

L Gonzalez-Sanchez

List of Publications by Year in descending order

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28
papers

236
citations

933447

10
h-index

1058476

14
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28
all docs

28
docs citations

28
times ranked

155
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum scattering of OH(\tilde{X}^2) with He(S1): Propensity features in rotational relaxation at ultralow energies. <i>Physical Review A</i> , 2006, 73, .	2.5	24
2	Computing rotational energy transfers of OD(\tilde{a}^1)/OH(\tilde{a}^1) in collisions with Rb: isotopic effects and inelastic rates at cold ion-trap conditions. <i>New Journal of Physics</i> , 2015, 17, 123003.	2.9	17
3	STATE-TO-STATE QUANTUM WAVE PACKET DYNAMICS OF THE LiH + H REACTION ON TWO AB INITIO POTENTIAL ENERGY SURFACES. <i>Astrophysical Journal</i> , 2014, 784, 55.	4.5	16
4	OH(\tilde{X}^1) collisions with $^4\text{He}(1\text{S})$ at vanishing energies: a quantum analysis of rotational quenching efficiency. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, S1203-S1213.	1.5	15
5	Ionic interactions and collision dynamics in cold traps: rotational quenching of OH(\tilde{X}^1) by Rb(2S). <i>European Physical Journal D</i> , 2008, 49, 85-92.	1.3	13
6	Quenching of molecular ions by He buffer loading at ultralow energies: rotational cooling of OH(\tilde{X}^1) from quantum calculations. <i>European Physical Journal D</i> , 2007, 44, 65-72.	1.3	12
7	Modeling state-selective photodetachment in cold ion traps: Rotational state "crowding" in small anions. <i>Journal of Chemical Physics</i> , 2019, 151, 144304.	3.0	11
8	HeH(\tilde{X}^1) Collisions with H_2 : Rotationally Inelastic Cross Sections and Rate Coefficients from Quantum Dynamics at Interstellar Temperatures. <i>Journal of Physical Chemistry A</i> , 2022, 126, 2244-2261.	2.5	11
9	Collisional state-changing of OH(\tilde{X}^1) rotations by interaction with Rb atoms in cold traps. <i>Chemical Physics</i> , 2015, 462, 111-118.	1.9	10
10	Rotationally Inelastic Collisions of CN(\tilde{X}^1) with He: Computing Cross Sections and Rates in the Interstellar Medium. <i>Astrophysical Journal</i> , 2020, 897, 75.	4.5	10
11	Unveiling shape resonances in H + HF collisions at cold energies. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 24943-24950.	2.8	10
12	Energy-transfer quantum dynamics of HeH $^+$ with He atoms: Rotationally inelastic cross sections and rate coefficients. <i>Journal of Chemical Physics</i> , 2021, 154, 054311.	3.0	10
13	Collisional quenching of rotations in lithium dimers by ultracold helium: The Li $_2$ (\tilde{a}^1) and Li $_2$ (\tilde{X}^1) targets. <i>Journal of Chemical Physics</i> , 2007, 127, 244315.	3.0	9
14	Orientation effects in Cl + H $_2$ inelastic collisions: characterization of the mechanisms. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 2911.	2.8	8
15	Quenching efficiency of "hot" polar molecules by He buffer gas at ultralow energies: quantum results for MgH and LiH rotations. <i>European Physical Journal D</i> , 2008, 48, 75-82.	1.3	7
16	Dynamical regimes on the Cl + H $_2$ collisions: Inelastic rainbow scattering. <i>Journal of Chemical Physics</i> , 2011, 135, 064301.	3.0	7
17	Modeling Quantum Kinetics in Ion Traps: State-changing Collisions for OH(\tilde{X}^1) Ions with He as a Buffer Gas. <i>ChemPhysChem</i> , 2018, 19, 1866-1875.	2.1	7
18	Rotationally inelastic processes of C_2^+ ($\tilde{\Sigma}^+$) colliding with He (1 S) at low temperatures: ab initio interaction potential, state changing rates and kinetic modelling. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 025201.	1.5	7

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19	A Quantum Mechanical Study of the $\langle i \rangle \langle b \rangle \langle k \rangle \langle /b \rangle \langle /i \rangle$ and $\langle b \rangle \langle i \rangle \langle k \rangle \langle /i \rangle \langle /b \rangle$ Vector Correlations for the $\text{H} + \text{LiH} \hat{\rightarrow} \text{Li} + \text{H}_2$ Reaction. Journal of Physical Chemistry A, 2017, 121, 1535-1543.	2.5	6
20	Collisional cooling of internal rotation in MgH^+ ions trapped with He atoms: Quantum modeling meets experiments in Coulomb crystals. Physical Review A, 2018, 98, .	2.5	5
21	Investigating the electronic properties and structural features of MgH and of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:msup} \langle \text{mml:mrow} \langle \text{mml:mi} \text{MgH} \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \hat{\rightarrow} \langle / \text{mml:mo} \rangle \langle \text{mml:mi} \text{anions} \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$. Physical Review A, 2017, 96, .	2.5	5
22	Rotational $\hat{\leftarrow}$ cooling $\hat{\leftarrow}$ and $\hat{\leftarrow}$ heating $\hat{\leftarrow}$ of $\text{OH}^+(\nu=3)$ ($\hat{\leftarrow}$) by collisions with He: quantum dynamics revealing propensity rules under ion trap conditions. Molecular Physics, 2018, 116, 2686-2697.	1.7	4
23	Dynamics of HeHHe^+ Rotational State Changes Induced by Collision with He: A Possible New Path in Early Universe Chemistry. Journal of Physical Chemistry A, 2021, 125, 3748-3759.	2.5	4
24	Reaction Dynamics and Mechanism of the $\text{Cl} + \text{HD}(\nu=1)$ Reaction: A Quantum Mechanical Study. Journal of Physical Chemistry A, 2013, 117, 7030-7041.	2.5	3
25	State-changing processes for ions in cold traps: LiH^+ molecules colliding with He as a buffer gas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 235201.	1.5	3
26	Efficiency of rovibrational cooling of HeH^+ by collisions with He: Cross sections and rate coefficients from quantum dynamics. Journal of Chemical Physics, 2021, 155, 154301.	3.0	2
27	A semiclassical treatment of the $\langle b \rangle \langle i \rangle \langle a \rangle \langle /i \rangle \langle /b \rangle$ correlation in atom-diatom collisions. Journal of Chemical Physics, 2015, 143, 064302.	3.0	1
28	Influence of the Reactants Rotational Excitation on the $\text{H} + \text{D}_2(\nu=0, j)$ Reactivity. Journal of Physical Chemistry A, 2015, 119, 12245-12254.	2.5	0