Juha Song

List of Publications by Citations

67 papers	2,547 citations	27 h-index	49 g-index
68 ext. papers	2,947 ext. citations	6.5 avg, IF	5.22 L-index

#	Paper	IF	Citations
67	Materials design principles of ancient fish armour. *Nature Materials*, **2008**, 7, 748-56	27	321
66	Nanofiber Generation of Gelatin□Hydroxyapatite Biomimetics for Guided Tissue Regeneration. *Advanced Functional Materials*, **2005**, 15, 1988-1994	15.6	305
65	Production of electrospun gelatin nanofiber by water-based co-solvent approach. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 95-102	4.5	141
64	Bioactive glass nanofiber-collagen nanocomposite as a novel bone regeneration matrix. *Journal of Biomedical Materials Research - Part A*, **2006**, 79, 698-705	5.4	107
63	3D printing of hydrogel composite systems: Recent advances in technology for tissue engineering. *International Journal of Bioprinting*, **2018**, 4, 126	6.2	100
62	Effect of Polystyrene Addition on Freeze Casting of Ceramic/Camphene Slurry for Ultra-High Porosity Ceramics with Aligned Pore Channels. *Journal of the American Ceramic Society*, **2006**, 89, 3646-3653	3.8	97
61	Freezing Dilute Ceramic/Camphene Slurry for Ultra-High Porosity Ceramics with Completely Interconnected Pore Networks. *Journal of the American Ceramic Society*, **2006**, 89, 3089-3093	3.8	85
60	Electrospun fibrous web of collagen-apatite precipitated nanocomposite for bone regeneration. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 2925-32	4.5	78
59	Improved compressive strength of reticulated porous zirconia using carbon coated polymeric sponge as novel template. *Materials Letters*, **2006**, 60, 2507-2510	3.3	70
58	Threat-protection mechanics of an armored fish. *Journal of the Mechanical Behavior of Biomedical Materials*, **2011**, 4, 699-712	4.1	69
57	Collagen-apatite nanocomposite membranes for guided bone regeneration. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2007**, 83, 248-57	3.5	66
56	Quantitative microstructural studies of the armor of the marine threespine stickleback (Gasterosteus aculeatus). *Journal of Structural Biology*, **2010**, 171, 318-31	3.4	58
55	Strong and Biostable Hyaluronic Acid-Calcium Phosphate Nanocomposite Hydrogel via in Situ Precipitation Process. *Biomacromolecules*, **2016**, 17, 841-51	6.9	50
54	Bioactive and degradable hybridized nanofibers of gelatin-siloxane for bone regeneration. *Journal of Biomedical Materials Research - Part A*, **2008**, 84, 875-84	5.4	49
53	Porous Hydroxyapatite Scaffolds Coated With Bioactive Apatite□Wollastonite Glass□Ceramics. *Journal of the American Ceramic Society*, **2007**, 90, 2703-2708	3.8	48
52	Novel strategy for mechanically tunable and bioactive metal implants. *Biomaterials*, **2015**, 37, 49-61	15.6	46
51	Fabrication of a Porous Bioactive Glass□Ceramic Using Room-Temperature Freeze Casting. *Journal of the American Ceramic Society*, **2006**, 89, 2649-2653	3.8	46

