

# Artëm E Masunov

## List of Publications by Year in descending order

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149  
papers

5,565  
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152  
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times ranked

6794  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Influence of Binary Diffusion Coefficients on Supercritical CO <sub>2</sub> Flame Characteristics of Methane/Natural Gas. , 2022, , .   |      | 0         |
| 2  | Direct measurement of reaction rate for decomposition of diisopropyl methylphosphonate at high temperature using shock tube and laser absorption. International Journal of Chemical Kinetics, 2022, 54, 371-380.  | 1.6  | 5         |
| 3  | Prediction of Crystal Structures and Mechanical Properties for Brittle, Plastic, and Elastic Polymorphs of 4-Bromophenyl 4-Bromobenzoate. Crystal Growth and Design, 2022, 22, 4546-4558.   | 3.0  | 3         |
| 4  | How Many Isomers Do Metallic Clusters Have? Case of Magnesium Clusters of up to 55 Atoms. Journal of Physical Chemistry A, 2021, 125, 6543-6555.  | 2.5  | 3         |
| 5  | Pseudocyclic Form of 4-Hydroxypyrrrolidine-2-carboxanilide Podands with Trioxyethylene Chain: Modeling, Conformational Search, and NMR Analysis. Journal of Physical Chemistry A, 2021, 125, 6029-6041.   | 2.5  | 5         |
| 6  | DMMP pyrolysis and oxidation studies at high temperature inside a shock tube using laser absorption measurements of CO. Combustion and Flame, 2020, 214, 14-24.   | 5.2  | 21        |
| 7  | Virtual Tensile Test for Brittle, Plastic, and Elastic Polymorphs of 4-Bromophenyl 4-Bromobenzoate. Crystal Growth and Design, 2020, 20, 6093-6100.   | 3.0  | 9         |
| 8  | High accuracy machine learning identification of fentanyl-relevant molecular compound classification via constituent functional group analysis. Scientific Reports, 2020, 10, 13569.  | 3.3  | 9         |
| 9  | Three-Photon Spectroscopy of Porphyrins. Journal of Physical Chemistry A, 2020, 124, 11038-11050.   | 2.5  | 9         |
| 10 | Global Structure Optimization of Pt Clusters Based on the Modified Empirical Potentials, Calibrated using Density Functional Theory. Journal of Physical Chemistry C, 2019, 123, 29024-29036.   | 3.1  | 16        |
| 11 | Molecular dynamics of combustion reactions in supercritical carbon dioxide. Part 4: boxed MD study of formyl radical dissociation and recombination. Journal of Molecular Modeling, 2019, 25, 35.   | 1.8  | 6         |
| 12 | Electronic Nature of Neutral and Charged Two-Photon Absorbing Squaraines for Fluorescence Bioimaging Application. ACS Omega, 2019, 4, 14669-14679.  | 3.5  | 19        |
| 13 | Oxyphor 2P: A High-Performance Probe for Deep-Tissue Longitudinal Oxygen Imaging. Cell Metabolism, 2019, 29, 736-744.e7.  | 16.2 | 105       |
| 14 | Molecular Dynamics of Combustion Reactions in Supercritical Carbon Dioxide. Part 5: Computational Study of Ethane Dissociation and Recombination Reactions $C_2H_6 \rightleftharpoons CH_3 + CH_3$ . Journal of Physical Chemistry A, 2019, 123, 4776-4784.                                       | 2.5  | 6         |
| 15 | Theoretical Calculation of Reaction Rates and Combustion Kinetic Modeling Study of Triethyl Phosphate (TEP). Journal of Physical Chemistry A, 2019, 123, 4764-4775.   | 2.5  | 15        |
| 16 | Molecular Dynamics of Combustion Reactions in Supercritical Carbon Dioxide. 6. Computational Kinetics of Reactions between Hydrogen Atom and Oxygen Molecule $H + O_2 \rightleftharpoons HO + O$ and $H + O_2 \rightleftharpoons HO_2$ . Journal of Physical Chemistry A, 2019, 123, 10772-10781. | 2.5  | 7         |
