## Rawil F Fakhrullin

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8146159/publications.pdf

Version: 2024-02-01

		38660	56606
141	7,782	50	83
papers	citations	h-index	g-index
145	145	145	6480
143	143	143	0400
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Halloysite Clay Nanotubes for Loading and Sustained Release of Functional Compounds. Advanced Materials, 2016, 28, 1227-1250.	11.1	779
2	An assembly of organic-inorganic composites using halloysite clay nanotubes. Current Opinion in Colloid and Interface Science, 2018, 35, 42-50.	3.4	316
3	Cyborg cells: functionalisation of living cells with polymers and nanomaterials. Chemical Society Reviews, 2012, 41, 4189.	18.7	253
4	Toxicity of halloysite clay nanotubes in vivo: a Caenorhabditis elegans study. Environmental Science: Nano, 2015, 2, 54-59.	2.2	237
5	The application of halloysite tubule nanoclay in drug delivery. Expert Opinion on Drug Delivery, 2016, 13, 977-986.	2.4	222
6	Clay nanotube encapsulation for functional biocomposites. Advances in Colloid and Interface Science, 2014, 207, 189-198.	7.0	182
7	Clay nanotube–biopolymer composite scaffolds for tissue engineering. Nanoscale, 2016, 8, 7257-7271.	2.8	178
8	"Face-Lifting―and "Make-Up―for Microorganisms: Layer-by-Layer Polyelectrolyte Nanocoating. ACS Nano, 2012, 6, 4557-4564.	7.3	177
9	Evaluation of toxicity of nanoclays and graphene oxide in vivo: a Paramecium caudatum study. Environmental Science: Nano, 2016, 3, 442-452.	2.2	174
10	Enzyme-activated intracellular drug delivery with tubule clay nanoformulation. Scientific Reports, 2015, 5, 10560.	1.6	163
11	Nanohydrogel Formation within the Halloysite Lumen for Triggered and Sustained Release. ACS Applied Materials & Samp; Interfaces, 2018, 10, 8265-8273.	4.0	155
12	Layer-by-layer coating of bacteria with noble metal nanoparticles for surface-enhanced Raman scattering. Analytical and Bioanalytical Chemistry, 2009, 395, 2559-2567.	1.9	122
13	Biomimetic cell-mediated three-dimensional assembly of halloysite nanotubes. Chemical Communications, 2013, 49, 4208.	2.2	117
14	Enhanced efficiency of antiseptics with sustained release from clay nanotubes. RSC Advances, 2014, 4, 488-494.	1.7	116
15	Self-assembly of clay nanotubes on hair surface for medical and cosmetic formulations. Nanoscale, 2018, 10, 18205-18216.	2.8	105
16	Paclitaxel Encapsulated in Halloysite Clay Nanotubes for Intestinal and Intracellular Delivery. Journal of Pharmaceutical Sciences, 2017, 106, 3131-3139.	1.6	98
17	Halloysite/Keratin Nanocomposite for Human Hair Photoprotection Coating. ACS Applied Materials & Lamp; Interfaces, 2020, 12, 24348-24362.	4.0	96
18	Targeting microbial biofilms using Ficin, a nonspecific plant protease. Scientific Reports, 2017, 7, 46068.	1.6	93

#	Article	IF	CITATIONS
19	Halloysite Nanotubes: Controlled Access and Release by Smart Gates. Nanomaterials, 2017, 7, 199.	1.9	93
20	Tubule Nanoclayâ€Organic Heterostructures for Biomedical Applications. Macromolecular Bioscience, 2019, 19, e1800419.	2.1	87
21	Hybrid Cellularâ^Inorganic Coreâ^'Shell Microparticles: Encapsulation of Individual Living Cells in Calcium Carbonate Microshells. Langmuir, 2009, 25, 6617-6621.	1.6	86
22	Living Fungi Cells Encapsulated in Polyelectrolyte Shells Doped with Metal Nanoparticles. Langmuir, 2009, 25, 4628-4634.	1.6	86
23	A direct technique for preparation of magnetically functionalised living yeast cells. Soft Matter, 2010, 6, 391-397.	1.2	85
24	Interfacial Self-Assembly in Halloysite Nanotube Composites. Langmuir, 2019, 35, 8646-8657.	1.6	82
