

Michael Fogler

List of Publications by Year in descending order

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161
papers

14,559
citations

31949

53
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18633

119
g-index

165
all docs

165
docs citations

165
times ranked

10556
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene as a source of entangled plasmons. <i>Physical Review Research</i> , 2022, 4, .	1.3	4
2	Hyperbolic Cooper-Pair Polaritons in Planar Graphene/Cuprate Plasmonic Cavities. <i>Nano Letters</i> , 2021, 21, 308-316.	4.5	13
3	Dipolar interactions in bilayers of indirect excitons. , 2021, , .		0
4	Attractive and repulsive dipolar interaction in bilayers of indirect excitons. <i>Physical Review B</i> , 2021, 103, .	1.1	7
5	Programmable hyperbolic polaritons in van der Waals semiconductors. <i>Science</i> , 2021, 371, 617-620.	6.0	58
6	Hyperbolic enhancement of photocurrent patterns in minimally twisted bilayer graphene. <i>Nature Communications</i> , 2021, 12, 1641.	5.8	34
7	Programmable Bloch polaritons in graphene. <i>Science Advances</i> , 2021, 7, .	4.7	12
8	Fizeau drag in graphene plasmonics. <i>Nature</i> , 2021, 594, 513-516.	13.7	57
9	Long-Lived Phonon Polaritons in Hyperbolic Materials. <i>Nano Letters</i> , 2021, 21, 5767-5773.	4.5	38
10	Hybrid Machine Learning for Scanning Near-Field Optical Spectroscopy. <i>ACS Photonics</i> , 2021, 8, 2987-2996.	3.2	22
11	Terahertz response of monolayer and few-layer WTe ₂ at the nanoscale. <i>Nature Communications</i> , 2021, 12, 5594.	5.8	29
12	Polaritonic Vortices with a Half-Integer Charge. <i>Nano Letters</i> , 2021, 21, 9256-9261.	4.5	13
13	Ground and excited states of coupled exciton liquids in electron-hole quadrilayers. <i>Physical Review B</i> , 2021, 104, .	1.1	1
14	Imaging viscous flow of the Dirac fluid in graphene. <i>Nature</i> , 2020, 583, 537-541.	13.7	213
15	Femtosecond exciton dynamics in WSe ₂ optical waveguides. <i>Nature Communications</i> , 2020, 11, 3567.	5.8	31
16	Charge-Transfer Plasmon Polaritons at Graphene/ $\sqrt{3}\times\sqrt{3}$ -RuCl ₃ Interfaces. <i>Nano Letters</i> , 2020, 20, 8438-8445.	4.5	53
17	Inductor coil of the highest possible \mathbf{Q} . <i>Scientific Reports</i> , 2020, 10, 15380.	1.6	2
18	Nano-photocurrent Mapping of Local Electronic Structure in Twisted Bilayer Graphene. <i>Nano Letters</i> , 2020, 20, 2958-2964.	4.5	34

