Takashi Taniguchi

List of Publications by Year in Descending Order

1,443 papers	90,368 citations	135 h-index	265 g-index
1,641 ext. papers	119,243 ext. citations	13.4 avg, IF	8.6 L-index

#	Paper	IF	Citations
1443	Out-of-equilibrium criticalities in graphene superlattices.. *Science*, **2022**, 375, 430-433	33.3	1
1442	Gate-Tunable Transport in Quasi-One-Dimensional □Bi Field Effect Transistors.. *Nano Letters*, **2022**,	11.5	2
1441	Isospin magnetism and spin-polarized superconductivity in Bernal bilayer graphene.. *Science*, **2022**, 375, eabm8386	33.3	12
1440	Switchable out-of-plane shift current in ferroelectric two-dimensional material CuInP2S6. *Applied Physics Letters*, **2022**, 120, 013103	3.4	0
1439	Tunable Spin Injection in High-Quality Graphene with One-Dimensional Contacts.. *Nano Letters*, **2022**,	11.5	2
1438	Probing dark exciton navigation through a local strain landscape in a WSe monolayer.. *Nature Communications*, **2022**, 13, 232	17.4	8
1437	Spatially indirect intervalley excitons in bilayer WSe2. *Physical Review B*, **2022**, 105,	3.3	2
1436	Magnetic Phase Transitions and Magnetoelastic Coupling in a Two-Dimensional Stripy Antiferromagnet.. *Nano Letters*, **2022**,	11.5	4
1435	Interlayer exciton complexes in bilayer MoS2. *Physical Review B*, **2022**, 105,	3.3	3
1434	Interfacial ferroelectricity in rhombohedral-stacked bilayer transition metal dichalcogenides.. *Nature Nanotechnology*, **2022**,	28.7	13
1433	Observation of ballistic upstream modes at fractional quantum Hall edges of graphene.. *Nature Communications*, **2022**, 13, 213	17.4	0
1432	Crossover between strongly coupled and weakly coupled exciton superfluids.. *Science*, **2022**, 375, 205-209	33.3	4
1431	Enhancing Perpendicular Magnetic Anisotropy in Garnet Ferrimagnet by Interfacing with Few-Layer WTe.. *Nano Letters*, **2022**,	11.5	2
1430	Positron charge sensing using a double-gated graphene field effect transistor.. *Review of Scientific Instruments*, **2022**, 93, 015002	1.7	
1429	Visualizing broken symmetry and topological defects in a quantum Hall ferromagnet. *Science*, **2022**, 375, 321-326	33.3	9
1428	Spin-orbit-driven ferromagnetism at half moir□filling in magic-angle twisted bilayer graphene.. *Science*, **2022**, 375, eabh2889	33.3	7
1427	Hexagonal boron nitride as a low-loss dielectric for superconducting quantum circuits and qubits.. *Nature Materials*, **2022**,	27	4

