

Tomoki Machida

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3323979/tomoki-machida-publications-by-citations.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

54
papers

1,162
citations

20
h-index

33
g-index

61
ext. papers

1,431
ext. citations

5.6
avg, IF

4.64
L-index

#	Paper	IF	Citations
54	Autonomous robotic searching and assembly of two-dimensional crystals to build van der Waals superlattices. <i>Nature Communications</i> , 2018 , 9, 1413	17.4	129
53	Large current modulation in exfoliated-graphene/MoS ₂ /metal vertical heterostructures. <i>Applied Physics Letters</i> , 2014 , 105, 083119	3.4	91
52	Electrical Spin Injection into Graphene through Monolayer Hexagonal Boron Nitride. <i>Applied Physics Express</i> , 2013 , 6, 073001	2.4	80
51	Cubic Rashba spin-orbit interaction of a two-dimensional hole gas in a strained-Ge/SiGe quantum well. <i>Physical Review Letters</i> , 2014 , 113, 086601	7.4	75
50	Electric field modulation of Schottky barrier height in graphene/MoSe ₂ van der Waals heterointerface. <i>Applied Physics Letters</i> , 2015 , 107, 023109	3.4	66
49	Atomic force microscopy based tunable local anodic oxidation of graphene. <i>Nano Letters</i> , 2011 , 11, 4542-4546	6.5	64
48	Suppression of exciton-exciton annihilation in tungsten disulfide monolayers encapsulated by hexagonal boron nitrides. <i>Physical Review B</i> , 2017 , 95,	3.3	58
47	Supercurrent in van der Waals Josephson junction. <i>Nature Communications</i> , 2016 , 7, 10616	17.4	44
46	Deep-learning-based image segmentation integrated with optical microscopy for automatically searching for two-dimensional materials. <i>Npj 2D Materials and Applications</i> , 2020 , 4,	8.8	42
45	Boundary scattering in ballistic graphene. <i>Physical Review Letters</i> , 2012 , 109, 036601	7.4	41
44	Construction of van der Waals magnetic tunnel junction using ferromagnetic layered dichalcogenide. <i>Applied Physics Letters</i> , 2015 , 107, 103107	3.4	34
43	Classifying optical microscope images of exfoliated graphene flakes by data-driven machine learning. <i>Npj 2D Materials and Applications</i> , 2019 , 3,	8.8	31
42	Dry release transfer of graphene and few-layer h-BN by utilizing thermoplasticity of polypropylene carbonate. <i>Npj 2D Materials and Applications</i> , 2019 , 3,	8.8	30
41	Exfoliation and van der Waals heterostructure assembly of intercalated ferromagnet Cr 1/3 TaS ₂ . <i>2D Materials</i> , 2017 , 4, 041007	5.9	27
40	Tunneling transport in a few monolayer-thick WS ₂ /graphene heterojunction. <i>Applied Physics Letters</i> , 2014 , 105, 223109	3.4	27
39	Assembly of van der Waals heterostructures: exfoliation, searching, and stacking of 2D materials. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, 010101	1.4	27
38	Imaging ballistic carrier trajectories in graphene using scanning gate microscopy. <i>Applied Physics Letters</i> , 2015 , 107, 243102	3.4	23

37	N- and p-type carrier injections into WSe ₂ with van der Waals contacts of two-dimensional materials. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 04CK09	1.4	22
36	Edge-channel interferometer at the graphene quantum Hall pn junction. <i>Applied Physics Letters</i> , 2015 , 106, 183101	3.4	22
35	Modulation of Schottky barrier height in graphene/MoS ₂ /metal vertical heterostructure with large current ON/OFF ratio. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 04DJ04	1.4	22
34	Influence of the density of states of graphene on the transport properties of graphene/MoS ₂ /metal vertical field-effect transistors. <i>Applied Physics Letters</i> , 2015 , 106, 223103	3.4	19
33	3D Manipulation of 2D Materials Using Microdome Polymer. <i>Nano Letters</i> , 2020 , 20, 2486-2492	11.5	19
32	Fabrication and Characterization of High-Mobility Graphene p ⁺⁺ n Junctions Encapsulated by Hexagonal Boron Nitride. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 110105	1.4	19
31	Dirac fermion reflector by ballistic graphene sawtooth-shaped npn junctions. <i>Semiconductor Science and Technology</i> , 2017 , 32, 045010	1.8	13
30	Photovoltaic infrared photoresponse of the high-mobility graphene quantum Hall system due to cyclotron resonance. <i>Physical Review B</i> , 2013 , 88,	3.3	13
29	Optical coupling between atomically thin black phosphorus and a two dimensional photonic crystal nanocavity. <i>Applied Physics Letters</i> , 2017 , 110, 223105	3.4	11
28	Carbon-Rich Domain in Hexagonal Boron Nitride: Carrier Mobility Degradation and Anomalous Bending of the Landau Fan Diagram in Adjacent Graphene. <i>Nano Letters</i> , 2019 , 19, 7282-7286	11.5	11
27	Superconducting proximity effect in a NbSe ₂ /graphene van der Waals junction. <i>Physical Review B</i> , 2020 , 101,	3.3	11
26	Intersubband Landau Level Couplings Induced by In-Plane Magnetic Fields in Trilayer Graphene. <i>Physical Review Letters</i> , 2017 , 119, 186802	7.4	9
25	Observation of Half-Integer Quantum Hall Effect in Single-Layer Graphene Using Pulse Magnet. <i>Journal of the Physical Society of Japan</i> , 2008 , 77, 113707	1.5	9
24	Hexagonal Boron Nitride Synthesized at Atmospheric Pressure Using Metal Alloy Solvents: Evaluation as a Substrate for 2D Materials. <i>Nano Letters</i> , 2020 , 20, 735-740	11.5	7
23	Photo-thermoelectric detection of cyclotron resonance in asymmetrically carrier-doped graphene two-terminal device. <i>Applied Physics Letters</i> , 2018 , 113, 103102	3.4	7
22	Dynamic Nuclear Polarization in a Quantum Hall Corbino Disk. <i>Journal of the Physical Society of Japan</i> , 2008 , 77, 023710	1.5	6
21	Emergence of orbital angular moment at van Hove singularity in graphene/h-BN moiré superlattice. <i>Nature Communications</i> , 2020 , 11, 5380	17.4	6
20	Rhenium dinitride: Carrier transport in a novel transition metal dinitride layered crystal. <i>APL Materials</i> , 2019 , 7, 101103	5.7	5