25	Functionalization of wholeâ€cell bacterial reporters with magnetic nanoparticles. Microbial Biotechnology, 2011, 4, 89-97.	2.0	81
26	Halloysite clay nanotubes for tissue engineering. Nanomedicine, 2016, 11, 2243-2246.	1.7	77
27	Cryogel composites based on hyaluronic acid and halloysite nanotubes as scaffold for tissue engineering. International Journal of Biological Macromolecules, 2019, 130, 627-635.	3.6	77
28	Selective Antimicrobial Effects of Curcumin@Halloysite Nanoformulation: A <i>Caenorhabditis elegans</i> Study. ACS Applied Materials & Interfaces, 2019, 11, 23050-23064.	4.0	73
29	Comparative cytotoxicity of kaolinite, halloysite, multiwalled carbon nanotubes and graphene oxide. Applied Clay Science, 2021, 205, 106041.	2.6	73
30	A whole-cell amperometric herbicide biosensor based on magnetically functionalised microalgae and screen-printed electrodes. Analytical Methods, 2011, 3, 509.	1.3	72
31	Naturally derived nano- and micro-drug delivery vehicles: halloysite, vaterite and nanocellulose. New Journal of Chemistry, 2020, 44, 5638-5655.	1.4	72
32	Antimicrobial Applications of Clay Nanotube-Based Composites. Nanomaterials, 2019, 9, 708.	1.9	71
33	Pickering Emulsion Gels Based on Halloysite Nanotubes and Ionic Biopolymers: Properties and Cleaning Action on Marble Surface. ACS Applied Nano Materials, 2019, 2, 3169-3176.	2.4	71
34	Spherical and tubule nanocarriers for sustained drug release. Current Opinion in Pharmacology, 2014, 18, 141-148.	1.7	70
35	A Direct Technique for Magnetic Functionalization of Living Human Cells. Langmuir, 2011, 27, 14386-14393.	1.6	68
36	Liposomes loaded with hydrophilic magnetite nanoparticles: Preparation and application as contrast agents for magnetic resonance imaging. Colloids and Surfaces B: Biointerfaces, 2015, 135, 109-115.	2.5	68

#	Article	IF	Citations
37	Cytocompatibility and uptake of polycations-modified halloysite clay nanotubes. Applied Clay Science, 2019, 169, 21-30.	2.6	67
38	Materials Nanoarchitectonics from Atom to Living Cell: A Method for Everything. Bulletin of the Chemical Society of Japan, 2022, 95, 774-795.	2.0	65
39	Stabilized Dye–Pigment Formulations with Platy and Tubular Nanoclays. Advanced Functional Materials, 2018, 28, 1703553.	7.8	64
40	Polyelectrolyte-Mediated Assembly of Multiwalled Carbon Nanotubes on Living Yeast Cells. Langmuir, 2010, 26, 2671-2679.	1.6	63
41	Cell surface engineering with polyelectrolyte-stabilized magnetic nanoparticles: A facile approach for fabrication of artificial multicellular tissue-mimicking clusters. Nano Research, 2015, 8, 2515-2532.	5.8	63
42	Composite films of natural clay nanotubes with cellulose and chitosan. Green Materials, 2014, 2, 232-242.	1.1	61
43	Interfacing Living Unicellular Algae Cells with Biocompatible Polyelectrolyte‧tabilised Magnetic Nanoparticles. Macromolecular Bioscience, 2010, 10, 1257-1264.	2.1	60
44	Nanoshell Assembly for Magnet-Responsive Oil-Degrading Bacteria. Langmuir, 2016, 32, 12552-12558.	1.6	60
45	Peptide-modulated self-assembly as a versatile strategy for tumor supramolecular nanotheranostics. Theranostics, 2019, 9, 3249-3261.	4.6	60
46	Halloysites Stabilized Emulsions for Hydroformylation of Long Chain Olefins. Advanced Materials Interfaces, 2017, 4, 1600435.	1.9	57
47	Assessment of Resistance and Bioremediation Ability of <i>Lactobacillus </i> Strains to Lead and Cadmium. International Journal of Microbiology, 2017, 2017, 1-7.	0.9	55