1426	Raman spectra of twisted bilayer graphene close to the magic angle. *2D Materials*, **2022**, 9, 025007	5.9	3
1425	Enhanced Performance of WS Field-Effect Transistor through Mono and Bilayer h-BN Tunneling Contacts.. *Small*, **2022**, e2105753	11	2
1424	Pauli Blockade of Tunable Two-Electron Spin and Valley States in Graphene Quantum Dots.. *Physical Review Letters*, **2022**, 128, 067702	7.4	2
1423	Scattering between Minivalleys in Twisted Double Bilayer Graphene.. *Physical Review Letters*, **2022**, 128, 057702	7.4	0
1422	Excitonic transport driven by repulsive dipolar interaction in a van der Waals heterostructure.. *Nature Photonics*, **2022**, 16, 79-85	33.9	5
1421	Evidence for a monolayer excitonic insulator. *Nature Physics*, **2022**, 18, 87-93	16.2	6
1420	High-mobility p-channel wide-bandgap transistors based on hydrogen-terminated diamond/hexagonal boron nitride heterostructures. *Nature Electronics*, **2022**, 5, 37-44	28.4	16
1419	In-situ twistable bilayer graphene.. *Scientific Reports*, **2022**, 12, 204	4.9	1
1418	Evidence for a single-layer van der Waals multiferroic.. *Nature*, **2022**, 602, 601-605	50.4	12
1417	Enhanced Radiative Exciton Recombination in Monolayer WS2 on the hBN Substrate Competing with Nonradiative Exciton–Exciton Annihilation. *ACS Photonics*, **2022**, 9, 873-879	6.3	2
1416	Tunable angle-dependent electrochemistry at twisted bilayer graphene with moiré flat bands.. *Nature Chemistry*, **2022**,	17.6	11
1415	Spatiotemporally controlled room-temperature exciton transport under dynamic strain. *Nature Photonics*, **2022**, 16, 242-247	33.9	2
1414	Hybridized Exciton-Photon-Phonon States in a Transition Metal Dichalcogenide van der Waals Heterostructure Microcavity.. *Physical Review Letters*, **2022**, 128, 087401	7.4	2
1413	Breakdown of semiclassical description of thermoelectricity in near-magic angle twisted bilayer graphene.. *Nature Communications*, **2022**, 13, 1522	17.4	0
1412	Giant Photoresponse Enhancement in Mixed-Dimensional Van der Waals Heterostructure through Dielectric Engineering (Adv. Mater. Interfaces 9/2022). *Advanced Materials Interfaces*, **2022**, 9, 2270048	4.6	
1411	Spin-Phonon Coupling in Ferromagnetic Monolayer Chromium Tribromide.. *Advanced Materials*, **2022**, e2108506	24	1
1410	Magnon-Coupled Intralayer Moiré Trion in Monolayer Semiconductor-Antiferromagnet Heterostructures.. *Advanced Materials*, **2022**, e2200301	24	1
1409	Visualization of Dark Excitons in Semiconductor Monolayers for High-Sensitivity Strain Sensing.. *Nano Letters*, **2022**,	11.5	2

1408	Structure of the moiré exciton captured by imaging its electron and hole.. *Nature*, **2022**, 603, 247-252	50.4	3
1407	Tunable and giant valley-selective Hall effect in gapped bilayer graphene.. *Science*, **2022**, 375, 1398-1402	33.3	2
1406	Spectroscopy signatures of electron correlations in a trilayer graphene/hBN moiré superlattice.. *Science*, **2022**, 375, 1295-1299	33.3	2
1405	Long-range transport of 2D excitons with acoustic waves.. *Nature Communications*, **2022**, 13, 1334	17.4	3
1404	Quasi 1D Electronic Transport in a 2D Magnetic Semiconductor.. *Advanced Materials*, **2022**, e2109759	24	5
1403	Steady Floquet-Andreev states in graphene Josephson junctions.. *Nature*, **2022**, 603, 421-426	50.4	0
1402	Spin-Valley Relaxation and Exciton-Induced Depolarization Dynamics of Landau-Quantized Electrons in MoSe_{2} Monolayer.. *Physical Review Letters*, **2022**, 128, 127402	7.4	
1401	A monolithically sculpted van der Waals nano-opto-electro-mechanical coupler.. *Light: Science and Applications*, **2022**, 11, 48	16.7	0
1400	Nitrogen concentration control in diamonds grown in Co(Fe)Ti/Al solvents under high-pressure and high-temperature. *Japanese Journal of Applied Physics*, **2022**, 61, 045507	1.4	2
1399	Mechanisms of Interface Cleaning in Heterostructures Made from Polymer-Contaminated Graphene.. *Small*, **2022**, e2201248	11	2
1398	Orderly disorder in magic-angle twisted trilayer graphene.. *Science*, **2022**, 376, 193-199	33.3	8
1397	Non-invasive digital etching of van der Waals semiconductors.. *Nature Communications*, **2022**, 13, 1844	17.4	1
1396	All About the Interface: Do Residual Contaminants at A High-Quality h-BN Monolayer Perylene Diimide Interface Cause Charge Trapping? (Adv. Mater. Interfaces 10/2022). *Advanced Materials Interfaces*, **2022**, 9, 2270056	4.6	
1395	Topological charge density waves at half-integer filling of a moiré superlattice. *Nature Physics*, **2022**, 18, 42-47	16.2	5
1394	Moiré hematic phase in twisted double bilayer graphene. *Nature Physics*, **2022**, 18, 196-202	16.2	10
1393	In-Plane Field-Driven Excitonic Electro-Optic Modulation in Monolayer Semiconductor. *Advanced Optical Materials*, **2022**, 10, 2102132	8.1	1
1392	Band Structure Engineering of WSe 2 Homo-Junction Interfaces via Thickness Control. *Advanced Materials Interfaces*, **2022**, 9, 2101763	4.6	1
1391	Bulk and edge properties of twisted double bilayer graphene. *Nature Physics*, **2022**, 18, 48-53	16.2	1

