

Oddur IngÃ³lfsson

List of Publications by Year in descending order

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112
papers

2,022
citations

279798

23
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289244

40
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115
all docs

115
docs citations

115
times ranked

1062
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-energy electron interaction and focused electron beam-induced deposition of molybdenum hexacarbonyl ($\text{Mo}(\text{CO})_6$). Beilstein Journal of Nanotechnology, 2022, 13, 182-191.	2.8	3
2	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
3	HF Formation through Dissociative Electron Attachment—A Combined Experimental and Theoretical Study on Pentafluorothiophenol and 2-Fluorothiophenol. International Journal of Molecular Sciences, 2022, 23, 2430.	4.1	6
4	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
5	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
6	Extreme Ultraviolet-Printability and Mechanistic Studies of Engineered Hydrogen Silsesquioxane Photoresist Systems. ACS Applied Polymer Materials, 2021, 3, 1964-1972.	4.4	8
7	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
8	The Role of Low-Energy Electron Interactions in $\text{cis-Pt}(\text{CO})_2\text{Br}_2$ Fragmentation. International Journal of Molecular Sciences, 2021, 22, 8984.	4.1	5
9	Electron-Induced Reactions of $\text{Ru}(\text{CO})_4\text{I}_2$: Gas Phase, Surface, and Electron Beam-Induced Deposition. Journal of Physical Chemistry C, 2020, 124, 10593-10604.	3.1	12
10	Dissociation of the FEBID precursor $\text{cis-Pt}(\text{CO})_2\text{Cl}_2$ driven by low-energy electrons. Physical Chemistry Chemical Physics, 2020, 22, 6100-6108.	2.8	10
11	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
12	Dissociative ionization of the potential focused electron beam induced deposition precursor η^5 -allyl ruthenium(II) tricarbonyl bromide, a combined theoretical and experimental study. European Physical Journal D, 2019, 73, 1.	1.3	8
13	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
14	Low Energy Electron-Induced Dissociation. , 2019, , 47-120.		6
15	Electron induced surface reactions of $(\eta^5\text{-C}_5\text{H}_5)_2\text{Fe}(\text{CO})_2\text{Mn}(\text{CO})_5$, a potential heterobimetallic precursor for focused electron beam induced deposition (FEBID). Physical Chemistry Chemical Physics, 2018, 20, 7862-7874.	2.8	21
16	Low energy electron-induced decomposition of $(\eta^5\text{-Cp})\text{Fe}(\text{CO})_2\text{Mn}(\text{CO})_5$, a potential bimetallic precursor for focused electron beam induced deposition of alloy structures. Physical Chemistry Chemical Physics, 2018, 20, 5644-5656.	2.8	11
17	Electron Induced Surface Reactions of $\text{HFeCo}_3(\text{CO})_{12}$, a Bimetallic Precursor for Focused Electron Beam Induced Deposition (FEBID). Journal of Physical Chemistry C, 2018, 122, 2648-2660.	3.1	22
18	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

