

# Abhilash Patra

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/379074/publications.pdf>

Version: 2024-02-01

20  
papers

280  
citations

759233

12  
h-index

940533

16  
g-index

20  
all docs

20  
docs citations

20  
times ranked

179  
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessing the performance of the Tao-Mo semilocal density functional in the projector-augmented-wave method. <i>Journal of Chemical Physics</i> , 2018, 149, 044120.	3.0	50
2	Bandgap of two-dimensional materials: Thorough assessment of modern exchange–correlation functionals. <i>Journal of Chemical Physics</i> , 2021, 155, 104103.	3.0	26
3	Screened range-separated hybrid by balancing the compact and slowly varying density regimes: Satisfaction of local density linear response. <i>Journal of Chemical Physics</i> , 2020, 152, 044111.	3.0	22
4	Laplacian free and asymptotic corrected semilocal exchange potential applied to the band gap of solids. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 19639-19650.	2.8	21
5	Efficient Band Structure Calculation of Two-Dimensional Materials from Semilocal Density Functionals. <i>Journal of Physical Chemistry C</i> , 2021, 125, 11206-11215.	3.1	19
6	Electronic band structure of layers within meta generalized gradient approximation of density functionals. <i>Physical Review B</i> , 2020, 102, .	3.2	18
7	Long-range screened hybrid-functional theory satisfying the local-density linear response. <i>Physical Review A</i> , 2019, 99, .	2.5	16
8	A way of resolving the order-of-limit problem of Tao–Mo semilocal functional. <i>Journal of Chemical Physics</i> , 2020, 153, 184112.	3.0	15
9	Efficient lattice constants and energy bandgaps for condensed systems from a meta-GGA level screened range-separated hybrid functional. <i>Journal of Chemical Physics</i> , 2018, 149, 094105.	3.0	14
10	Performance of Tao–Mo Semilocal Functional with rVV10 Dispersion-Correction: Influence of Different Correlation. <i>Journal of Physical Chemistry A</i> , 2019, 123, 10582-10593.	2.5	14
11	Improved transition metal surface energies from a generalized gradient approximation developed for quasi two-dimensional systems. <i>Journal of Chemical Physics</i> , 2020, 152, 151101.	3.0	14
12	Insights from the density functional performance of water and water–solid interactions: SCAN in relation to other meta-GGAs. <i>Journal of Chemical Physics</i> , 2020, 153, 214116.	3.0	14
13	Efficient yet accurate dispersion-corrected semilocal exchange–correlation functionals for non-covalent interactions. <i>Journal of Chemical Physics</i> , 2020, 153, 084117.	3.0	10
14	Gradient approximated exchange energy functionals with improved performances for two-dimensional quantum dot systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2018, 97, 268-276.	2.7	9
15	A Parameter-Free Semilocal Exchange Energy Functional for Two-Dimensional Quantum Systems. <i>Journal of Physical Chemistry A</i> , 2018, 122, 3455-3461.	2.5	5
16	Inhomogeneity induced and appropriately parameterized semilocal exchange and correlation energy functionals in two-dimensions. <i>Journal of Chemical Physics</i> , 2018, 148, 134117.	3.0	5
17	Phase evolution in thermally annealed Ni/Bi multilayers studied by X-ray absorption spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 4415-4424.	2.8	4
18	Colle-Salvetti type correlation functionals for two-dimensional quantum dot systems. <i>Chemical Physics Letters</i> , 2019, 720, 70-75.	2.6	2

#	ARTICLE	IF	CITATIONS
19	Adiabatic connection in density functional theory in two-dimensions: A semi-analytic wavefunction based study for two-electron atomic systems. <i>Journal of Chemical Physics</i> , 2019, 151, 204104.	3.0	1
20	Accurate band gaps from exchange potentials designed from cusplless hydrogen density-based exchange hole model. <i>Physical Chemistry Chemical Physics</i> , 0, , .	2.8	1