Steffen Michaelis de Vasconcellos

List of Publications by Year
in descending order

87	5,395	136950 32	88630 70
papers	citations	h-index	g-index

89	89	89	7833
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Photoluminescence emission and Raman response of monolayer MoS_2, MoSe_2, and WSe_2. Optics Express, 2013, 21, 4908.	3.4	1,241
2	Single-photon emission from localized excitons in an atomically thin semiconductor. Optica, 2015, 2, 347.	9.3	378
3	Bright solid-state sources of indistinguishable single photons. Nature Communications, 2013, 4, 1425.	12.8	309
4	Photovoltaic and Photothermoelectric Effect in a Double-Gated WSe₂ Device. Nano Letters, 2014, 14, 5846-5852.	9.1	232
5	Controlling Spontaneous Emission with Plasmonic Optical Patch Antennas. Nano Letters, 2013, 13, 1516-1521.	9.1	209
6	Biaxial strain tuning of the optical properties of single-layer transition metal dichalcogenides. Npj 2D Materials and Applications, 2017, 1, .	7.9	191
7	Strain Control of Excitonâ€“Phonon Coupling in Atomically Thin Semiconductors. Nano Letters, 2018, 18, 1751-1757.	9.1	177
8	Nanoscale Positioning of Singleâ€Photon Emitters in Atomically Thin WSe₂. Advanced Materials, 2016, 28, 7101-7105.	21.0	162
9	Thickness-Dependent Differential Reflectance Spectra of Monolayer and Few-Layer MoS2, MoSe2, WS2 and WSe2. Nanomaterials, 2018, 8, 725.	4.1	156
10	Thicknessâ€Dependent Refractive Index of 1L, 2L, and 3L MoS₂, MoSe₂, WS₂, and WSe₂. Advanced Optical Materials, 2019, 7, 1900239.	7.3	155
11	Ultrafast Coulomb-Induced Intervalley Coupling in Atomically Thin WS₂. Nano Letters, 2016, 16, 2945-2950.	9.1	139
12	Evidence for Confined Tamm Plasmon Modes under Metallic Microdisks and Application to the Control of Spontaneous Optical Emission. Physical Review Letters, 2011, 107, 247402.	7.8	136
13	Phonon Sidebands in Monolayer Transition Metal Dichalcogenides. Physical Review Letters, 2017, 119, 187402.	7.8	136
14	Highly Anisotropic in-Plane Excitons in Atomically Thin and Bulklike 1Tâ€²-ReSe₂. Nano Letters, 2017, 17, 3202-3207.	9.1	130
15	Reversible uniaxial strain tuning in atomically thin WSe ₂. 2D Materials, 2016, 3, 021011.	4.4	125
16	Nanoantenna-Enhanced Lightâ€“Matter Interaction in Atomically Thin WS₂. ACS Photonics, 2015, 2, 1260-1265.	6.6	114
17	Single photon source using confined Tamm plasmon modes. Applied Physics Letters, 2012, 100, .	3.3	77
18	Single-photon emitters in GaSe. 2D Materials, 2017, 4, 021010.	4.4	77

