Steffen Michaelis de Vasconcellos

List of Publications by Year in Descending Order

72 papers	3,969 citations	29 h-index	62 g-index
89 ext. papers	4,771 ext. citations	7.3 avg, IF	5.18 L-index

#	Paper	IF	Citations
72	Composition-dependent ultrafast THz emission of spintronic CoFe/Pt thin films. *Applied Physics Letters*, **2022**, 120, 042404	3.4	1
71	Anisotropic exciton diffusion in atomically-thin semiconductors. *2D Materials*, **2022**, 9, 025008	5.9	1
70	Strain-dependent exciton diffusion in transition metal dichalcogenides. *2D Materials*, **2021**, 8, 015030	5.9	11
69	Assembly of large hBN nanocrystal arrays for quantum light emission. *2D Materials*, **2021**, 8, 035005	5.9	6
68	Dispersionless Propagation of Ultrashort Spin-Wave Pulses in Ultrathin Yttrium Iron Garnet Waveguides. *Physical Review Applied*, **2021**, 16,	4.3	3
67	Dark exciton anti-funneling in atomically thin semiconductors. *Nature Communications*, **2021**, 12, 7221	17.4	2
66	Dark trions govern the temperature-dependent optical absorption and emission of doped atomically thin semiconductors. *Physical Review B*, **2020**, 101,	3.3	21
65	Resonant photocurrent from a single quantum emitter in tungsten diselenide. *2D Materials*, **2020**, 7, 045021	5.9	2
64	Thermomagnetic control of spintronic THz emission enabled by ferrimagnets. *Applied Physics Letters*, **2020**, 116, 012402	3.4	16
63	Spin valves as magnetically switchable spintronic THz emitters. *Applied Physics Letters*, **2020**, 117, 132407	3.4	10
62	Strain tuning of the Stokes shift in atomically thin semiconductors. *Nanoscale*, **2020**, 12, 20786-20796	7.7	8
61	Theory of the Coherent Response of Magneto-Excitons and Magneto-Biexcitons in Monolayer Transition Metal Dichalcogenides. *Physical Review B*, **2020**, 102,	3.3	6
60	Interlayer excitons in bilayer MoS under uniaxial tensile strain. *Nanoscale*, **2019**, 11, 12788-12792	7.7	32
59	Thickness-Dependent Refractive Index of 1L, 2L, and 3L MoS2, MoSe2, WS2, and WSe2. *Advanced Optical Materials*, **2019**, 7, 1900239	8.1	80
58	Thickness determination of MoS2, MoSe2, WS2 and WSe2 on transparent stamps used for deterministic transfer of 2D materials. *Nano Research*, **2019**, 12, 1691-1695	10	30
57	Phonon-assisted emission and absorption of individual color centers in hexagonal boron nitride. *2D Materials*, **2019**, 6, 035006	5.9	36
56	Supercontinuum second harmonic generation spectroscopy of atomically thin semiconductors. *Review of Scientific Instruments*, **2019**, 90, 083102	1.7	8

55	Excited-State Trions in Monolayer WS_{2}. *Physical Review Letters*, **2019**, 123, 167401	7.4	32
54	Spintronic GdFe/Pt THz emitters. *Applied Physics Letters*, **2019**, 115, 152401	3.4	20
53	Ultrafast dynamics in monolayer transition metal dichalcogenides: Interplay of dark excitons, phonons, and intervalley exchange. *Physical Review Research*, **2019**, 1,	3.9	24
52	Zeeman spectroscopy of excitons and hybridization of electronic states in few-layer WSe 2 , MoSe 2 and MoTe 2. *2D Materials*, **2019**, 6, 015010	5.9	11
51	Exciton broadening and band renormalization due to Dexter-like intervalley coupling. *2D Materials*, **2018**, 5, 025011	5.9	12
50	Strain Control of Exciton-Phonon Coupling in Atomically Thin Semiconductors. *Nano Letters*, **2018**, 18, 1751-1757	11.5	121
49	Strain transfer across grain boundaries in MoS 2 monolayers grown by chemical vapor deposition. *2D Materials*, **2018**, 5, 031003	5.9	16
48	Inverted valley polarization in optically excited transition metal dichalcogenides. *Nature Communications*, **2018**, 9, 971	17.4	38
47	Exciton□phonon coupling in mono- and bilayer MoTe 2. *2D Materials*, **2018**, 5, 045007	5.9	17
46	Valley-contrasting optics of interlayer excitons in Mo- and W-based bulk transition metal dichalcogenides. *Nanoscale*, **2018**, 10, 15571-15577	7.7	18
45	Incorporation of oxygen atoms as a mechanism for photoluminescence enhancement of chemically treated MoS. *Physical Chemistry Chemical Physics*, **2018**, 20, 16918-16923	3.6	12
44	Thickness-Dependent Differential Reflectance Spectra of Monolayer and Few-Layer MoS□MoSe□ WS□and WSe□*Nanomaterials*, **2018**, 8,	5.4	106
43	Magnetic-Field-Dependent THz Emission of Spintronic TbFe/Pt Layers. *ACS Photonics*, **2018**, 5, 3936-3942	6.3	37
42	Single-photon emitters in GaSe. *2D Materials*, **2017**, 4, 021010	5.9	52
41	Highly Anisotropic in-Plane Excitons in Atomically Thin and Bulklike 1T∀ReSe. *Nano Letters*, **2017**, 17, 3202-3207	11.5	86
40	Biaxial strain tuning of the optical properties of single-layer transition metal dichalcogenides. *Npj 2D Materials and Applications*, **2017**, 1,	8.8	118
39	Phonon Sidebands in Monolayer Transition Metal Dichalcogenides. *Physical Review Letters*, **2017**, 119, 187402	7.4	100
38	Interlayer excitons in a bulk van der Waals semiconductor. *Nature Communications*, **2017**, 8, 639	17.4	52

