

Lev Yu Rusin

List of Publications by Year in descending order

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62
papers

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citations

567281

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Detailed dynamics of direct three-body recombination of singly charged ions. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 3129-3143.	2.8	5
2	Dynamics of third order direct three-body recombination of heavy ions. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 7783-7798.	2.8	6
3	Scattering of particles from a solid surface: the impulsive model of composite encounters. <i>Rendiconti Lincei</i> , 2019, 30, 785-795.	2.2	0
4	Two Mechanisms of Recombination of Atomic Ions. <i>Russian Journal of Physical Chemistry B</i> , 2018, 12, 957-964.	1.3	7
5	Dissociation of Potassium Iodide at a Graphite Surface within the Framework of an Impulsive Model. <i>Russian Journal of Physical Chemistry B</i> , 2018, 12, 1082-1093.	1.3	1
6	Statistical dynamics of direct three-body recombination of heavy ions in the presence of argon and xenon atoms. <i>Russian Journal of Physical Chemistry B</i> , 2016, 10, 553-560.	1.3	9
7	Statistical characteristics of the motion of a pair of heavy ions in non-convex cavities of complicated geometry with fixed crosspieces and charges. <i>Russian Journal of Physical Chemistry B</i> , 2015, 9, 849-865.	1.3	0
8	A hard sphere model for direct three-body recombination of heavy ions. <i>Russian Journal of Physical Chemistry B</i> , 2014, 8, 769-782.	1.3	9
9	Effectiveness of the third body in the direct recombination of ions. <i>Russian Journal of Physical Chemistry B</i> , 2014, 8, 261-271.	1.3	9
10	Dynamics of two-stage direct three-body recombination of ions. <i>Chemical Physics</i> , 2013, 411, 26-34.	1.9	13
11	Dynamics of a heavy ionic pair in a cavity with an elastic or inelastic boundary, crosspieces, and fixed charges of opposite sign. <i>Russian Journal of Physical Chemistry B</i> , 2013, 7, 355-370.	1.3	1
12	Mechanism of the direct three-body recombination of atomic ions in a central collision. <i>Russian Journal of Physical Chemistry B</i> , 2012, 6, 475-485.	1.3	9
13	Stabilization of diatomic products in recombination of heavy ions. <i>Russian Journal of Physical Chemistry B</i> , 2012, 6, 583-592.	1.3	10
14	Detailed dynamics of three-body recombination of ions in central collisions. <i>Chemical Physics</i> , 2012, 392, 149-159.	1.9	11
15	Dynamical Mechanisms of Direct Three-Body Recombination. <i>Journal of Physical Chemistry A</i> , 2011, 115, 7055-7064.	2.5	19
16	A study of the detailed dynamics of the collision-induced dissociation of CsBr by the visualization of elementary process trajectories. <i>Russian Journal of Physical Chemistry B</i> , 2011, 5, 177-187.	1.3	6
17	The optimization of potential energy surface parameters for the CsCl + RbI system with the use of linear regression analysis. <i>Russian Journal of Physical Chemistry B</i> , 2010, 4, 353-369.	1.3	2
18	A microwave discharge source operating at pressures of several atmospheres. <i>Instruments and Experimental Techniques</i> , 2009, 52, 394-399.	0.5	0

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19	Structure of small hydrogen nanoclusters containing ortho-molecules. Russian Journal of Physical Chemistry B, 2009, 3, 743-752.	1.3	2
20	On the maximum in the differential cross sections of the F + H ₂ reaction in the region of small scattering angles. Russian Journal of Physical Chemistry B, 2009, 3, 857-863.	1.3	2
21	Efficiency of detection of Cs ⁺ and Cl ⁺ ions with a D ⁺ D ⁺ £-7-2 microchannel electron multiplier. Instruments and Experimental Techniques, 2008, 51, 562-566.	0.5	0
22	The dynamics of direct three-body recombination of ions. Russian Journal of Physical Chemistry B, 2008, 2, 499-511.	1.3	14
23	XUV laser-plasma source based on solid Ar filament. Review of Scientific Instruments, 2007, 78, 103509.	1.3	14
24	A simple method for measuring time-of-flight spectra of a gas-dynamic molecular beam. Instruments and Experimental Techniques, 2007, 50, 366-369.	0.5	1
25	Ion source with longitudinal ionization of a molecular beam by an electron beam in a magnetic field. Instruments and Experimental Techniques, 2006, 49, 709-713.	0.5	8
26	An improved source of intense beams of fluorine atoms. Journal Physics D: Applied Physics, 2006, 39, 4186-4193.	2.8	4
27	Dynamics of Collision-Induced Dissociation of Two Molecules with Ionic Bond. AIP Conference Proceedings, 2005, , .	0.4	0
28	Comparison of experimental time-of-flight spectra of the HF products from the F+H ₂ reaction with exact quantum mechanical calculations. Journal of Chemical Physics, 2005, 122, 134314.	3.0	21
29	The complete T ⁺ V,R energy conversion in three-body collisions within the hard sphere model. Journal of Chemical Physics, 2005, 122, 074322.	3.0	3
30	â€œEclipseâ€•Effect in the Scattering of Weakly Bound Helium Clusters. Physical Review Letters, 2004, 93, 163402.	7.8	9
31	Simulation of the reactive scattering of F+D ₂ on a model family of potential energy surfaces with various topographies: The correlation approach. Journal of Chemical Physics, 2004, 120, 800-812.	3.0	3
32	Long-Range Interaction in Some Simple Open-Shell Systems, Including Rare-Gas Sulfides: Features of Post-Adiabatic Potentials and Couplings. Journal of Physical Chemistry A, 2004, 108, 8731-8742.	2.5	13
33	Evidence for a bound HeH ₂ halo molecule by diffraction from a transmission grating. Journal of Chemical Physics, 2004, 121, 625-627.	3.0	16
34	Anomalous HF product rotational distributions in the F + H ₂ reaction at threshold collision energies. Physical Chemistry Chemical Physics, 2000, 2, 501-505.	2.8	19
35	Rotationally resolved differential scattering cross sections for the reaction F+para-H ₂ (v=0, â€šj=0) â†• HF(v=2, â€š3, â€šj=2)+H. Journal of Chemical Physics, 1999, 110, 10231-10234.	3.0	36
36	Elastic and rotationally inelastic scattering of fluorine atoms by deuterium molecules at 112 meV collision energy. Chemical Physics, 1998, 229, 21-35.	1.9	7