| 17 | Cover Image, Volume 51, Issue 1. International Journal of Chemical Kinetics, 2019, 51, i.   | 1.6  | 0         |
| 18 | Quantum chemical and master equation study of $OH + CH_2O \rightleftharpoons H_2CO + HO$ reaction rates in supercritical CO <sub>2</sub> environment. International Journal of Chemical Kinetics, 2019, 51, 42-48.  | 1.6  | 12        |

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|----|--|-----|-----------|
| 19 | Theoretical study of chromophores for biological sensing: Understanding the mechanism of rhodol based multi-chromophoric systems. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 198, 123-135.                               | 3.9 | 1         |
| 20 | Molecular Dynamics Study of Combustion Reactions in Supercritical Environment. Part 3: Boxed MD Study of $\text{CH}_3 + \text{HO}_2 \rightarrow \text{CH}_3\text{O} + \text{OH}$ Reaction Kinetics. <i>Journal of Physical Chemistry A</i> , 2018, 122, 3337-3345. | 2.5 | 6         |
| 21 | Molecular Dynamics Study of Combustion Reactions in a Supercritical Environment. Part 2: Boxed MD Study of $\text{CO} + \text{OH} \rightarrow \text{CO}_2 + \text{H}$ Reaction Kinetics. <i>Journal of Physical Chemistry A</i> , 2018, 122, 897-908.              | 2.5 | 12        |
| 22 | Sarin simulants combustion at high temperature: Time-resolved laser absorption spectroscopy of intermediate products in a shock tube. , 2018, , .  |     | 0         |
| 23 | Tuning structures and emissive properties in a series of Zn(II) and Cd(II) coordination polymers containing dicarboxylic acids and nicotinamide pillars. <i>CrystEngComm</i> , 2018, 20, 432-447.  | 2.6 | 22        |
| 24 | Shock Tube/Laser Absorption and Kinetic Modeling Study of Triethyl Phosphate Combustion. <i>Journal of Physical Chemistry A</i> , 2018, 122, 3829-3836.  | 2.5 | 23        |
| 25 | Nonlinear Optical Properties of Mixed Oxide Crystals $\text{CsNbMoO}_6$ and $\text{CsTaMoO}_6$ : A Periodic CPHF/KS Study. <i>Journal of Physical Chemistry C</i> , 2018, 122, 24907-24916.  | 3.1 | 1         |
| 26 | First-Principles Crystal Engineering of Nonlinear Optical Materials. II. Effect of Halogen Bonds on the Structure and Properties of Triiodobenzenes. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22622-22631.  | 3.1 | 14        |
| 27 | Catalytic Effect of Carbon Dioxide on Reaction $\text{OH} + \text{CO} \rightarrow \text{H} + \text{CO}_2$ in Supercritical Environment: Master Equation Study. <i>Journal of Physical Chemistry A</i> , 2018, 122, 6355-6359.                                      | 2.5 | 11        |
| 28 | Toward First-Principles Design of Organic Nonlinear Optical Materials: Crystal Structure Prediction and Halogen Bonding Impact on Hyperpolarizabilities of 2-Iodo-3-hydroxypyridine. <i>Crystal Growth and Design</i> , 2018, 18, 5069-5079.                       | 3.0 | 22        |
| 29 | Quantum Chemical Study of Supercritical Carbon Dioxide Effects on Combustion Kinetics. <i>Journal of Physical Chemistry A</i> , 2017, 121, 3728-3735.  | 2.5 | 19        |
| 30 | Linear photophysics, two-photon absorption and femtosecond transient absorption spectroscopy of styryl dye bases. <i>Journal of Luminescence</i> , 2017, 183, 360-367.   | 3.1 | 10        |
| 31 | Raman spectroscopy and theoretic study of hyperpolarizability effect in diiodobutenylbis(1-thioquinolinium triiodide) at low temperature. <i>Journal of Raman Spectroscopy</i> , 2017, 48, 1411-1413.  | 2.5 | 16        |