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19	Magnetic-Field-Induced Rotation of Polarized Light Emission from Monolayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>WS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2016, 117, 077402.	7.8	76
20	Interlayer excitons in a bulk van der Waals semiconductor. Nature Communications, 2017, 8, 639.	12.8	76
21	On-Chip Waveguide Coupling of a Layered Semiconductor Single-Photon Source. Nano Letters, 2017, 17, 5446-5451.	9.1	72
22	Coherent control of a single exciton qubit by optoelectronic manipulation. Nature Photonics, 2010, 4, 545-548.	31.4	66
23	Inverted valley polarization in optically excited transition metal dichalcogenides. Nature Communications, 2018, 9, 971.	12.8	59
24	Ultrafast dynamics in monolayer transition metal dichalcogenides: Interplay of dark excitons, phonons, and intervalley exchange. Physical Review Research, 2019, 1, .	3.6	57
25	Phonon-assisted emission and absorption of individual color centers in hexagonal boron nitride. 2D Materials, 2019, 6, 035006.	4.4	56
26	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></mml:m Physical Review Letters, 2019, 123, 167401.	7.8	56
27	Magnetic-Field-Dependent THz Emission of Spintronic TbFe/Pt Layers. ACS Photonics, 2018, 5, 3936-3942.	6.6	52
28	Interlayer excitons in bilayer MoS₂ under uniaxial tensile strain. Nanoscale, 2019, 11, 12788-12792.	5.6	47
29	Thickness determination of MoS2, MoSe2, WS2 and WSe2 on transparent stamps used for deterministic transfer of 2D materials. Nano Research, 2019, 12, 1691-1695.	10.4	46
30	Spatial, spectral, and polarization properties of coupled micropillar cavities. Applied Physics Letters, 2011, 99, 101103.	3.3	39
31	Dark trions govern the temperature-dependent optical absorption and emission of doped atomically thin semiconductors. Physical Review B, 2020, 101, .	3.2	39
32	Spintronic GdFe/Pt THz emitters. Applied Physics Letters, 2019, 115, .	3.3	35
33	Dark exciton anti-funneling in atomically thin semiconductors. Nature Communications, 2021, 12, 7221.	12.8	35
34	Excitonâ€“phonon coupling in mono- and bilayer MoTe ₂. 2D Materials, 2018, 5, 045007.	4.4	33
35	Valley-contrasting optics of interlayer excitons in Mo- and W-based bulk transition metal dichalcogenides. Nanoscale, 2018, 10, 15571-15577.	5.6	31
36	Thermomagnetic control of spintronic THz emission enabled by ferrimagnets. Applied Physics Letters, 2020, 116, .	3.3	28

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37	Assembly of large hBN nanocrystal arrays for quantum light emission. 2D Materials, 2021, 8, 035005.	4.4	25
38	Single photon emission based on coherent state preparation. Applied Physics Letters, 2007, 91, 111110.	3.3	24
39	Strain transfer across grain boundaries in MoS ₂ monolayers grown by chemical vapor deposition. 2D Materials, 2018, 5, 031003.	4.4	23
40	Zeeman spectroscopy of excitons and hybridization of electronic states in few-layer WSe ₂ , MoSe ₂ and MoTe ₂. 2D Materials, 2019, 6, 015010.	4.4	22
41	Strain-dependent exciton diffusion in transition metal dichalcogenides. 2D Materials, 2021, 8, 015030.	4.4	21
42	Singleâ€Photon Emitters in Layered Van der Waals Materials. Physica Status Solidi (B): Basic Research, 2022, 259, .	1.5	19
43	Single-Photon Emission from Individual Nanophotonic-Integrated Colloidal Quantum Dots. ACS Photonics, 2022, 9, 551-558.	6.6	18
44	An intentionally positioned (In,Ga)As quantum dot in a micron sized light emitting diode. Applied Physics Letters, 2010, 97, 143101.	3.3	17
45	Strain tuning of the Stokes shift in atomically thin semiconductors. Nanoscale, 2020, 12, 20786-20796.	5.6	17
46	Supercontinuum second harmonic generation spectroscopy of atomically thin semiconductors. Review of Scientific Instruments, 2019, 90, 083102.	1.3	16
47	Exciton broadening and band renormalization due to Dexter-like intervalley coupling. 2D Materials, 2018, 5, 025011.	4.4	15
48	Incorporation of oxygen atoms as a mechanism for photoluminescence enhancement of chemically treated MoS₂. Physical Chemistry Chemical Physics, 2018, 20, 16918-16923.	2.8	15
49	Spin valves as magnetically switchable spintronic THz emitters. Applied Physics Letters, 2020, 117, .	3.3	15
50	Selective Raman modes and strong photoluminescence of gallium selenide flakes on sp2carbon. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 04E106.	1.2	14
51	Recent developments in single dot coherent devices. Physica Status Solidi (B): Basic Research, 2006, 243, 3696-3708.	1.5	8
52	Micro-Raman imaging and micro-photoluminescence measurements of strain in ZnMgSe/ZnSe microdiscs. Microelectronics Journal, 2009, 40, 221-223.	2.0	8
53	Theory of the Coherent Response of Magneto-Excitons and Magneto-Biexcitons in Monolayer Transition Metal Dichalcogenides. Physical Review B, 2020, 102, .	3.2	8
54	Intentionally positioned self-assembled InAs quantum dots in an electroluminescent pâ€“iâ€“n junction diode. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2749-2752.	2.7	7