50	Anisotropic design of a multilayered biological exoskeleton. *Journal of Materials Research*, **2009**, 24, 3477-3494	2.5	44
49	Direct quantification of the mechanical anisotropy and fracture of an individual exoskeleton layer via uniaxial compression of micropillars. *Nano Letters*, **2011**, 11, 3868-74	11.5	43
48	Biomimetic porous Mg with tunable mechanical properties and biodegradation rates for bone regeneration. *Acta Biomaterialia*, **2019**, 84, 453-467	10.8	38
47	Antibacterial and bioactive properties of stabilized silver on titanium with a nanostructured surface for dental applications. *Applied Surface Science*, **2018**, 451, 232-240	6.7	32
46	MgF2-coated porous magnesium/alumina scaffolds with improved strength, corrosion resistance, and biological performance for biomedical applications. *Materials Science and Engineering C*, **2016**, 62, 634-42	8.3	31
45	Actuation and locomotion driven by moisture in paper made with natural pollen. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 8711-8718	11.5	30
44	Hydroxyapatite (HA)/poly-L-lactic acid (PLLA) dual coating on magnesium alloy under deformation for biomedical applications. *Journal of Materials Science: Materials in Medicine*, **2016**, 27, 34	4.5	30
43	Transformation of hard pollen into soft matter. *Nature Communications*, **2020**, 11, 1449	17.4	28
42	The Production of Porous Hydroxyapatite Scaffolds with Graded Porosity by Sequential Freeze-Casting. *Materials*, **2017**, 10,	3.5	27
41	Signaling responses of osteoblast cells to hydroxyapatite: the activation of ERK and SOX9. *Journal of Bone and Mineral Metabolism*, **2008**, 26, 138-42	2.9	27
40	Polyurethane-silica hybrid foams from a one-step foaming reaction, coupled with a sol-gel process, for enhanced wound healing. *Materials Science and Engineering C*, **2017**, 79, 866-874	8.3	25
39	Multi-scale porous Ti6Al4V scaffolds with enhanced strength and biocompatibility formed via dynamic freeze-casting coupled with micro-arc oxidation. *Materials Letters*, **2016**, 185, 21-24	3.3	24
38	Poly(ether imide)-silica hybrid coatings for tunable corrosion behavior and improved biocompatibility of magnesium implants. *Biomedical Materials (Bristol)*, **2016**, 11, 035003	3.5	23
37	The effects of morphological irregularity on the mechanical behavior of interdigitated biological sutures under tension. *Journal of Biomechanics*, **2017**, 58, 71-78	2.9	22
36	Multiscale porous titanium surfaces via a two-step etching process for improved mechanical and biological performance. *Biomedical Materials (Bristol)*, **2017**, 12, 025008	3.5	22
35	Silicone 3D Printing: Process Optimization, Product Biocompatibility, and Reliability of Silicone Meniscus Implants. *3D Printing and Additive Manufacturing*, **2019**, 6, 319-332	4	21
34	Improved cell viability for large-scale biofabrication with photo-crosslinkable hydrogel systems through a dual-photoinitiator approach. *Biomaterials Science*, **2019**, 8, 450-461	7.4	19
33	Mechanical response of common millet (Panicum miliaceum) seeds under quasi-static compression: Experiments and modeling. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 73, 102-113	4.1	18

32	A crack-free anti-corrosive coating strategy for magnesium implants under deformation. *Corrosion Science*, **2018**, 132, 116-124	6.8	18
31	Freeform 3D printing of soft matters: recent advances in technology for biomedical engineering. *Biomedical Engineering Letters*, **2020**, 10, 453-479	3.6	18
30	3D Direct Printing of Silicone Meniscus Implant Using a Novel Heat-Cured Extrusion-Based Printer. *Polymers*, **2020**, 12,	4.5	17
29	Acceleration of the healing process of full-thickness wounds using hydrophilic chitosan-silica hybrid sponge in a porcine model. *Journal of Biomaterials Applications*, **2018**, 32, 1011-1023	2.9	17
28	Ta ion implanted nanoridge-platform for enhanced vascular responses. *Biomaterials*, **2019**, 223, 119461	15.6	16
27	Large-scale nanopatterning of metal surfaces by target-ion induced plasma sputtering (TIPS). *RSC Advances*, **2016**, 6, 23702-23708	3.7	16
26	CO/N Separation Properties of Polyimide-Based Mixed-Matrix Membranes Comprising UiO-66 with Various Functionalities. *Membranes*, **2020**, 10,	3.8	16
25	Antimicrobial Microneedle Patch for Treating Deep Cutaneous Fungal Infection. *Advanced Therapeutics*, **2019**, 2, 1900064	4.9	14
24	High-performance porous carbon-zeolite mixed-matrix membranes for CO2/N2 separation. *Journal of Membrane Science*, **2021**, 622, 119031	9.6	14
23	Long-lasting and bioactive hyaluronic acid-hydroxyapatite composite hydrogels for injectable dermal fillers: Physical properties and in vivo durability. *Journal of Biomaterials Applications*, **2016**, 31, 464-74	2.9	14
22	Effect of HF/HNO3-treatment on the porous structure and cell penetrability of titanium (Ti) scaffold. *Materials and Design*, **2018**, 145, 65-73	8.1	13
21	3D Freeform Printing of Nanocomposite Hydrogels through Precipitation in Reactive Viscous Fluid. *International Journal of Bioprinting*, **2020**, 6, 258	6.2	13
20	The accelerating effect of chitosan-silica hybrid dressing materials on the early phase of wound healing. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2017**, 105, 1828-1839	3.5	12
19	Plant seed-inspired cell protection, dormancy, and growth for large-scale biofabrication. *Biofabrication*, **2019**, 11, 025008	10.5	12
18	3D Printed Silicone Meniscus Implants: Influence of the 3D Printing Process on Properties of Silicone Implants. *Polymers*, **2020**, 12,	4.5	11
17	Fabrication and Characterization of Dual-Channeled Zirconia Ceramic Scaffold. *Journal of the American Ceramic Society*, **2006**, 89, 2021-2026	3.8	10
16	Bioinspired cell-in-shell systems in biomedical engineering and beyond: Comparative overview and prospects. *Biomaterials*, **2021**, 266, 120473	15.6	10
15	Extremely Versatile Deformability beyond Materiality: A New Material Platform through Simple Cutting for Rugged Batteries. *Advanced Engineering Materials*, **2019**, 21, 1900206	3.5	8

