , 1992, 277, 313-327.  | 1.5  | 14        |
| 100 | Theoretical and infrared matrix isolation study of 4(3H)-pyrimidinethione and 3(2H)-pyridazinethione: tautomerism and phototautomerism. <i>The Journal of Physical Chemistry</i> , 1991, 95, 2404-2411.                        | 2.9  | 55        |
| 101 | Theoretical and matrix-isolation experimental study of the infrared spectra of 5-azauracil and 6-azauracil. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1991, 47, 595-613.                                     | 0.1  | 37        |
| 102 | Infrared experimental and ab initio quantum mechanical studies of 2-mercaptopyrimidine tautomers. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1991, 47, 339-353.   | 0.1  | 41        |
| 103 | Infrared matrix isolation and ab initio quantum mechanical studies of purine and adenine. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1991, 47, 87-103.  | 0.1  | 61        |
| 104 | Ab initio, CNDO/2 and matrix isolation studies of 2-hydroxypyrimidine infrared absorption spectra. <i>Journal of Molecular Structure</i> , 1990, 220, 147-167.   | 3.6  | 14        |
| 105 | Infrared matrix isolation and ab initio studies of 3(2H)-pyridazinone and photoproducted 3-hydroxypyridazine. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1990, 46, 1087-1096.                                 | 0.1  | 37        |
| 106 | Infrared matrix isolation and ab initio studies of 4-oxopyrimidine; separation of the spectra of tautomers based on the phototautomeric effect. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1990, 46, 61-71.   | 0.1  | 40        |
| 107 | The structure and spectroscopy of H-bonded benzoxazole derivatives.. <i>Journal of Molecular Structure</i> , 1990, 219, 209-214.   | 3.6  | 4         |
| 108 | Theoretical and matrix-isolation experimental study on 2(1H)-pyridinethione/2-pyridinethiol. <i>The Journal of Physical Chemistry</i> , 1990, 94, 7406-7414.   | 2.9  | 84        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 109 | Matrix isolation and ab initio theoretical studies of the IR spectrum of 5-methylcytosine. <i>The Journal of Physical Chemistry</i> , 1990, 94, 6555-6564.  | 2.9  | 48        |
| 110 | Thiouracils. 2. Tautomerism and infrared spectra of thiouracils. Matrix-isolation and ab initio studies. <i>Journal of the American Chemical Society</i> , 1990, 112, 2147-2160.                                      | 13.7 | 117       |
| 111 | An infrared matrix isolation study of tautomerism in purine and adenine. <i>Chemical Physics Letters</i> , 1989, 157, 14-18.  | 2.6  | 55        |
| 112 | Matrix isolation studies of cytosine: The separation of the infrared spectra of cytosine tautomers. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1989, 45, 229-242.                                    | 0.1  | 146       |
| 113 | IR matrix isolation studies of nucleic acid constituents: the spectrum of monomeric thymine. <i>Journal of Molecular Structure</i> , 1989, 193, 35-49.  | 3.6  | 58        |
| 114 | IR spectra and phototautomerism of matrix isolated 4-oxypyrimidine. <i>Journal of Molecular Structure</i> , 1988, 175, 91-96.   | 3.6  | 47        |
| 115 | Autoassociates and tautomerism of 2-oxo-5-halogenopyrimidines: theoretical and experimental investigations. <i>Journal of Molecular Structure</i> , 1986, 140, 235-251.   | 3.6  | 23        |
| 116 | Matrix isolation studies of nucleic acid constituents <sup>III</sup> . 1-Methyluracil, 3-methyluracil and 1,3-dimethyluracil monomers. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1985, 41, 223-235. | 0.1  | 48        |
| 117 | Effect of intermolecular interactions on the infrared spectrum of 1-methyluracil. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1985, 41, 237-250.  | 0.1  | 41        |
| 118 | Infrared matrix isolation studies on tautomerism of cytosine and isocytosine methyl-derivatives. <i>Journal of Molecular Structure</i> , 1984, 115, 221-224.  | 3.6  | 37        |
| 119 | Matrix isolation studies of nucleic acid constituents. 1. Infrared spectra of uracil monomers. <i>Journal of the American Chemical Society</i> , 1983, 105, 5969-5976.  | 13.7 | 182       |
| 120 | Tautomeric equilibria of 2(4)-monooxypyrimidines in the gas phase, in low-temperature matrices and in solution. <i>Journal of Molecular Structure</i> , 1980, 62, 47-69.  | 3.6  | 69        |
| 121 | Infrared studies of Me <sub>2</sub> CO - HCl Hydrogen bonded complex in argon matrices and two-component solids. <i>Journal of Molecular Structure</i> , 1978, 47, 307-316.   | 3.6  | 22        |
| 122 | Spectroscopic Studies on Vapour Phase Tautomerism of Natural Bases Found in Nucleic Acids. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1978, 33, 876-883.                              | 1.4  | 101       |