# Francesco Sebastianelli

List of Publications by Year
in descending order



| 37 | 1,024 | 394421 | 414414 |
|---|---|---|---|
| papers | citations | 19 h-index | 32 g-index |

| 39 | 39 | 39 | 569 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Hydrogen Molecule in the Small Dodecahedral Cage of a Clathrate Hydrate:Â Quantum Five-Dimensional Calculations of the Coupled Translationâ"Rotation Eigenstates. Journal of Physical Chemistry B, 2006, 110, 24806-24811. | 2.6 | 83 |
| 2 | H 2 , HD, and D2 inside C60: Coupled translation-rotation eigenstates of the endohedral molecules from quantum five-dimensional calculations. Journal of Chemical Physics, 2008, 129, 064313. | 3.0 | 80 |
| 3 | Quantum dynamics of coupled translational and rotational motions of H2 inside C60. Journal of Chemical Physics, 2008, 128, 011101. | 3.0 | 74 |
| 4 | Coupled translation-rotation eigenstates of H2 in C60 and C70 on the spectroscopically optimized interaction potential: Effects of cage anisotropy on the energy level structure and assignments. Journal of Chemical Physics, 2009, 130, 224306. | 3.0 | 69 |
| 5 | Quantum dynamics of H2, D2, and HD in the small dodecahedral cage of clathrate hydrate: Evaluating H2-water nanocage interaction potentials by comparison of theory with inelastic neutron scattering experiments. Journal of Chemical Physics, 2008, 128, 244715. | 3.0 | 66 |
| 6 | Quantum dynamics of small H2 and D2 clusters in the large cage of structure II clathrate hydrate: Energetics, occupancy, and vibrationally averaged cluster structures. Journal of Chemical Physics, 2008, 129, 244706. | 3.0 | 59 |
| 7 | Hydrogen Molecules inside Fullerene C<sub>70</sub>: Quantum Dynamics, Energetics, Maximum Occupancy, And Comparison with C<sub>60</sub>. Journal of the American Chemical Society, 2010, 132, 9826-9832. | 13.7 | 51 |
| 8 | Path Integral Molecular Dynamics Study of Small H<sub>2</sub> Clusters in the Large Cage of Structure II Clathrate Hydrate: Temperature Dependence of Quantum Spatial Distributions. Journal of Physical Chemistry C, 2010, 114, 20775-20782. | 3.1 | 48 |
| 9 | Hydrogen Molecules in the Small Dodecahedral Cage of a Clathrate Hydrate:â€‰ Quantum Translationâ"Rotation Dynamics of the Confined Molecules. Journal of Physical Chemistry C, 2007, 111, 2497-2504. | 3.1 | 45 |
| 10 | Coupled Translationâ"Rotation Eigenstates of H<sub>2</sub>, HD, and D<sub>2</sub> in the Large Cage of Structure II Clathrate Hydrate: Comparison with the Small Cage and Rotational Raman Spectroscopy. Journal of Physical Chemistry A, 2009, 113, 7601-7609. | 2.5 | 41 |
| 11 | Dissociative Electron Attachment to Formamide: Direct and Indirect Pathways from Resonant Intermediates. Journal of Chemical Theory and Computation, 2009, 5, 217-221. | 5.3 | 34 |
| 12 | Electron scattering cross sections from HCN over a broad energy range (0.1â€"10â€‰000 eV): Influence of the permanent dipole moment on the scattering process. Journal of Chemical Physics, 2012, 137, 124103. | 3.0 | 34 |
| 13 | Microsolvation of Li+in Small He Clusters. Li+HenSpecies from Classical and Quantum Calculations. Journal of Chemical Theory and Computation, 2005, 1, 1045-1054. | 5.3 | 32 |
| 14 | Hydrogen Molecule in the Small Dodecahedral Cage of a Clathrate Hydrate:â€‰ Quantum Translationâ"Rotation Dynamics at Higher Excitation Energies. Journal of Physical Chemistry A, 2007, 111, 12763-12771. | 2.5 | 30 |
| 15 | One and Two Hydrogen Molecules in the Large Cage of the Structure II Clathrate Hydrate:â€‰ Quantum Translationâ"Rotation Dynamics Close to the Cage Wall. Journal of Physical Chemistry A, 2007, 111, 6115-6121. | 2.5 | 27 |
| 16 | Ab initio quantum dynamics with very weak van der Waals interactions: Structure and stability of small Li2(1Î£g+)â€"(He)n clusters. Journal of Chemical Physics, 2004, 120, 9160-9166. | 3.0 | 25 |
| 17 | Quantum and classical structures for 4He clusters with the Hâ" impurity. Journal of Chemical Physics, 2003, 119, 8276-8288. | 3.0 | 22 |
| 18 | Microsolvation of Li+ in bosonic helium clusters. I. Many-body effects on the structures of the small aggregates. Computational Materials Science, 2006, 35, 261-267. | 3.0 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Structural and quantum effects from anionic centers in rare gas clusters: The (Ne)nHâ˜ and (Ne)n+1 systems. Journal of Chemical Physics, 2003, 119, 5570-5582. | 3.0 | 20 |
| 20 | Gas-phase route to polycyclic aromatic hydrocarbon formation in protoplanetary atmospheres: role of stabilized benzyne anions. Monthly Notices of the Royal Astronomical Society, 2011, 415, 425-430. | 4.4 | 16 |
| 21 | ELECTRON-DRIVEN REACTIONS IN PROTO-PLANETARY ATMOSPHERES: METASTABLE ANIONS OF GASEOUS o-BENZYNE. Astrophysical Journal, 2010, 712, 445-452. | 4.5 | 15 |
| 22 | Forming (NCCN)â˜ by quantum scattering: A modeling for Titanâ€™s atmosphere. Chemical Physics, 2012, 398, 199-205. | 1.9 | 14 |
| 23 | Rotational cooling of Li2(1?g+) molecules by ultracold collisions with a helium gas buffer. Theoretical Chemistry Accounts, 2004, 112, 263. | 1.4 | 13 |
| 24 | Modelling ionic nucleation in small neon clusters. International Journal of Mass Spectrometry, 2002, 220, 193-209. | 1.5 | 12 |
| 25 | Microsolvation of LiH+in Helium Clusters:Â Many-Body Effects and Additivity Models for the Interaction Forces. Journal of Physical Chemistry A, 2005, 109, 4252-4260. | 2.5 | 12 |
| 26 | HF in clusters of molecular hydrogen: II. Quantum solvation by H2 isotopomers, cluster rigidity, and comparison with CO-doped parahydrogen clusters. Journal of Chemical Physics, 2006, 125, 164313. | 3.0 | 10 |
| 27 | | | |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Scattering of electrons by gaseous CS(1Î£): The role of short-range forces on the very-low energy 2Î resonance. Chemical Physics Letters, 2009, 476, 182-185. | 2.6 | 2 |