

Eduardo Fabiano

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4306356/publications.pdf>

Version: 2024-02-01

119
papers

3,898
citations

109137

35
h-index

155451

55
g-index

123
all docs

123
docs citations

123
times ranked

2935
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and Investigation of Electro-Optical Properties of H-Shape Dibenzofulvene Derivatives. <i>Molecules</i> , 2022, 27, 1091.	1.7	3
2	Kinetic Energy Density Functionals Based on a Generalized Screened Coulomb Potential: Linear Response and Future Perspectives. <i>Computation</i> , 2022, 10, 30.	1.0	7
3	Boosting the OEP2-sc method with spin-component scaling. <i>Molecular Physics</i> , 2022, 120, .	0.8	2
4	Spontaneous Coassembly of the Protein Terthiophene into Fluorescent Electroactive Microfibers in 2D and 3D Cell Cultures. <i>ACS Omega</i> , 2022, 7, 12624-12636.	1.6	2
5	Correlating the chemical structure and charge transport ability of dibenzofulvene-based hole transporting materials for stable perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5981-5993.	2.7	4
6	Nonlocal kinetic energy functionals in real space using a Yukawa-potential kernel: Properties, linear response, and model functionals. <i>Physical Review B</i> , 2021, 103, .	1.1	13
7	Noncovalent Interactions from Models for the Møller-Plesset Adiabatic Connection. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4867-4875.	2.1	15
8	Processable Thiophene-Based Polymers with Tailored Electronic Properties and their Application in Solid-State Electrochromic Devices Using Nanoparticle Films. <i>Advanced Electronic Materials</i> , 2021, 7, 2100166.	2.6	9
9	Plasmon Couplings from Subsystem Time-Dependent Density Functional Theory. <i>Journal of Physical Chemistry A</i> , 2021, 125, 7246-7259.	1.1	9
10	Control of Electron Transfer Processes in Multidimensional Arylamine-Based Mixed-Valence Compounds by Molecular Backbone Design. <i>Journal of Physical Chemistry A</i> , 2021, 125, 7840-7851.	1.1	7
11	Nonlocal exchange and correlation energy functionals using the Yukawa potential as ingredient: Application to the linear response of the uniform electron gas. <i>Physical Review B</i> , 2021, 104, .	1.1	0
12	MAP: An MP2 Accuracy Predictor for Weak Interactions from Adiabatic Connection Theory. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 4141-4149.	2.3	10
13	The <i>ab initio</i> density functional theory applied for spin-polarized calculations. <i>Journal of Chemical Physics</i> , 2020, 152, 054109.	1.2	19
14	Arylamino-fluorene derivatives: Optically induced electron transfer investigation, redox-controlled modulation of absorption and fluorescence. <i>Dyes and Pigments</i> , 2020, 177, 108325.	2.0	17
15	Methods to generate reference total and Pauli kinetic potentials. <i>Physical Review B</i> , 2020, 101, .	1.1	14
16	Tailoring of the self-assembled structures and optical waveguide behaviour of arylaminofluorenone derivatives. <i>Dyes and Pigments</i> , 2019, 171, 107780.	2.0	2
17	Ab Initio Plasmonics of Externally Doped Silicon Nanocrystals. <i>ACS Photonics</i> , 2019, 6, 1474-1484.	3.2	10
18	High-Performance Electrofluorochromic Switching Devices Using a Novel Arylamine-Fluorene Redox-Active Fluorophore. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 12202-12208.	4.0	38

