Yongho Seo

List of Publications by Year in Descending Order

126 papers	2,313 citations	26 h-index	41 g-index
134 ext. papers	2,679 ext. citations	5 avg, IF	4.96 L-index

#	Paper	IF	Citations
126	Optimum design for the ballistic diode based on graphene field-effect transistors. *Npj 2D Materials and Applications*, **2021**, 5,	8.8	1
125	Supercapacitors based on TiCT MXene extracted from supernatant and current collectors passivated by CVD-graphene. *Scientific Reports*, **2021**, 11, 649	4.9	12
124	NIR self-powered photodetection and gate tunable rectification behavior in 2D GeSe/MoSe heterojunction diode. *Scientific Reports*, **2021**, 11, 3688	4.9	19
123	Application of Titanium-Carbide MXene-Based Transparent Conducting Electrodes in Flexible Smart Windows. *ACS Applied Materials & Interfaces*, **2021**, 13, 40976-40985	9.5	5
122	Optoelectronics of Multijunction Heterostructures of Transition Metal Dichalcogenides. *Nano Letters*, **2020**, 20, 1934-1943	11.5	13
121	Visibility of hexagonal boron nitride on transparent substrates. *Nanotechnology*, **2020**, 31, 195701	3.4	2
120	Solar cell based on vertical graphene nano hills directly grown on silicon. *Carbon*, **2020**, 164, 235-243	10.4	10
119	Studies on directly grown few layer graphene processed using tape-peeling method. *Carbon*, **2020**, 158, 749-755	10.4	7
118	Effect of TiCT MXenes etched at elevated temperatures using concentrated acid on binder-free supercapacitors.. *RSC Advances*, **2020**, 10, 41837-41845	3.7	8
117	Polymer-dispersed liquid-crystal-based switchable glazing fabricated vacuum glass coupling.. *RSC Advances*, **2020**, 10, 32225-32231	3.7	22
116	WSe Homojunction p-n Diode Formed by Photoinduced Activation of Mid-Gap Defect States in Boron Nitride. *ACS Applied Materials & Interfaces*, **2020**, 12, 42007-42015	9.5	21
115	Acrylate-assisted fractal nanostructured polymer dispersed liquid crystal droplet based vibrant colored smart-windows.. *RSC Advances*, **2019**, 9, 12645-12655	3.7	23
114	Thickness-dependent efficiency of directly grown graphene based solar cells. *Carbon*, **2019**, 148, 187-195	10.4	28
113	Efficient gas-phase purification using chloroform for metal-free multi-walled carbon nanotubes. *Carbon*, **2019**, 148, 258-266	10.4	6
112	Quartz tuning fork based three-dimensional topography imaging for sidewall with blind features. *Ultramicroscopy*, **2019**, 210, 112916	3.1	0
111	Twist-Angle-Dependent Optoelectronics in a Few-Layer Transition-Metal Dichalcogenide Heterostructure. *ACS Applied Materials & Interfaces*, **2019**, 11, 2470-2478	9.5	15
110	Three-dimensional atomic force microscopy for ultra-high-aspect-ratio imaging. *Applied Surface Science*, **2019**, 469, 582-592	6.7	4