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19	Electron interactions with the heteronuclear carbonyl precursor $\text{H}_2\text{FeRu}_3(\text{CO})_{13}$ and comparison with $\text{HFeCo}_3(\text{CO})_{12}$: from fundamental gas phase and surface science studies to focused electron beam induced deposition. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 555-579.	2.8	16
20	An experimental and theoretical investigation into the electronically excited states of para-benzoquinone. <i>Journal of Chemical Physics</i> , 2017, 146, 184303.	3.0	12
21	Low energy electron-induced decomposition of $(\text{I}^{\text{sup}3}\text{-C}^{\text{sub}3}\text{H}^{\text{sub}5})\text{Ru}(\text{CO})_3\text{Br}$, a potential focused electron beam induced deposition precursor with a heteroleptic ligand set. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 13264-13271.	2.8	17
22	Formation and decay of negative ion states up to 11 ÅeV above the ionization energy of the nanofabrication precursor $\text{HFeCo}_3(\text{CO})_{12}$. <i>Chemical Science</i> , 2017, 8, 5949-5952.	7.4	16
23	Proton Shuttling and Reaction Paths in Dissociative Electron Attachment to <i>o</i> - and <i>p</i> -Tetrafluorohydroquinone, an Experimental and Theoretical Study. <i>Journal of Physical Chemistry A</i> , 2017, 121, 5580-5585.	2.5	2
24	A combined gas phase and surface study on electron induced decomposition of the heteronuclear FEBID precursor; $\text{CpFe}(\text{CO})_2\text{Mn}(\text{CO})_5$. <i>Journal of Physics: Conference Series</i> , 2017, 875, 062039.	0.4	1
25	Amplified cross-linking efficiency of self-assembled monolayers through targeted dissociative electron attachment for the production of carbon nanomembranes. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 2562-2571.	2.8	8
26	Electron beam induced deposition of silacyclohexane and dichlorosilacyclohexane: the role of dissociative ionization and dissociative electron attachment in the deposition process. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 2376-2388.	2.8	4
27	Electron induced fragmentation and deposit formation from nano-meter thin surface layers of $\text{HFeCo}_3(\text{CO})_{12}$ adsorbed on gold surfaces.. <i>Journal of Physics: Conference Series</i> , 2017, 875, 062041.	0.4	1
28	A combined experimental and theoretical study on dissociative ionization and dissociative electron attachment to the heteronuclear FEBID precursor; $\text{HFeCo}_3(\text{CO})_{12}$. <i>Journal of Physics: Conference Series</i> , 2017, 875, 062040.	0.4	0
29	$\text{Pt}(\text{CO})_2\text{Cl}_2$ fragmentation upon low energy electron interactions. <i>Journal of Physics: Conference Series</i> , 2017, 875, 062035.	0.4	1
30	Electron impact ionization dynamics of <i>para</i> -benzoquinone. <i>Journal of Chemical Physics</i> , 2016, 145, 164306.	3.0	21
31	Computational study of dissociative electron attachment to η^3 -allyl ruthenium (II) tricarbonyl bromide. <i>European Physical Journal D</i> , 2016, 70, 1.	1.3	9
32	Structure and energetics in dissociative electron attachment to $\text{HFeCo}_3(\text{CO})_{12}$. <i>European Physical Journal D</i> , 2016, 70, 1.	1.3	17
33	Side chain effects in reactions of the potassium-tyrosine charge transfer complex. <i>Chemical Physics Letters</i> , 2016, 662, 19-24.	2.6	11
34	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. <i>Journal of Physics: Conference Series</i> , 2015, 635, 072088.	0.4	1
35	The role of low-energy electrons in focused electron beam induced deposition: four case studies of representative precursors. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1904-1926.	2.8	131
36	Dissociative electron attachment to bromotrifluoromethane. <i>International Journal of Mass Spectrometry</i> , 2015, 387, 78-82.	1.5	1

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37	Electron and positron induced processes. POSMOL 2013. European Physical Journal D, 2014, 68, 1.	1.3	2
38	Elastic differential cross sections for C ₄ F ₆ isomers in the 1.5–200 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
39	Low energy positron interactions with uracil—Total scattering, positronium formation, and differential elastic scattering cross sections. Journal of Chemical Physics, 2014, 141, 034306.	3.0	23
40	Velocity slice imaging study on dissociative electron attachment to CF ₄ . European Physical Journal D, 2014, 68, 1.	1.3	5
41	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
42	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
43	Influence of metal ion complexation on the metastable fragmentation of DNA hexamers. European Physical Journal D, 2014, 68, 1.	1.3	2
44	Dissociative electron attachment to titanium tetrachloride and titanium tetraisopropoxide. European Physical Journal D, 2014, 68, 1.	1.3	31
45	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
46	State Selectivity and Dynamics in Dissociative Electron Attachment to CF ₃ I Revealed through Velocity Slice Imaging. Angewandte Chemie - International Edition, 2014, 53, 12051-12054.	13.8	10
47	Dynamical (e,2e) investigations of structurally related cyclic ethers. Journal of Physics: Conference Series, 2014, 488, 052004.	0.4	0
48	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
49	Quantum Superposition of Target and Product States in Reactive Electron Scattering from CF ₄ Revealed through Velocity Slice Imaging. Physical Review Letters, 2013, 111, 063201.	7.8	16
50	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
51	Molecular rearrangement reactions in the gas phase triggered by electron attachment. Physical Chemistry Chemical Physics, 2013, 15, 4754.	2.8	25
52	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
53	Dynamical (e,2e) investigations of tetrahydrofuran and tetrahydrofurfuryl alcohol as DNA analogues. Chemical Physics Letters, 2013, 572, 32-37.	2.6	39
54	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