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19	Nanoscale Infrared Spectroscopy and Imaging of Catalytic Reactions in Cu ₂ O Crystals. ACS Photonics, 2020, 7, 576-580.	3.2	11
20	Collective modes and terahertz near-field response of superconductors. Physical Review Research, 2020, 2, .	1.3	38
21	Strong Metasurface Josephson Plasma Resonance Coupling in Superconducting La _{2-x} Sr _x CuO ₄ . Advanced Optical Materials, 2019, 7, 1900712.	3.6	9
22	Phonon Polaritons in Monolayers of Hexagonal Boron Nitride. Advanced Materials, 2019, 31, e1806603.	11.1	73
23	Exciton Gas Transport through Nanoconstrictions. Nano Letters, 2019, 19, 5373-5379.	4.5	2
24	Photonic crystal for graphene plasmons. Nature Communications, 2019, 10, 4780.	5.8	69
25	Soliton superlattices in twisted hexagonal boron nitride. Nature Communications, 2019, 10, 4360.	5.8	51
26	Photoenhanced metastable c-axis electrodynamic in stripe-ordered cuprate La _{1.885} Ba _{0.115} CuO ₄ . Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19875-19879.	3.3	51
27	Optical signatures of Dirac nodal lines in NbAs ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1168-1173.	3.3	60
28	Third-order optical conductivity of an electron fluid. Physical Review B, 2018, 97, .	1.1	16
29	Nanoscale Mapping and Spectroscopy of Nonradiative Hyperbolic Modes in Hexagonal Boron Nitride Nanostructures. Nano Letters, 2018, 18, 1628-1636.	4.5	55
30	Manipulation and Steering of Hyperbolic Surface Polaritons in Hexagonal Boron Nitride. Advanced Materials, 2018, 30, e1706358.	11.1	63
31	Universal linear and nonlinear electrodynamic of a Dirac fluid. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3285-3289.	3.3	37
32	Ultralow-loss polaritons in isotopically pure boron nitride. Nature Materials, 2018, 17, 134-139.	13.3	291
33	Photonic crystals for nano-light in moiré graphene superlattices. Science, 2018, 362, 1153-1156.	6.0	273
34	Indirect excitons in van der Waals heterostructures at room temperature. Nature Communications, 2018, 9, 1895.	5.8	130
35	Fundamental limits to graphene plasmonics. Nature, 2018, 557, 530-533.	13.7	401
36	Split-gate device for indirect excitons. Applied Physics Letters, 2018, 112, .	1.5	10

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37	Theory of plasmon reflection by a 1D junction. Optics Express, 2018, 26, 17209.	1.7	19
38	Pancharatnam-Berry Phase in a Condensate of Indirect Excitons. , 2018, , .		0
39	Pancharatnamâ€“Berry phase in condensate of indirect excitons. Nature Communications, 2018, 9, 2158.	5.8	14
40	Indirect excitons in van der Waals heterostructures at room temperature. , 2018, , .		0
41	Faraday Rotation Due to Surface States in the Topological Insulator (Bi_{1-x}Sb_x)₂Te₃. Nano Letters, 2017, 17, 980-984.	4.5	21
42	The quest for ultrafast plasmonics. Nature Nanotechnology, 2017, 12, 187-188.	15.6	9
43	Plasmon Reflections by Topological Electronic Boundaries in Bilayer Graphene. Nano Letters, 2017, 17, 7080-7085.	4.5	48
44	Plasmonic imaging is gaining momentum. Science, 2017, 357, 132-133.	6.0	5
45	Mechanical Detection and Imaging of Hyperbolic Phonon Polaritons in Hexagonal Boron Nitride. ACS Nano, 2017, 11, 8741-8746.	7.3	48
46	Intrinsic Plasmonâ€“Phonon Interactions in Highly Doped Graphene: A Near-Field Imaging Study. Nano Letters, 2017, 17, 5908-5913.	4.5	42
47	Imaging the Localized Plasmon Resonance Modes in Graphene Nanoribbons. Nano Letters, 2017, 17, 5423-5428.	4.5	51
48	Efficiency of Launching Highly Confined Polaritons by Infrared Light Incident on a Hyperbolic Material. Nano Letters, 2017, 17, 5285-5290.	4.5	79
49	Electrical detection of hyperbolic phonon-polaritons in heterostructures of graphene and boron nitride. Npj 2D Materials and Applications, 2017, 1, .	3.9	25
50	Nanoplasmonic Phenomena at Electronic Boundaries in Graphene. ACS Photonics, 2017, 4, 2971-2977.	3.2	18
51	Low-Loss Phonon Polaritons in Nanostructured Dielectrics. NATO Science for Peace and Security Series B: Physics and Biophysics, 2017, , 511-512.	0.2	0
52	Control of excitons in multi-layer van der Waals heterostructures. Applied Physics Letters, 2016, 108, .	1.5	56
53	Generalized spectral method for near-field optical microscopy. Journal of Applied Physics, 2016, 119, .	1.1	51
54	Imaging of Anomalous Internal Reflections of Hyperbolic Phonon-Polaritons in Hexagonal Boron Nitride. Nano Letters, 2016, 16, 3858-3865.	4.5	106