1390	Thermodynamics of free and bound magnons in graphene. *Nature Physics*, **2022**, 18, 37-41	16.2	1
1389	Intelligent infrared sensing enabled by tunable moir quantum geometry.. *Nature*, **2022**, 604, 266-272	50.4	7
1388	Dissipation-enabled hydrodynamic conductivity in a tunable bandgap semiconductor.. *Science Advances*, **2022**, 8, eabi8481	14.3	1
1387	The effect of dielectric environment on the brightening of neutral and charged dark excitons in WSe2 monolayer. *Applied Physics Letters*, **2022**, 120, 163101	3.4	0
1386	Unusual magnetotransport in twisted bilayer graphene.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2118482119	11.5	2
1385	Light-induced ferromagnetism in moir superlattices.. *Nature*, **2022**, 604, 468-473	50.4	5
1384	Optical absorption of interlayer excitons in transition-metal dichalcogenide heterostructures.. *Science*, **2022**, 376, 406-410	33.3	7
1383	Nanoscale solid-state nuclear quadrupole resonance spectroscopy using depth-optimized nitrogen-vacancy ensembles in diamond. *Applied Physics Letters*, **2022**, 120, 174002	3.4	0
1382	One-dimensional Luttinger liquids in a two-dimensional moir lattice.. *Nature*, **2022**, 605, 57-62	50.4	1
1381	Tunable multi-bands in twisted double bilayer graphene. *2D Materials*, **2022**, 9, 034001	5.9	0
1380	Twisted black phosphorus-based van der Waals stacks for fiber-integrated polarimeters.. *Science Advances*, **2022**, 8, eabo0375	14.3	3
1379	Imaging tunable quantum Hall broken-symmetry orders in graphene.. *Nature*, **2022**, 605, 51-56	50.4	3
1378	Imaging of Submicroampere Currents in Bilayer Graphene Using a Scanning Diamond Magnetometer. *Physical Review Applied*, **2022**, 17,	4.3	4
1377	Waveguide-Coupled Disk Resonators Fabricated from Hexagonal Boron Nitride. *NATO Science for Peace and Security Series B: Physics and Biophysics*, **2022**, 325-327	0.2	
1376	Catalytic growth of ultralong graphene nanoribbons on insulating substrates.. *Advanced Materials*, **2022**, e2200956	24	0
1375	Defect-assisted tunneling spectroscopy of electronic band structure in twisted bilayer graphene/hexagonal boron nitride moir superlattices. *Applied Physics Letters*, **2022**, 120, 203103	3.4	
1374	Boosting quantum yields in two-dimensional semiconductors via proximal metal plates. *Nature Communications*, **2021**, 12, 7095	17.4	1
1373	Fractional Chern insulators in magic-angle twisted bilayer graphene.. *Nature*, **2021**, 600, 439-443	50.4	11

