Gunnar BerghÃ¤user

List of Publications by Year
in descending order

23 papers	2,131 citations	516710 16 h-index	713466 21 g-index
23 all docs	23 docs citations	23 times ranked	2550 citing authors

#	Article	IF	Citations
1	Intrinsic homogeneous linewidth and broadening mechanisms of excitons in monolayer transition metal dichalcogenides. Nature Communications, 2015, 6, 8315.	12.8	408
2	Excitonic linewidth and coherence lifetime in monolayer transition metal dichalcogenides. Nature Communications, 2016, 7, 13279.	12.8	360
3	Analytical approach to excitonic properties of MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2014, 89, .	3.2	186
4	Strain Control of Excitonâ€“Phonon Coupling in Atomically Thin Semiconductors. Nano Letters, 2018, 18, 1751-1757.	9.1	177
5	Dark excitons in transition metal dichalcogenides. Physical Review Materials, 2018, 2, .	2.4	149
6	Ultrafast Coulomb-Induced Intervalley Coupling in Atomically Thin WS₂. Nano Letters, 2016, 16, 2945-2950.	9.1	139
7	Phonon Sidebands in Monolayer Transition Metal Dichalcogenides. Physical Review Letters, 2017, 119, 187402.	7.8	136
8	Dark and bright exciton formation, thermalization, and photoluminescence in monolayer transition metal dichalcogenides. 2D Materials, 2018, 5, 035017.	4.4	129
9	Proposal for dark exciton based chemical sensors. Nature Communications, 2017, 8, 14776.	12.8	70
10	The role of momentum-dark excitons in the elementary optical response of bilayer WSe2. Nature Communications, 2018, 9, 2586.	12.8	70
11	Inverted valley polarization in optically excited transition metal dichalcogenides. Nature Communications, 2018, 9, 971.	12.8	59
12	Mapping of the dark exciton landscape in transition metal dichalcogenides. Physical Review B, 2018, 98, .	3.2	53
13	Impact of strain on the optical fingerprint of monolayer transition-metal dichalcogenides. Physical Review B, 2017, 96, .	3.2	50
14	Enhancement of Excitonâ€“Phonon Scattering from Monolayer to Bilayer WS₂. Nano Letters, 2018, 18, 6135-6143.	9.1	50
15	Dielectric Engineering of Electronic Correlations in a van der Waals Heterostructure. Nano Letters, 2018, 18, 1402-1409.	9.1	39
16	Dark exciton based strain sensing in tungsten-based transition metal dichalcogenides. Physical Review B, 2019, 99, .	3.2	23
17	Exciton broadening and band renormalization due to Dexter-like intervalley coupling. 2D Materials, 2018, 5, 025011.	4.4	15
18	Moleculeâ€“substrate interaction in functionalized graphene. Carbon, 2014, 69, 536-542.	10.3	9

#	Article	IF	Citations
19	Molecule signatures in photoluminescence spectra of transition metal dichalcogenides. Physical Review Materials, 2018, 2, .	2.4	5
20	Optical Response From Functionalized Atomically Thin Nanomaterials. Annalen Der Physik, 2017, 529, 1700097.	2.4	2
21	Optical fingerprint of non-covalently functionalized transition metal dichalcogenides. Journal of Physics Condensed Matter, 2017, 29, 384003.	1.8	2
22	Excitonic linewidth and coherence lifetime in monolayer transition metal dichalcogenides. Proceedings of SPIE, 2017, , .	0.8	0
23	Internal structure and ultrafast dynamics of tailored excitons in van der Waals heterostructures. , 2019, , .		0