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55	Adiabatic Amplification of Plasmons and Demons in 2D Systems. Physical Review Letters, 2016, 117, 076805.	2.9	26
56	Tunable Plasmonic Reflection by Bound 1D Electron States in a 2D Dirac Metal. Physical Review Letters, 2016, 117, 086801.	2.9	31
57	Hyperbolic phonon polaritons in hexagonal boron nitride (Conference Presentation). , 2016, , .		0
58	Polaritons in van der Waals materials. Science, 2016, 354, .	6.0	799
59	Ultraconfined Plasmonic Hotspots Inside Graphene Nanobubbles. Nano Letters, 2016, 16, 7842-7848.	4.5	40
60	Ultrafast optical switching of infrared plasmon polaritons in high-mobility graphene. Nature Photonics, 2016, 10, 244-247.	15.6	312
61	Control of excitons in multi-layer van der Waals heterostructures. , 2016, , .		0
62	Measurement of Exciton Correlations Using Electrostatic Lattices. , 2016, , .		0
63	Electronic response of graphene to linelike charge perturbations. Physical Review B, 2015, 91, .	1.1	3
64	Topological insulators are tunable waveguides for hyperbolic polaritons. Physical Review B, 2015, 92, .	1.1	53
65	Sum-Rule Constraints on the Surface State Conductance of Topological Insulators. Physical Review Letters, 2015, 115, 116804.	2.9	22
66	Measurement of exciton correlations using electrostatic lattices. Physical Review B, 2015, 92, .	1.1	20
67	Infrared Pump-Probe Spectroscopy of Plasmons in Graphene and Semiconductors. Microscopy and Microanalysis, 2015, 21, 1415-1416.	0.2	1
68	Tunneling Plasmonics in Bilayer Graphene. Nano Letters, 2015, 15, 4973-4978.	4.5	64
69	Tuning and Persistent Switching of Graphene Plasmons on a Ferroelectric Substrate. Nano Letters, 2015, 15, 4859-4864.	4.5	29
70	Hamiltonian Optics of Hyperbolic Polaritons in Nanogranules. Nano Letters, 2015, 15, 4455-4460.	4.5	32
71	Graphene on hexagonal boron nitride as a tunable hyperbolic metamaterial. Nature Nanotechnology, 2015, 10, 682-686.	15.6	526
72	Subdiffractional focusing and guiding of polaritonic rays in a natural hyperbolic material. Nature Communications, 2015, 6, 6963.	5.8	340

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73	Plasmons in graphene moiré superlattices. <i>Nature Materials</i> , 2015, 14, 1217-1222.	13.3	141
74	Sub-diffractive, volume-confined polaritons in a natural hyperbolic material: hexagonal boron nitride (Presentation Recording). , 2015, , .		0
75	Edge and Surface Plasmons in Graphene Nanoribbons. <i>Nano Letters</i> , 2015, 15, 8271-8276.	4.5	162
76	Infrared nanospectroscopy and imaging of collective superfluid excitations in anisotropic superconductors. <i>Physical Review B</i> , 2014, 90, .	1.1	31
77	Scattering of two-dimensional massless Dirac electrons by a circular potential barrier. <i>Physical Review B</i> , 2014, 90, .	1.1	50
78	Ultrafast and Nanoscale Plasmonic Phenomena in Exfoliated Graphene Revealed by Infrared Pump-Probe Nanoscopy. <i>Nano Letters</i> , 2014, 14, 894-900.	4.5	158
79	Sub-diffractive volume-confined polaritons in the natural hyperbolic material hexagonal boron nitride. <i>Nature Communications</i> , 2014, 5, 5221.	5.8	686
80	High-temperature superfluidity with indirect excitons in van der Waals heterostructures. <i>Nature Communications</i> , 2014, 5, 4555.	5.8	413
81	<i>Colloquium</i>: Graphene spectroscopy. <i>Reviews of Modern Physics</i> , 2014, 86, 959-994.	16.4	220
82	Ultrafast Dynamics of Surface Plasmons in InAs by Time-Resolved Infrared Nanospectroscopy. <i>Nano Letters</i> , 2014, 14, 4529-4534.	4.5	92
83	Model for quantitative tip-enhanced spectroscopy and the extraction of nanoscale-resolved optical constants. <i>Physical Review B</i> , 2014, 90, .	1.1	140
84	Tunable Phonon Polaritons in Atomically Thin van der Waals Crystals of Boron Nitride. <i>Science</i> , 2014, 343, 1125-1129.	6.0	957
85	Infrared Pump-Probe Imaging and Spectroscopy with 10nm Resolution. , 2014, , .		0
86	Anisotropic Electronic State via Spontaneous Phase Separation in Strained Vanadium Dioxide Films. <i>Physical Review Letters</i> , 2013, 111, 096602.	2.9	122
87	Electronic and plasmonic phenomena at graphene grain boundaries. <i>Nature Nanotechnology</i> , 2013, 8, 821-825.	15.6	226
88	Universal behavior of repulsive two-dimensional fermions in the vicinity of the quantum freezing point. <i>Europhysics Letters</i> , 2013, 103, 16002.	0.7	13
89	GraXe, graphene and xenon for neutrinoless double beta decay searches. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 037-037.	1.9	4
90	Interaction corrections to the polarization function of graphene. <i>Physical Review B</i> , 2012, 86, .	1.1	97

