Henrik Ottosson

List of Publications by Year
in descending order

72	2,964	201674 27	175258 52
papers	citations	h-index	g-index

94	94	94	2513
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Excited State Aromaticity and Antiaromaticity: Opportunities for Photophysical and Photochemical Rationalizations. Chemical Reviews, 2014, 114, 5379-5425.	47.7	353
2	Diindeno-fusion of an anthracene as a design strategy for stable organic biradicals. Nature Chemistry, 2016, 8, 753-759.	13.6	302
3	Exciting excited-state aromaticity. Nature Chemistry, 2012, 4, 969-971.	13.6	164
4	Silylenes, Silenes, and Disilenes: Novel Silicon-Based Reagents for Organic Synthesis?. Chemistry - A European Journal, 2006, 12, 1576-1585.	3.3	160
5	Fulvenes, Fulvalenes, and Azulene:Â Are They Aromatic Chameleons?. Journal of the American Chemical Society, 2004, 126, 13938-13939.	13.7	134
6	The excited state antiaromatic benzene ring: a molecular Mr Hyde?. Chemical Society Reviews, 2015, 44, 6472-6493.	38.1	126
7	Energetics of Baird aromaticity supported by inversion of photoexcited chiral [4n]annulene derivatives. Nature Communications, 2017, 8, 346.	12.8	86
8	Strategies for Design of Potential Singlet Fission Chromophores Utilizing a Combination of Ground-State and Excited-State Aromaticity Rules. Journal of the American Chemical Society, 2020, 142, 5602-5617.	13.7	86
9	Scope and Limitations of Baird's Theory on Triplet State Aromaticity: Application to the Tuning of Singletâ€“Triplet Energy Gaps in Fulvenes. Chemistry - A European Journal, 2007, 13, 6998-7005.	3.3	80
10	The Missing C₁â€“C₅ Cycloaromatization Reaction: Triplet State Antiaromaticity Relief and Self-Terminating Photorelease of Formaldehyde for Synthesis of Fulvenes from Enynes. Journal of the American Chemical Society, 2015, 137, 15441-15450.	13.7	67
11	Unraveling factors leading to efficient norbornadieneâ€“quadricyclane molecular solar-thermal energy storage systems. Journal of Materials Chemistry A, 2017, 5, 12369-12378.	10.3	65
12	Excited-state proton transfer relieves antiaromaticity in molecules. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20303-20308.	7.1	63
13	Impact of Groundâ€•and Excitedâ€State Aromaticity on Cyclopentadiene and Silole Excitation Energies and Excitedâ€State Polarities. Chemistry - A European Journal, 2014, 20, 9295-9303.	3.3	61
14	Tripletâ€State Aromaticity of 4nÏ€â€Electron Monocycles: Analysis of Bifurcation in the Ï€ Contribution to the Electron Localization Function. ChemPhysChem, 2008, 9, 257-264.	2.1	59
15	Metal-free photochemical silylations and transfer hydrogenations of benzenoid hydrocarbons and graphene. Nature Communications, 2016, 7, 12962.	12.8	58
16	Can Bairdâ€™s and Clarâ€™s Rules Combined Explain Triplet State Energies of Polycyclic Conjugated Hydrocarbons with Fused 4nÏ€- and (4n + 2)Ï€-Rings?. Journal of Organic Chemistry, 2017, 82, 6327-6340.	3.2	55
17	Influence of excited state aromaticity in the lowest excited singlet states of fulvene derivatives. Physical Chemistry Chemical Physics, 2011, 13, 12912.	2.8	52
18	Charge transfer through cross-hyperconjugated versus cross-Ï€-conjugated bridges: an intervalence charge transfer study. Chemical Science, 2013, 4, 3522.	7.4	44