| 32 | High temperature shock tube experiments and kinetic modeling study of diisopropyl ketone ignition and pyrolysis. <i>Combustion and Flame</i> , 2017, 177, 207-218.   | 5.2 | 33        |
| 33 | Products and Pathways of Aldehydes Oxidation in the Negative Temperature Coefficient Region. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2017, 139, .  | 2.3 | 11        |
| 34 | Quantum Chemical Study of $\text{CH}_3 + \text{O}_2$ Combustion Reaction System: Catalytic Effects of Additional $\text{CO}_2$ Molecule. <i>Journal of Physical Chemistry A</i> , 2017, 121, 5681-5689.  | 2.5 | 18        |
| 35 | Stabilizing <i>g</i> -States in Centrosymmetric Tetrapyrroles: Two-Photon-Absorbing Porphyrins with Bright Phosphorescence. <i>Journal of Physical Chemistry A</i> , 2017, 121, 6243-6255.   | 2.5 | 22        |
| 36 | First principles crystal engineering of nonlinear optical materials. I. Prototypical case of urea. <i>Journal of Chemical Physics</i> , 2017, 146, 244104.   | 3.0 | 16        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Chemical Reaction $\text{CO} + \text{OH} \rightarrow \text{CO}_2 + \text{H}$ Autocatalyzed by Carbon Dioxide: Quantum Chemical Study of the Potential Energy Surfaces. <i>Journal of Physical Chemistry A</i> , 2016, 120, 6023-6028.                             | 2.5  | 26        |
| 38 | Combustion of Aldehydes in the Negative Temperature Coefficient Region: Products and Pathways. , 2016, , .  |      | 0         |
| 39 | Linear Photophysics and Femtosecond Nonlinear Spectroscopy of a Star-Shaped Squaraine Derivative with Efficient Two-Photon Absorption. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11099-11110.   | 3.1  | 33        |
| 40 | Molecular Dynamics Study of Combustion Reactions in a Supercritical Environment. Part 1: Carbon Dioxide and Water Force Field Parameters Refitting and Critical Isotherms of Binary Mixtures. <i>Energy &amp; Fuels</i> , 2016, 30, 9622-9627.                    | 5.1  | 17        |
| 41 | Potential Energy Surfaces for the Reactions of $\text{HO}_2$ Radical with $\text{CH}_2\text{O}$ and $\text{HO}_2$ in $\text{CO}_2$ Environment. <i>Journal of Physical Chemistry A</i> , 2016, 120, 7681-7688.  | 2.5  | 17        |
| 42 | Report on the sixth blind test of organic crystal structure prediction methods. <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2016, 72, 439-459.   | 1.1  | 445       |
| 43 | Two-Photon Absorbing Phosphorescent Metalloporphyrins: Effects of $\pi$ -Extension and Peripheral Substitution. <i>Journal of the American Chemical Society</i> , 2016, 138, 15648-15662.   | 13.7 | 55        |
| 44 | New Two-Photon Absorbing BODIPY-Based Fluorescent Probe: Linear Photophysics, Stimulated Emission, and Ultrafast Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016, 120, 14317-14329.   | 3.1  | 30        |
| 45 | From pink to blue and back to pink again: changing the Co(II) ligation in a two-dimensional coordination network upon desolvation. <i>CrystEngComm</i> , 2016, 18, 384-389.   | 2.6  | 14        |
| 46 | Aqueous medium induced optical transitions in cerium oxide nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 6217-6221.   | 2.8  | 13        |
| 47 | Symmetry-Breaking in Cationic Polymethine Dyes: Part 2. Shape of Electronic Absorption Bands Explained by the Thermal Fluctuations of the Solvent Reaction Field. <i>Journal of Physical Chemistry A</i> , 2015, 119, 6807-6815.                                  | 2.5  | 39        |