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91	Near-field spectroscopy of silicon dioxide thin films. <i>Physical Review B</i> , 2012, 85, .	1.1	80
92	Two-dimensional electrostatic lattices for indirect excitons. <i>Applied Physics Letters</i> , 2012, 100, 061103.	1.5	39
93	Spontaneous coherence in a cold exciton gas. <i>Nature</i> , 2012, 483, 584-588.	13.7	263
94	Quenching of the Quantum Hall Effect in Graphene with Scrolled Edges. <i>Physical Review Letters</i> , 2012, 108, 166602.	2.9	12
95	Gate-tuning of graphene plasmons revealed by infrared nano-imaging. <i>Nature</i> , 2012, 487, 82-85.	13.7	1,780
96	Electrostatic Lattices for Indirect Excitons in Coupled Quantum Wells. , 2012, , .		0
97	Hopping transport in systems of finite thickness or length. <i>Physical Review B</i> , 2011, 84, .	1.1	11
98	Integer Quantum Hall Effect in Trilayer Graphene. <i>Physical Review Letters</i> , 2011, 107, 126806.	2.9	94
99	Microwaving and stirring the quantum Hall spaghetti. <i>Physics Magazine</i> , 2011, 4, .	0.1	0
100	Infrared Nanoscopy of Dirac Plasmons at the Graphene/SiO ₂ Interface. <i>Nano Letters</i> , 2011, 11, 4701-4705.	4.5	500
101	Model of large volumetric capacitance in graphene supercapacitors based on ion clustering. <i>Physical Review B</i> , 2011, 84, .	1.1	9
102	Magnetoelectric coupling, Berry phase, and Landau level dispersion in a biased bilayer graphene. <i>Physical Review B</i> , 2011, 84, .	1.1	28
103	Comment on "Screening in gated bilayer graphene". <i>Physical Review B</i> , 2010, 82, .	1.1	13
104	Apparent Power-Law Behavior of Conductance in Disordered Quasi-One-Dimensional Systems. <i>Physical Review Letters</i> , 2010, 105, 106801.	2.9	51
105	Simple variational method for calculating energy and quantum capacitance of an electron gas with screened interactions. <i>Physical Review B</i> , 2010, 82, .	1.1	13
106	Effect of external conditions on the structure of scrolled graphene edges. <i>Physical Review B</i> , 2010, 81, .	1.1	43
107	Singular elastic strains and magnetoconductance of suspended graphene. <i>Physical Review B</i> , 2010, 81, .	1.1	33
108	Publisher's Note: Numerical studies of variable-range hopping in one-dimensional systems [<i>Phys. Rev. B</i> 80, 155435 (2009)]. <i>Physical Review B</i> , 2009, 80, .	1.1	3