1372	Quantum anomalous Hall effect from intertwined moiré bands.. *Nature*, **2021**, 600, 641-646	50.4	18
1371	Probing Two-Electron Multiplets in Bilayer Graphene Quantum Dots.. *Physical Review Letters*, **2021**, 127, 256802	7.4	3
1370	Exposing the trion's fine structure by controlling the carrier concentration in hBN-encapsulated MoS. *Nanoscale*, **2021**, 13, 18726-18733	7.7	2
1369	Spin photovoltaic effect in magnetic van der Waals heterostructures. *Science Advances*, **2021**, 7, eabg8094	14.3	0
1368	Spatial coherence of room-temperature monolayer WSe exciton-polaritons in a trap. *Nature Communications*, **2021**, 12, 6406	17.4	7
1367	Gate-Controlled Supercurrent in Epitaxial Al/InAs Nanowires. *Nano Letters*, **2021**, 21, 9684-9690	11.5	2
1366	Upconversion of Light into Bright Intravalley Excitons via Dark Intervalley Excitons in hBN-Encapsulated WSe Monolayers. *ACS Nano*, **2021**,	16.7	4
1365	Spectral asymmetry of phonon sideband luminescence in monolayer and bilayer WSe2. *Physical Review Research*, **2021**, 3,	3.9	3
1364	Competing Zero-Field Chern Insulators in Superconducting Twisted Bilayer Graphene. *Physical Review Letters*, **2021**, 127, 197701	7.4	11
1363	Orbital gating driven by giant Stark effect in tunneling phototransistors. *Advanced Materials*, **2021**, e2106625	24	1
1362	Coexisting ferromagnetic-antiferromagnetic state in twisted bilayer CrI. *Nature Nanotechnology*, **2021**,	28.7	14
1361	Non-Local Electrostatic Gating Effect in Graphene Revealed by Infrared Nano-Imaging. *Small*, **2021**, e2105687	13	1
1360	Miniaturizing Transmon Qubits Using van der Waals Materials. *Nano Letters*, **2021**, 21, 10122-10126	11.5	3
1359	Magnetization dependent tunneling conductance of ferromagnetic barriers. *Nature Communications*, **2021**, 12, 6659	17.4	0
1358	Prominent Verway Transition of Fe3O4 Thin Films Grown on Transferable Hexagonal Boron Nitride. *ACS Applied Electronic Materials*, **2021**, 3, 5031-5036	4	1
1357	Interlayer exciton mediated second harmonic generation in bilayer MoS. *Nature Communications*, **2021**, 12, 6894	17.4	7
1356	Multiterminal Inverse AC Josephson Effect. *Nano Letters*, **2021**, 21, 9668-9674	11.5	1
1355	Light helicity detector based on 2D magnetic semiconductor CrI. *Nature Communications*, **2021**, 12, 6874	17.4	4

1354	Direct visualization of magnetic domains and moir magnetism in twisted 2D magnets. *Science*, **2021**, 374, 1140-1144	33.3	21
1353	Phonon engineering of boron nitride via isotopic enrichment. *Journal of Materials Research*, **2021**, 36, 4394-4403	2.5	0
1352	Versatile Post-Doping toward Two-Dimensional Semiconductors. *ACS Nano*, **2021**,	16.7	4
1351	Crystalline boron monosulfide nanosheets with tunable bandgaps. *Journal of Materials Chemistry A*, **2021**, 9, 24631-24640	13	3
1350	Generation of High-Density Quantum Emitters in High-Quality, Exfoliated Hexagonal Boron Nitride. *ACS Applied Materials & Interfaces*, **2021**, 13, 47283-47292	9.5	2
1349	Electrically driven strain-induced deterministic single-photon emitters in a van der Waals heterostructure. *Science Advances*, **2021**, 7, eabj3176	14.3	3
1348	Electrically tunable Feshbach resonances in twisted bilayer semiconductors. *Science*, **2021**, 374, 336-340	33.3	0
1347	Critical current fluctuations in graphene Josephson junctions. *Scientific Reports*, **2021**, 11, 19900	4.9	0
1346	Broadband electro-optic polarization conversion with atomically thin black phosphorus. *Science*, **2021**, 374, 448-453	33.3	11
1345	High carrier mobility in graphene doped using a monolayer of tungsten oxyselenide. *Nature Electronics*, **2021**, 4, 731-739	28.4	4
1344	Resonant Light Emission from Graphene/Hexagonal Boron Nitride/Graphene Tunnel Junctions. *Nano Letters*, **2021**, 21, 8332-8339	11.5	1
1343	Exciton-polaron Rydberg states in monolayer MoSe and WSe. *Nature Communications*, **2021**, 12, 6131	17.4	6
1342	Tailoring the Band Structure of Twisted Double Bilayer Graphene with Pressure. *Nano Letters*, **2021**, 21, 8777-8784	11.5	4
1341	Visualizing Band Profiles of Gate-Tunable Junctions in MoS/WSe Heterostructure Transistors. *ACS Nano*, **2021**, 15, 16314-16321	16.7	3
1340	Kondo effect and spin-orbit coupling in graphene quantum dots. *Nature Communications*, **2021**, 12, 6004	17.4	5
1339	Unraveling Strain Gradient Induced Electromechanical Coupling in Twisted Double Bilayer Graphene Moir Superlattices. *Advanced Materials*, **2021**, 33, e2105879	24	7
1338	Creating Quantum Emitters in Hexagonal Boron Nitride Deterministically on Chip-Compatible Substrates. *Nano Letters*, **2021**, 21, 8182-8189	11.5	6
1337	Evidence for unconventional superconductivity in twisted bilayer graphene. *Nature*, **2021**, 600, 240-245	50.4	16

