# Xavier Marie

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6114782/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 37 papers | 5,956 citations | 147801 31 h-index | 345221 36 g-index |
| 37 all docs | 37 docs citations | 37 times ranked | 6064 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Colloquium : Excitons in atomically thin transition metal dichalcogenides. Reviews of Modern Physics, 2018, 90, . | 45.6 | 1,292 |
| 2 | Giant Enhancement of the Optical Second-Harmonic Emission of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ by Laser Excitation at Exciton Resonances. Physical Review Letters, 2015, 114, 097403. | 7.8 | 464 |
| 3 | Robust optical emission polarization in MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>monolayers through selective valley excitation. Physical Review B, 2012, 86, . | 3.2 | 385 |
| 4 | Strain tuning of optical emission energy and polarization in monolayer and bilayer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 88, . | 3.2 | 365 |
| 5 | Exciton radiative lifetime in transition metal dichalcogenide monolayers. Physical Review B, 2016, 93, . | 3.2 | 335 |
| 6 | Carrier and Polarization Dynamics in Monolayer<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></ Physical Review Letters, 2014, 112, 047401. | 7.8 | 317 |
| 7 | In-Plane Propagation of Light in Transition Metal Dichalcogenide Monolayers: Optical Selection Rules. Physical Review Letters, 2017, 119, 047401. | 7.8 | 257 |
| 8 | Splitting between bright and dark excitons in transition metal dichalcogenide monolayers. Physical Review B, 2016, 93, . | 3.2 | 212 |
| 9 | Charged excitons in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WSe</mml:mi><mml:mn>2</mml:mn></mml:msub></ : Experiment and theory. Physical Review B, 2017, 96, . | 3.2 | 207 |
| 10 | Revealing exciton masses and dielectric properties of monolayer semiconductors with high magnetic fields. Nature Communications, 2019, 10, 4172. | 12.8 | 179 |
| 11 | Spin-orbit engineering in transition metal dichalcogenide alloy monolayers. Nature Communications, 2015, 6, 10110. | 12.8 | 176 |
| 12 | Fine structure and lifetime of dark excitons in transition metal dichalcogenide monolayers. Physical Review B, 2017, 96, . | 3.2 | 141 |
| 13 | Control of Exciton Valley Coherence in Transition Metal Dichalcogenide Monolayers. Physical Review Letters, 2016, 117, 187401. | 7.8 | 126 |
| 14 | Spin Quantum Beats of 2D Excitons. Physical Review Letters, 1997, 78, 1355-1358. | 7.8 | 124 |
| 15 | Enabling valley selective exciton scattering in monolayer WSe2 through upconversion. Nature Communications, 2017, 8, 14927. | 12.8 | 124 |
| 16 | Exciton diffusion in WSe2 monolayers embedded in a van der Waals heterostructure. Applied Physics Letters, 2018, 112, . | 3.3 | 114 |
| 17 | Gate-Controlled Spin-Valley Locking of Resident Carriers in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ Monolayers. Physical Review Letters, 2017, 119, 137401. | 7.8 | 107 |
| 18 | Observation of exciton-phonon coupling 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></ monolayers. Physical Review B, 2018, 98, . | 3.2 | 103 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Interlayer excitons in bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> with strong oscillator strength up to room temperature. Physical Review B, 2019, 99, . | 3.2 | 88 |
| 20 | Measurement of the spin-forbidden dark excitons in MoS2 and MoSe2 monolayers. Nature Communications, 2020, 11, 4037. | 12.8 | 86 |
| 21 | Control of the Exciton Radiative Lifetime in van der Waals Heterostructures. Physical Review Letters, 2019, 123, 067401. | 7.8 | 85 |
| 22 | High optical quality of MoS <sub>2</sub> monolayers grown by chemical vapor deposition. 2D Materials, 2020, 7, 015011. | 4.4 | 76 |
| 23 | Optical spectroscopy of excited exciton states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> monolayers in van der Waals heterostructures. Physical Review Materials, 2018, 2, . | 3.1 | 74 |
| 24 | Controlling interlayer excitons in MoS2 layers grown by chemical vapor deposition. Nature Communications, 2020, 11, 2391. | 12.8 | 73 |
| 25 | Giant Stark splitting of an exciton in bilayer MoS2. Nature Nanotechnology, 2020, 15, 901-907. | 31.5 | 72 |
| 26 | Exciton states in monolayer MoSe <sub>2</sub> : impact on interband transitions. 2D Materials, 2015, 2, 045005. | 4.4 | 71 |
| 27 | Excitonic properties of semiconducting monolayer and bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>MoT</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 94, . | 3.2 | 60 |
| 28 | Intrinsic exciton-state mixing and nonlinear optical properties in transition metal dichalcogenide monolayers. Physical Review B, 2017, 95, . | 3.2 | 60 |
| 29 | Guide to optical spectroscopy of layered semiconductors. Nature Reviews Physics, 2021, 3, 39-54. | 26.6 | 41 |
| 30 | Interlayer exciton mediated second harmonic generation in bilayer MoS2. Nature Communications, 2021, 12, 6894. | 12.8 | 38 |
| 31 | Efficient phonon cascades in WSe2 monolayers. Nature Communications, 2021, 12, 538. | 12.8 | 34 |
| 32 | Exciton valley depolarization in monolayer transition-metal dichalcogenides. Physical Review B, 2020, 101, . | 3.2 | 23 |
| 33 | Unveiling the Optical Emission Channels of Monolayer Semiconductors Coupled to Silicon Nanoantennas. ACS Photonics, 2020, 7, 3106-3115. | 6.6 | 16 |
| 34 | Control of the exciton valley dynamics in atomically thin semiconductors by tailoring the environment. Physical Review B, 2021, 103, . | 3.2 | 15 |
| 35 | Second harmonic generation control in twisted bilayers of transition metal dichalcogenides. Physical Review B, 2022, 105, . | 3.2 | 15 |
| 36 | Time-Resolved Optical Spectroscopy. Springer Series in Materials Science, 2012, , 223-258. | 0.6 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Spin dependent charge transfer in MoSe<sub>2</sub>/hBN/Ni hybrid structures. Applied Physics Letters, 2021, 119, 263103. | 3.3 | 0 |