| 48 | Heisenberg coupling constant predicted for molecular magnets with pairwise spin-contamination correction. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 396, 222-227.  | 2.3  | 3         |
| 49 | Atomistic mechanism of polyphenol amyloid aggregation inhibitors: molecular dynamics study of Curcumin, Exifone, and Myricetin interaction with the segment of tau peptide oligomer. <i>Journal of Biomolecular Structure and Dynamics</i> , 2015, 33, 1399-1411. | 3.5  | 53        |
| 50 | Robust Packing Patterns and Luminescence Quenching in Mononuclear $[\text{Cu}(\text{II})(\text{phen})_2]$ Sulfates. <i>Journal of Physical Chemistry C</i> , 2014, 118, 30087-30100.  | 3.1  | 31        |
| 51 | Full length amylin oligomer aggregation: insights from molecular dynamics simulations and implications for design of aggregation inhibitors. <i>Journal of Biomolecular Structure and Dynamics</i> , 2014, 32, 1651-1669.   | 3.5  | 18        |
| 52 | Structure and properties of cerium oxides in bulk and nanoparticulate forms. <i>Journal of Alloys and Compounds</i> , 2014, 584, 199-208.   | 5.5  | 79        |
| 53 | Adsorption of Glyoxal (CHOCHO) and Its UV Photolysis Products on the Surface of Atmospheric Ice Nanoparticles. DFT and Density Functional Tight-Binding Study. <i>Journal of Physical Chemistry C</i> , 2014, 118, 7398-7413.                                     | 3.1  | 21        |
| 54 | The Atomic Level Interaction of Polyphenols with the $\text{A}\beta^2$ Oligomer Aggregate, A Molecular Dynamic Guidance for Rational Drug Design. , 2014, , 59-70.  |      | 1         |

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|----|--|-----|-----------|
| 55 | Mechanism of Nonlinear Optical Enhancement and Supramolecular Isomerism in 1D Polymeric Zn(II) and Cd(II) Sulfates with Pyridine-4-aldoxime Ligands. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9217-9227.              | 3.1 | 25        |
| 56 | Polymeric Luminescent Zn(II) and Cd(II) Dicarboxylates Decorated by Oxime Ligands: Tuning the Dimensionality and Adsorption Capacity. <i>Crystal Growth and Design</i> , 2014, 14, 3935-3948.                                    | 3.0 | 32        |
| 57 | Predictions of the Spin Configuration in Mn <sup>12</sup> Molecular Magnets Made Accurate with the Help of Hubbard $U$ on the Ligand Atoms. <i>Journal of Physical Chemistry C</i> , 2014, 118, 20605-20612.                     | 3.1 | 5         |
| 58 | Molecular Packing in Organic Solar Cell Materials: Insights from the Emission Line Shapes of P3HT/PCBM Polymer Blend Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2014, 118, 19975-19984.                             | 3.1 | 21        |
| 59 | Design and Electronic Structure of New Styryl Dye Bases: Steady-State and Time-Resolved Spectroscopic Studies. <i>Journal of Physical Chemistry A</i> , 2014, 118, 4502-4509.  | 2.5 | 15        |
| 60 | Two-Photon Absorption Spectra Predicted by Semiempirical Methods. <i>Journal of Computational and Theoretical Nanoscience</i> , 2014, 11, 2208-2220.   | 0.4 | 5         |
| 61 | Enhanced Intersystem Crossing Rate in Polymethine-Like Molecules: Sulfur-Containing Squaraines versus Oxygen-Containing Analogues. <i>Journal of Physical Chemistry A</i> , 2013, 117, 2333-2346.                                | 2.5 | 44        |
| 62 | Comparison of TD-DFT Methods for the Calculation of Two-Photon Absorption Spectra of Oligophenylvinylenes. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18170-18189.  | 3.1 | 68        |
| 63 | Permanent dipole moments and energies of excited states from density functional theory compared with coupled cluster predictions: Case of para-nitroaniline. <i>Computational and Theoretical Chemistry</i> , 2013, 1019, 23-32. | 2.5 | 10        |