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109	Neutrality Point of Graphene with Coplanar Charged Impurities. Physical Review Letters, 2009, 103, 236801.	2.9	49
110	Trapping Indirect Excitons in a GaAs Quantum-Well Structure with a Diamond-Shaped Electrostatic Trap. Physical Review Letters, 2009, 103, 087403.	2.9	62
111	Numerical studies of variable-range hopping in one-dimensional systems. Physical Review B, 2009, 80, .	1.1	13
112	Localization-Delocalization Transition of Indirect Excitons in Lateral Electrostatic Lattices. Physical Review Letters, 2009, 102, 186803.	2.9	81
113	Biexcitons in two-dimensional systems with spatially separated electrons and holes. Physical Review B, 2008, 78, .	1.1	36
114	Effect of disorder on a graphene μ junction. Physical Review B, 2008, 77, .	1.1	10
115	Pseudomagnetic Fields and Ballistic Transport in a Suspended Graphene Sheet. Physical Review Letters, 2008, 101, 226804.	2.9	152
116	Determination of the electronic structure of bilayer graphene from infrared spectroscopy. Physical Review B, 2008, 78, .	1.1	263
117	Nonlinear Screening and Ballistic Transport in a Graphene μ Junction. Physical Review Letters, 2008, 100, 116804.	2.9	142
118	Effect of spatial resolution on the estimates of the coherence length of excitons in quantum wells. Physical Review B, 2008, 78, .	1.1	19
119	Concentration-dependent mobility in organic field-effect transistors probed by infrared spectromicroscopy of the charge density profile. Applied Physics Letters, 2007, 90, 222108.	1.5	12
120	Screening of a hypercritical charge in graphene. Physical Review B, 2007, 76, .	1.1	129
121	Thermodynamic and transport properties of 2D GaAs systems near the apparent Metal-Insulator Transition. AIP Conference Proceedings, 2007, , .	0.3	0
122	Scanned Gate Microscopy of a One-Dimensional Quantum Dot. Nano Letters, 2006, 6, 2206-2210.	4.5	13
123	Spin exchange in quantum rings and wires in the Wigner-crystal limit. Journal of Physics Condensed Matter, 2006, 18, L7-L13.	0.7	8
124	Effects of interactions and disorder on the compressibility of two-dimensional electron and hole systems. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 343-346.	0.8	0
125	Effects of interactions and disorder on the compressibility of two-dimensional electron and hole systems. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 240-243.	1.3	2
126	Thermodynamic Density of States of Two-Dimensional GaAs Systems near the Apparent Metal-Insulator Transition. Physical Review Letters, 2006, 96, 216407.	2.9	50