#	ARTICLE	IF	CITATIONS
19	Performance of Semilocal Kinetic Energy Functionals for Orbital-Free Density Functional Theory. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 3044-3055.	2.3	37
20	The Role of the Reduced Laplacian Renormalization in the Kinetic Energy Functional Development. <i>Computation</i> , 2019, 7, 65.	1.0	13
21	Investigation of the Exchange-Correlation Potentials of Functionals Based on the Adiabatic Connection Interpolation. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 1006-1015.	2.3	26
22	Assessment of interaction-strength interpolation formulas for gold and silver clusters. <i>Journal of Chemical Physics</i> , 2018, 148, 134106.	1.2	28
23	Controlling the Functional Properties of Oligothiophene Crystalline Nano/Microfibers via Tailoring of the Self-Assembling Molecular Precursors. <i>Advanced Functional Materials</i> , 2018, 28, 1801946.	7.8	21
24	Communication: Strong-interaction limit of an adiabatic connection in Hartree-Fock theory. <i>Journal of Chemical Physics</i> , 2018, 149, 241101.	1.2	25
25	Restoring Size Consistency of Approximate Functionals Constructed from the Adiabatic Connection. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3137-3142.	2.1	26
26	Nonlocal kinetic energy functional from the jellium-with-gap model: Applications to orbital-free density functional theory. <i>Physical Review B</i> , 2018, 97, .	1.1	31
27	Colorless to All-Black Full-NIR High-Contrast Switching in Solid Electrochromic Films Prepared with Organic Mixed Valence Systems Based on Dibenzofulvene Derivatives. <i>Chemistry of Materials</i> , 2018, 30, 5610-5620.	3.2	68
28	Semilocal Pauli-Gaussian Kinetic Functionals for Orbital-Free Density Functional Theory Calculations of Solids. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4385-4390.	2.1	65
29	Solid-State Testing of a Van-Der-Waals-Corrected Exchange-Correlation Functional Based on the Semiclassical Atom Theory. <i>Computation</i> , 2018, 6, 7.	1.0	17
30	Effects of donor position on dibenzofulvene-based organic dyes for photovoltaics. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 8694-8707.	1.1	8
31	Orthogonal electronic coupling in multicentre arylamine mixed-valence compounds based on a dibenzofulvene-thiophene conjugated bridge. <i>Chemical Communications</i> , 2017, 53, 8960-8963.	2.2	19
32	Electrostatic Mechanophores in Tuneable Light-Emitting Piezopolymer Nanowires. <i>Advanced Materials</i> , 2017, 29, 1701031.	11.1	12
33	Jellium-with-gap model applied to semilocal kinetic functionals. <i>Physical Review B</i> , 2017, 95, .	1.1	26
34	Laplacian-dependent models of the kinetic energy density: Applications in subsystem density functional theory with meta-generalized gradient approximation functionals. <i>Journal of Chemical Physics</i> , 2017, 146, 064105.	1.2	44
35	Approximate solution of coupled cluster equations: application to the coupled cluster doubles method and non-covalent interacting systems. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 30249-30260.	1.3	9
36	Modified Fourth-Order Kinetic Energy Gradient Expansion with Hartree Potential-Dependent Coefficients. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 4228-4239.	2.3	33

#	ARTICLE	IF	CITATIONS
37	Dispersion corrections applied to the TCA family of exchange-correlation functionals. Theoretical Chemistry Accounts, 2017, 136, 1.	0.5	4
38	Kinetic and Exchange Energy Densities near the Nucleus. Computation, 2016, 4, 19.	1.0	20
39	Hartree potential dependent exchange functional. Journal of Chemical Physics, 2016, 145, 084110.	1.2	15
40	A series of diphenylamine-fluorenone derivatives as potential fluorescent probes for neuroblastoma cell staining. Tetrahedron, 2016, 72, 2920-2928.	1.0	17
41	Interaction-Strength Interpolation Method for Main-Group Chemistry: Benchmarking, Limitations, and Perspectives. Journal of Chemical Theory and Computation, 2016, 12, 4885-4896.	2.3	34
42	Accurate Kohn-Sham ionization potentials from scaled opposite-spin second-order optimized effective potential methods. Journal of Computational Chemistry, 2016, 37, 2081-2090.	1.5	24
43	Synthesis and photovoltaic performance of dibenzofulvene-based organic sensitizers for DSSC. Tetrahedron, 2016, 72, 5788-5797.	1.0	5
44	Kinetic energy density dependent semilocal exchange-correlation functionals. International Journal of Quantum Chemistry, 2016, 116, 1641-1694.	1.0	78
45	Improving the Property Function Tuning Range of Thiophene Materials via Facile Synthesis of Oligo/Polythiophene Sulfides and Mixed Oligo/Polythiophene Sulfides/Dioxides. Advanced Functional Materials, 2016, 26, 6970-6984.		25
46	Semiclassical atom theory applied to solid-state physics. Physical Review B, 2016, 93, .	1.1	51
47	Semilocal density functional theory with correct surface asymptotics. Physical Review B, 2016, 93, .	1.1	41
48	Exploiting Photo- and Electroluminescence Properties of Flrpic Organic Crystals. Inorganic Chemistry, 2016, 55, 6532-6538.	1.9	5
49	[1]Benzothieno[3,2- <i>b</i>]benzothiophene-Based Organic Dyes for Dye-Sensitized Solar Cells. Journal of Organic Chemistry, 2016, 81, 3235-3245.	1.7	52
50	Synthesis and characterization of a new series of dibenzofulvene based organic dyes for DSSCs. Dyes and Pigments, 2016, 130, 79-89.	2.0	26
51	Global Hybrids from the Semiclassical Atom Theory Satisfying the Local Density Linear Response. Journal of Chemical Theory and Computation, 2015, 11, 122-131.	2.3	22
52	Nanoscale Characterization and Unexpected Photovoltaic Behavior of Low Band Gap Sulfur-Overrich-Thiophene/Benzothiadiazole Decamers and Polymers. Journal of Physical Chemistry C, 2015, 119, 27200-27211.	1.5	19
53	“Darker-than-Black” PbS Quantum Dots: Enhancing Optical Absorption of Colloidal Semiconductor Nanocrystals via Short Conjugated Ligands. Journal of the American Chemical Society, 2015, 137, 1875-1886.	6.6	149
54	Gradient-dependent upper bound for the exchange-correlation energy and application to density functional theory. Physical Review B, 2015, 91, .	1.1	31

