

Fabio Caruso

List of Publications by Year in descending order

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38
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1,887
citations

257450

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377865

34
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38
all docs

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docs citations

38
times ranked

1689
citing authors

#	ARTICLE	IF	CITATIONS
1	Hybrid excitations at the interface between a MoS_2 monolayer and organic molecules: A first-principles study. <i>Physical Review Materials</i> , 2022, 6, .		
2	Properties and challenges of hot-phonon physics in metals: MgB_2 and other compounds. <i>Progress in Surface Science</i> , 2022, 97, 100664.	8.3	8
3	Direct View of Phonon Dynamics in Atomically Thin MoS_2 . <i>Nano Letters</i> , 2022, 22, 4718-4724.	9.1	19
4	Nonequilibrium Lattice Dynamics in Monolayer MoS_2 . <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1734-1740.	4.6	36
5	Two-dimensional plasmonic polarons in n -doped monolayer MoS_2 . <i>Physical Review B</i> , 2021, 103, .	3.2	13
6	Accessing the Anisotropic Nonthermal Phonon Populations in Black Phosphorus. <i>Nano Letters</i> , 2021, 21, 6171-6178.	9.1	25
7	Multiphonon diffuse scattering in solids from first principles: Application to layered crystals and two-dimensional materials. <i>Physical Review B</i> , 2021, 104, .	3.2	16
8	Efficient First-Principles Methodology for the Calculation of the All-Phonon Inelastic Scattering in Solids. <i>Physical Review Letters</i> , 2021, 127, 207401.	7.8	18
9	Ultrafast Hot Phonon Dynamics in MgB_2 Driven by Anisotropic Electron-Phonon Coupling. <i>Physical Review Letters</i> , 2020, 124, 077001.	7.8	20
10	Photoemission signatures of nonequilibrium carrier dynamics from first principles. <i>Physical Review B</i> , 2020, 101, .	3.2	23
11	Many-Body Calculations of Plasmon and Phonon Satellites in Angle-Resolved Photoelectron Spectra Using the Cumulant Expansion Approach. , 2020, , 341-365.		1
12	Thermally enhanced Fröhlich coupling in SnSe . <i>Physical Review B</i> , 2019, 99, .	3.2	19
13	Electron-plasmon and electron-phonon satellites in the angle-resolved photoelectron spectra of n -doped anatase TiO_2 . <i>Physical Review B</i> , 2018, 97, .	3.2	27
14	Many-Body Calculations of Plasmon and Phonon Satellites in Angle-Resolved Photoelectron Spectra Using the Cumulant Expansion Approach. , 2018, , 1-25.		0
15	Phonon-assisted damping of plasmons in three- and two-dimensional metals. <i>Physical Review B</i> , 2018, 97, .	3.2	9
16	Crossover from lattice to plasmonic polarons of a spin-polarised electron gas in ferromagnetic EuO . <i>Nature Communications</i> , 2018, 9, 2305.	12.8	31
17	Origin of the crossover from polarons to Fermi liquids in transition metal oxides. <i>Nature Communications</i> , 2017, 8, 15769.	12.8	122
18	Nonadiabatic Kohn Anomaly in Heavily Boron-Doped Diamond. <i>Physical Review Letters</i> , 2017, 119, 017001.	7.8	36

#	ARTICLE	IF	CITATIONS
19	The GW plus cumulant method and plasmonic polarons: application to the homogeneous electron gas*. European Physical Journal B, 2016, 89, 1.	1.5	20
20	Theory of electron-plasmon coupling in semiconductors. Physical Review B, 2016, 94, .	3.2	36
21	On the combined use of GW approximation and cumulant expansion in the calculations of quasiparticle spectra: The paradigm of Si valence bands. Physical Review B, 2016, 94, .	3.2	36
22	Benchmark of $\langle i \rangle GW \langle /i \rangle$ Approaches for the $\langle i \rangle GW \langle /i \rangle$ 100 Test Set. Journal of Chemical Theory and Computation, 2016, 12, 5076-5087.	5.3	95
23	Piecewise linearity in the $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle G \langle /mml:mi \rangle \langle mml:mi \rangle W \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ for accurate quasiparticle energy predictions. Physical Review B, 2016, 93, .	3.2	30
24	Beyond the $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle G \langle /mml:mi \rangle \langle mml:mi \rangle W \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ A second-order screened exchange correction. Physical Review B, 2015, 92, .	3.2	30
25	Excitons in one-dimensional van der Waals materials: $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mrow \rangle \langle mml:msub \rangle \langle mml:mi \rangle S_b \langle /mml:mi \rangle \langle mml:mn \rangle 2 \langle /mml:mn \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mrow \rangle \langle mml:msub \rangle \langle mml:mi \rangle S \langle /mml:mi \rangle \langle mml:mn \rangle 3 \langle /mml:mn \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ nanoribbons. Physical Review B, 2015, 92, .	3.2	30
26	Static correlation and electron localization in molecular dimers from the self-consistent RPA and $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle G \langle /mml:mi \rangle \langle mml:mi \rangle W \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ Physical Review B, 2015, 91, .	3.2	54
27	Spectral fingerprints of electron-plasmon coupling. Physical Review B, 2015, 92, .	3.2	24
28	Band Structures of Plasmonic Polarons. Physical Review Letters, 2015, 114, 146404.	7.8	57
29	$\langle i \rangle GW \langle /i \rangle$ 100: Benchmarking $\langle i \rangle G \langle /i \rangle \langle sub \rangle 0 \langle /sub \rangle \langle i \rangle W \langle /i \rangle \langle sub \rangle 0 \langle /sub \rangle$ for Molecular Systems. Journal of Chemical Theory and Computation, 2015, 11, 5665-5687.	5.3	280
30	First-principles description of charge transfer in donor-acceptor compounds from self-consistent many-body perturbation theory. Physical Review B, 2014, 90, .	3.2	44
31	Self-consistent $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle G \langle /mml:mi \rangle \langle mml:mi \rangle W \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ All-electron implementation with localized basis functions. Physical Review B, 2013, 88, .	3.2	135
32	Bond Breaking and Bond Formation: How Electron Correlation is Captured in Many-Body Perturbation Theory and Density-Functional Theory. Physical Review Letters, 2013, 110, 146403.	7.8	82
33	Hybrid density functional theory meets quasiparticle calculations: A consistent electronic structure approach. Physical Review B, 2013, 88, .	3.2	115
34	Unified description of ground and excited states of finite systems: The self-consistent $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle G \langle /mml:mi \rangle \langle mml:mi \rangle W \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ approach. Physical Review B, 2012, 86, .	3.2	171
35	Benchmark of $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle G \langle /mml:mi \rangle \langle mml:mi \rangle W \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ methods for azabenzenes. Physical Review B, 2012, 86, .	3.2	154
36	Static Friction on the Fly: Velocity Depinning Transitions of Lubricants in Motion. Physical Review Letters, 2007, 99, 206101.	7.8	33

#	ARTICLE	IF	CITATIONS
37	Publisher's Note: Static Friction on the Fly: Velocity Depinning Transitions of Lubricants in Motion [Phys. Rev. Lett.99, 206101 (2007)]. Physical Review Letters, 2007, 99, .	7.8	0
38	Chirality of Valley Excitons in Monolayer Transition-Metal Dichalcogenides. Journal of Physical Chemistry Letters, 0, , 5894-5899.	4.6	11