Thorsten Deilmann

List of Publications by Year
in descending order

43 papers	2,544 citations	304743 22 h-index	233421 45 g-index
45 all docs	45 docs citations	45 times ranked	3306 citing authors

#	Article	IF	Citations
1	Uniaxial strain tuning of Raman spectra of a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>ReS</mml:mi></mml:mrow><mml:mn>2</m monolayer. Physical Review B, 2022, 105, .	3.2	5
2	Electronic and optical properties of a hexagonal boron nitride monolayer in its pristine form and with point defects from first principles. Physical Review B, 2022, 106, .	3.2	12
3	Towards fully automated GW band structure calculations: What we can learn from 60.000 self-energy evaluations. Npj Computational Materials, 2021, 7, .	8.7	20
4	Subsystem-Based GW/Betheâ€"Salpeter Equation. Journal of Chemical Theory and Computation, 2021, 17, 2186-2199.	5.3	12
5	Valley-Dependent Interlayer Excitons in Magnetic WSe₂/CrI₃. Nano Letters, 2021, 21, 5173-5178.	9.1	21
6	Electrical tuning of optically active interlayer excitons in bilayer MoS2. Nature Nanotechnology, 2021, 16, 888-893.	31.5	60
7	Recent progress of the Computational 2D Materials Database (C2DB). 2D Materials, 2021, 8, 044002.	4.4	218
8	Covalent photofunctionalization and electronic repair of 2H-MoS₂<i>via</i> nitrogen incorporation. Physical Chemistry Chemical Physics, 2021, 23, 18517-18524.	2.8	3
9	Strain tuning of the Stokes shift in atomically thin semiconductors. Nanoscale, 2020, 12, 20786-20796.	5.6	17
10	<i>AbÂInitio</i> Studies of Exciton <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>g</mml:mi></mml:math> Factors: Monolayer Transition Metal Dichalcogenides in Magnetic Fields. Physical Review Letters, 2020, 124, 226402.	7.8	51
11	Valley selectivity induced by magnetic adsorbates: Triplet oxygen on monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2020, 101, .	3.2	8
12	Inelastic electron tunneling spectroscopy for probing strongly correlated many-body systems by scanning tunneling microscopy. Physical Review B, 2020, 101, .	3.2	7
13	Lightâ€"matter interaction in van der Waals hetero-structures. Journal of Physics Condensed Matter, 2020, 32, 333002.	1.8	22
14	Dark trions govern the temperature-dependent optical absorption and emission of doped atomically thin semiconductors. Physical Review B, 2020, 101, .	3.2	39
15	Interlayer and excited-state exciton transitions in bulk <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>H</mml:mi><mml:mtext>â^’</m Physical Review B, 2020, 102, .	3.2	7
16	Classifying the Electronic and Optical Properties of Janus Monolayers. ACS Nano, 2019, 13, 13354-13364.	14.6	93
17	Excited-State Trions in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></m Physical Review Letters, 2019, 123, 167401.	7.8	55
18	Reply to comment on â€˜The Computational 2D Materials Database: high-throughput modeling and discovery of atomically thin crystalsâ€™. 2D Materials, 2019, 6, 048002.	4.4	12

#	Article	IF	Citations
19	Important role of screening the electron-hole exchange interaction for the optical properties of molecules near metal surfaces. Physical Review B, 2019, 99, .	3.2	8
20	Finite-momentum exciton landscape in mono- and bilayer transition metal dichalcogenides. 2D Materials, 2019, 6, 035003.	4.4	84
21	Nature of the excited states of layered systems and molecular excimers: Exciplex states and their dependence on structure. Physical Review B, 2019, 99, .	3.2	9
22	Discovering two-dimensional topological insulators from high-throughput computations. Physical Review Materials, 2019, 3, .	2.4	60
23	Interlayer Excitons with Large Optical Amplitudes in Layered van der Waals Materials. Nano Letters, 2018, 18, 2984-2989.	9.1	71
24	Anomalous behavior of the excited state of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi></mml:math> exciton in bulk <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WS</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review B, 2018, 97, .	3.2	16
25	Interlayer Trions in the MoS₂/WS₂ van der Waals Heterostructure. Nano Letters, 2018, 18, 1460-1465.	9.1	56
26	Trions in bulk LiF and at the LiF(001) surface. Physical Review B, 2018, 98, .	3.2	4
27	Electronic excitations in transition metal dichalcogenide monolayers from an <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>LDA</mml:mi><mml:mo>+</mml:mo><mml:mi mathvariant="italic">GdW</mml:mi></mml:math> approach. Physical Review B, 2018, 98, .	3.2	39
28	Valley-contrasting optics of interlayer excitons in Mo- and W-based bulk transition metal dichalcogenides. Nanoscale, 2018, 10, 15571-15577.	5.6	31
29	The Computational 2D Materials Database: high-throughput modeling and discovery of atomically thin crystals. 2D Materials, 2018, 5, 042002.	4.4	711
30	Unraveling the not-so-large trion binding energy in monolayer black phosphorus. 2D Materials, 2018, 5, 041007.	4.4	14
31	Highly Anisotropic in-Plane Excitons in Atomically Thin and Bulklike 1<i>T</i>â€²-ReSe₂. Nano Letters, 2017, 17, 3202-3207.	9.1	130
32	Huge Trionic Effects in Graphene Nanoribbons. Nano Letters, 2017, 17, 6833-6837.	9.1	22
33	Correction to Highly Anisotropic in-Plane Excitons in Atomically Thin and Bulklike 1Tâ€²-ReSe2. Nano Letters, 2017, 17, 7169-7169.	9.1	1
34	Interlayer excitons in a bulk van der Waals semiconductor. Nature Communications, 2017, 8, 639.	12.8	76
35	Diversity of trion states and substrate effects in the optical properties of an MoS2 monolayer. Nature Communications, 2017, 8, 2117.	12.8	144
36	Dark excitations in monolayer transition metal dichalcogenides. Physical Review B, 2017, 96, .	3.2	60

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37	A chemically driven quantum phase transition in a two-molecule Kondo system. Nature Physics, 2016, 12, 867-873.	16.7	49
38	Three-particle correlation from a Many-Body Perspective: Trions in a Carbon Nanotube. Physical Review Letters, 2016, 116, 196804.	7.8	43
39	Scanning quantum dot microscopy: A quantitative method to measure local electrostatic potential near surfaces. Japanese Journal of Applied Physics, 2016, 55, 08NA04.	1.5	8
40	Reversible uniaxial strain tuning in atomically thin WSe ₂. 2D Materials, 2016, 3, 021011.	4.4	125
41	Transfering spin into an extended<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Ï€</mml:mi></mml:math>orbital of a large molecule. Physical Review B, 2015, 91, .	3.2	24
42	Scanning Quantum Dot Microscopy. Physical Review Letters, 2015, 115, 026101.	7.8	80
43	Adsorption and STM imaging of tetracyanoethylene on Ag(001): An<i>ab initio</i>study. Physical Review B, 2014, 89, .	3.2	12