#	ARTICLE	IF	CITATIONS
55	Accurate non-covalent interaction energies via an efficient MP2 scaling procedure. <i>Chemical Physics Letters</i> , 2015, 635, 262-267.	1.2	6
56	Kohn-Sham kinetic energy density in the nuclear and asymptotic regions: Deviations from the von Weizsäcker behavior and applications to density functionals. <i>Physical Review B</i> , 2015, 91, .	1.1	49
57	Design and synthesis of fluorenone-based dyes: two-photon excited fluorescent probes for imaging of lysosomes and mitochondria in living cells. <i>Journal of Materials Chemistry B</i> , 2015, 3, 3315-3323.	2.9	50
58	Assessment of the TCA functional in computational chemistry and solid-state physics. <i>Theoretical Chemistry Accounts</i> , 2015, 134, 1.	0.5	10
59	Subsystem density functional theory with meta-generalized gradient approximation exchange-correlation functionals. <i>Journal of Chemical Physics</i> , 2015, 142, 154121.	1.2	23
60	Frozen density embedding with non-integer subsystems' particle numbers. <i>Journal of Chemical Physics</i> , 2014, 140, 114101.	1.2	17
61	Orbital-dependent second-order scaled-opposite-spin correlation functionals in the optimized effective potential method. <i>Journal of Chemical Physics</i> , 2014, 141, 024113.	1.2	35
62	Polymorphism in Crystalline Microfibers of Achiral Octithiophene: The Effect on Charge Transport, Supramolecular Chirality and Optical Properties. <i>Advanced Functional Materials</i> , 2014, 24, 4943-4951.	7.8	21
63	Generalized Gradient Approximation Correlation Energy Functionals Based on the Uniform Electron Gas with Gap Model. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 2016-2026.	2.3	23
64	A density difference based analysis of orbital-dependent exchange-correlation functionals. <i>Molecular Physics</i> , 2014, 112, 700-710.	0.8	25
65	New organic dyes based on a dibenzofulvene bridge for highly efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 14181-14188.	5.2	31
66	Laplacian-Level Kinetic Energy Approximations Based on the Fourth-Order Gradient Expansion: Global Assessment and Application to the Subsystem Formulation of Density Functional Theory. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 164-179.	2.3	62
67	Wave Function and Density Functional Theory Studies of Dihydrogen Complexes. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 3151-3162.	2.3	23
68	Testing the broad applicability of the PBEint GGA functional and its one-parameter hybrid form. <i>International Journal of Quantum Chemistry</i> , 2013, 113, 673-682.	1.0	33
69	Fluorene-thiophene-substituted organic dyes for dye sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11909.	5.2	25
70	A simple non-empirical procedure for spin-component-scaled MP2 methods applied to the calculation of the dissociation energy curve of noncovalently-interacting systems. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 15485.	1.3	13
71	Accurate ionization potential of gold anionic clusters from density functional theory and many-body perturbation theory. <i>European Physical Journal B</i> , 2013, 86, 1.	0.6	13
72	Semilocal and hybrid density embedding calculations of ground-state charge-transfer complexes. <i>Journal of Chemical Physics</i> , 2013, 138, 124112.	1.2	18

