

# Davide Sangalli

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4439662/publications.pdf>

Version: 2024-02-01

49

papers

4,491

citations

279798

23

h-index

223800

46

g-index

51

all docs

51

docs citations

51

times ranked

6115

citing authors

#	ARTICLE	IF	CITATIONS
1	ABINIT: First-principles approach to material and nanosystem properties. Computer Physics Communications, 2009, 180, 2582-2615.	7.5	2,297
2	Effect of spin-orbit interaction on the optical spectra of single-layer, double-layer, and bulk MoS <sub>2</sub> . <i>Physical Review B</i> , 2013, 88, .	3.2	382
3	Photo-Induced Bandgap Renormalization Governs the Ultrafast Response of Single-Layer MoS <sub>2</sub> . <i>ACS Nano</i> , 2016, 10, 1182-1188.	14.6	272
4	Many-body perturbation theory calculations using the yambo code. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 325902.	1.8	269
5	Effect of Axial Torsion on Carbon Atomic Wires. <i>Physical Review Letters</i> , 2009, 102, 245502.	7.8	99
6	Double excitations in finite systems. <i>Journal of Chemical Physics</i> , 2009, 130, 044108.	3.0	96
7	Ab Initio Calculations of Ultrashort Carrier Dynamics in Two-Dimensional Materials: Valley Depolarization in Single-Layer WSe <sub>2</sub> . <i>Nano Letters</i> , 2017, 17, 4549-4555.	9.1	83
8	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS <sub>2</sub> . <i>Nano Letters</i> , 2018, 18, 6882-6891.	9.1	82
9	Double excitations in correlated systems: A many-body approach. <i>Journal of Chemical Physics</i> , 2011, 134, 034115.	3.0	59
10	Exciton-Phonon Interaction and Relaxation Times from First Principles. <i>Physical Review Letters</i> , 2020, 125, 107401.	7.8	57
11	First-principles approach to excitons in time-resolved and angle-resolved photoemission spectra. <i>Physical Review B</i> , 2016, 94, .	3.2	56
12	Carbon nanotubes as excitonic insulators. <i>Nature Communications</i> , 2017, 8, 1461.	12.8	51
13	Ultra-fast carriers relaxation in bulk silicon following photo-excitation with a short and polarized laser pulse. <i>Europhysics Letters</i> , 2015, 110, 47004.	2.0	47
14	Magneto-optical response of chromium trihalide monolayers: chemical trends. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8856-8863.	5.5	44
15	Strongly Coupled Coherent Phonons in Single-Layer MoS <sub>2</sub> . <i>ACS Nano</i> , 2020, 14, 5700-5710.	14.6	44
16	Nonequilibrium Bethe-Salpeter equation for transient photoabsorption spectroscopy. <i>Physical Review B</i> , 2015, 92, .	3.2	37
17	Theory and Ab Initio Computation of the Anisotropic Light Emission in Monolayer Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2018, 18, 3839-3843.	9.1	37
18	Ultrafast Charge Migration in XUV Photoexcited Phenylalanine: A First-Principles Study Based on Real-Time Nonequilibrium Green's Functions. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1353-1358.	4.6	36

