Malte Selig

List of Publications by Year
in descending order

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38 papers	2,214 citations	304743 22 h-index	377865 34 g-index
38 all docs	38 docs citations	38 times ranked	2146 citing authors

#	Article	IF	Citations
1	Optical dipole orientation of interlayer excitons in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoSe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi></mml:mi></mml:math> heterostacks. Physical Review B, 2022, 105, .	3.2	22
2	Interlayer exciton valley polarization dynamics in large magnetic fields. Physical Review B, 2022, 105, .	3.2	11
3	Terahertz control of photoluminescence emission in few-layer InSe. Applied Physics Letters, 2022, 120, .	3.3	4
4	Excitons in Bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Displaying a Colossal Electric Field Splitting and Tunable Magnetic Response. Physical Review Letters, 2021, 126, 037401.	7.8	30
5	Direct measurement of key exciton properties: Energy, dynamics, and spatial distribution of the wave function. Natural Sciences, 2021, 1, e10010.	2.1	52
6	Strong coupling regime and hybrid quasinormal modes from a single plasmonic resonator coupled to a transition metal dichalcogenide monolayer. Physical Review B, 2021, 104, .	3.2	12
7	Phonon-Assisted Intervalley Scattering Determines Ultrafast Exciton Dynamics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Bilayers. Physical Review Letters, 2021, 127, 157403.	7.8	15
8	Theory of coherent pumpâ€“probe spectroscopy in monolayer transition metal dichalcogenides. 2D Materials, 2020, 7, 015021.	4.4	30
9	The ultrafast onset of exciton formation in 2D semiconductors. Nature Communications, 2020, 11, 5277.	12.8	57
10	Theory of the Coherent Response of Magneto-Excitons and Magneto-Biexcitons in Monolayer Transition Metal Dichalcogenides. Physical Review B, 2020, 102, .	3.2	8
11	Temporal Evolution of Low-Temperature Phonon Sidebands in Transition Metal Dichalcogenides. ACS Photonics, 2020, 7, 2756-2764.	6.6	20
12	Exciton-Scattering-Induced Dephasing in Two-Dimensional Semiconductors. Physical Review Letters, 2020, 124, 257402.	7.8	55
13	Phonon-Assisted Photoluminescence from Indirect Excitons in Monolayers of Transition-Metal Dichalcogenides. Nano Letters, 2020, 20, 2849-2856.	9.1	106
14	Suppression of intervalley exchange coupling in the presence of momentum-dark states in transition metal dichalcogenides. Physical Review Research, 2020, 2, .	3.6	23
15	Phonon-Assisted Exciton Polarization to Population Transfer in a 2D Semiconductor. , 2020, , .		0
16	Theory of exciton dynamics in time-resolved ARPES: Intra- and intervalley scattering in two-dimensional semiconductors. Physical Review B, 2019, 100, .	3.2	49
17	Theory of second-order excitonic nonlinearities in transition metal dichalcogenides. Physical Review B, 2019, 100, .	3.2	12
18	Intrinsic lifetime of higher excitonic states in tungsten diselenide monolayers. Nanoscale, 2019, 11, 12381-12387.	5.6	56

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19	Interlayer exciton dynamics in van der Waals heterostructures. Communications Physics, 2019, 2, .	5.3	103
20	Theory of optically induced FÃ¶rster coupling in van der Waals coupled heterostructures. Physical Review B, 2019, 99, .	3.2	20
21	Impact of strain on the excitonic linewidth in transition metal dichalcogenides. 2D Materials, 2019, 6, 015015.	4.4	51
22	Ultrafast dynamics in monolayer transition metal dichalcogenides: Interplay of dark excitons, phonons, and intervalley exchange. Physical Review Research, 2019, 1, .	3.6	57
23	Internal structure and ultrafast dynamics of tailored excitons in van der Waals heterostructures. , 2019, , .		0
24	Exciton dynamics in atomically thin semiconductors: optical lineshape, intervalley coupling, and luminescence dynamics. , 2019, , .		0
25	Exciton broadening and band renormalization due to Dexter-like intervalley coupling. 2D Materials, 2018, 5, 025011.	4.4	15
26	Strain Control of Excitonâ€“Phonon Coupling in Atomically Thin Semiconductors. Nano Letters, 2018, 18, 1751-1757.	9.1	177
27	Dielectric Engineering of Electronic Correlations in a van der Waals Heterostructure. Nano Letters, 2018, 18, 1402-1409.	9.1	39
28	Dark and bright exciton formation, thermalization, and photoluminescence in monolayer transition metal dichalcogenides. 2D Materials, 2018, 5, 035017.	4.4	129
29	Theory of Excitonâ€“Exciton Interactions in Monolayer Transition Metal Dichalcogenides. Physica Status Solidi (B): Basic Research, 2018, 255, 1800185.	1.5	61
30	The role of momentum-dark excitons in the elementary optical response of bilayer WSe2. Nature Communications, 2018, 9, 2586.	12.8	70
31	Enhancement of Excitonâ€“Phonon Scattering from Monolayer to Bilayer WS₂. Nano Letters, 2018, 18, 6135-6143.	9.1	50
32	Exciton Relaxation Cascade in two-dimensional Transition Metal Dichalcogenides. Scientific Reports, 2018, 8, 8238.	3.3	82
33	Dark excitons in transition metal dichalcogenides. Physical Review Materials, 2018, 2, .	2.4	149
34	Molecule signatures in photoluminescence spectra of transition metal dichalcogenides. Physical Review Materials, 2018, 2, .	2.4	5
35	Phonon Sidebands in Monolayer Transition Metal Dichalcogenides. Physical Review Letters, 2017, 119, 187402.	7.8	136
36	Ultrafast Coulomb-Induced Intervalley Coupling in Atomically Thin WS₂. Nano Letters, 2016, 16, 2945-2950.	9.1	139

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37	Excitonic linewidth and coherence lifetime in monolayer transition metal dichalcogenides. Nature Communications, 2016, 7, 13279.	12.8	360
38	Terahertz-Induced Energy Transfer from Hot Carriers to Trions in a MoSe2 Monolayer. ACS Photonics, 0, , .	6.6	9