Oddur IngÃ³lfsson

List of Publications by Year
in descending order

112 papers	2,022 citations	279798 23 h-index	289244 40 g-index
115 all docs	115 docs citations	115 times ranked	1062 citing authors

#	Article	IF	Citations
1	The reactivity of slow electrons with molecules at different degrees of aggregation: gas phase, clusters and condensed phase. International Journal of Mass Spectrometry and Ion Processes, 1996, 155, 1-68.	1.8	147
2	The role of low-energy electrons in focused electron beam induced deposition: four case studies of representative precursors. Beilstein Journal of Nanotechnology, 2015, 6, 1904-1926.	2.8	131
3	From isolated molecules through clusters and condensates to the building blocks of life. International Journal of Mass Spectrometry, 2008, 277, 4-25.	1.5	113
4	Dissociative electron attachment to gas phase valine: A combined experimental and theoretical study. Journal of Chemical Physics, 2006, 125, 204301.	3.0	74
5	Energy-resolved collision-induced dissociation of Cun+â€‰(n=2â€“9): Stability and fragmentation pathways. Journal of Chemical Physics, 2000, 112, 4613-4620.	3.0	60
6	Anion formation from gaseous and condensed CF3I on low energy electron impact. Journal of Chemical Physics, 1993, 99, 5141-5150.	3.0	57
7	Cross section data sets for electron collisions with H2, O2, CO, CO2, N2O and H2O. European Physical Journal D, 2012, 66, 1.	1.3	55
8	The Role of Dissociative Electron Attachment in Focused Electron Beam Induced Processing: A Case Study on Cobalt Tricarbonyl Nitrosyl. Angewandte Chemie - International Edition, 2011, 50, 9475-9477.	13.8	54
9	NCO^{â€“}, a Key Fragment Upon Dissociative Electron Attachment and Electron Transfer to Pyrimidine Bases: Site Selectivity for a Slow Decay Process. Journal of the American Society for Mass Spectrometry, 2013, 24, 1787-1797.	2.8	53
10	Gas phase low energy electron induced decomposition of the focused electron beam induced deposition (FEBID) precursor trimethyl (methylcyclopentadienyl) platinum(iv) (MeCpPtMe3). Physical Chemistry Chemical Physics, 2012, 14, 14611.	2.8	52
11	Absolute cross sections for dissociative electron attachment and dissociative ionization of cobalt tricarbonyl nitrosyl in the energy range from 0 eV to 140 eV. Journal of Chemical Physics, 2013, 138, 044305.	3.0	51
12	Combined Experimental and Theoretical Study on the Nature and the Metastable Decay Pathways of the Amino Acid Ion Fragment [Mâ^'H]^{â^'}. Angewandte Chemie - International Edition, 2007, 46, 8057-8059.	13.8	47
13	Dissociative electron attachment to gas phase glycine: Exploring the decomposition pathways by mass separation of isobaric fragment anions. Physical Chemistry Chemical Physics, 2007, 9, 5680.	2.8	44
14	Dynamical (e,2e) investigations of tetrahydrofuran and tetrahydrofurfuryl alcohol as DNA analogues. Chemical Physics Letters, 2013, 572, 32-37.	2.6	39
15	Medium enhanced, electron stimulated desorption of CF3â^ from condensed CF3I. Chemical Physics Letters, 1998, 296, 208-214.	2.6	38
16	Cross sections for electron impact excitation of the Câ€‰Î1 and Dâ€‰Î£1+ electronic states in N2O. Journal of Chemical Physics, 2009, 131, 114307.	3.0	31
17	Substitution effects in elastic electron collisions with CH3X (X=F, Cl, Br, I) molecules. Journal of Chemical Physics, 2010, 132, 074309.	3.0	31
18	Dissociative electron attachment to titatinum tetrachloride and titanium tetraisopropoxide. European Physical Journal D, 2014, 68, 1.	1.3	31