48	Organic-nanoclay composite materials as removal agents for environmental decontamination. RSC Advances, 2019, 9, 40553-40564.	1.7	54
49	Core/Shell Gel Beads with Embedded Halloysite Nanotubes for Controlled Drug Release. Coatings, 2019, 9, 70.	1.2	52
50	Microscreening toxicity system based on living magnetic yeast and gradient chips. Analytical and Bioanalytical Chemistry, 2011, 400, 1009-1013.	1.9	51
51	Dark-field/hyperspectral microscopy for detecting nanoscale particles in environmental nanotoxicology research. Science of the Total Environment, 2021, 772, 145478.	3.9	51
52	Clay-based drug-delivery systems: what does the future hold?. Therapeutic Delivery, 2017, 8, 633-646.	1.2	49
53	Ru/CdS Quantum Dots Templated on Clay Nanotubes as Visibleâ€Lightâ€Active Photocatalysts: Optimization of S/Cd Ratio and Ru Content. Chemistry - A European Journal, 2020, 26, 13085-13092.	1.7	48
54	Biogenic Silver Nanoparticles: Synthesis and Application as Antibacterial and Antifungal Agents. Micromachines, 2021, 12, 1480.	1.4	47

#	Article	IF	CITATIONS
55	Antimicrobial Effects of Sulfonyl Derivative of 2(5H)-Furanone against Planktonic and Biofilm Associated Methicillin-Resistant and -Susceptible Staphylococcus aureus. Frontiers in Microbiology, 2017, 8, 2246.	1.5	46
56	Directed assembly of yeast cells into living yeastosomes by microbubble templating. Soft Matter, 2010, 6, 3494.	1,2	45
57	Interfacing Multicellular Organisms with Polyelectrolyte Shells and Nanoparticles: A Caenorhabtidis elegans Study. Langmuir, 2011, 27, 7708-7713.	1.6	45
58	Bidirectional alterations in antibiotics susceptibility in Staphylococcus aureusâ€"Pseudomonas aeruginosa dual-species biofilm. Scientific Reports, 2020, 10, 14849.	1.6	45
59	Rapid and direct magnetization of GFP-reporter yeast for micro-screening systems. Biosensors and Bioelectronics, 2010, 25, 1816-1819.	<b>5.</b> 3	44
60	Fluorescence and Cytotoxicity of Cadmium Sulfide Quantum Dots Stabilized on Clay Nanotubes. Nanomaterials, 2018, 8, 391.	1.9	43
61	Dark-field hyperspectral microscopy for label-free microplastics and nanoplastics detection and identification inÂvivo: A Caenorhabditis elegans study. Environmental Pollution, 2021, 271, 116337.	3.7	43
62	Fabrication of living cellosomes of rod-like and rhombohedral morphologies based on magnetically responsive templates. Chemical Communications, 2009, , 2511.	2.2	42
63	Halloysite Nanoclay/Biopolymers Composite Materials in Tissue Engineering. Biotechnology Journal, 2019, 14, e1900055.	1.8	42
64	Kaolin Alleviates Graphene Oxide Toxicity. Environmental Science and Technology Letters, 2018, 5, 295-300.	3.9	41
65	Uptake of halloysite clay nanotubes by human cells: Colourimetric viability tests and microscopy study. Nano Structures Nano Objects, 2018, 15, 54-60.	1.9	41
66	Selective Cytotoxic Activity of Prodigiosin@halloysite Nanoformulation. Frontiers in Bioengineering and Biotechnology, 2020, 8, 424.	2.0	41
67	Surface-Enhanced Raman Scattering to Evaluate Nanomaterial Cytotoxicity on Living Cells. Analytical Chemistry, 2016, 88, 9813-9820.	3.2	40
68	Cytocompatibility and cellular uptake of alkylsilane-modified hydrophobic halloysite nanotubes. Applied Clay Science, 2020, 185, 105371.	2.6	40
69	Molecular dynamics of the halloysite nanotubes. Physical Chemistry Chemical Physics, 2018, 20, 5841-5849.	1.3	39
70	Magnetically Responsive Calcium Carbonate Microcrystals. ACS Applied Materials & Eamp; Interfaces, 2009, 1, 1847-1851.	4.0	38
71	Silver nanoparticle-coated "cyborg―microorganisms: rapid assembly of polymer-stabilised nanoparticles on microbial cells. RSC Advances, 2015, 5, 13530-13537.	1.7	36