| 64 | Design of a New Optical Material with Broad Spectrum Linear and Two-Photon Absorption and Solvatochromism. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23133-23147.  | 3.1 | 48        |
| 65 | Preparation, Characterization, and Electronic Structure of Asymmetric Isonaphthalimide: Mechanism of Dual Fluorescence in Solid State. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18154-18162.                          | 3.1 | 13        |
| 66 | New acentric materials constructed from aminopyridines and 4-nitrophenol. <i>CrystEngComm</i> , 2013, 15, 4700.  | 2.6 | 58        |
| 67 | From discrete molecules to one-dimensional coordination polymers containing Mn(II), Zn(II) or Cd(II) pyridine-2-aldoxime building unit. <i>Polyhedron</i> , 2013, 60, 140-150.   | 2.2 | 26        |
| 68 | Supramolecular step in design of nonlinear optical materials: Effect of $\pi$ - $\pi$ stacking aggregation on hyperpolarizability. <i>Journal of Chemical Physics</i> , 2013, 139, 094310.                                       | 3.0 | 77        |
| 69 | Two-Photon Absorption Spectrum of a Single Crystal Cyanine-like Dye. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1222-1228.  | 4.6 | 27        |
| 70 | Quantum Chemical Study of the Initial Step of Ozone Addition to the Double Bond of Ethylene. <i>Journal of Physical Chemistry A</i> , 2012, 116, 10420-10434.  | 2.5 | 50        |
| 71 | Solitonic waves in polyene dications and principles of charge carrier localization in $\pi$ -conjugated organic materials. <i>International Journal of Quantum Chemistry</i> , 2012, 112, 2659-2667.                             | 2.0 | 8         |
| 72 | Alternative packing modes leading to amyloid polymorphism in five fragments studied with molecular dynamics. <i>Biopolymers</i> , 2012, 98, 131-144.   | 2.4 | 20        |

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| 73 | Unique example of amyloid aggregates stabilized by main chain H-bond instead of the steric zipper: molecular dynamics study of the amyloidogenic segment of amylin wild-type and mutants. <i>Journal of Molecular Modeling</i> , 2012, 18, 891-903.                                    | 1.8 | 18        |
| 74 | Density functional theory study of small nickel clusters. <i>Journal of Molecular Modeling</i> , 2012, 18, 783-790.  | 1.8 | 36        |
| 75 | Controlling the aggregation and rate of release in order to improve insulin formulation: molecular dynamics study of full-length insulin amyloid oligomer models. <i>Journal of Molecular Modeling</i> , 2012, 18, 1129-1142.  | 1.8 | 33        |
| 76 | Theoretical Study of Photochromic Compounds: Part 3. Prediction of Thermal Stability. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10292-10297.   | 3.1 | 55        |
| 77 | Mechanism of Nitric Oxide Oxidation Reaction ( $2\text{NO} + \text{O}_2 \rightarrow 2\text{NO}_2$ ) Revisited. <i>Journal of Chemical Theory and Computation</i> , 2011, 7, 2021-2024.   | 5.3 | 45        |
| 78 | Crystal Morphology as an Evidence of Supramolecular Organization in Adducts of 1,2-Bis(chloromercurio)tetrafluorobenzene with Organic Esters. <i>Crystal Growth and Design</i> , 2011, 11, 3964-3978.  | 3.0 | 17        |
| 79 | Efficient Photochromic Transformation of a New Fluorenyl Diarylethene: One- and Two-Photon Absorption Spectroscopy. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 3559-3567.  | 8.0 | 23        |