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19	Dissociative electron attachment to hexafluoroacetylacetone and its bidentate metal complexes M(hfac)2; M = Cu, Pd. Journal of Chemical Physics, 2013, 138, 234309.	3.0	30
20	A study of electron scattering from benzene: Excitation of the 1B1u, 3E2g, and 1E1u electronic states. Journal of Chemical Physics, 2011, 134, 134308.	3.0	29
21	Energy selective excision of CNâ^'following electron attachment to hexafluoroacetone azine ((CF3)2Cî€Nâ€"Nî€€(CF3)2). Physical Chemistry Chemical Physics, 2007, 9, 2983-2990.	2.8	28
22	Molecular rearrangement reactions in the gas phase triggered by electron attachment. Physical Chemistry Chemical Physics, 2013, 15, 4754.	2.8	25
23	Formation and decay of negative ion resonances in gaseous and condensed molecules. International Reviews in Physical Chemistry, 1996, 15, 133-151.	2.3	24
24	Low energy positron interactions with uracilâ€"Total scattering, positronium formation, and differential elastic scattering cross sections. Journal of Chemical Physics, 2014, 141, 034306.	3.0	23
25	A detailed study on the decomposition pathways of the amino acid valine upon dissociative electron attachment. European Physical Journal D, 2010, 60, 37-44.	1.3	22
26	Negative ion formation through dissociative electron attachment to the group IV tetrafluorides: Carbon tetrafluoride, silicon tetrafluoride and germanium tetrafluoride. International Journal of Mass Spectrometry, 2013, 339-340, 45-53.	1.5	22
27	Electron Induced Surface Reactions of HFeCo₃(CO)₁₂, a Bimetallic Precursor for Focused Electron Beam Induced Deposition (FEBID). Journal of Physical Chemistry C, 2018, 122, 2648-2660.	3.1	22
28	Electron attachment time-of-flight mass spectrometry reveals geometrical shell closings in van der Waals aggregates. Journal of Chemical Physics, 2002, 117, 3721-3732.	3.0	21
29	Effective quenching of fragment formation in negative ion oligonucleotide matrix-assisted laser desorption/ionization mass spectrometry through sodium adduct formation. Rapid Communications in Mass Spectrometry, 2006, 20, 3498-3502.	1.5	21
30	Electron impact ionization dynamics of para-benzoquinone. Journal of Chemical Physics, 2016, 145, 164306.	3.0	21
31	Electron induced surface reactions of (Î·⁵-C₅H₅)Fe(CO)₂Mn(CO)₅, a potential heterobimetallic precursor for focused electron beam induced deposition (FEBID). Physical Chemistry Chemical Physics, 2018, 20, 7862-7874.	2.8	21
32	Effective intermolecular relaxation in (C6F6)nâ^' clusters: mechanism of C6F6â^' formation on low energy electron impact. International Journal of Mass Spectrometry and Ion Processes, 1995, 149-150, 79-86.	1.8	20
33	Energy-resolved collision-induced dissociation of Aln+ clusters (n=2â€"11) in the center of mass energy range from few hundred meV to 10 eV. Journal of Chemical Physics, 1999, 110, 4382-4393.	3.0	20
34	Experimental and theoretical study of the metastable decay of negatively charged nucleosides in the gas phase. Physical Chemistry Chemical Physics, 2011, 13, 15283.	2.8	19
35	Stabilization, fragmentation and rearrangement reactions in low-energy electron interaction with tetrafluoro-para-benzoquinone: a combined theoretical and experimental study. Physical Chemistry Chemical Physics, 2013, 15, 16758.	2.8	17
36	Structure and energetics in dissociative electron attachment to HFeCo3(CO)12. European Physical Journal D, 2016, 70, 1.	1.3	17