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55	Absolute cross sections for dissociative electron attachment and dissociative ionization of cobalt tricarbonyl nitrosyl in the energy range from 0 eV to 140 eV. <i>Journal of Chemical Physics</i> , 2013, 138, 044305.	3.0	51
56	NCO ⁺ , a Key Fragment Upon Dissociative Electron Attachment and Electron Transfer to Pyrimidine Bases: Site Selectivity for a Slow Decay Process. <i>Journal of the American Society for Mass Spectrometry</i> , 2013, 24, 1787-1797.	2.8	53
57	Dissociative electron attachment to CF ₄ probed by Velocity Slice Imaging. <i>Journal of Physics: Conference Series</i> , 2012, 388, 052017.	0.4	1
58	Velocity Slice Imaging of X ⁺ fragments from CF ₃ X (X=Cl, Br and I) upon Dissociative Electron Attachment. <i>Journal of Physics: Conference Series</i> , 2012, 388, 052018.	0.4	0
59	Electron induced reactions in gas phase MeCpPtMe ₃ and Pd(hfac) ₂ . <i>Journal of Physics: Conference Series</i> , 2012, 388, 052019.	0.4	3
60	On the role of electron-driven processes in planetary and cometary atmospheres. <i>Journal of Physics: Conference Series</i> , 2012, 399, 012018.	0.4	1
61	Bond formations and rearrangement reactions in DEA experiments. <i>Journal of Physics: Conference Series</i> , 2012, 388, 052020.	0.4	0
62	Gas phase low energy electron induced decomposition of the focused electron beam induced deposition (FEBID) precursor trimethyl (methylcyclopentadienyl) platinum(IV) (MeCpPtMe ₃). <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 14611.	2.8	52
63	Chemical control through dissociative electron attachment – A study on pentafluorotoluene, pentafluoroaniline and pentafluorophenol. <i>Chemical Physics Letters</i> , 2012, 539-540, 7-10.	2.6	11
64	Metastable decay of DNA components and their compositions – a perspective on the role of reactive electron scattering in radiation damage. <i>European Physical Journal D</i> , 2012, 66, 1.	1.3	15
65	Cross section data sets for electron collisions with H ₂ , O ₂ , CO, CO ₂ , N ₂ O and H ₂ O. <i>European Physical Journal D</i> , 2012, 66, 1.	1.3	55
66	Dissociative electron attachment to CF ₃ Cl. <i>European Physical Journal D</i> , 2012, 66, 1.	1.3	11
67	Mass Spectrometric Study on Sodium Ion Induced Central Nucleotide Deletion in the Gas Phase. <i>Journal of the American Society for Mass Spectrometry</i> , 2012, 23, 690-698.	2.8	3
68	Metastable fragmentation of a thymidine-nucleotide and its components. <i>International Journal of Mass Spectrometry</i> , 2012, 313, 15-20.	1.5	10
69	Negative ion formation mechanism and velocity distribution in laser desorption/ionization of C ₆₀ . <i>European Physical Journal D</i> , 2012, 66, 1.	1.3	1
70	Experimental and theoretical study of the metastable decay of negatively charged nucleosides in the gas phase. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 15283.	2.8	19
71	A study of electron scattering from benzene: Excitation of the 1B _{1u} , 3E _{2g} , and 1E _{1u} electronic states. <i>Journal of Chemical Physics</i> , 2011, 134, 134308.	3.0	29
72	Fast and metastable fragmentation of deprotonated d-fructose – A combined experimental and computational study. <i>International Journal of Mass Spectrometry</i> , 2011, 305, 50-57.	1.5	11

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73	The Role of Dissociative Electron Attachment in Focused Electron Beam Induced Processing: A Case Study on Cobalt Tricarbonyl Nitrosyl. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9475-9477.	13.8	54
74	Cover Picture: The Role of Dissociative Electron Attachment in Focused Electron Beam Induced Processing: A Case Study on Cobalt Tricarbonyl Nitrosyl (<i>Angew. Chem. Int. Ed.</i> 40/2011). <i>Angewandte Chemie - International Edition</i> , 2011, 50, 9213-9213.	13.8	1
75	A detailed study on the decomposition pathways of the amino acid valine upon dissociative electron attachment. <i>European Physical Journal D</i> , 2010, 60, 37-44.	1.3	22
76	Substitution effects in elastic electron collisions with CH ₃ X (X=F, Cl, Br, I) molecules. <i>Journal of Chemical Physics</i> , 2010, 132, 074309.	3.0	31
77	Resonant vibrational excitation of CH ₃ X (X = F, Cl, Br and I) by low-energy electron impact. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 065205.	1.5	11
78	A-band methyl halide dissociation via electronic curve crossing as studied by electron energy loss spectroscopy. <i>Journal of Chemical Physics</i> , 2010, 133, 054304.	3.0	14
79	Benchmark Integral Cross Sections for Electron Impact Excitation of the $n=2$ States in Helium. <i>Plasma Science and Technology</i> , 2010, 12, 348-352.	1.5	5
80	Cross sections for electron impact excitation of the $C\hat{a}^{\infty}1$ and $D\hat{a}^{\infty}1+$ electronic states in N ₂ O. <i>Journal of Chemical Physics</i> , 2009, 131, 114307.	3.0	31
81	Benchmark differential cross sections for electron impact excitation of the $n=2$ states in helium at near-ionization-threshold energies. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009, 42, 145202.	1.5	10
82	Fragmentation of deprotonated d-ribose and d-fructose in MALDI—Comparison with dissociative electron attachment. <i>International Journal of Mass Spectrometry</i> , 2009, 280, 190-197.	1.5	15
83	Sodium controlled selective reactivity of protonated deoxy-oligonucleotides in the gas phase. <i>Journal of the American Society for Mass Spectrometry</i> , 2009, 20, 689-696.	2.8	7
84	Reactions in gas phase and condensed phase C ₆ F ₅ X (X = NCO, CH ₂ CN) triggered by low energy electrons. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 5323.	2.8	7
85	From isolated molecules through clusters and condensates to the building blocks of life. <i>International Journal of Mass Spectrometry</i> , 2008, 277, 4-25.	1.5	113
86	Low energy (0-12 eV) electron interaction with gas phase building blocks of DNA/RNA. <i>Journal of Physics: Conference Series</i> , 2008, 115, 012008.	0.4	0
87	Metastable Dissociation of Deprotonated Nucleosides in Matrix Assisted Laser Desorption/Ionisation. , 2008, , .		0
88	Simulations of the fragmentation of the [V-H] ⁻ anions as formed upon DEA to L-valine. <i>Journal of Physics: Conference Series</i> , 2008, 115, 012014.	0.4	2
89	Metastable decay of deprotonated deoxynucleosides in matrix assisted laser desorption/ionization.. <i>Journal of Physics: Conference Series</i> , 2008, 101, 012017.	0.4	0
90	Dissociative electron attachment to gas phase glycine: Exploring the decomposition pathways by mass separation of isobaric fragment anions. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 5680.	2.8	44