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55	Composition-dependent ultrafast THz emission of spintronic CoFe/Pt thin films. Applied Physics Letters, 2022, 120, .	3.3	7
56	Dispersionless Propagation of Ultrashort Spin-Wave Pulses in Ultrathin Yttrium Iron Garnet Waveguides. Physical Review Applied, 2021, 16, .	3.8	6
57	Photoluminescence Emission and Raman Response of MoS2, MoSe2, and WSe2 Nanolayers. , 2013, , .		5
58	Coherent optoelectronics with single quantum dots. Journal of Physics Condensed Matter, 2008, 20, 454210.	1.8	4
59	Resonant photocurrent from a single quantum emitter in tungsten diselenide. 2D Materials, 2020, 7, 045021.	4.4	4
60	Anisotropic exciton diffusion in atomically-thin semiconductors. 2D Materials, 2022, 9, 025008.	4.4	4
61	High resolution photocurrent-spectroscopy of a single quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3722-3725.	0.8	3
62	Single-Photon Emitters: Nanoscale Positioning of Single-Photon Emitters in Atomically Thin WSe2 (Adv. Mater. 33/2016). Advanced Materials, 2016, 28, 7032-7032.	21.0	3
63	Nanoantenna-controlled radiation pattern of the third-harmonic emission. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	3
64	Quantum interferences of a single quantum dot in the case of detuning. Physical Review B, 2006, 74, .	3.2	2
65	Exciton spectroscopy on single CdSe/ZnSe quantum dot photodiodes. Microelectronics Journal, 2009, 40, 215-217.	2.0	2
66	Resonant photocurrent-spectroscopy of individual CdSe quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2521-2523.	2.7	2
67	Coherent optoelectronics with quantum dots. , 2012, , 528-559.		2
68	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.	2.7	1
69	Ultrafast spin dynamics in magnetic wideâ€bandgap semiconductors. Physica Status Solidi (B): Basic Research, 2014, 251, 1685-1693.	1.5	1
70	Correction to Highly Anisotropic in-Plane Excitons in Atomically Thin and Bulklike 1Tâ€²-ReSe2. Nano Letters, 2017, 17, 7169-7169.	9.1	1
71	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.	0.8	0
72	Ramsey fringes in a single InGaAs/GaAs quantum dot. Physica Status Solidi (B): Basic Research, 2006, 243, 2229-2232.	1.5	0

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73	Controlling quantum bits. Nature Photonics, 2010, 4, 578-578.	31.4	0
74	Electrically driven intentionally positioned single quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1182-1185.	0.8	0
75	High purcell effect and directional emission for semi-conductor nanocrystals deterministically positionned in a plasmonic patch antenna. , 2013, , .		0
76	Nanoantenna-enhanced light-matter interaction in atomically thin WS2. , 2015, , .		0
77	Polarization contrast scattering spectroscopy of individual metal nanoantennas. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	0
78	Single-photon emitters in GaSe. , 2017, , .		0
79	Rotation of polarized light emission from monolayer WS2 induced by high magnetic fields. , 2017, , .		0
80	Deterministic positioning of single-photon emitters in monolayer WSe<inf>2</inf> on the nanoscale. , 2017, , .		0
81	Correction to â€œMagnetic-Field-Dependent THz Emission of Spintronic TbFe/Pt Layersâ€• ACS Photonics, 2019, 6, 2366-2367.	6.6	0
82	Switchable ultrafast spintronic THz emitters. , 2021, , .		0
83	Cavity quantum electrodynamics with semiconductor quantum dots. , 2013, , .		0
84	Ultrafast Coulomb Intervalley Interaction in Monolayer WS2. , 2015, , .		0
85	Single Photon Emission from Localized Excitons in Monolayer WSe₂. , 2015, , .		0
86	Spintronic GdFe/Pt THz Emitter Systems. , 2020, , .		0
87	Capillary assembly of large arrays of hBN single-photon emitters. , 2021, , .		0