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37	Low energy electron-induced decomposition of (Î·³-C₃H₅)Ru(CO)₃Br, a potential focused electron beam induced deposition precursor with a heteroleptic ligand set. Physical Chemistry Chemical Physics, 2017, 19, 13264-13271.	2.8	17
38	Strong Solvation Effects in the Reactivity of C6F5Xâ^' Anions (X = Cl, Br, I). Competition between Dissociative and Associative Processes Following Electron Capture. Zeitschrift Fur Physikalische Chemie, 1996, 195, 217-236.	2.8	16
39	Quantum Superposition of Target and Product States in Reactive Electron Scattering fromCF4Revealed through Velocity Slice Imaging. Physical Review Letters, 2013, 111, 063201.	7.8	16
40	Formation and decay of negative ion states up to 11ÂeV above the ionization energy of the nanofabrication precursor HFeCo₃(CO)₁₂. Chemical Science, 2017, 8, 5949-5952.	7.4	16
41	Electron interactions with the heteronuclear carbonyl precursor H₂FeRu₃(CO)₁₃ and comparison with HFeCo₃(CO)₁₂: from fundamental gas phase and surface science studies to focused electron beam induced deposition. Beilstein Journal of Nanotechnology, 2018, 9, 555-579.	2.8	16
42	Fragmentation of deprotonated d-ribose and d-fructose in MALDIâ€"Comparison with dissociative electron attachment. International Journal of Mass Spectrometry, 2009, 280, 190-197.	1.5	15
43	Metastable decay of DNA components and their compositions â€“ a perspective on the role of reactive electron scattering in radiation damage. European Physical Journal D, 2012, 66, 1.	1.3	15
44	A-band methyl halide dissociation via electronic curve crossing as studied by electron energy loss spectroscopy. Journal of Chemical Physics, 2010, 133, 054304.	3.0	14
45	Electron attachment reactions in mixed SF6/N2 clusters. Chemical Physics Letters, 1995, 241, 180-184.	2.6	13
46	An experimental and theoretical study on structural parameters and energetics in ionization and dissociation of cobalt tricarbonyl nitrosyl. International Journal of Mass Spectrometry, 2013, 356, 24-32.	1.5	13
47	Electron attachment time-of-flight mass spectrometry reveals fcc bulk-like packing in CO2 aggregates. Chemical Physics Letters, 2002, 360, 415-421.	2.6	12
48	An experimental and theoretical investigation into the electronically excited states of para-benzoquinone. Journal of Chemical Physics, 2017, 146, 184303.	3.0	12
49	Electron-Induced Reactions of Ru(CO)₄I₂: Gas Phase, Surface, and Electron Beam-Induced Deposition. Journal of Physical Chemistry C, 2020, 124, 10593-10604.	3.1	12
50	Resonant vibrational excitation of CH₃X (X = F, Cl, Br and I) by low-energy electron impact. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 065205.	1.5	11
51	Fast and metastable fragmentation of deprotonated d-fructose â€“ A combined experimental and computational study. International Journal of Mass Spectrometry, 2011, 305, 50-57.	1.5	11
52	Chemical control through dissociative electron attachment â€“ A study on pentafluorotoluene, pentafluoroaniline and pentafluorophenol. Chemical Physics Letters, 2012, 539-540, 7-10.	2.6	11
53	Dissociative electron attachment to CF3Cl. European Physical Journal D, 2012, 66, 1.	1.3	11
54	Dissociative electron attachment to the complexation ligands hexafluoroacetylacetone, trifluoroacetylacetone and acetylacetone; a comparative experimental and theoretical study. RSC Advances, 2014, 4, 33222-33235.	3.6	11

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55	Side chain effects in reactions of the potassium-tyrosine charge transfer complex. Chemical Physics Letters, 2016, 662, 19-24.	2.6	11
56	Low energy electron-induced decomposition of (Î·⁵-Cp)Fe(CO)₂Mn(CO)₅, a potential bimetallic precursor for focused electron beam induced deposition of alloy structures. Physical Chemistry Chemical Physics, 2018, 20, 5644-5656.	2.8	11
57	Negative ion formation through dissociative electron attachment to the group IV tetrachlorides: Carbon tetrachloride, silicon tetrachloride and germanium tetrachloride. International Journal of Mass Spectrometry, 2018, 426, 12-28.	1.5	11
58	Stabilization of transient negative ions by vibrational energy transfer: A cluster and thin film study on SF6 and C6F6. Journal of Chemical Physics, 2000, 112, 9046-9051.	3.0	10
59	Laser desorption electron attachment time-of-flight mass spectrometry: A new approach to detection of involatile compounds. Journal of the American Society for Mass Spectrometry, 2001, 12, 1339-1347.	2.8	10
60	Bridging the Cluster-to-Bulk Divide: Electron Attachment Time-of-Flight Mass Spectrometry Reveals Geometrical Shell Closings in(SF6)nClusters(n=2â€“550). Physical Review Letters, 2001, 87, 183401.	7.8	10
61	Benchmark differential cross sections for electron impact excitation of then= 2 states in helium at near-ionization- threshold energies. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 145202.	1.5	10
62	Metastable fragmentation of a thymidine-nucleotide and its components. International Journal of Mass Spectrometry, 2012, 313, 15-20.	1.5	10
63	State Selectivity and Dynamics in Dissociative Electron Attachment to CF₃I Revealed through Velocity Slice Imaging. Angewandte Chemie - International Edition, 2014, 53, 12051-12054.	13.8	10
64	Dissociation of the FEBID precursor cis-Pt(CO)₂Cl₂ driven by low-energy electrons. Physical Chemistry Chemical Physics, 2020, 22, 6100-6108.	2.8	10
65	Elastic differential cross sections for C4F6 isomers in the 1.5â€“200 eV energy electron impact: Similarities with six fluorine containing molecules and evidence of F-atom like scattering. Journal of Chemical Physics, 2014, 141, 124302.	3.0	9
66	Computational study of dissociative electron attachment to Ï€-allyl ruthenium (II) tricarbonyl bromide. European Physical Journal D, 2016, 70, 1.	1.3	9
67	Dissociative electron attachment and dissociative ionization of 1,1-dichloro-1-silacyclohexane and silacyclohexane. International Journal of Mass Spectrometry, 2014, 370, 39-43.	1.5	8
68	Amplified cross-linking efficiency of self-assembled monolayers through targeted dissociative electron attachment for the production of carbon nanomembranes. Beilstein Journal of Nanotechnology, 2017, 8, 2562-2571.	2.8	8
69	Dissociative ionization of the potential focused electron beam induced deposition precursor Ï€-allyl ruthenium(II) tricarbonyl bromide, a combined theoretical and experimental study. European Physical Journal D, 2019, 73, 1.	1.3	8
70	Extreme Ultraviolet-Printability and Mechanistic Studies of Engineered Hydrogen Silsesquioxane Photoresist Systems. ACS Applied Polymer Materials, 2021, 3, 1964-1972.	4.4	8
71	Photodetachment from anions in a drift cell. Application to SF6â^' at 337 nm. International Journal of Mass Spectrometry and Ion Processes, 1994, 139, 103-110.	1.8	7
72	Sodium controlled selective reactivity of protonated deoxy-oligonucleotides in the gas phase. Journal of the American Society for Mass Spectrometry, 2009, 20, 689-696.	2.8	7