72	Mesoporous additive-free vaterite CaCO3 crystals of untypical sizes: From submicron to Giant. Materials and Design, 2021, 197, 109220.	3.3	34

#	Article	IF	CITATIONS
73	Simultaneous Intracellular Detection of Plasmonic and Non-Plasmonic Nanoparticles Using Dark-Field Hyperspectral Microscopy. Bulletin of the Chemical Society of Japan, 2018, 91, 1640-1645.	2.0	32
74	Recent advances in the design of inorganic and nano-clay particles for the treatment of brain disorders. Journal of Materials Chemistry B, 2021, 9, 2756-2784.	2.9	32
75	Microworms swallow the nanobait: the use of nanocoated microbial cells for the direct delivery of nanoparticles into Caenorhabditis elegans. Nanoscale, 2013, 5, 11761.	2.8	30
76	Microfluidic device for the rapid coating of magnetic cells with polyelectrolytes. Materials Letters, 2013, 95, 182-185.	1.3	28
77	Binase Immobilized on Halloysite Nanotubes Exerts Enhanced Cytotoxicity toward Human Colon Adenocarcinoma Cells. Frontiers in Pharmacology, 2017, 8, 631.	1.6	28
78	Live celloidosome structures based on the assembly of individual cells by colloid interactions. Physical Chemistry Chemical Physics, 2010, 12, 11912.	1.3	27
79	Surface-modified magnetic human cells for scaffold-free tissue engineering. Biomaterials Science, 2013, 1, 810.	2.6	27
80	Electrochemical DNA Sensors Based on Nanostructured Organic Dyes/DNA/Polyelectrolyte Complexes. Journal of Nanoscience and Nanotechnology, 2014, 14, 6738-6747.	0.9	27
81	Magnetic halloysite nanotubes for yeast cell surface engineering. Clay Minerals, 2016, 51, 429-433.	0.2	27
82	Clay Nanotube Liquid Marbles Enhanced with Inner Biofilm Formation for the Encapsulation and Storage of Bacteria at Room Temperature. ACS Applied Nano Materials, 2020, 3, 1263-1271.	2.4	27
83	Nanomechanical Atomic Force Microscopy to Probe Cellular Microplastics Uptake and Distribution. International Journal of Molecular Sciences, 2022, 23, 806.	1.8	27
84	Turning Diamagnetic Microbes into Multinary Micro-Magnets: Magnetophoresis and Spatio-Temporal Manipulation of Individual Living Cells. Scientific Reports, 2016, 6, 38517.	1.6	25
85	Nanoarchitectonics meets cell surface engineering: shape recognition of human cells by halloysite-doped silica cell imprints. Beilstein Journal of Nanotechnology, 2019, 10, 1818-1825.	1.5	24
86	Self-assembled peptide nanoparticles for enhanced dark-field hyperspectral imaging at the cellular and invertebrate level. Chemical Engineering Journal, 2021, 424, 130348.	6.6	24
87	Unraveling the Molecular Mechanism of Selective Antimicrobial Activity of 2(5H)-Furanone Derivative against Staphylococcus aureus. International Journal of Molecular Sciences, 2019, 20, 694.	1.8	23
88	Facile Fabrication of Natural Polyelectrolyte-Nanoclay Composites: Halloysite Nanotubes, Nucleotides and DNA Study. Molecules, 2020, 25, 3557.	1.7	23
89	Clay Composites for Thermal Energy Storage: A Review. Molecules, 2020, 25, 1504.	1.7	23
90	Nanoscale imaging and characterization of Caenorhabditis elegans epicuticle using atomic force microscopy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 483-491.	1.7	22

#	Article	IF	CITATIONS
91	Mesoporous inorganic nanoscale particles for drug adsorption and controlled release. Therapeutic Delivery, 2018, 9, 287-301.	1.2	22
92	Nanoarchitectonics on living cells. RSC Advances, 2021, 11, 18898-18914.	1.7	22
93	Fluorescent gold nanoclusters stabilized on halloysite nanotubes: in vitro study on cytotoxicity. Applied Clay Science, 2021, 207, 106106.	2.6	22