1336	Imaging Reconfigurable Molecular Concentration on a Graphene Field-Effect Transistor. *Nano Letters*, **2021**, 21, 8770-8776	11.5	1
1335	Dynamic Tuning of Moir Excitons in a WSe/WS Heterostructure via Mechanical Deformation. *Nano Letters*, **2021**, 21, 8910-8916	11.5	2
1334	Imaging Quantum Interference in Stadium-Shaped Monolayer and Bilayer Graphene Quantum Dots. *Nano Letters*, **2021**, 21, 8993-8998	11.5	0
1333	Destructive Photon Echo Formation in Six-Wave Mixing Signals of a MoSe Monolayer. *Advanced Science*, **2021**, e2103813	13.6	1
1332	Quasi-1D exciton channels in strain-engineered 2D materials. *Science Advances*, **2021**, 7, eabj3066	14.3	6
1331	Strongly correlated excitonic insulator in atomic double layers. *Nature*, **2021**, 598, 585-589	50.4	18
1330	Radiative lifetime of free excitons in hexagonal boron nitride. *Physical Review B*, **2021**, 104,	3.3	1
1329	Open-Cavity in Closed-Cycle Cryostat as a Quantum Optics Platform. *PRX Quantum*, **2021**, 2,	6.1	5
1328	Nonmonotonic Temperature-Dependent Dissipation at Nonequilibrium in Atomically Thin Clean-Limit Superconductors. *Nano Letters*, **2021**, 21, 583-589	11.5	1
1327	Optoelectronic Mixing in High-Mobility Graphene. *ACS Photonics*, **2021**, 8, 369-375	6.3	2
1326	Single- and narrow-line photoluminescence in a boron nitride-supported MoSe 2 /graphene heterostructure. *Comptes Rendus Physique*, **2021**, 22, 1-12	1.4	
1325	Magnetic domains and domain wall pinning in atomically thin CrBr revealed by nanoscale imaging. *Nature Communications*, **2021**, 12, 1989	17.4	20
1324	Nano-imaging photoresponse in a moir unit cell of minimally twisted bilayer graphene. *Nature Communications*, **2021**, 12, 1640	17.4	11
1323	In Operando Angle-Resolved Photoemission Spectroscopy with Nanoscale Spatial Resolution: Spatial Mapping of the Electronic Structure of Twisted Bilayer Graphene. *Small Science*, **2021**, 1, 2000075		2
1322	Van der Waals heterostructure polaritons with moir nduced nonlinearity. *Nature*, **2021**, 591, 61-65	50.4	28
1321	Ultrafast non-excitonic valley Hall effect in MoS/WTe heterobilayers. *Nature Communications*, **2021**, 12, 1635	17.4	0
1320	Raman spectroscopic study of artificially twisted and non-twisted trilayer graphene. *Applied Physics Letters*, **2021**, 118, 133101	3.4	2
1319	Dispersive sensing of charge states in a bilayer graphene quantum dot. *Applied Physics Letters*, **2021** , 118, 093104	3.4	2