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19	Zwitterionic Silenes: Interesting Goals for Synthesis?. Chemistry - A European Journal, 2003, 9, 4144-4155.	3.3	43
20	On the Importance of Clar Structures of Polybenzenoid Hydrocarbons as Revealed by the Ï€-Contribution to the Electron Localization Function. Symmetry, 2010, 2, 1653-1682.	2.2	41
21	Is Excitedâ€Šstate Aromaticity a Driving Force for Planarization of Dibenzannelated 8Ï€â€Šelectron Heterocycles?. ChemPlusChem, 2019, 84, 712-721.	2.8	38
22	Benzo[b]thiophene Fusion Enhances Local Borepin Aromaticity in Polycyclic Heteroaromatic Compounds. Journal of Organic Chemistry, 2017, 82, 13440-13448.	3.2	37
23	Impact of Excited-State Antiaromaticity Relief in a Fundamental Benzene Photoreaction Leading to Substituted Bicyclo[3.1.0]hexenes. Journal of the American Chemical Society, 2020, 142, 10942-10954.	13.7	37
24	Unraveling Excited-Singlet-State Aromaticity via Vibrational Analysis. CheM, 2017, 3, 870-880.	11.7	35
25	Tuning the Baird aromatic triplet-state energy of cyclooctatetraene to maximize the self-healing mechanism in organic fluorophores. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24305-24315.	7.1	35
26	Electron-driven proton transfer relieves excited-state antiaromaticity in photoexcited DNA base pairs. Chemical Science, 2020, 11, 10071-10077.	7.4	32
27	Substituent Effects on the Electron Affinities and Ionization Energies of Tria-, Penta-, and Heptafulvenes: A Computational Investigation. Journal of Organic Chemistry, 2010, 75, 8060-8068.	3.2	30
28	Analysis of a Compound Class with Triplet States Stabilized by Potentially Baird Aromatic [10]Annulenyl Dicationic Rings. Chemistry - A European Journal, 2016, 22, 2793-2800.	3.3	30
29	Excited state character of Cibalackrot-type compounds interpreted in terms of HÃ¼ckel-aromaticity: a rationale for singlet fission chromophore design. Chemical Science, 2021, 12, 6159-6171.	7.4	30
30	Three-Dimensional Fully Ï€-Conjugated Macrocycles: When 3D-Aromatic and When 2D-Aromatic-in-3D?. Journal of the American Chemical Society, 2022, 144, 8560-8575.	13.7	28
31	A light-switched yin and yang pair. Nature Chemistry, 2015, 7, 373-375.	13.6	25
32	The First Isolable 2-Silenolate. Angewandte Chemie, 2003, 115, 1678-1680.	2.0	24
33	Superior adhesion of graphene nanoscrolls. Communications Physics, 2018, 1, .	5.3	24
34	Exploration of the Ï€-Electronic Structure of Singlet, Triplet, and Quintet States of Fulvenes and Fulvalenes Using the Electron Localization Function. Journal of Physical Chemistry A, 2012, 116, 5008-5017.	2.5	23
35	Aromaticity Changes along the Lowest-Triplet-State Path for Câ•C Bond Rotation of Annulenyl-Substituted Olefins Probed by the Electron Localization Function. Journal of Physical Chemistry A, 2009, 113, 12304-12310.	2.5	22
36	Coupling of Disilane and Trisilane Segments Through Zero, One, Two, and Three Disilanyl Bridges in Cyclic and Bicyclic Saturated Carbosilanes. Organometallics, 2013, 32, 396-405.	2.3	22

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37	Whiteâ€Light Photoassisted Covalent Functionalization of Graphene Using 2â€Propanol. Small Methods, 2017, 1, 1700214.	8.6	22
38	Nano-fabrication of molecular electronic junctions by targeted modification of metal-molecule bonds. Scientific Reports, 2015, 5, 14431.	3.3	21
39	Structureâ€“Property Relationships in Unsymmetric Bis(antiaromatics): Who Wins the Battle between Pentalene and Benzocyclobutadiene?. Journal of Organic Chemistry, 2020, 85, 5158-5172.	3.2	19
40	1,4-Disilacyclohexa-2,5-diene: a molecular building block that allows for remarkably strong neutral cyclic cross-hyperconjugation. Chemical Science, 2014, 5, 360-371.	7.4	18
41	Guidelines for Tuning the Excited State HÃ¼ckelâ€“Baird Hybrid Aromatic Character of Proâ€Aromatic Quinoidal Compounds**. Angewandte Chemie - International Edition, 2021, 60, 10255-10265.	13.8	17
42	Conductance through Carbosilane Cage Compounds: A Computational Investigation. Journal of Physical Chemistry C, 2013, 117, 21692-21699.	3.1	16
43	Triplet state homoaromaticity: concept, computational validation and experimental relevance. Chemical Science, 2018, 9, 3165-3176.	7.4	16
44	Z/E-Photoisomerizations of Olefins with 4nÏ€- or (4n+ 2)Ï€-Electron Substituents:Â Zigzag Variations in Olefin Properties along the T1State Energy Surfaces. Journal of Organic Chemistry, 2005, 70, 9495-9504.	3.2	15
45	Optimization of the Cyclic Cross-Hyperconjugation in 1,4-Ditetrelcyclohexa-2,5-dienes. Organometallics, 2014, 33, 2997-3004.	2.3	15
46	Cooperative Gold Nanoparticle Stabilization by Acetylenic Phosphaalkenes. Angewandte Chemie - International Edition, 2015, 54, 10634-10638.	13.8	15
47	An Elementâ€Substituted Cyclobutadiene Exhibiting Highâ€Energy Blue Phosphorescence. Angewandte Chemie - International Edition, 2021, 60, 21817-21823.	13.8	15
48	Solution phase, solid state and computational structural studies of the 2-aryl-3-bromoquinolin-4(1H)-one derivatives1. Perkin Transactions II RSC, 2002, , 2159-2164.	1.1	14
49	Polyfulvenes: Polymers with â€œHandlesâ€•That Enable Extensive Electronic Structure Tuning. Journal of Physical Chemistry C, 2015, 119, 25726-25737.	3.1	14
50	Many-body effects and excitonic features in 2D biphenylene carbon. Journal of Chemical Physics, 2016, 144, 024702.	3.0	14
51	The 6,6â€Dicyanopentafulvene Core: A Template for the Design of Electronâ€Acceptor Compounds. Chemistry - A European Journal, 2015, 21, 8168-8176.	3.3	13
52	A Computational Investigation of the Substituent Effects on Geometric, Electronic, and Optical Properties of Siloles and 1,4-Disilacyclohexa-2,5-dienes. Molecules, 2017, 22, 370.	3.8	13
53	Exploiting the Aromatic Chameleon Character of Fulvenes for Computational Design of Bairdâ€Aromatic Triplet Ground State Compounds. Chemistry - an Asian Journal, 2019, 14, 1870-1878.	3.3	13
54	Computational Investigation of Brook-Type Silabenzenes and Their Possible Formation through [1,3]-Siâ†'O Silyl Shifts. Organometallics, 2013, 32, 16-28.	2.3	12