#	ARTICLE	IF	CITATIONS
73	Optimized effective potential method based on spin-resolved components of the second-order correlation energy in density functional theory. <i>Physical Review B</i> , 2013, 87, .	1.1	26
74	Meta-GGA Exchange-Correlation Functional with a Balanced Treatment of Nonlocality. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 2256-2263.	2.3	60
75	Relevance of coordinate and particle-number scaling in density-functional theory. <i>Physical Review A</i> , 2013, 87, .	1.0	42
76	Construction of a general semilocal exchange-correlation hole model: Application to nonempirical meta-GGA functionals. <i>Physical Review B</i> , 2013, 88, .	1.1	40
77	Theoretical investigation of molecular excited states in polar organic monolayers via an efficient embedding approach. <i>Highlights in Theoretical Chemistry</i> , 2013, , 121-128.	0.0	0
78	Spin-dependent gradient correction for more accurate atomization energies of molecules. <i>Journal of Chemical Physics</i> , 2012, 137, 194105.	1.2	23
79	Nonuniform Scaling Applied to Surface Energies of Transition Metals. <i>Physical Review Letters</i> , 2012, 108, 126402.	2.9	57
80	Semilocal dynamical correlation with increased localization. <i>Physical Review B</i> , 2012, 86, .	1.1	45
81	On the accuracy of frozen density embedding calculations with hybrid and orbital-dependent functionals for non-bonded interaction energies. <i>Journal of Chemical Physics</i> , 2012, 137, 014102.	1.2	20
82	A periodic charge-dipole electrostatic model: Parametrization for silver slabs. <i>Journal of Chemical Physics</i> , 2012, 137, 134702.	1.2	2
83	Accuracy of basis-set extrapolation schemes for DFT-RPA correlation energies in molecular calculations. <i>Theoretical Chemistry Accounts</i> , 2012, 131, 1.	0.5	22
84	Theoretical investigation of molecular excited states in polar organic monolayers via an efficient embedding approach. <i>Theoretical Chemistry Accounts</i> , 2012, 131, 1.	0.5	1
85	Generalized Gradient Approximations of the Noninteracting Kinetic Energy from the Semiclassical Atom Theory: Rationalization of the Accuracy of the Frozen Density Embedding Theory for Nonbonded Interactions. <i>Journal of Chemical Theory and Computation</i> , 2011, 7, 2439-2451.	2.3	83
86	Interfacial Electronic Structure of the Dipolar Vanadyl Naphthalocyanine on Au(111): σ -Push-Back vs Dipolar Effects. <i>Journal of Physical Chemistry C</i> , 2011, 115, 21128-21138.	1.5	40
87	Two-Dimensional Scan of the Performance of Generalized Gradient Approximations with Perdew-Burke-Ernzerhof-Like Enhancement Factor. <i>Journal of Chemical Theory and Computation</i> , 2011, 7, 3548-3559.	2.3	49
88	Live-Cell-Permeant Thiophene Fluorophores and Cell-Mediated Formation of Fluorescent Fibrils. <i>Journal of the American Chemical Society</i> , 2011, 133, 17777-17785.	6.6	62
89	Frozen density embedding calculations with the orbital-dependent localized Hartree-Fock Kohn-Sham potential. <i>Chemical Physics Letters</i> , 2011, 518, 114-118.	1.2	20
90	Accurate singlet and triplet excitation energies using the Localized Hartree-Fock Kohn-Sham potential. <i>Chemical Physics</i> , 2011, 391, 19-26.	0.9	13