19	Low-temperature p-type ohmic contact to WSe ₂ using p+-MoS ₂ /WSe ₂ van der Waals interface. <i>Applied Physics Letters</i> , 2020 , 117, 153101	3.4	5
18	Resonant Tunneling Due to van der Waals Quantum-Well States of Few-Layer WSe in WSe/h-BN/p-MoS Junction. <i>Nano Letters</i> , 2021 , 21, 3929-3934	11.5	5
17	Cyclotron Resonance Study of Monolayer Graphene under Double Moiré Potentials. <i>Nano Letters</i> , 2020 , 20, 4566-4572	11.5	4
16	Carbon annealed HPHT-hexagonal boron nitride: Exploring defect levels using 2D materials combined through van der Waals interface. <i>Carbon</i> , 2020 , 167, 785-791	10.4	4
15	Selective etching of hexagonal boron nitride by high-pressure CF ₄ plasma for individual one-dimensional ohmic contacts to graphene layers. <i>Applied Physics Letters</i> , 2020 , 117, 243101	3.4	4
14	Photo-Nernst detection of cyclotron resonance in partially irradiated graphene. <i>Applied Physics Letters</i> , 2019 , 115, 153102	3.4	3
13	Edge-Channel Transport of Dirac Fermions in Graphene Quantum Hall Junctions. <i>Journal of the Physical Society of Japan</i> , 2015 , 84, 121007	1.5	3
12	Effect of a pick-and-drop process on optical properties of a CVD-grown monolayer tungsten disulfide. <i>Physical Review Materials</i> , 2018 , 2,	3.2	3
11	Dark-state impact on the exciton recombination of WS ₂ monolayers as revealed by multi-timescale pump-probe spectroscopy. <i>Physical Review B</i> , 2020 , 102,	3.3	2
10	Heat transfer at the van der Waals interface between graphene and NbSe ₂ . <i>Physical Review B</i> , 2018 , 98,	3.3	2
9	Mid-infrared Photodetection Using Cyclotron Resonance in Graphene/h-BN van der Waals Heterostructures. <i>Sensors and Materials</i> , 2019 , 31, 2281	1.5	2
8	Detection of cyclotron resonance using photo-induced thermionic emission at graphene/MoS ₂ van der Waals interface. <i>Applied Physics Letters</i> , 2019 , 115, 143101	3.4	1
7	Electrical Control of Cyclotron Resonance in Dual-Gated Trilayer Graphene. <i>Nano Letters</i> , 2019 , 19, 8097-8102	11.5	1
6	Subband-resolved momentum-conserved resonant tunneling in monolayer graphene/h-BN/ABA-trilayer graphene small-twist-angle tunneling device. <i>Applied Physics Letters</i> , 2022 , 120, 083102	3.4	1
5	Resonant Tunneling between Quantized Subbands in van der Waals Double Quantum Well Structure Based on Few-Layer WSe ₂ . <i>Nano Letters</i> ,	11.5	1
4	Switchable out-of-plane shift current in ferroelectric two-dimensional material CuInP ₂ S ₆ . <i>Applied Physics Letters</i> , 2022 , 120, 013103	3.4	0
3	Coherent Carrier Transport in Graphene npn Junctions. <i>Hyomen Kagaku</i> , 2015 , 36, 124-128		
2	Comparison of magnetoresistances of triangular and rectangular ballistic graphene npn junctions. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 100305	1.4	

- 1 Defect-assisted tunneling spectroscopy of electronic band structure in twisted bilayer graphene/hexagonal boron nitride moiré superlattices. *Applied Physics Letters*, **2022**, 120, 203103 34