| 80 | Near-field enhancement of infrared intensities for f-f transitions in $\text{Er}^{3+}$ ions close to the surface of silicon nanoparticles. <i>Journal of Molecular Modeling</i> , 2011, 17, 423-428.   | 1.8 | 6         |
| 81 | Can molecular dynamics simulations assist in design of specific inhibitors and imaging agents of amyloid aggregation? Structure, stability and free energy predictions for amyloid oligomers of VQIVYK, MVGGVV and LYQLEN. <i>Journal of Molecular Modeling</i> , 2011, 17, 2423-2442. | 1.8 | 19        |
| 82 | Dissociation curves and binding energies of diatomic transition metal carbides from density functional theory. <i>International Journal of Quantum Chemistry</i> , 2011, 111, 4276-4287.   | 2.0 | 11        |
| 83 | Molecular dynamic simulation of wild type and mutants of the polymorphic amyloid NNQNTF segments of elk prion: Structural stability and thermodynamic of association. <i>Biopolymers</i> , 2011, 95, 573-590.  | 2.4 | 33        |
| 84 | Insight into how molecular structures of thiophene-based conjugated polymers affect crystallization behaviors. <i>Polymer</i> , 2011, 52, 2302-2309.   | 3.8 | 58        |
| 85 | Fluorene-Based Metal-Ion Sensing Probe with High Sensitivity to $\text{Zn}^{2+}$ and Efficient Two-Photon Absorption. <i>Journal of Physical Chemistry B</i> , 2010, 114, 9313-9321.   | 2.6 | 53        |
| 86 | Are density functional theory predictions of the Raman spectra accurate enough to distinguish conformational transitions during amyloid formation?. <i>Journal of Molecular Modeling</i> , 2010, 16, 1093-1101.  | 1.8 | 8         |
| 87 | Density functional study of oxygen vacancy formation and spin density distribution in octahedral ceria nanoparticles. <i>Journal of Molecular Modeling</i> , 2010, 16, 1617-1623.  | 1.8 | 22        |
| 88 | Phosphate ester hydrolysis of biologically relevant molecules by cerium oxide nanoparticles. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2010, 6, 738-744.  | 3.3 | 171       |
| 89 | Understanding oxygen vacancy migration and clustering in barium strontiumcobalt iron oxide. <i>Solid State Ionics</i> , 2010, 181, 1067-1073.  | 2.7 | 25        |
| 90 | Natural polyphenols as inhibitors of amyloid aggregation. Molecular dynamics study of GNNQQNY heptapeptide decamer. <i>Biophysical Chemistry</i> , 2010, 149, 12-21.   | 2.8 | 47        |

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|-----|--|-----|-----------|
| 91  | Theoretical spectroscopy of carbocyanine dyes made accurate by frozen density correction to excitation energies obtained by TDâ€DFT. International Journal of Quantum Chemistry, 2010, 110, 3095-3100.   | 2.0 | 36        |
| 92  | Theory and computations of two-photon absorbing photochromic chromophores. European Journal of Chemistry, 2010, 1, 142-161.  | 0.6 | 16        |
| 93  | Effective Generation of Triplet States and Singlet Oxygen by Sulfur-Containing Squaraines: Experimental and Theoretical Study. , 2010, , .   |     | 0         |
| 94  | Two-photon Absorption in Single Crystals of Cyanine-like Dye. , 2010, , .  |     | 1         |
| 95  | Near-Unity Quantum Yields for Intersystem Crossing and Singlet Oxygen Generation in Polymethine-like Molecules: Design and Experimental Realization. Journal of Physical Chemistry Letters, 2010, 1, 2354-2360.                                  | 4.6 | 62        |
| 96  | Tuning Hydrated Nanoceria Surfaces: Experimental/Theoretical Investigations of Ion Exchange and Implications in Organic and Inorganic Interactions. Langmuir, 2010, 26, 7188-7198.   | 3.5 | 35        |