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127	Coulomb Blockade and Transport in a Chain of One-Dimensional Quantum Dots. Physical Review Letters, 2006, 97, 096601.	2.9	23
128	Coherence Length of Cold Exciton Gases in Coupled Quantum Wells. Physical Review Letters, 2006, 97, 187402.	2.9	86
129	Exchange coupling in quantum rings and wires in the Wigner-crystal limit. European Physical Journal Special Topics, 2005, 131, 217-220.	0.2	0
130	Short-range correlations and spin-mode velocities in ultrathin one-dimensional conductors. Physical Review B, 2005, 71, .	1.1	20
131	Ground-State Energy of the Electron Liquid in Ultrathin Wires. Physical Review Letters, 2005, 94, 056405.	2.9	50
132	Exchange interaction in quantum rings and wires in the Wigner-crystal limit. Physical Review B, 2005, 72, .	1.1	28
133	Non-Ohmic Variable-Range Hopping Transport in One-Dimensional Conductors. Physical Review Letters, 2005, 95, 166604.	2.9	22
134	Nonlinear screening and percolative transition in a two-dimensional electron liquid. Physical Review B, 2004, 69, .	1.1	38
135	Electrostatics of two-dimensional structures: Exact solutions and approximate methods. Physical Review B, 2004, 69, .	1.1	12
136	Dynamics of disordered quantum Hall crystals. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 98-103.	1.3	5
137	Effective theory of incompressible quantum Hall liquid crystals. Europhysics Letters, 2004, 66, 572-578.	0.7	10
138	Variable-range hopping in quasi-one-dimensional electron crystals. Physical Review B, 2004, 69, .	1.1	109
139	Low Frequency Dynamics of Disordered XY Spin Chains and Pinned Density Waves: From Localized Spin Waves to Soliton Tunneling. Physical Review Letters, 2002, 88, 186402.	2.9	26
140	QUANTUM HALL LIQUID CRYSTALS. International Journal of Modern Physics B, 2002, 16, 2924-2929.	1.0	9
141	Stripe and Bubble Phases in Quantum Hall Systems. Lecture Notes in Physics, 2002, , 98-138.	0.3	15
142	QUANTUM HALL LIQUID CRYSTALS. , 2002, , .		1
143	Comment on "Analytic Structure of One-Dimensional Localization Theory: Reexamining Mott's Law". Physical Review Letters, 2001, 86, 4715-4715.	2.9	2
144	Josephson Effect without Superconductivity: Realization in Quantum Hall Bilayers. Physical Review Letters, 2001, 86, 1833-1836.	2.9	96

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145	Hydrodynamics of the Quantum Hall Smectics. <i>Physical Review Letters</i> , 2000, 84, 5828-5831.	2.9	21
146	Dynamical response of a pinned two-dimensional Wigner crystal. <i>Physical Review B</i> , 2000, 62, 7553-7570.	1.1	66
147	Unconventionally sharp dynamic resonances from a disordered Wigner crystal. <i>European Physical Journal Special Topics</i> , 1999, 09, Pr10-219-Pr10-221.	0.2	0
148	Localization length at the resistivity minima of the quantum Hall effect. <i>Physical Review B</i> , 1998, 57, 4614-4627.	1.1	20
149	Quasiclassical approach to the weak levitation of extended states in the quantum Hall effect. <i>Physical Review B</i> , 1998, 57, 11947-11950.	1.1	8
150	Cyclotron Resonance in a Two-Dimensional Electron Gas with Long-Range Randomness. <i>Physical Review Letters</i> , 1998, 80, 4749-4752.	2.9	12
151	Laughlin liquid to charge-density-wave transition at high Landau levels. <i>Physical Review B</i> , 1997, 55, 9326-9329.	1.1	99
152	Suppression of chaotic dynamics and localization of two-dimensional electrons by a weak magnetic field. <i>Physical Review B</i> , 1997, 56, 6823-6838.	1.1	69
153	Localization length at the conductivity minima of the quantum Hall effect. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1997, 1, 132-134.	1.3	0
154	Activated conductivity in the quantum Hall effect. <i>Surface Science</i> , 1996, 361-362, 255-260.	0.8	9
155	Ground state of a two-dimensional electron liquid in a weak magnetic field. <i>Physical Review B</i> , 1996, 54, 1853-1871.	1.1	329
156	Charge Density Wave in Two-Dimensional Electron Liquid in Weak Magnetic Field. <i>Physical Review Letters</i> , 1996, 76, 499-502.	2.9	429
157	Thermally activated deviations from quantum Hall plateaux. <i>Solid State Communications</i> , 1995, 94, 503-507.	0.9	7
158	Probability of an Eigenvalue Number Fluctuation in an Interval of a Random Matrix Spectrum. <i>Physical Review Letters</i> , 1995, 74, 3312-3315.	2.9	25
159	Collapse of spin splitting in the quantum Hall effect. <i>Physical Review B</i> , 1995, 52, 17366-17378.	1.1	93
160	Resistance of a long wire in the quantum Hall regime. <i>Physical Review B</i> , 1994, 50, 1656-1662.	1.1	13
161	Chemical potential and magnetization of a Coulomb island. <i>Physical Review B</i> , 1994, 49, 13767-13775.	1.1	30