List of Publications

14	Incorporation of Calcium Sulfate Dihydrate into Hydroxyapatite Microspheres To Improve the Release of Bone Morphogenetic Protein-2 and Accelerate Bone Regeneration. *ACS Biomaterials Science and Engineering*, **2018**, 4, 846-856	5.5	8
13	Development of a new additive manufacturing platform for direct freeform 3D printing of intrinsically curved flexible membranes. *Additive Manufacturing*, **2020**, 36, 101563	6.1	7
12	Chitosan-Based Dressing Materials for Problematic Wound Management. *Advances in Experimental Medicine and Biology*, **2018**, 1077, 527-537	3.6	7
11	Fabrication of Mechanically Tunable and Bioactive Metal Scaffolds for Biomedical Applications. *Journal of Visualized Experiments*, **2015**, e53279	1.6	6
10	Recyclable and biocompatible microgel-based supporting system for positive 3D freeform printing of silicone rubber. *Biomedical Engineering Letters*, **2020**, 10, 517-532	3.6	6
9	Morphometric structural diversity of a natural armor assembly investigated by 2D continuum strain analysis. *Journal of Structural Biology*, **2015**, 192, 487-499	3.4	5
8	Carbon Molecular Sieve Membranes Comprising Graphene Oxides and Porous Carbon for CO/N Separation. *Membranes*, **2021**, 11,	3.8	4
7	Functionally assembled metal platform as lego-like module system for enhanced mechanical tunability and biomolecules delivery. *Materials and Design*, **2021**, 207, 109840	8.1	4
6	Engineering Natural Pollen Grains as Multifunctional 3D Printing Materials. *Advanced Functional Materials*,2106276	15.6	3
5	3D-printed monolithic porous adsorbents from a solution-processible, hypercrosslinkable, functionalizable polymer. *Chemical Engineering Journal*, **2022**, 427, 130883	14.7	3
4	Nanotechnology Facilitated Cultured Neuronal Network and Its Applications. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	2
3	Customizable design of multiple-biomolecule delivery platform for enhanced osteogenic responses via tailored assembly system *Bio-Design and Manufacturing*,1	4.7	1
2	Engineering Natural Pollen Grains as Multifunctional 3D Printing Materials (Adv. Funct. Mater. 49/2021). *Advanced Functional Materials*, **2021**, 31, 2170360	15.6	1
1	Unraveling the distinct germination processes of sporopollenin-based pollen grains and spores through morphological analyses upon natural nano-architectonics process. *Applied Materials Today*, **2022**, 27, 101471	6.6	1