| 97  | Weak antiferromagnetic coupling in molecular ring is predicted correctly by density functional theory plus Hubbard $U$ . Journal of Chemical Physics, 2010, 132, 244104.   | 3.0 | 11        |
| 98  | Thermally controlled preferential molecular aggregation state in a thiocarbocyanine dye. Journal of Chemical Physics, 2010, 133, 134508.   | 3.0 | 20        |
| 99  | Predictions of Two Photon Absorption Profiles Using Time-Dependent Density Functional Theory Combined with SOS and CEO Formalisms. Lecture Notes in Computer Science, 2009, , 179-188.   | 1.3 | 1         |
| 100 | Theoretical study of photochromic compounds, part 2: Thermal mechanism for byproduct formation and fatigue resistance of diarylethenes used as data storage materials. International Journal of Quantum Chemistry, 2009, 109, 3711-3722.         | 2.0 | 66        |
| 101 | Symmetry breaking in cationic polymethine dyes, part 1: Ground state potential energy surfaces and solvent effects on electronic spectra of streptocyanines. International Journal of Quantum Chemistry, 2009, 109, 3592-3601.                   | 2.0 | 29        |
| 102 | Computational search for nonlinear optical materials: are polarization functions important in the hyperpolarizability predictions of molecules and aggregates?. Mendeleev Communications, 2009, 19, 311-313.                                     | 1.6 | 40        |
| 103 | Electronic Properties of a New Two-Photon Absorbing Fluorene Derivative: The Role of Hartreeâ€Fock Exchange in the Density Functional Theory Design of Improved Nonlinear Chromophores. Journal of Physical Chemistry C, 2009, 113, 20719-20724. | 3.1 | 49        |
| 104 | Quantum Chemical Study of Trimolecular Reaction Mechanism between Nitric Oxide and Oxygen in the Gas Phase. Journal of Physical Chemistry A, 2009, 113, 9092-9101.   | 2.5 | 42        |
| 105 | Theoretical Study of Photochromic Compounds. 1. Bond Length Alternation and Absorption Spectra for the Open and Closed Forms of 29 Diarylethene Derivatives. Journal of Physical Chemistry A, 2009, 113, 8409-8414.                              | 2.5 | 61        |
| 106 | Two-Photon Absorption Properties of New Fluorene-Based Singlet Oxygen Photosensitizers. Journal of Physical Chemistry C, 2009, 113, 4706-4711.   | 3.1 | 45        |
| 107 | Electronic Hyperpolarizabilities for Donorâ€™Acceptor Molecules with Long Conjugated Bridges: Calculations versus Experiment. Journal of Physical Chemistry A, 2009, 113, 10994-11001.   | 2.5 | 129       |
| 108 | DFT-Based Methods in the Design of Two-Photon Operated Molecular Switches. Journal of Physical Chemistry A, 2009, 113, 7080-7089.  | 2.5 | 49        |





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|-----|---|------|-----------|
| 127 | Untangling the Excited States of DR1 in Solution: An Experimental and Theoretical Study. <i>Journal of Physical Chemistry A</i> , 2008, 112, 3886-3890.   | 2.5  | 54        |
| 128 | Quantum chemistry of the minimal CdSe clusters. <i>Journal of Chemical Physics</i> , 2008, 129, 074709.   | 3.0  | 58        |
| 129 | Two-Photon Excitation of Substituted Eneidyne. <i>Journal of Physical Chemistry A</i> , 2006, 110, 241-251.   | 2.5  | 44        |
| 130 | Role of Donor-Acceptor Strengths and Separation on the Two-Photon Absorption Response of Cytotoxic Dyes: A TD-DFT Study. <i>Journal of Physical Chemistry A</i> , 2005, 109, 7276-7284.                           | 2.5  | 55        |
| 131 | Theoretical study of the effects of solvent environment on photophysical properties and electronic structure of paracyclophane chromophores. <i>Journal of Chemical Physics</i> , 2005, 122, 224505.              | 3.0  | 59        |