94	Pharmaceuticals Removal by Adsorption with Montmorillonite Nanoclay. International Journal of Molecular Sciences, 2021, 22, 9670.	1.8	22
95	Architectural design of core–shell nanotube systems based on aluminosilicate clay. Nanoscale Advances, 2022, 4, 2823-2835.	2.2	22
96	Quartz crystal microbalance immunosensor for the detection of antibodies to double-stranded DNA. Analytical and Bioanalytical Chemistry, 2007, 388, 367-375.	1.9	21
97	Atomic force microscopy for imaging and nanomechanical characterisation of live nematode epicuticle: A comparative Caenorhabditis elegans and Turbatrix aceti study. Ultramicroscopy, 2018, 194, 40-47.	0.8	21
98	Multicellular spheroids formation: The synergistic effects of halloysite nanoclay and cationic magnetic nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 565, 16-24.	2.3	21
99	lonic clathrate hydrates loaded into a cryogel – halloysite clay composite for cold storage. Applied Clay Science, 2020, 191, 105618.	2.6	21
100	Label-free identification of microplastics in human cells: dark-field microscopy and deep learning study. Analytical and Bioanalytical Chemistry, 2022, 414, 1297-1312.	1.9	20
101	Nano-labelled cells—a functional tool in biomedical applications. Current Opinion in Pharmacology, 2014, 18, 84-90.	1.7	19
102	Kaolin alleviates the toxicity of graphene oxide for mammalian cells. MedChemComm, 2019, 10, 1457-1464.	3.5	19
103	Functional artificial free-standing yeast biofilms. Colloids and Surfaces B: Biointerfaces, 2011, 88, 656-663.	2.5	17
104	Antibacterial properties and <i>in vivo</i> studies of tannic acid-stabilized silver–halloysite nanomaterials. Clay Minerals, 2020, 55, 112-119.	0.2	17
105	Boron Nitride Nanotubes and Layer-By-Layer Polyelectrolyte Coating for Yeast Cell Surface Engineering. ChemNanoMat, 2016, 2, 426-429.	1.5	15
106	Spatial manipulation of magnetically-responsive nanoparticle engineered human neuronal progenitor cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 20, 102038.	1.7	15
107	Self-assembly of concentric microrings of tubule and platy nanoclays for cell patterning and capturing. Applied Clay Science, 2020, 195, 105707.	2.6	15
108	Clay Nanotube Immobilization on Animal Hair for Sustained Anti-Lice Protection. Pharmaceutics, 2021, 13, 1477.	2.0	15

#	Article	IF	CITATIONS
109	DNA/Magnetic Nanoparticles Composite to Attenuate Glass Surface Nanotopography for Enhanced Mesenchymal Stem Cell Differentiation. Polymers, 2022, 14, 344.	2.0	15
110	Biodistribution of Quantum Dots-Labelled Halloysite Nanotubes: A Caenorhabditis elegans In Vivo Study. Materials, 2021, 14, 5469.	1.3	14
111	Porous Alginate Scaffolds Designed by Calcium Carbonate Leaching Technique. Advanced Functional Materials, 2022, 32, .	7.8	14
112	Ceramic nanotubes for polymer composites with stable anticorrosion properties. Crystallography Reports, 2014, 59, 1107-1113.	0.1	12
113	Probing Diffusive Dynamics of Natural Tubule Nanoclays with Machine Learning. ACS Nano, 2022, 16, 5867-5873.	7.3	12
114	Worms eat oil: Alcanivorax borkumensis hydrocarbonoclastic bacteria colonise Caenorhabditis elegans nematodes intestines as a first step towards oil spills zooremediation. Science of the Total Environment, 2021, 761, 143209.	3.9	10
115	Comparative Toxicity of Fly Ash: An In Vitro Study. Molecules, 2021, 26, 1926.	1.7	10
116	Revisiting the Cytotoxicity of Cationic Polyelectrolytes as a Principal Component in Layer-by-Layer Assembly Fabrication. Pharmaceutics, 2021, 13, 1230.	2.0	10