109	Operation Protocols To Improve Durability of Protonic Ceramic Fuel Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 457-468	9.5	7
108	Gate Modulation of the Spin-orbit Interaction in Bilayer Graphene Encapsulated by WS films. *Scientific Reports*, **2018**, 8, 3412	4.9	9
107	Influence of an Al2O3 interlayer in a directly grown graphene-silicon Schottky junction solar cell. *Carbon*, **2018**, 132, 157-164	10.4	50
106	CVD-graphene for low equivalent series resistance in rGO/CVD-graphene/Ni-based supercapacitors. *Nanotechnology*, **2018**, 29, 195404	3.4	12
105	Comparison of Electrical and Photoelectrical Properties of ReS Field-Effect Transistors on Different Dielectric Substrates. *ACS Applied Materials & Interfaces*, **2018**, 10, 32501-32509	9.5	27
104	Dynamics of liquid crystal on hexagonal lattice. *2D Materials*, **2018**, 5, 045021	5.9	4
103	Visualizing Degradation of Black Phosphorus Using Liquid Crystals. *Scientific Reports*, **2018**, 8, 12966	4.9	4
102	Improving the thermal stability of carbon nanotubes and their field emission characteristics by adding boron and phosphorus compounds. *Carbon*, **2018**, 139, 404-414	10.4	8
101	Influence of removing PMMA residues on surface of CVD graphene using a contact-mode atomic force microscope. *RSC Advances*, **2017**, 7, 6943-6949	3.7	44
100	A facile route to a high-quality graphene/MoS2 vertical field-effect transistor with gate-modulated photocurrent response. *Journal of Materials Chemistry C*, **2017**, 5, 2337-2343	7.1	13
99	Study of Grains and Boundaries of Molybdenum Diselenide and Tungsten Diselenide Using Liquid Crystal. *Nano Letters*, **2017**, 17, 1474-1481	11.5	20
98	Enhanced photoresponse of ZnO quantum dot-decorated MoS2 thin films. *RSC Advances*, **2017**, 7, 16890-16900	3.7	38
97	Gate Tunable Transport in Graphene/MoS$_2$/(Cr/Au) Vertical Field-Effect Transistors. *Nanomaterials*, **2017**, 8,	5.4	14
96	High-□dielectric oxide as an interfacial layer with enhanced photo-generation for Gr/Si solar cells. *Carbon*, **2017**, 125, 56-62	10.4	12
95	Energy harvesting efficiency of piezoelectric polymer film with graphene and metal electrodes. *Scientific Reports*, **2017**, 7, 17290	4.9	44
94	Inorganic gel and liquid crystal based smart window using silica sol-gel process. *Solar Energy Materials and Solar Cells*, **2017**, 159, 488-495	6.4	24
93	Effect of grain boundaries on electrical properties of polycrystalline graphene. *Carbon*, **2017**, 112, 142-148	10.4	17
92	Experimental data of inorganic gel based smart window using silica sol-gel process. *Data in Brief*, **2016**, 9, 716-722	1.2	

91	Characterization of Graphene-based FET Fabricated using a Shadow Mask. *Scientific Reports*, **2016**, 6, 25050	4.9	20
90	Study of Graphene-based 2D-Heterostructure Device Fabricated by All-Dry Transfer Process. *ACS Applied Materials & Interfaces*, **2016**, 8, 3072-8	9.5	38
89	Flexible polymer dispersed liquid crystal film with graphene transparent electrodes. *Current Applied Physics*, **2016**, 16, 409-414	2.6	23
88	A progressive route for tailoring electrical transport in MoS2. *Nano Research*, **2016**, 9, 380-391	10	13
87	Understanding the relationship between microstructure and mechanical properties of Al□CuSi ultrafine eutectic composites. *Materials and Design*, **2016**, 92, 1038-1045	8.1	37
86	Synthesis and characterization of large-area and continuous MoS2 atomic layers by RF magnetron sputtering. *Nanoscale*, **2016**, 8, 4340-7	7.7	62
85	n-MoS/p-Si Solar Cells with AlO Passivation for Enhanced Photogeneration. *ACS Applied Materials & Interfaces*, **2016**, 8, 29383-29390	9.5	61
84	High-mobility and air-stable single-layer WS2 field-effect transistors sandwiched between chemical vapor deposition-grown hexagonal BN films. *Scientific Reports*, **2015**, 5, 10699	4.9	187
83	Characterisation of carbon nanotube pastes for field emission using their sheet resistances. *Applied Surface Science*, **2015**, 353, 54-62	6.7	1
82	Designing porous metallic glass compact enclosed with surface iron oxides. *Journal of Alloys and Compounds*, **2015**, 635, 233-237	5.7	5
81	Improving the plasticity and strength of Fe□NbB ultrafine eutectic composite. *Materials & Design*, **2015**, 76, 190-195		22
80	Enhanced proton conductivity of yttrium-doped barium zirconate with sinterability in protonic ceramic fuel cells. *Journal of Alloys and Compounds*, **2015**, 639, 435-444	5.7	42
79	Degradation analysis of anode-supported intermediate temperature-solid oxide fuel cells under various failure modes. *Journal of Power Sources*, **2015**, 276, 120-132	8.9	18
78	Electrochemical properties of dual phase neodymium-doped ceria alkali carbonate composite electrolytes in intermediate temperature. *Journal of Power Sources*, **2015**, 275, 563-572	8.9	38
77	Nematic Liquid Crystal on a Two Dimensional Hexagonal Lattice and its Application. *Scientific Reports*, **2015**, 5, 13331	4.9	36
76	High-Efficiency Supercapacitor Electrodes of CVD-grown Graphenes Hybridized with Multiwalled Carbon Nanotubes. *Bulletin of the Korean Chemical Society*, **2015**, 36, 2111-2115	1.2	7
75	Optical properties and optimized conditions for polymer dispersed liquid crystal containing UV curable polymer and nematic liquid crystal. *Current Applied Physics*, **2015**, 15, 292-297	2.6	35
74	Cu/MoS2/ITO based hybrid structure for catalysis of hydrazine oxidation. *RSC Advances*, **2015**, 5, 15374-15378	3.7	10