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37	Effect of the angular dependence of the barrier height on the features of the F+H ₂ reaction. <i>Chemical Physics</i> , 1998, 232, 307-320.	1.9	2
38	State-to-state differential cross sections for the reaction F+D ₂ at 90 meV: A crossed molecular beam experiment and a quantum mechanical study. <i>Journal of Chemical Physics</i> , 1998, 108, 9694-9710.	3.0	44
39	Diffraction and rotational transitions in the scattering of D ₂ from Cu(001) at energies up to 250 meV. <i>Journal of Chemical Physics</i> , 1998, 109, 8036-8044.	3.0	39
40	Detection of oxygen atoms in a high pressure surfatron microwave discharge via two-photon four-wave mixing. <i>Applied Physics B: Lasers and Optics</i> , 1997, 64, 613-618.	2.2	2
41	Excitation functions of cation formation in collisions of diatomic molecules with an ionic bond: CsCl + RbI. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1996, 92, 1683.	1.7	2
42	An intense fluorine atom beam source. <i>Journal Physics D: Applied Physics</i> , 1996, 29, 1885-1893.	2.8	14
43	New Results on the Reactive Scattering of Atomic Fluorine by Molecular Deuterium at 3.2 kcal/mol Collision Energy. <i>Zeitschrift Fur Physikalische Chemie</i> , 1995, 188, 197-214.	2.8	22
44	A scattering study of the dependence of the F + D ₂ (j _i = 0, 1, 2) → DF($\hat{1}/2f, j_f$) + D reaction on the initial rotational state. <i>Chemical Physics Letters</i> , 1995, 232, 197-206.	2.6	42
45	A hard-sphere model for the reactions of two diatomic molecules with ionic bond. <i>Chemical Physics</i> , 1995, 199, 195-206.	1.9	5
46	A test of the semiclassical Wigner method for the reaction F + H ₂ → H + HF. <i>Chemical Physics</i> , 1995, 195, 243-258.	1.9	15
47	A further test of the shape and anisotropy of the F ⁻ -H ₂ interaction potential. <i>Chemical Physics</i> , 1995, 200, 405-413.	1.9	10
48	A wave packet propagation study of inelastic and reactive F+D ₂ scattering. <i>Journal of Chemical Physics</i> , 1995, 103, 2482-2494.	3.0	21
49	Kinematic Mechanism for the Formation of Two-Body Ionic Products in Collision-Induced Dissociation of Cesium Halides. <i>The Journal of Physical Chemistry</i> , 1995, 99, 15502-15508.	2.9	8
50	Post-adiabatic approach to atomic and molecular processes: The van der Waals interactions of some open shell systems. <i>Theoretica Chimica Acta</i> , 1995, 90, 225-256.	0.8	5
51	A high resolution crossed molecular beam investigation of the absolute cross sections and product rotational states for the reaction F+D ₂ (v _i =0; j _i =0,1) → DF(v _f ; j _f)+D. <i>Journal of Chemical Physics</i> , 1994, 101, 2106-2125.	3.0	85
52	The H ₂ ↔ Ne interaction. <i>Journal of Chemical Physics</i> , 1994, 101, 8800-8811.	3.0	44
53	Multiple impacts and energy transfer in a three-body system for noncollinear collisions. <i>Theoretica Chimica Acta</i> , 1993, 87, 195-213.	0.8	4
54	Inelastic F ↔ H ₂ scattering. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 1475-1480.	1.7	28

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55	Ionic dissociation of CsBr induced by collisions with Hg: molecular-ion formation. Chemical Physics Letters, 1991, 180, 541-544.	2.6	5
56	Long-range features of the F-HBr and F-HI potential energy surfaces from crossed molecular-beam experiments: a model analysis. Chemical Physics Letters, 1991, 177, 536-542.	2.6	3
57	Ionic dissociation of CsBr induced by collisions with Hg: trajectory simulation. Chemical Physics Letters, 1990, 175, 608-612.	2.6	7
58	Ionic dissociation of CsBr induced by collisions with Hg: Molecular beam investigation. Chemical Physics Letters, 1990, 170, 502-508.	2.6	6
59	Momentum model for dissociative ionization in the collision of inert-gas atoms with alkali-halide molecules. Theoretical and Experimental Chemistry, 1982, 17, 453-458.	0.8	0
60	Molecular beam scattering experiments on the abstraction and exchange reactions of deuterium atoms with the hydrogen halides HCl, HBr, and HI. Journal of Chemical Physics, 1978, 68, 4490-4504.	3.0	25
61	Elastic scattering studies of the van der Waals potential for D ⁺ HCl and D ⁺ HBr. Journal of Chemical Physics, 1977, 66, 3837-3838.	3.0	9
62	Flame spectra from the interaction of fluorine and some halogen-containing compounds. Journal of Applied Spectroscopy, 1966, 4, 90-93.	0.7	0