37	On-Chip Waveguide Coupling of a Layered Semiconductor Single-Photon Source. *Nano Letters*, **2017**, 17, 5446-5451	11.5	52
36	Polarization contrast scattering spectroscopy of individual metal nanoantennas. *Applied Physics B: Lasers and Optics*, **2017**, 123, 1	1.9	
35	Single-Photon Emitters: Nanoscale Positioning of Single-Photon Emitters in Atomically Thin WSe2 (Adv. Mater. 33/2016). *Advanced Materials*, **2016**, 28, 7032-7032	24	3
34	Magnetic-Field-Induced Rotation of Polarized Light Emission from Monolayer WS_{2}. *Physical Review Letters*, **2016**, 117, 077402	7.4	63
33	Nanoantenna-controlled radiation pattern of the third-harmonic emission. *Applied Physics B: Lasers and Optics*, **2016**, 122, 1	1.9	3
32	Reversible uniaxial strain tuning in atomically thin WSe 2. *2D Materials*, **2016**, 3, 021011	5.9	89
31	Nanoscale Positioning of Single-Photon Emitters in Atomically Thin WSe2. *Advanced Materials*, **2016** , 28, 7101-5	24	121
30	Ultrafast Coulomb-Induced Intervalley Coupling in Atomically Thin WS2. *Nano Letters*, **2016**, 16, 2945-50	11.5	110
29	Nanoantenna-Enhanced Light–Matter Interaction in Atomically Thin WS2. *ACS Photonics*, **2015**, 2, 1260-1265	6.9	92
28	Single-photon emission from localized excitons in an atomically thin semiconductor. *Optica*, **2015**, 2, 347	8.6	290
27	Ultrafast spin dynamics in magnetic wide-bandgap semiconductors. *Physica Status Solidi (B): Basic Research*, **2014**, 251, 1685-1693	1.3	1
26	Photovoltaic and photothermoelectric effect in a double-gated WSe2 device. *Nano Letters*, **2014**, 14, 5846-52	11.5	186
25	Selective Raman modes and strong photoluminescence of gallium selenide flakes on sp2 carbon. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2014**, 32, 04E106	1.3	14
24	Photoluminescence emission and Raman response of monolayer MoS□MoSe□and WSe□*Optics Express*, **2013**, 21, 4908-16	3.3	1005
23	Bright solid-state sources of indistinguishable single photons. *Nature Communications*, **2013**, 4, 1425	17.4	257
22	Controlling spontaneous emission with plasmonic optical patch antennas. *Nano Letters*, **2013**, 13, 1516-21	11.5	177
21	Photoluminescence Emission and Raman Response of MoS2, MoSe2, and WSe2 Nanolayers **2013**,		3
20	Single photon source using confined Tamm plasmon modes. *Applied Physics Letters*, **2012**, 100, 232111	3.4	68

19	Coherent optoelectronics with quantum dots **2012**, 528-559		2
18	Spatial, spectral, and polarization properties of coupled micropillar cavities. *Applied Physics Letters*, **2011**, 99, 101103	3.4	37
17	Evidence for confined tamm plasmon modes under metallic microdisks and application to the control of spontaneous optical emission. *Physical Review Letters*, **2011**, 107, 247402	7.4	116
16	Electrically driven intentionally positioned single quantum dot. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 1182-1185		
15	Coherent control of a single exciton qubit by optoelectronic manipulation. *Nature Photonics*, **2010**, 4, 545-548	33.9	53
14	An intentionally positioned (In,Ga)As quantum dot in a micron sized light emitting diode. *Applied Physics Letters*, **2010**, 97, 143101	3.4	14
13	Intentionally positioned self-assembled InAs quantum dots in an electroluminescent p□n junction diode. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 2749-2752	3	7
12	Resonant photocurrent-spectroscopy of individual CdSe quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 2521-2523	3	2
11	Micro-Raman imaging and micro-photoluminescence measurements of strain in ZnMgSe/ZnSe microdiscs. *Microelectronics Journal*, **2009**, 40, 221-223	1.8	7
10	Exciton spectroscopy on single CdSe/ZnSe quantum dot photodiodes. *Microelectronics Journal*, **2009**, 40, 215-217	1.8	2
9	Coherent optoelectronics with single quantum dots. *Journal of Physics Condensed Matter*, **2008**, 20, 454210	2.18	4
8	p-Shell Rabi-flopping and single photon emission in an InGaAs/GaAs quantum dot. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 2004-2006	3	1
7	Single photon emission based on coherent state preparation. *Applied Physics Letters*, **2007**, 91, 111110	3.4	23
6	Quantum interferences of a single quantum dot in the case of detuning. *Physical Review B*, **2006**, 74,	3.3	1
5	High resolution photocurrent-spectroscopy of a single quantum dot. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 3722-3725		2
4	Quantum interferences of a single quantum dot in the case of detuning. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 3730-3733		
3	Recent developments in single dot coherent devices. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3696-3708	1.3	8
2	Ramsey fringes in a single InGaAs/GaAs quantum dot. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 2229-2232	1.3	

1 Single-photon emitters in layered van der Waals materials. *Physica Status Solidi (B): Basic Research*, 1.3 3