73	Effect of Annealing in Ar/H2 Environment on Chemical Vapor Deposition-Grown Graphene Transferred With Poly (Methyl Methacrylate). *IEEE Nanotechnology Magazine*, **2015**, 14, 70-74	2.6	25
72	PdO-doped BaZr0.8Y0.2O3 electrolyte for intermediate-temperature protonic ceramic fuel cells. *Acta Materialia*, **2014**, 66, 273-283	8.4	22
71	General algorithm and method for scanning a via hole by using critical-dimension atomic force microscopy. *Journal of the Korean Physical Society*, **2014**, 64, 1643-1647	0.6	2
70	Post-mortem analysis of a long-term tested proton exchange membrane fuel cell stack under low cathode humidification conditions. *Journal of Power Sources*, **2014**, 253, 90-97	8.9	12
69	Mechanically stable tuning fork sensor with high quality factor for the atomic force microscope. *Scanning*, **2014**, 36, 632-9	1.6	3
68	Micro-to-nano-scale deformation mechanisms of a bimodal ultrafine eutectic composite. *Scientific Reports*, **2014**, 4, 6500	4.9	36
67	Electrochromic Device Containing Heptyl Viologen, PEDOT, TiO2and TEMPO. *Journal of the Electrochemical Society*, **2014**, 161, H716-H721	3.9	7
66	Tailoring the electrical properties of graphene layers by molecular doping. *ACS Applied Materials & Interfaces*, **2013**, 5, 5276-81	9.5	26
65	Heterogeneous duplex structured TiSnMo alloys with high strength and large plastic deformability. *Journal of Alloys and Compounds*, **2013**, 574, 546-551	5.7	12
64	Nanographene device fabrication using atomic force microscope. *Micro and Nano Letters*, **2013**, 8, 422-425	0.9	3
63	Raman spectroscopic image analysis on micropatterned graphene. *Micro and Nano Letters*, **2013**, 8, 362-365	0.9	3
62	Nanolithography on graphene by using scanning tunneling microscopy in a methanol environment. *Microscopy and Microanalysis*, **2013**, 19, 1569-74	0.5	1
61	The stress-dependent piezoelectric coefficient of ZnO wire measured by piezoresponse force microscopy. *Scripta Materialia*, **2012**, 66, 101-104	5.6	13
60	Nanoscale investigation of charge transport at the grain boundaries and wrinkles in graphene film. *Nanotechnology*, **2012**, 23, 285705	3.4	26
59	Optimization of mechanical properties of TiFeSn alloys by controlling heterogeneous eutectic structure. *Intermetallics*, **2012**, 23, 27-31	3.5	13
58	Solid-state phase transformation-induced heterogeneous duplex structure in TiSnFe alloys. *Journal of Alloys and Compounds*, **2012**, 515, 86-89	5.7	10
57	Field emission characteristics of carbon nanotube films fabricated on a metal mesh by filtration. *Journal of Alloys and Compounds*, **2012**, 521, 126-133	5.7	9
56	Removing graphite flakes for preparing mechanically exfoliated graphene sample. *Micro and Nano Letters*, **2012**, 7, 1133-1135	0.9	5