| 132 | Calculations of the third-order nonlinear optical responses in push-pull chromophores with a time-dependent density functional theory. <i>Chemical Physics Letters</i> , 2004, 392, 444-451.                      | 2.6  | 38        |
| 133 | Prediction of Two-Photon Absorption Properties for Organic Chromophores Using Time-Dependent Density-Functional Theory. <i>Journal of Physical Chemistry B</i> , 2004, 108, 899-907.                              | 2.6  | 178       |
| 134 | Potentials of Mean Force between Ionizable Amino Acid Side Chains in Water. <i>Journal of the American Chemical Society</i> , 2003, 125, 1722-1730.   | 13.7 | 190       |
| 135 | A Disilapentalene and a Stable Diradical from the Reaction of a Dilithiosilole with a Dichlorocyclopropene. <i>Journal of the American Chemical Society</i> , 2003, 125, 5767-5773.                               | 13.7 | 25        |
| 136 | Distance and exposure dependent effective dielectric function. <i>Journal of Computational Chemistry</i> , 2002, 23, 1090-1099.   | 3.3  | 53        |
| 137 | Contributions to the binding free energy of ligands to avidin and streptavidin. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 47, 194-208.  | 2.6  | 94        |
| 138 | C-H Bond-Shortening upon Hydrogen Bond Formation: Influence of an Electric Field. <i>Journal of Physical Chemistry A</i> , 2001, 105, 4737-4740.  | 2.5  | 203       |
| 139 | ACD/I-Lab 4.5: An Internet Service Review. <i>Journal of Chemical Information and Computer Sciences</i> , 2001, 41, 1093-1095.  | 2.8  | 13        |
| 140 | Theoretical Study of Urea and Thiourea. 2. Chains and Ribbons. <i>Journal of Physical Chemistry B</i> , 2000, 104, 806-810.   | 2.6  | 145       |
| 141 | Theoretical Study of Urea. I. Monomers and Dimers. <i>Journal of Physical Chemistry A</i> , 1999, 103, 178-184.   | 2.5  | 95        |
| 142 | Are Hydrogen Bonds Covalent or Electrostatic? A Molecular Orbital Comparison of Molecules in Electric Fields and H-Bonding Environments. <i>Journal of Physical Chemistry A</i> , 1999, 103, 7083-7086.           | 2.5  | 105       |
| 143 | Molecular Orbital Study of Crystalline p-Benzoquinone. <i>Journal of Physical Chemistry A</i> , 1999, 103, 7042-7046.   | 2.5  | 29        |
| 144 | Proximity effects on nuclear spin-spin coupling constants. Part 2. The electric field effect on <sup>1</sup> J(CH) couplings. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996, 92, 3029-3033. | 1.7  | 46        |

| #   | ARTICLE   | IF  | CITATIONS |
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| 145 | A theoretical investigation of the C <sub>i</sub> -H <sup>+</sup> ...O interaction between substituted phenylacetylenes and water. Computational and Theoretical Chemistry, 1996, 371, 17-19. | 1.5 | 4         |
| 146 | Topological properties of electron density in the H <sup>+</sup> + H <sub>2</sub> CO reaction system. Journal of Molecular Structure, 1994, 311, 161-167.                                     | 3.6 | 1         |
| 147 | Topological properties of electron density in the H <sup>+</sup> +H <sub>2</sub> CO reaction system. Computational and Theoretical Chemistry, 1994, 311, 161-167.                             | 1.5 | 1         |
| 148 | Donor-acceptor nature of specific nonbonded interactions of sulfur and halogen atoms. Influence on the geometry and packing of molecules. Journal of Structural Chemistry, 1992, 33, 423-435. | 1.0 | 14        |
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