#	ARTICLE	IF	CITATIONS
91	QM/MM Nonadiabatic Decay Dynamics of 9 <i>H</i> -Adenine in Aqueous Solution. ChemPhysChem, 2011, 12, 1989-1998.	1.0	79
92	Semiclassical Neutral Atom as a Reference System in Density Functional Theory. Physical Review Letters, 2011, 106, 186406.	2.9	117
93	Improving atomization energies of molecules and solids with a spin-dependent gradient correction from one-electron density analysis. Physical Review B, 2011, 84, .	1.1	26
94	Correlation energy functional from jellium surface analysis. Physical Review B, 2011, 84, .	1.1	39
95	Exchange-correlation generalized gradient approximation for gold nanostructures. Journal of Chemical Physics, 2011, 134, 194112.	1.2	34
96	The role of exact exchange in the theoretical description of organic-metal interfaces. International Journal of Quantum Chemistry, 2010, 110, 2162-2171.	1.0	16
97	Generalized gradient approximation bridging the rapidly and slowly varying density regimes: A PBE-like functional for hybrid interfaces. Physical Review B, 2010, 82, .	1.1	50
98	Frozen density embedding with hybrid functionals. Journal of Chemical Physics, 2010, 133, 164111.	1.2	49
99	Monodispersed molecular donors for bulk hetero-junction solar cells: from molecular properties to device performances. Chemical Communications, 2010, 46, 6273.	2.2	13
100	First disubstituted dibenzothiophene-5,5-dioxide monodispersed molecular materials for efficient blue-electroluminescence. Journal of Materials Chemistry, 2010, 20, 1012-1018.	6.7	29
101	Towards an accurate description of the electronic properties of the biphenylthiol/gold interface: The role of exact exchange. Journal of Chemical Physics, 2009, 131, 234101.	1.2	23
102	Photoinduced Nonadiabatic Dynamics of 9 <i>H</i> -Guanine. ChemPhysChem, 2009, 10, 1225-1229.	1.0	107
103	Photoinduced Nonadiabatic Dynamics of Pyrimidine Nucleobases: On-the-Fly Surface-Hopping Study with Semiempirical Methods. Journal of Physical Chemistry B, 2009, 113, 3548-3555.	1.2	209
104	<i>Ab initio</i> depolarization in self-assembled molecular monolayers: Beyond conventional density-functional theory. Physical Review B, 2009, 80, .	1.1	24
105	Structural and electronic properties of gold microclusters: assessment of the localized Hartree-Fock method. Physical Chemistry Chemical Physics, 2009, 11, 9160.	1.3	10
106	Implementation of surface hopping molecular dynamics using semiempirical methods. Chemical Physics, 2008, 349, 334-347.	0.9	219
107	Approximate switching algorithms for trajectory surface hopping. Chemical Physics, 2008, 351, 111-116.	0.9	54
108	Torsional effects on excitation energies of thiophene derivatives induced by R^2 substituents: Comparison between time-dependent density functional theory and approximated coupled cluster approaches. Journal of Computational Chemistry, 2008, 29, 451-457.	1.5	11

#	ARTICLE	IF	CITATIONS
109	Nonradiative Deexcitation Dynamics of 9H-Adenine: An OM2 Surface Hopping Study. <i>Journal of Physical Chemistry A</i> , 2008, 112, 6859-6863.	1.1	111
110	Localized exchange-correlation potential from second-order self-energy for accurate Kohn-Sham energy gap. <i>Journal of Chemical Physics</i> , 2007, 126, 214102.	1.2	31
111	Bright OligothiopheneN-Succinimidyl Esters for Efficient Fluorescent Labeling of Proteins and Oligonucleotides. <i>Bioconjugate Chemistry</i> , 2007, 18, 1015-1015.	1.8	0
112	Optical Properties ofN-Succinimidyl Bithiophene and the Effects of the Binding to Biomolecules:Â Comparison between Coupled-Cluster and Time-Dependent Density Functional Theory Calculations and Experiments. <i>Journal of Physical Chemistry B</i> , 2006, 110, 18651-18660.	1.2	26
113	Bright OligothiopheneN-Succinimidyl Esters for Efficient Fluorescent Labeling of Proteins and Oligonucleotides. <i>Bioconjugate Chemistry</i> , 2006, 17, 58-67.	1.8	55
114	Theoretical study on N-succinimidyl oligothiophenes: A novel class of materials for biological applications. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 2452-2456.	1.5	0
115	Torsional potential of Î€-conjugated molecules using the localized Hartreeâ€Fock Kohnâ€Sham exchange potential. <i>Chemical Physics Letters</i> , 2006, 418, 496-501.	1.2	35
116	Nonradiative Relaxation in Thiophene-S,S-dioxide Derivatives:Â The Role of the Environment. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6004-6011.	1.2	21
117	Theoretical Study of Singlet and Triplet Excitation Energies in Oligothiophenes. <i>Journal of Physical Chemistry A</i> , 2005, 109, 3078-3085.	1.1	73
118	Ab-initio study of singlet and triplet excitation energies in oligothiophenes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 539-542.	0.8	6
119	Self-Assembled Monolayers of Cobalt(II)âˆ (4-tert-Butylphenyl)-Porphyrins:Â The Influence of the Electronic Dipole on Scanning Tunneling Microscopy Images. <i>Journal of the American Chemical Society</i> , 2004, 126, 16951-16958.	6.6	37