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91	Energy selective excision of CN ⁻ following electron attachment to hexafluoroacetone azine ((CF ₃) ₂ C=N-NiC(CF ₃) ₂). Physical Chemistry Chemical Physics, 2007, 9, 2983-2990.	2.8	28
92	Combined Experimental and Theoretical Study on the Nature and the Metastable Decay Pathways of the Amino Acid Ion Fragment [M+H] ⁺ . Angewandte Chemie - International Edition, 2007, 46, 8057-8059.	13.8	47
93	Decomposition of propionyl chloride triggered by slow electrons. Chemical Physics Letters, 2007, 442, 270-274.	2.6	3
94	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
95	Dissociative electron attachment to gas phase valine: A combined experimental and theoretical study. Journal of Chemical Physics, 2006, 125, 204301.	3.0	74
96	Gas Phase Dissociative electron attachment study to L-Valine. AIP Conference Proceedings, 2006, , .	0.4	0
97	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
98	Electron attachment time-of-flight mass spectrometry reveals fcc bulk-like packing in CO ₂ aggregates. Chemical Physics Letters, 2002, 360, 415-421.	2.6	12
99	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
100	Bridging the Cluster-to-Bulk Divide: Electron Attachment Time-of-Flight Mass Spectrometry Reveals Geometrical Shell Closings in (SF ₆) _n Clusters (n=2-550). Physical Review Letters, 2001, 87, 183401.	7.8	10
101	Energy-resolved collision-induced dissociation of Cu _n ⁺ (n=2-9): Stability and fragmentation pathways. Journal of Chemical Physics, 2000, 112, 4613-4620.	3.0	60
102	Stabilization of transient negative ions by vibrational energy transfer: A cluster and thin film study on SF ₆ and C ₆ F ₆ . Journal of Chemical Physics, 2000, 112, 9046-9051.	3.0	10
103	Energy-resolved collision-induced dissociation of Al _n ⁺ clusters (n=2-11) 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
104	Electronic shell model contemplation of the dissociation dynamics of Al ₈ ⁺ : a collision-induced dissociation study. Chemical Physics Letters, 1999, 311, 421-427.	2.6	0
105	Medium enhanced, electron stimulated desorption of CF ₃ ⁻ from condensed CF ₃ I. Chemical Physics Letters, 1998, 296, 208-214.	2.6	38
106	Strong Solvation Effects in the Reactivity of C ₆ F ₅ X ⁻ 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
107	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
108	Formation and decay of negative ion resonances in gaseous and condensed molecules. International Reviews in Physical Chemistry, 1996, 15, 133-151.	2.3	24

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109	Electron attachment reactions in mixed SF ₆ /N ₂ clusters. <i>Chemical Physics Letters</i> , 1995, 241, 180-184.	2.6	13
110	Effective intermolecular relaxation in (C ₆ F ₆) _n ⁻ clusters: mechanism of C ₆ F ₆ ⁻ formation on low energy electron impact. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1995, 149-150, 79-86.	1.8	20
111	Photodetachment from anions in a drift cell. Application to SF ₆ ⁻ at 337 nm. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1994, 139, 103-110.	1.8	7
112	Anion formation from gaseous and condensed CF ₃ I on low energy electron impact. <i>Journal of Chemical Physics</i> , 1993, 99, 5141-5150.	3.0	57