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73	Reactions in gas phase and condensed phase C6F5X (X = NCO, CH2CN) triggered by low energy electrons. Physical Chemistry Chemical Physics, 2009, 11, 5323.	2.8	7
74	A dynamical (e,2e) investigation into the ionization of the outermost orbitals of R-carvone. Journal of Chemical Physics, 2019, 151, 124306.	3.0	7
75	Negative ion formation through dissociative electron attachment to the group IV tetrabromides: Carbon tetrabromide, silicon tetrabromide and germanium tetrabromide. International Journal of Mass Spectrometry, 2014, 365-366, 275-280.	1.5	6
76	Low Energy Electronâ€“Induced Dissociation. , 2019, , 47-120.		6
77	HF Formation through Dissociative Electron Attachmentâ€”A Combined Experimental and Theoretical Study on Pentafluorothiophenol and 2-Fluorothiophenol. International Journal of Molecular Sciences, 2022, 23, 2430.	4.1	6
78	Benchmark Integral Cross Sections for Electron Impact Excitation of then= 2 States in Helium. Plasma Science and Technology, 2010, 12, 348-352.	1.5	5
79	Velocity slice imaging study on dissociative electron attachment to CF4. European Physical Journal D, 2014, 68, 1.	1.3	5
80	Electron-induced fragmentation mechanisms in organic monomers and their implications for photoresist optimization for EUV lithography. Physical Chemistry Chemical Physics, 2021, 23, 9228-9234.	2.8	5
81	The Role of Low-Energy Electron Interactions in cis-Pt(CO)2Br2 Fragmentation. International Journal of Molecular Sciences, 2021, 22, 8984.	4.1	5
82	Electron beam induced deposition of silacyclohexane and dichlorosilacyclohexane: the role of dissociative ionization and dissociative electron attachment in the deposition process. Beilstein Journal of Nanotechnology, 2017, 8, 2376-2388.	2.8	4
83	The role of the dihedral angle and excited cation states in ionization and dissociation of mono-halogenated biphenyls; a combined experimental and theoretical coupled cluster study. Physical Chemistry Chemical Physics, 2019, 21, 4556-4567.	2.8	4
84	Decomposition of propionyl chloride triggered by slow electrons. Chemical Physics Letters, 2007, 442, 270-274.	2.6	3
85	Electron induced reactions in gas phase MeCpPtMe₃and Pd(hfac)₂. Journal of Physics: Conference Series, 2012, 388, 052019.	0.4	3
86	Mass Spectrometric Study on Sodium Ion Induced Central Nucleotide Deletion in the Gas Phase. Journal of the American Society for Mass Spectrometry, 2012, 23, 690-698.	2.8	3
87	Relative cross sections and appearance energies in electron impact ionization and dissociation of mono-halogenated biphenyls. International Journal of Mass Spectrometry, 2021, 459, 116452.	1.5	3
88	Electron-Transfer-Induced Side-Chain Cleavage in Tryptophan Facilitated through Potassium-Induced Transition-State Stabilization in the Gas Phase. Journal of Physical Chemistry A, 2021, 125, 2324-2333.	2.5	3
89	Low-energy electron interaction and focused electron beam-induced deposition of molybdenum hexacarbonyl (Mo(CO)₆). Beilstein Journal of Nanotechnology, 2022, 13, 182-191.	2.8	3
90	Simulations of the fragmentation of the [V-H]^{â^'}anions as formed upon DEA to L-valine. Journal of Physics: Conference Series, 2008, 115, 012014.	0.4	2