#	ARTICLE	IF	CITATIONS
19	Observation of an Excitonic Mott Transition Through Ultrafast Core- <i>cum</i> -Conduction Photoemission Spectroscopy. <i>Physical Review Letters</i> , 2020, 125, 096401.	7.8	35
20	Nonequilibrium optical properties in semiconductors from first principles: A combined theoretical and experimental study of bulk silicon. <i>Physical Review B</i> , 2016, 93, .	3.2	34
21	Pseudopotential-based first-principles approach to the magneto-optical Kerr effect: From metals to the inclusion of local fields and excitonic effects. <i>Physical Review B</i> , 2012, 86, .	3.2	31
22	Pump-driven normal-to-excitonic insulator transition: Josephson oscillations and signatures of BEC-BCS crossover in time-resolved ARPES. <i>Physical Review Materials</i> , 2019, 3, .	2.4	30
23	Role of oxygen vacancies on the structure and density of states of iron-doped zirconia. <i>Physical Review B</i> , 2013, 87, .	3.2	27
24	Subpicosecond metamagnetic phase transition in FeRh driven by non-equilibrium electron dynamics. <i>Nature Communications</i> , 2021, 12, 5088.	12.8	25
25	Exchange-correlation effects in the monoclinic to tetragonal phase stabilization of yttrium-doped ZrO <sub>3</sub> : A first-principles approach. <i>Physical Review B</i> , 2011, 84, .	3.2	23
26	Optical properties of periodic systems within the current-current response framework: Pitfalls and remedies. <i>Physical Review B</i> , 2017, 95, .	3.2	22
27	An ab-initio approach to describe coherent and non-coherent exciton dynamics. <i>European Physical Journal B</i> , 2018, 91, 1.	1.5	21
28	Dielectrics in a time-dependent electric field: A real-time approach based on density-polarization functional theory. <i>Physical Review B</i> , 2016, 94, .	3.2	20
29	Exploiting magnetic properties of Fe doping in zirconia. <i>European Physical Journal B</i> , 2013, 86, 1.	1.5	18
30	Experimental versus theoretical x-ray absorption of iron-doped zirconia: Trends in K-edge spectra as a function of iron doping. <i>Physical Review B</i> , 2014, 90, .	3.2	18
31	First-Principles Nonequilibrium Green's Function Approach to Ultrafast Charge Migration in Glycine. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 4526-4534.	5.3	17
32	Stabilization of tetragonal/cubic phase in Fe doped zirconia grown by atomic layer deposition. <i>Thin Solid Films</i> , 2013, 533, 83-87.	1.8	16
33	Complete collisions approximation to the Kadanoff-Baym equation: a first-principles implementation. <i>Journal of Physics: Conference Series</i> , 2015, 609, 012006.	0.4	16
34	Spinorial formulation of the -BSE equations and spin properties of excitons in two-dimensional transition metal dichalcogenides. <i>Physical Review B</i> , 2021, 103, .	3.2	16
35	Vibrational properties of sp carbon atomic wires in cluster-assembled carbon films. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 2017-2021.	1.5	10
36	Electronic and magnetic properties of iron doped zirconia: Theory and experiment. <i>Journal of Applied Physics</i> , 2014, 115, 17D718.	2.5	10

#	ARTICLE		IF	CITATIONS
37	Anomalous Aharonovâ€“Bohm Gap Oscillations in Carbon Nanotubes. <i>Nano Letters</i> , 2011, 11, 4052-4057.	9.1	9	
38	Excitons and carriers in transient absorption and time-resolved ARPES spectroscopy: An <i>&lt; i&gt; ab initio&lt;/i&gt;</i> approach. <i>Physical Review Materials</i> , 2021, 5, .	2.4	9	
39	Photoinduced modulation of the excitonic resonance via coupling with coherent phonons in a layered semiconductor. <i>Physical Review Research</i> , 2021, 3, .	3.6	9	
40	<i>&lt; i&gt; Ab initio&lt;/i&gt;</i> electronic structure, optical, and magneto-optical properties of MnGaAs digital ferromagnetic heterostructures. <i>Physical Review B</i> , 2015, 91, .	3.2	8	
41	Real-time modeling of optical orientation in GaAs: Generation and decay of the degree of spin polarization. <i>Physical Review B</i> , 2020, 102, .	3.2	5	
42	A systematic study of the valence electronic structure of cyclo(Glyâ€“Phe), cyclo(Trpâ€“Tyr) and cyclo(Trpâ€“Trp) dipeptides in the gas phase. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 26793-26805.	2.8	4	
43	Spectroscopic ellipsometry model for optical constant of NiSi formed on silicon-on-insulator substrates. <i>Journal of Applied Physics</i> , 2012, 111, 093501.	2.5	3	
44	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS <sub>2</sub> . , 2019, , .			3
45	Double k-Grid Method for Solving the Bethe-Salpeter Equation via Lanczos Approaches. <i>Frontiers in Chemistry</i> , 2021, 9, 763946.	3.6	2	
46	Ultrafast carriers dynamics in silicon: a joint experimental and theoretical study. , 2014, , .			0
47	Real-time observation of the intravalley spin-flip process in single-layer WS <sub>2</sub> . <i>EPJ Web of Conferences</i> , 2019, 205, 05012.	0.3	0	
48	Strong Exciton-Coherent Phonon Coupling in Single-Layer MoS <sub>2</sub> . , 2020, , .			0
49	Real-time ab initio description of the photon-echo mechanisms in extended systems: the case study of bulk GaAs. <i>SciPost Physics</i> , 2022, 12, .	4.9	0	