

James M Farrar

List of Publications by Year in descending order

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45
papers

668
citations

687363

13
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580821

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46
all docs

46
docs citations

46
times ranked

359
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Entropies of dissociation of some moderately strong acids. <i>Journal of the American Chemical Society</i> , 1969, 91, 6057-6062. | 13.7 | 57 |
| 2 | Velocity Map Imaging Study of Charge-Transfer and Proton-Transfer Reactions of CH ₃ Radicals with H ₃ ⁺ . <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1684-1689. | 4.6 | 51 |
| 3 | Size-dependent reactivity in open shell metal-ion polar solvent clusters: spectroscopic probes of electronic-vibration coupling, oxidation and ionization. <i>International Reviews in Physical Chemistry</i> , 2003, 22, 593-640. | 2.3 | 50 |
| 4 | Spectroscopic studies of mass selected clusters of Sr ⁺ solvated by H ₂ O and D ₂ O. <i>Journal of Chemical Physics</i> , 1999, 111, 8469-8480. | 3.0 | 49 |
| 5 | Kinetic Energy Release in molecular dications fragmentation after VUV and EUV ionization and escape from planetary atmospheres. <i>Planetary and Space Science</i> , 2014, 99, 149-157. | 1.7 | 49 |
| 6 | Spectroscopy and reactivity of size-selected Mg ⁺ -methanol clusters. <i>Journal of Chemical Physics</i> , 2001, 114, 6180-6189. | 3.0 | 36 |
| 7 | Ion Reaction Dynamics. <i>Annual Review of Physical Chemistry</i> , 1995, 46, 525-554. | 10.8 | 33 |
| 8 | Dynamics of the reaction of N ⁺ with H ₂ . V. Reactive and nonreactive scattering of N ⁺ (3P) at relative energies below 3.6 eV. <i>Journal of Chemical Physics</i> , 1980, 73, 3750-3762. | 3.0 | 27 |
| 9 | Frequency- and time-resolved cluster photodissociation dynamics in Sr ⁺ (H ₂ O) _n , Sr ⁺ (NH ₃) _n and Sr ⁺ (CH ₃ OH) _n . <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 1457. | 1.7 | 27 |
| 10 | Quantum-State Controlled Reaction Channels in Chemi-ionization Processes: Radiative (Optical-Physical) and Exchange (Oxidative-Chemical) Mechanisms. <i>Accounts of Chemical Research</i> , 2020, 53, 2248-2260. | 15.6 | 27 |
| 11 | Imaging ion-molecule reactions: Charge transfer and C-N bond formation in the C ⁺ + NH ₃ system. <i>Journal of Chemical Physics</i> , 2012, 136, 204305. | 3.0 | 24 |
| 12 | Spectroscopy and reactivity of size-selected Mg ⁺ -ammonia clusters. <i>Journal of Chemical Physics</i> , 2004, 121, 8375. | 3.0 | 20 |
| 13 | Ion imaging study of reaction dynamics in the N ⁺ + CH ₄ system. <i>Journal of Chemical Physics</i> , 2012, 137, 154312. | 3.0 | 15 |
| 14 | Angular and energy distributions of fragment ions in dissociative double photoionization of acetylene molecules in the 31.9-50.0 eV photon energy range. <i>Journal of Chemical Physics</i> , 2016, 145, 114308. | 3.0 | 13 |
| 15 | A New Insight on Stereo-Dynamics of Penning Ionization Reactions. <i>Frontiers in Chemistry</i> , 2019, 7, 445. | 3.6 | 13 |
| 16 | Cluster size specific chemistry: deuterium atom pickup in Sr ⁺ solvated by ammonia. <i>Chemical Physics Letters</i> , 1999, 304, 350-356. | 2.6 | 12 |
| 17 | Proton transfer dynamics of the reaction H ₃ O ⁺ (NH ₃ ,H ₂ O)NH ₄ ⁺ studied using the crossed molecular beam technique. <i>Journal of Chemical Physics</i> , 2004, 120, 199-205. | 3.0 | 12 |
| 18 | Reaction Dynamics of H ₂ O ⁺ (D ₂ O ⁺) + NH ₃ Studied with Crossed Molecular Beams and Density Functional Theory Calculations. <i>Journal of Physical Chemistry A</i> , 2004, 108, 9876-9886. | 2.5 | 11 |