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91	Electron and positron induced processes. POSMOL 2013. European Physical Journal D, 2014, 68, 1.	1.3	2
92	Influence of metal ion complexation on the metastable fragmentation of DNA hexamers. European Physical Journal D, 2014, 68, 1.	1.3	2
93	Proton Shuttling and Reaction Paths in Dissociative Electron Attachment to o- and p-Tetrafluorohydroquinone, an Experimental and Theoretical Study. Journal of Physical Chemistry A, 2017, 121, 5580-5585.	2.5	2
94	Dissociative ionization and electron beam induced deposition of tetrakis(dimethylamino)silane, a precursor for silicon nitride deposition. Physical Chemistry Chemical Physics, 2022, 24, 9564-9575.	2.8	2
95	Cover Picture: The Role of Dissociative Electron Attachment in Focused Electron Beam Induced Processing: A Case Study on Cobalt Tricarbonyl Nitrosyl (Angew. Chem. Int. Ed. 40/2011). Angewandte Chemie - International Edition, 2011, 50, 9213-9213.	13.8	1
96	Dissociative electron attachment to CF4probed by Velocity Slice Imaging. Journal of Physics: Conference Series, 2012, 388, 052017.	0.4	1
97	On the role of electron-driven processes in planetary and cometary atmospheres. Journal of Physics: Conference Series, 2012, 399, 012018.	0.4	1
98	Negative ion formation mechanism and velocity distribution in laser desorption/ionization of C60. European Physical Journal D, 2012, 66, 1.	1.3	1
99	Focused Electron Beam Induced Deposition of 1,1-dichloro-1-silacyclohexane, silacyclohexane and 1,3,5-trisilacyclohexane; preliminary study on the role of low energy secondary electrons in the deposition process. Journal of Physics: Conference Series, 2015, 635, 072088.	0.4	1
100	Dissociative electron attachment to bromotrifluoromethane. International Journal of Mass Spectrometry, 2015, 387, 78-82.	1.5	1
101	A combined gas phase and surface study on electron induced decomposition of the heteronuclear FEBID precursor; CpFe(CO)₂Mn(CO)₅. Journal of Physics: Conference Series, 2017, 875, 062039.	0.4	1
102	Electron induced fragmentation and deposit formation from nano-meter thin surface layers of HFeCo₃(CO)₁₂ adsorbed on gold surfaces.. Journal of Physics: Conference Series, 2017, 875, 062041.	0.4	1
103	Pt(CO)₂Cl₂ fragmentation upon low energy electron interactions. Journal of Physics: Conference Series, 2017, 875, 062035.	0.4	1
104	Electronic shell model contemplation of the dissociation dynamics of Al8+: a collision-induced dissociation study. Chemical Physics Letters, 1999, 311, 421-427.	2.6	0
105	Gas Phase Dissociative electron attachment study to L-Valine. AIP Conference Proceedings, 2006, , .	0.4	0
106	Low energy (0-12 eV) electron interaction with gas phase building blocks of DNA/RNA. Journal of Physics: Conference Series, 2008, 115, 012008.	0.4	0
107	Metastable Dissociation of Deprotonated Nucleosides in Matrix Assisted Laser Desorptionâˆ•Ionisation. , 2008, , .		0
108	Metastable decay of deprotonated deoxynucleosides in matrix assisted laser desorption/ionization.. Journal of Physics: Conference Series, 2008, 101, 012017.	0.4	0

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109	Velocity Slice Imaging of Xâ¯fragments from CF3X (X=Cl, Br and I) upon Dissociative Electron Attachment. Journal of Physics: Conference Series, 2012, 388, 052018.	0.4	0
110	Bond formations and rearrangement reactions in DEA experiments. Journal of Physics: Conference Series, 2012, 388, 052020.	0.4	0
111	Dynamical (e,2e) investigations of structurally related cyclic ethers. Journal of Physics: Conference Series, 2014, 488, 052004.	0.4	0
112	A combined experimental and theoretical study on dissociative ionization and dissociative electron attachment to the heteronuclear FEBID precursor; HFeCo3(CO)12. Journal of Physics: Conference Series, 2017, 875, 062040.	0.4	0