117	COMPOSITE BIODEGRADABLE POLYMERIC MATRIX DOPED WITH HALLOYSITE NANOTUBES FOR THE REPAIR OF BONE DEFECTS IN DOGS. Clays and Clay Minerals, 2021, 69, 522-532.	0.6	10
118	Prokaryotic and eukaryotic toxicity of halloysite decorated with photoactive nanoparticles. Chemical Communications, 2022, 58, 7719-7729.	2.2	10
119	Hair surface engineering: Combining nanoarchitectonics with hair topical and beauty formulations. Applied Surface Science Advances, 2022, 7, 100188.	2.9	9
120	Halloysite Clay Nanotube Composites with Sustained Release of Chemicals. NATO Science for Peace and Security Series C: Environmental Security, 2015, , 87-118.	0.1	7
121	Targeted and theranostic applications for nanotechnologies in medicine. , 2018, , 399-511.		7
122	The Effect of Mammalian Cell Functionalization with Polycation and Halloysite Nanotubes on Intercellular Interactions. BioNanoScience, 2018, 8, 310-312.	1.5	7
123	Probing Antimicrobial Halloysite/Biopolymer Composites with Electron Microscopy: Advantages and Limitations. Polymers, 2021, 13, 3510.	2.0	7
124	Forskolin-Loaded Halloysite Nanotubes as Osteoconductive Additive for the Biopolymer Tissue Engineering Scaffolds. Polymers, 2021, 13, 3949.	2.0	7
125	Force interactions between Yersiniae lipopolysaccharides and monoclonal antibodies: An optical tweezers study. Journal of Biomechanics, 2020, 99, 109504.	0.9	6
126	Restoration of a XVII Century's predella reliquary: From Physico-Chemical Characterization to the Conservation Process. Forests, 2021, 12, 345.	0.9	6

#	Article	IF	CITATIONS
127	Sequence Does Not Matter: The Biomedical Applications of DNA-Based Coatings and Cores. International Journal of Molecular Sciences, 2021, 22, 12884.	1.8	6
128	Dark-Field Hyperspectral Microscopy for Carbon Nanotubes Bioimaging. Applied Sciences (Switzerland), 2021, 11, 12132.	1.3	5
129	Fabrication of Magnetically Modified Chlorella pyrenoidosa Microalgae Using Poly(diallyldimethyl) Tj ETQq1 1 0.7	784314 rg 1.5	BT JOverlock
130	Photoinduced Antibacterial Activity and Cytotoxicity of CdS Stabilized on Mesoporous Aluminosilicates and Silicates. Pharmaceutics, 2022, 14, 1309.	2.0	3
131	Layer-by-Layer Nanopreparations for Medicine — Smart Polyelectrolyte Multilayer Capsules and Coatings. Frontiers in Nanobiomedical Research, 2014, , 329-365.	0.1	2
132	Fabrication of Magnetically Responsive Agarose Microbeads Doped with Live Microbial Cells. BioNanoScience, 2017, 7, 75-77.	1.5	2
133	CHAPTER 15. Toxicological Evaluation of Clay Nanomaterials and Polymer–Clay Nanocomposites. RSC Smart Materials, 2016, , 399-419.	0.1	2
134	Advanced Microscopy Techniques for Nanoscale Diagnostic of Cultural Heritage., 2019, , 1-23.		1
135	Introduction: overview of nanoclays. , 2020, , xv.		1
136	Nematode Epicuticle Visualisation by PeakForce Tapping Atomic Force Microscopy. Bio-protocol, 2017, 7, e2596.	0.2	1
137	Caenorhabditis elegans Nematode: A Versatile Model to Evaluate the Toxicity of Nanomaterials In Vivo. , 2019, , 323-345.		1
138	Extracellular Vesicles from Mycoplasmas Can Penetrate Eukaryotic Cells <i>In Vitro</i> and Modulate the Cellular Proteome., 2021, 13, 82-88.		1
139	Editorial: Functionalized Nanocarriers for Theranostics. Frontiers in Bioengineering and Biotechnology, 2020, 8, 616574.	2.0	0
140	Petr Rychkov's Map of Iske (Inner or Old) Kazan of 4 July 1770. Zolotoordynskoe Obozrenie, 2021, 9, 593-610.	0.1	0
141	Biomimetic Composite Materials and Their Biological Applications. Nanostructure Science and Technology, 2022, , 459-479.	0.1	0