55	Necking mechanisms on porous metallic glass and W compacts using electro-discharge sintering. *Journal of Alloys and Compounds*, **2012**, 536, S78-S82	5.7	10
54	Operating Temperature Dependency on Performance Degradation of Direct Methanol Fuel Cells. *Fuel Cells*, **2012**, 12, 426-438	2.9	20
53	High-speed atomic force microscopy with phase-detection. *Current Applied Physics*, **2012**, 12, 989-994	2.6	5
52	High-current field emission of point-type carbon nanotube emitters on Ni-coated metal wires. *Carbon*, **2012**, 50, 2126-2133	10.4	19
51	The production of a cellular graphene array by scanning probe lithography and its ability to store electrical charge. *Carbon*, **2012**, 50, 4640-4647	10.4	9
50	Operational characteristics of the direct methanol fuel cell stack on fuel and energy efficiency with performance and stability. *International Journal of Hydrogen Energy*, **2012**, 37, 5946-5957	6.7	18
49	Local conductance measurement of graphene layer using conductive atomic force microscopy. *Journal of Applied Physics*, **2011**, 110, 054307	2.5	43
48	Effect of solubility on strengthening of Ag□u ultrafine eutectic composites. *Journal of Alloys and Compounds*, **2011**, 509, 9015-9018	5.7	7
47	Heterogeneous eutectic structure in Ti□e□n alloys. *Intermetallics*, **2011**, 19, 536-540	3.5	27
46	Application of scanning probe lithography to graphite patterning. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 1397-400	1.3	3
45	Impact of duty ratio-controlled ion energy on surface roughness of silicon nitride films deposited using a SiH4-NH3 plasma. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 5744-8	1.3	
44	Ridge formation and removal via annealing in exfoliated graphene. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 5949-54	1.3	7
43	Viscosity dependence of electrochemical etching for gold tip fabrication. *Current Applied Physics*, **2011**, 11, 1332-1336	2.6	6
42	Effect of microstructure modulation on mechanical properties of Ti-Fe-Sn ultrafine eutectic composites. *Metals and Materials International*, **2011**, 17, 873-877	2.4	16
41	Spectroscopic studies and electrical properties of transparent conductive films fabricated by using surfactant-stabilized single-walled carbon nanotube suspensions. *Carbon*, **2011**, 49, 4301-4313	10.4	46
40	Graphite patterning in a controlled gas environment. *Nanotechnology*, **2011**, 22, 335304	3.4	13
39	Electrical and Thermal Conductivities of Stycast 1266 Epoxy/Graphite Composites. *Journal of the Korean Physical Society*, **2011**, 59, 2760-2764	0.6	23
38	Effect of Poly(2-ethyl-2-oxazoline) on Multi-Walled Carbon Nanotubes Reinforced Poly(vinyl alcohol) Composites. *Polymers and Polymer Composites*, **2010**, 18, 251-256	0.8	2

37	Mechanical properties of rippled structure in suspended stacks of graphene. *Journal of Applied Physics*, **2010**, 108, 014302	2.5	7
36	Effect of Si on microstructure and mechanical properties of Fe-based ultrafine eutectic composites. *Intermetallics*, **2010**, 18, 1856-1859	3.5	4
35	Effect of Nb on microstructure and mechanical properties of ultrafine eutectic FeNiBSi composites. *Journal of Alloys and Compounds*, **2010**, 504, S487-S490	5.7	2
34	Duty ratio-controlled surface oughness of silicon nitride film deposited using room-temperature SiH4NH3N2 Plasma. *Electronic Materials Letters*, **2010**, 6, 161-166	2.9	5
33	Real-time atomic force microscopy in lubrication condition. *Ultramicroscopy*, **2010**, 110, 826-30	3.1	2
32	Room temperature, ion energy-controlled deposition of silicon nitride films in a SiH4-N2 plasma. *Metals and Materials International*, **2010**, 16, 621-625	2.4	
31	Deformation mechanisms of a bimodal eutectic Mg72Cu5Zn23 ultrafine composite. *Materials Letters*, **2010**, 64, 534-536	3.3	2
30	Effect of micro and nanoparticle inorganic fillers on the field emission characteristics of photosensitive carbon nanotube pastes. *Applied Surface Science*, **2010**, 256, 2636-2642	6.7	5
29	Light radiation through a transparent cathode plate with single-walled carbon nanotube field emitters. *Applied Surface Science*, **2010**, 256, 6838-6842	6.7	4
28	Lateral force microscopy in low normal force limit. *Current Applied Physics*, **2010**, 10, 355-358	2.6	2
27	Magnetization anisotropy of Ni dots with several tens of nanometer diameter. *Solid State Communications*, **2009**, 149, 839-842	1.6	2
26	Comparison of frictional forces on graphene and graphite. *Nanotechnology*, **2009**, 20, 325701	3.4	141
25	Catalytic Effect of PbO Glass Frit on the Degradation of the Carbon Nanotubes in a Field Emitter Paste. *Journal of the Korean Physical Society*, **2009**, 54, 729-735	0.6	2
24	Atomic force microscopy and spectroscopy. *Reports on Progress in Physics*, **2008**, 71, 016101	14.4	98
23	Surface morphology of SiN film deposited by a pulsed-plasma enhanced chemical vapor deposition at room temperature. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 5363-6	1.3	11
22	Real-time atomic force microscopy using mechanical resonator type scanner. *Review of Scientific Instruments*, **2008**, 79, 103703	1.7	15
21	Frictional force detection from lateral force microscopic image using a Si grating. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2008**, 313-314, 567-570	5.1	6
20	Compact Coarse Approach Mechanism for a Scanning Probe Microscope. *Journal of the Korean Physical Society*, **2008**, 52, 209-211	0.6	2