1318	Enhanced tunable second harmonic generation from twistable interfaces and vertical superlattices in boron nitride homostructures. *Science Advances*, **2021**, 7,	14.3	23
1317	Stripe phases in WSe/WS moir superlattices. *Nature Materials*, **2021**, 20, 940-944	27	41
1316	Moir excitons in MoSe-WSe heterobilayers and heterotrilayers. *Nature Communications*, **2021**, 12, 1656	17.4	14
1315	Excitonic Complexes in n-Doped WS Monolayer. *Nano Letters*, **2021**, 21, 2519-2525	11.5	5
1314	A Reliable All-2D Materials Artificial Synapse for High Energy-Efficient Neuromorphic Computing. *Advanced Functional Materials*, **2021**, 31, 2011083	15.6	20
1313	Nanoimaging of Low-Loss Plasmonic Waveguide Modes in a Graphene Nanoribbon. *Nano Letters*, **2021**, 21, 3106-3111	11.5	3
1312	Material and Device Structure Designs for 2D Memory Devices Based on the Floating Gate Voltage Trajectory. *ACS Nano*, **2021**, 15, 6658-6668	16.7	3
1311	Electric field-tunable superconductivity in alternating-twist magic-angle trilayer graphene. *Science*, **2021**, 371, 1133-1138	33.3	73
1310	Superconductivity in type-II Weyl-semimetal WTe2 induced by a normal metal contact. *Journal of Applied Physics*, **2021**, 129, 113903	2.5	5
1309	Enhanced electron-phonon coupling in doubly aligned hexagonal boron nitride bilayer graphene heterostructure. *Physical Review B*, **2021**, 103,	3.3	3
1308	High performance ambipolar MoS2 transistor enabled by indium edge contacts. *Nanotechnology*, **2021**,	3.4	4
1307	Symmetry-broken Chern insulators and Rashba-like Landau-level crossings in magic-angle bilayer graphene. *Nature Physics*, **2021**, 17, 710-714	16.2	34
1306	Tuning electron correlation in magic-angle twisted bilayer graphene using Coulomb screening. *Science*, **2021**, 371, 1261-1265	33.3	47
1305	Flavour Hund's coupling, Chern gaps and charge diffusivity in moir graphene. *Nature*, **2021**, 592, 43-48	50.4	39
1304	Planar graphene-NbSe2 Josephson junctions in a parallel magnetic field. *Physical Review B*, **2021**, 103,	3.3	3
1303	Phonon renormalization in reconstructed MoS moir superlattices. *Nature Materials*, **2021**, 20, 1100-1105	27	31
1302	Enhanced Superconductivity in Monolayer -MoTe. *Nano Letters*, **2021**, 21, 2505-2511	11.5	14
1301	Gapless Spin Wave Transport through a Quantum Canted Antiferromagnet. *Physical Review X*, **2021**, 11,	9.1	2

1300	Accurate Measurement of the Gap of Graphene/h-BN Moiré Superlattice through Photocurrent Spectroscopy. *Physical Review Letters*, **2021**, 126, 146402	7.4	0
1299	A wavelength-scale black phosphorus spectrometer. *Nature Photonics*, **2021**, 15, 601-607	33.9	28
1298	One-dimensional edge contact to encapsulated MoS2 with a superconductor. *AIP Advances*, **2021**, 11, 045312	1.5	2
1297	Entropic evidence for a Pomeranchuk effect in magic-angle graphene. *Nature*, **2021**, 592, 214-219	50.4	36
1296	Controlling exciton many-body states by the electric-field effect in monolayer MoS2. *Physical Review Research*, **2021**, 3,	3.9	4
1295	Electron transport in dual-gated three-layer MoS2. *Physical Review Research*, **2021**, 3,	3.9	4
1294	A van der Waals interface that creates in-plane polarization and a spontaneous photovoltaic effect. *Science*, **2021**, 372, 68-72	33.3	24
1293	Josephson junction infrared single-photon detector. *Science*, **2021**, 372, 409-412	33.3	17
1292	Strain fields in twisted bilayer graphene. *Nature Materials*, **2021**, 20, 956-963	27	26
1291	Electrically controlled emission from singlet and triplet exciton species in atomically thin light-emitting diodes. *Physical Review B*, **2021**, 103,	3.3	10
1290	Shell Filling and Trigonal Warping in Graphene Quantum Dots. *Physical Review Letters*, **2021**, 126, 147703	7.4	6
1289	Experimental Determination of the Energy per Particle in Partially Filled Landau Levels. *Physical Review Letters*, **2021**, 126, 156802	7.4	4
1288	Bias-controlled multi-functional transport properties of InSe/BP van der Waals heterostructures. *Scientific Reports*, **2021**, 11, 7843	4.9	0
1287	Mitigation of Electromigration in Metal Interconnects via Hexagonal Boron Nitride as an Ångström-Thin Passivation Layer. *Advanced Electronic Materials*, **2021**, 7, 2100002	6.4	2
1286	Resonant Tunneling Due to van der Waals Quantum-Well States of Few-Layer WSe in WSe/h-BN/p-MoS Junction. *Nano Letters*, **2021**, 21, 3929-3934	11.5	5
1285	Near-Field Excited Archimedean-like Tiling Patterns in Phonon-Polaritonic Crystals. *ACS Nano*, **2021**, 15, 9134-9142	16.7	8
1284	Nematicity and competing orders in superconducting magic-angle graphene. *Science*, **2021**, 372, 264-271	33.3	49
1283	Isospin Pomeranchuk effect in twisted bilayer graphene. *Nature*, **2021**, 592, 220-224	50.4	38