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55	In Search of Flexible Molecular Wires with Near Conformer-Independent Conjugation and Conductance: A Computational Study. Journal of Physical Chemistry C, 2014, 118, 5637-5649.	3.1	12
56	Substituent Effects in Chainâ€Breaking Aryltellurophenol Antioxidants. Chemistry - A European Journal, 2018, 24, 3520-3527.	3.3	12
57	Cyclopropyl Group: An Excitedâ€State Aromaticity Indicator?. Chemistry - A European Journal, 2017, 23, 13684-13695.	3.3	10
58	Triplet State Baird Aromaticity in Macrocycles: Scope, Limitations, and Complications. Journal of Physical Chemistry A, 2021, 125, 570-584.	2.5	10
59	Silene equivalents through the rhodium-catalysed reactions of Î±-hypersilyl diazoesters: a computational and experimental study. Chemical Science, 2011, 2, 2367.	7.4	9
60	Proton and Hydride Affinities in Excited States: Magnitude Reversals in Proton and Hydride Affinities between the Lowest Singlet and Triplet States of Annulenyl and Benzannulenyl Anions and Cations. Journal of Organic Chemistry, 2010, 75, 2189-2196.	3.2	8
61	Expanding the (cross-)hyperconjugation of 1,4-disilacyclohexa-2,5-dienes to larger monomers and oligomers: a computational investigation. RSC Advances, 2016, 6, 36961-36970.	3.6	8
62	An Elementâ€Substituted Cyclobutadiene Exhibiting Highâ€Energy Blue Phosphorescence. Angewandte Chemie, 2021, 133, 21988-21994.	2.0	8
63	Torsional Bias as a Strategy To Tune Singletâ€“Triplet Gaps in Organic Diradicals. Journal of Physical Chemistry C, 2018, 122, 12148-12157.	3.1	7
64	The Silacyclobutene Ring: An Indicator of Triplet State Baird-Aromaticity. Inorganics, 2017, 5, 91.	2.7	5
65	Degradation of Pharmaceuticals through Sequential Photon Absorption and Photoionization in Amiloride Derivatives. Cell Reports Physical Science, 2020, 1, 100274.	5.6	5
66	Guidelines for Tuning the Excited State HÃ¼ckelâ€“Baird Hybrid Aromatic Character of Proâ€Aromatic Quinoidal Compounds**. Angewandte Chemie, 2021, 133, 10343-10353.	2.0	3
67	In search of 1,3-disila/germa/stannabicyclo[1.1.1]pentanes with short bridgehead-bridgehead distances and low ring strain energies. Silicon Chemistry, 2007, 3, 165-173.	0.8	2
68	Thermolytic Formation and Trapping of Silenes Strongly Influenced by Reversed Polarization. , 0, , 78-81.		0
69	Thermolytic Formation and Trapping of Silenes Strongly Influenced by Reversed Polarization. , 0, , 375-378.		0
70	Innentitelbild: An Elementâ€Substituted Cyclobutadiene Exhibiting Highâ€Energy Blue Phosphorescence (Angew. Chem. 40/2021). Angewandte Chemie, 2021, 133, 21766-21766.	2.0	0
71	Thermolytic Formation and Trapping of Silenes Strongly Influenced by Reversed Polarization. , 0, , 78-81.		0
72	Thermolytic Formation and Trapping of Silenes Strongly Influenced by Reversed Polarization. , 0, , 375-378.		0