19	Inductive detection of magnetostrictive resonance. *Sensors and Actuators A: Physical*, **2007**, 140, 84-88	3.9	2
18	Active Q control in tuning-fork-based atomic force microscopy. *Applied Physics Letters*, **2007**, 91, 023103	3.4	25
17	N2 adsorption study on quartz, silver, and carbon nanotube by inductive pulse quartz crystal microbalance. *Journal of Applied Physics*, **2007**, 101, 053521	2.5	5
16	Measurement of Gas Flow Through a Single-Wall Carbon Nanotube by Using the BET Method. *Journal of the Korean Physical Society*, **2007**, 51, 107	0.6	2
15	Amplitude Change of a Quartz Crystal Microbalance. *Journal of the Korean Physical Society*, **2007**, 51, 1948	0.6	3
14	Shear-mode magnetic force microscopy with a quartz tuning fork in ambient conditions. *Nanotechnology*, **2006**, 17, S201-4	3.4	17
13	Origin of nonlinear transport across the magnetically induced superconductor-metal-insulator transition in two dimensions. *Physical Review Letters*, **2006**, 97, 057005	7.4	24
12	Magnetic effect of bias current in superconducting thin films. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 34, 693-696	3	1
11	Formation, manipulation, and elasticity measurement of a nanometric column of water molecules. *Physical Review Letters*, **2005**, 95, 187801	7.4	75
10	QUARTZ CRYSTAL RESONATOR BASED SCANNING PROBE MICROSCOPY. *Modern Physics Letters B*, **2005**, 19, 1303-1322	1.6	4
9	Epitaxial Magnetic Perovskite Nanostructures. *Advanced Materials*, **2005**, 17, 2869-2872	24	32
8	Tapping mode quartz crystal resonator based scanning force microscopy. *Review of Scientific Instruments*, **2005**, 76, 016106	1.7	1
7	Low-temperature high-resolution magnetic force microscopy using a quartz tuning fork. *Applied Physics Letters*, **2005**, 87, 103103	3.4	29
6	Edge current switch of two-dimensional electron gas using carrier density control. *Solid State Communications*, **2004**, 130, 391-395	1.6	2
5	Atomic-resolution noncontact atomic force microscopy in air. *Applied Physics Letters*, **2003**, 83, 1860-1862	3.4	26
4	Electrostatic force microscopy using a quartz tuning fork. *Applied Physics Letters*, **2002**, 80, 4324-4326	3.4	22
3	High-speed near-field scanning optical microscopy with a quartz crystal resonator. *Review of Scientific Instruments*, **2002**, 73, 2057-2059	1.7	9
2	Fast-scanning shear-force microscopy using a high-frequency dithering probe. *Applied Physics Letters*, **2000**, 77, 4274-4276	3.4	15

1	Adsorption of N2 on a porous silica substrate studied by a quartz-crystal microbalance. *Physical Review B*, **1999**, 60, 17003-17007	3.3	5