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|----|--|------|-----------|
| 19 | Imaging ion-molecule reactions: Charge transfer and halide transfer reactions of O ⁺ with CH ₃ Cl, CH ₃ Br, and CH ₃ I. <i>International Journal of Mass Spectrometry</i> , 2015, 377, 93-100. | 1.5 | 11 |
| 20 | Experimental and theoretical studies of charge transfer and deuterium ion transfer between D ₂ O ⁺ and C ₂ H ₄ . <i>Journal of Chemical Physics</i> , 2004, 121, 3495-3506. | 3.0 | 10 |
| 21 | Dynamics of the reaction of C(+) with HCl. <i>Astrophysical Journal</i> , 1988, 335, 491. | 4.5 | 10 |
| 22 | Dynamics of the OH ⁺ +D ₂ isotope exchange reaction: Reactive and nonreactive decay of the collision complex. <i>Journal of Chemical Physics</i> , 2000, 113, 581-595. | 3.0 | 9 |
| 23 | Ion imaging study of dissociative charge transfer in the N ₂ ⁺ + CH ₄ system. <i>Journal of Chemical Physics</i> , 2013, 138, 124304. | 3.0 | 9 |
| 24 | Velocity Map Imaging Study of Ion-Induced Radical Chemistry: Charge Transfer and Carbon-Carbon Bond Formation in the Reactions of Allyl Radicals with C ⁺ . <i>Journal of Physical Chemistry A</i> , 2016, 120, 6122-6128. | 2.5 | 9 |
| 25 | Experimental and theoretical studies of charge transfer and hydride transfer in the reactions of OD ⁺ and C ₂ H ₄ . <i>International Journal of Mass Spectrometry</i> , 2005, 241, 271-282. | 1.5 | 8 |
| 26 | Chemi-Ionization Reactions and Basic Stereodynamical Effects in Collisions of Atom-Molecule Reagents. <i>Journal of Physical Chemistry A</i> , 2021, 125, 3307-3315. | 2.5 | 8 |
| 27 | Ethyl trichloroacetate hydrolysis. I. Kinetic evidence for a common tetrahedral intermediate in the acid-catalyzed and water-catalyzed hydrolyses. <i>Journal of the American Chemical Society</i> , 1975, 97, 2250-2254. | 13.7 | 7 |
| 28 | Vibrational state-resolved study of the O ⁺ +H ₂ reaction: Isotope effects on the product energy partitioning. <i>Journal of Chemical Physics</i> , 1999, 111, 7348-7358. | 3.0 | 7 |
| 29 | Photodissociation Spectra for Size-Selected Sr+(CH ₃ OH) _n and Sr+(CH ₃ OD) _n Clusters. <i>Journal of Physical Chemistry A</i> , 2002, 106, 9993-9998. | 2.5 | 7 |
| 30 | Dynamics study of the reaction OH ⁺ +C ₂ H ₂ ⁺ →C ₂ H ₃ ⁺ +H ₂ O with crossed beams and density-functional theory calculations. <i>Journal of Chemical Physics</i> , 2006, 124, 124317. | 3.0 | 7 |
| 31 | Reactive scattering from double-minimum potentials. <i>Faraday Discussions of the Chemical Society</i> , 1987, 84, 281. | 2.2 | 6 |
| 32 | Hot and Cold Clusters: Photodissociation of Sr+(CH ₃ OD) _n through Vibrationally Excited Intermediates. <i>Journal of Physical Chemistry A</i> , 2002, 106, 11882-11890. | 2.5 | 6 |
| 33 | Ion-molecule reaction dynamics: Velocity map imaging studies of N ⁺ and O ⁺ with CD ₃ OD. <i>Journal of Chemical Physics</i> , 2015, 143, 084304. | 3.0 | 6 |
| 34 | Quantum State-Resolved Study of the Four-Atom Reaction OH ⁻ (X ¹ Σ ⁺) + D ₂ (X ¹ Σ ^g +, v = 0) → HOD(X ¹ A ⁻ , v ⁻) _{2.5} +D ⁻ (1S). <i>Journal of Physical Chemistry A</i> , 2005, 109, 6392-6396. | 2.5 | 5 |
| 35 | Stereo-dynamical effects in chemi-ionization reactions of atmospheric O ₂ and N ₂ molecules promoted by collisions with Ne*(3P ₂ ,0) atoms. <i>Chemical Physics Letters</i> , 2021, 778, 138813. | 2.6 | 5 |
| 36 | Reaction dynamics of OH ⁺ (X ² Σ ⁺) + C ₂ H ₂ studied with crossed beams and density functional theory calculations. <i>Journal of Chemical Physics</i> , 2006, 125, 133117. | 3.0 | 3 |

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|----|--|------|-----------|
| 37 | Hydride transfer reaction dynamics of OD++C3H6. Journal of Chemical Physics, 2007, 126, 244315. | 3.0 | 2 |
| 38 | Singlet and triplet state dynamics of charge and hydride transfer reactions of OD+ (X3Î£âˆ“) with propyne. International Journal of Mass Spectrometry, 2009, 280, 154-161. | 1.5 | 2 |
| 39 | Vibrationalâˆ“Rotational Energy Distributions in the Reaction O^{âˆ“} + D₂ â†’ OD + D^{âˆ“}. Journal of Physical Chemistry A, 2009, 113, 15233-15239. | 2.5 | 2 |
| 40 | Dynamics of the reaction of O- with D2 at low collision energies: reagent rotational energy effects. Physical Chemistry Chemical Physics, 2000, 2, 679-685. | 2.8 | 1 |
| 41 | CHEMICAL REACTIONS: Steric and Solvent Effects in Ionic Reactions. Science, 2002, 295, 2222-2223. | 12.6 | 1 |
| 42 | A Velocity Map Imaging Study of the Reactions of O+ (4S) With CH4. Frontiers in Chemistry, 2019, 7, 227. | 3.6 | 1 |
| 43 | Highlights: Ventures in freshman chemistry. Journal of Chemical Education, 1993, 70, 847. | 2.3 | 0 |
| 44 | Low energy crossed beam studies of OD+and D2O+with C2H4: covalent and electrostatic complexes. Physica Scripta, 2007, 76, C48-C55. | 2.5 | 0 |
| 45 | Experiment and theory elucidate the pathways for H₃⁺formation in the ultrafast double ionization in methanol. Natural Sciences, 2022, 2, . | 2.1 | 0 |