

# Tobias Korn

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9483274/publications.pdf>

Version: 2024-02-01

39

papers

3,276

citations

236925

25

h-index

302126

39

g-index

39

all docs

39

docs citations

39

times ranked

4510

citing authors

#	ARTICLE		IF	CITATIONS
1	Interlayer exciton valley polarization dynamics in large magnetic fields. Physical Review B, 2022, 105, .	3.2	11	
2	Fluence-dependent dynamics of localized excited species in monolayer versus bulk $\text{Mo}_{\text{S}_2}/\text{WSe}_2$ heterobilayers and their correlation with interlayer excitons. Physical Review B, 2021, 103, .	3.2	8	
3	Moiré phonons in twisted $\text{MoSe}_{\text{2}}$ / $\text{WSe}_{\text{2}}$ heterobilayers and their correlation with interlayer excitons. 2D Materials, 2021, 8, 035030.	4.4	29	
4	Ultrafast Charge-Transfer Dynamics in Twisted $\text{MoS}_{\text{2}}$ / $\text{WSe}_{\text{2}}$ Heterostructures. ACS Nano, 2021, 15, 14725-14731.	14.6	32	
5	Two-color Kerr microscopy of two-dimensional materials with sub-picosecond time resolution. Review of Scientific Instruments, 2021, 92, 113904.	1.3	2	
6	Air tightness of hBN encapsulation and its impact on Raman spectroscopy of van der Waals materials. 2D Materials, 2020, 7, 015012.	4.4	10	
7	Interlayer Excitons in Transition-Metal Dichalcogenide Heterobilayers. Physica Status Solidi (B): Basic Research, 2019, 256, 1900308.	1.5	15	
8	Tuning Spontaneous Emission through Waveguide Cavity Effects in Semiconductor Nanowires. Nano Letters, 2019, 19, 7287-7292.	9.1	3	
9	Ultrafast transition between exciton phases in van der Waals heterostructures. Nature Materials, 2019, 18, 691-696.	27.5	168	
10	Dielectric Engineering of Electronic Correlations in a van der Waals Heterostructure. Nano Letters, 2018, 18, 1402-1409.	9.1	39	
11	Lightwave valleytronics in a monolayer of tungsten diselenide. Nature, 2018, 557, 76-80.	27.8	201	
12	Momentum-space indirect interlayer excitons in transition-metal dichalcogenide van der Waals heterostructures. Nature Physics, 2018, 14, 801-805.	16.7	229	
13	Spatial extent of the excited exciton states in $\text{WS}_{\text{2}}$ monolayers from diamagnetic shifts. Physical Review B, 2018, 98, .	3.2	50	
14	Exciton Diffusion and Halo Effects in Monolayer Semiconductors. Physical Review Letters, 2018, 120, 207401.	7.8	193	
15	Asymmetric g Tensor in Low-Symmetry Two-Dimensional Hole Systems. Physical Review X, 2018, 8, .	8.9	8	
16	Zeeman Splitting and Inverted Polarization of Biexciton Emission in Monolayer $\text{WS}_{\text{2}}$ . Physical Review Letters, 2018, 121, 057402.	7.8	70	
17	Two-dimensional semiconductors in the regime of strong light-matter coupling. Nature Communications, 2018, 9, 2695.	12.8	256	
18	Valley-Polarized Exciton Dynamics in Exfoliated Monolayer $\text{WSe}_{\text{2}}$ . Journal of Physical Chemistry C, 2017, 121, 6409-6413.	3.1	25	

#	ARTICLE		IF	CITATIONS
19	Optical investigation of electrical spin injection into an inverted two-dimensional electron gas structure. <i>Physical Review B</i> , 2017, 95, .		3.2	5
20	Direct Observation of Ultrafast Exciton Formation in a Monolayer of WSe <sub>2</sub> . <i>Nano Letters</i> , 2017, 17, 1455-1460.		9.1	171
21	Spectral focusing of broadband silver electroluminescence in nanoscopic FRET-LEDs. <i>Nature Nanotechnology</i> , 2017, 12, 637-641.		31.5	18
22	Valley polarized relaxation and upconversion luminescence from Tamm-plasmon trionâ€“polaritons with a MoSe <sub>2</sub> monolayer. <i>2D Materials</i> , 2017, 4, 025096.		4.4	36
23	Interlayer exciton dynamics in a dichalcogenide monolayer heterostructure. <i>2D Materials</i> , 2017, 4, 025112.		4.4	146
24	Coulomb engineering of the bandgap and excitons in two-dimensional materials. <i>Nature Communications</i> , 2017, 8, 15251.		12.8	526
25	Valley dynamics of excitons in monolayer dichalcogenides. <i>Physica Status Solidi - Rapid Research Letters</i> , 2017, 11, 1700131.		2.4	19
26	Characterization of highly crystalline lead iodide nanosheets prepared by room-temperature solution processing. <i>Nanotechnology</i> , 2017, 28, 455703.		2.6	45
27	Long-lived spin polarization in n-doped MoSe <sub>2</sub> monolayers. <i>Applied Physics Letters</i> , 2017, 111, .		3.3	12
28	Highly Localized Strain in a MoS <sub>2</sub> /Au Heterostructure Revealed by Tip-Enhanced Raman Spectroscopy. <i>Nano Letters</i> , 2017, 17, 6027-6033.		9.1	91
29	Direct Observation of the Band Gap Transition in Atomically Thin ReS <sub>2</sub> . <i>Nano Letters</i> , 2017, 17, 5187-5192.		9.1	65
30	Giant magnetic splitting inducing near-unity valley polarization in van der Waals heterostructures. <i>Nature Communications</i> , 2017, 8, 1551.		12.8	105
31	Observation of macroscopic valley-polarized monolayer exciton-polaritons at room temperature. <i>Physical Review B</i> , 2017, 96, .		3.2	35
32	Polarized surface-enhanced Raman spectroscopy of suspended carbon nanotubes by Pt-Re nanoantennas. <i>Physical Review B</i> , 2017, 96, .		3.2	4
33	Neutral and charged inter-valley biexcitons in monolayer MoSe <sub>2</sub> . <i>Nature Communications</i> , 2017, 8, 15552.		12.8	159
34	Trion valley coherence in monolayer semiconductors. <i>2D Materials</i> , 2017, 4, 025105.		4.4	34
35	Deterministic transfer of spin polarization in wire-like lateral structures via the persistent spin helix. <i>Applied Physics Letters</i> , 2016, 109, .		3.3	6
36	Controlling the Spontaneous Emission Rate of Quantum Wells in Rolled-Up Hyperbolic Metamaterials. <i>Physical Review Letters</i> , 2016, 117, 085503.		7.8	29

#	ARTICLE	IF	CITATIONS
37	Excitonic Valley Effects in Monolayer WS <sub>2</sub> under High Magnetic Fields. <i>Nano Letters</i> , 2016, 16, 7899-7904.	9.1	114
38	Coherent and Incoherent Coupling Dynamics between Neutral and Charged Excitons in Monolayer MoSe <sub>2</sub> . <i>Nano Letters</i> , 2016, 16, 5109-5113.	9.1	78
39	Trion fine structure and coupled spin-valley dynamics in monolayer tungsten disulfide. <i>Nature Communications</i> , 2016, 7, 12715.	12.8	239