1282	Quantum Hall Valley Splitters and a Tunable Mach-Zehnder Interferometer in Graphene. *Physical Review Letters*, **2021**, 126, 146803	7.4	5
1281	Programmable Bloch polaritons in graphene. *Science Advances*, **2021**, 7,	14.3	1
1280	High-Performance Vertical Organic Transistors of Sub-5 nm Channel Length. *Nano Letters*, **2021**, 21, 4430-4436	11.5	7
1279	Deterministic transfer of optical-quality carbon nanotubes for atomically defined technology. *Nature Communications*, **2021**, 12, 3138	17.4	5
1278	Gate-defined Josephson junctions in magic-angle twisted bilayer graphene. *Nature Nanotechnology*, **2021**, 16, 760-763	28.7	10
1277	Rashba valleys and quantum Hall states in few-layer black arsenic. *Nature*, **2021**, 593, 56-60	50.4	7
1276	Bosonic condensation of exciton-polaritons in an atomically thin crystal. *Nature Materials*, **2021**, 20, 1233-1239	27	10
1275	Highly Biaxially Strained Silicene on Au(111). *Journal of Physical Chemistry C*, **2021**, 125, 9973-9980	3.8	3
1274	Superconductivity emerging from a stripe charge order in IrTe nanoflakes. *Nature Communications*, **2021**, 12, 3157	17.4	8
1273	Anomalous thermopower oscillations in graphene-nanowire vertical heterostructures. *Nanotechnology*, **2021**, 32,	3.4	1
1272	Visualizing delocalized correlated electronic states in twisted double bilayer graphene. *Nature Communications*, **2021**, 12, 2516	17.4	7
1271	Microwave surface transport in narrow-bandgap PdSe2 -MOSFETs. *2D Materials*, **2021**, 8, 035035	5.9	
1270	Unconventional satellite resistance peaks in moir superlattice of h-BN/ AB-stacked tetralayer-graphene heterostructures. *Communications Physics*, **2021**, 4,	5.4	1
1269	Highly tunable junctions and non-local Josephson effect in magic-angle graphene tunnelling devices. *Nature Nanotechnology*, **2021**, 16, 769-775	28.7	16
1268	Imaging orbital ferromagnetism in a moir Chern insulator. *Science*, **2021**, 372, 1323-1327	33.3	25
1267	Vanishing Thermal Equilibration for Hole-Conjugate Fractional Quantum Hall States in Graphene. *Physical Review Letters*, **2021**, 126, 216803	7.4	6
1266	Stacking-engineered ferroelectricity in bilayer boron nitride. *Science*, **2021**, 372,	33.3	76
1265	Spectroscopy of a tunable moir system with a correlated and topological flat band. *Nature Communications*, **2021**, 12, 2732	17.4	9

1264	Optical Signatures of Periodic Charge Distribution in a Mott-like Correlated Insulator State. *Physical Review X*, **2021**, 11,	9.1	5
1263	Tunable high-temperature itinerant antiferromagnetism in a van der Waals magnet. *Nature Communications*, **2021**, 12, 2844	17.4	6
1262	Odd Integer Quantum Hall States with Interlayer Coherence in Twisted Bilayer Graphene. *Nano Letters*, **2021**, 21, 4249-4254	11.5	1
1261	Evidence of Orbital Ferromagnetism in Twisted Bilayer Graphene Aligned to Hexagonal Boron Nitride. *Nano Letters*, **2021**, 21, 4299-4304	11.5	3
1260	The limits of near field immersion microwave microscopy evaluated by imaging bilayer graphene moir□patterns. *Nature Communications*, **2021**, 12, 2980	17.4	5
1259	Twisted monolayer and bilayer graphene for vertical tunneling transistors. *Applied Physics Letters*, **2021**, 118, 183106	3.4	2
1258	Edge channels of broken-symmetry quantum Hall states in graphene visualized by atomic force microscopy. *Nature Communications*, **2021**, 12, 2852	17.4	3
1257	High mobility field-effect transistors based on MoScrystals grown by the flux method. *Nanotechnology*, **2021**, 32,	3.4	2
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