Dae Kun Hwang

List of Publications by Year
in descending order

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46 papers	1,700 citations	304743 22 h-index	276875 41 g-index
46 all docs	46 docs citations	46 times ranked	2513 citing authors

#	Article	IF	Citations
1	Multifunctional Superparamagnetic Janus Particles. Langmuir, 2010, 26, 4281-4287.	3.5	237
2	Microfluidic-based synthesis of non-spherical magnetic hydrogel microparticles. Lab on A Chip, 2008, 8, 1640.	6.0	203
3	Stop-Flow Lithography for the Production of Shape-Evolving Degradable Microgel Particles. Journal of the American Chemical Society, 2009, 131, 4499-4504.	13.7	128
4	Synthesis of Nonspherical Superparamagnetic Particles: In Situ Coprecipitation of Magnetic Nanoparticles in Microgels Prepared by Stop-Flow Lithography. Journal of the American Chemical Society, 2012, 134, 7337-7343.	13.7	115
5	Advanced cell culture platforms: a growing quest for emulating natural tissues. Materials Horizons, 2019, 6, 45-71.	12.2	114
6	Water-in-Water Droplets by Passive Microfluidic Flow Focusing. Analytical Chemistry, 2016, 88, 3982-3989.	6.5	99
7	Microfluidic generation of aqueous two-phase system (ATPS) droplets by controlled pulsating inlet pressures. Lab on A Chip, 2015, 15, 2437-2444.	6.0	86
8	Oneâ€Step Twoâ€Dimensional Microfluidicsâ€Based Synthesis of Threeâ€Dimensional Particles. Advanced Materials, 2014, 26, 1393-1398.	21.0	54
9	Analysis of mixing in an aerated reactor equipped with the coaxial mixer through electrical resistance tomography and response surface method. Chemical Engineering Research and Design, 2016, 109, 734-752.	5.6	53
10	Facile synthesis of Br-doped g-C3N4 nanosheets via one-step exfoliation using ammonium bromide for photodegradation of oxytetracycline antibiotics. Journal of Industrial and Engineering Chemistry, 2019, 79, 473-481.	5.8	53
11	Microfluidic Generation of Allâ€Aqueous Double and Triple Emulsions. Small, 2020, 16, e1906565.	10.0	49
12	Microarchitecture for a Threeâ€Dimensional Wrinkled Surface Platform. Advanced Materials, 2015, 27, 1880-1886.	21.0	45
13	Wrinkling Non-Spherical Particles and Its Application in Cell Attachment Promotion. Scientific Reports, 2016, 6, 30463.	3.3	42
14	Shrinking, growing, and bursting: microfluidic equilibrium control of water-in-water droplets. Lab on A Chip, 2016, 16, 2601-2608.	6.0	35
15	Analysis of power consumption and gas holdup distribution for an aerated reactor equipped with a coaxial mixer: Novel correlations for the gas flow number and gassed power. Chemical Engineering Science, 2016, 151, 25-35.	3.8	33
16	MODELING MECHANICAL CELL DAMAGE IN THE BIOPRINTING PROCESS EMPLOYING A CONICAL NEEDLE. Journal of Mechanics in Medicine and Biology, 2015, 15, 1550073.	0.7	29
17	Hydrodynamic characteristics of an aerated coaxial mixing vessel equipped with a pitched blade turbine and an anchor. Journal of Chemical Technology and Biotechnology, 2018, 93, 392-405.	3.2	27
18	Microneedle-assisted microfluidic flow focusing for versatile and high throughput water-in-water droplet generation. Journal of Colloid and Interface Science, 2019, 553, 382-389.	9.4	27

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19	Hydrogen generation using Pt/Ni bimetallic nanoparticles supported on Fe3O4@SiO2@TiO2 multi-shell microspheres. Journal of Industrial and Engineering Chemistry, 2019, 79, 364-369.	5.8	25
20	3D shape evolution of microparticles and 3D enabled applications using non-uniform UV flow lithography (NUFL). Soft Matter, 2017, 13, 7255-7263.	2.7	23
21	Controlled Electrospray Generation of Nonspherical Alginate Microparticles. ChemPhysChem, 2018, 19, 2113-2118.	2.1	23
22	Functional Polymer Sheet Patterning Using Microfluidics. Langmuir, 2014, 30, 8637-8644.	3.5	22
23	Microfluidic conformal coating of non-spherical magnetic particles. Biomicrofluidics, 2014, 8, 052103.	2.4	21
24	A review on microwell and microfluidic geometric array fabrication techniques and its potential applications in cellular studies. Canadian Journal of Chemical Engineering, 2021, 99, 61-96.	1.7	20
25	Rotary polymer micromachines: in situ fabrication of microgear components in microchannels. Microfluidics and Nanofluidics, 2015, 19, 67-74.	2.2	18
26	Computational modelling of light propagation in textured liquid crystals based on the finiteâ€difference timeâ€domain (FDTD) method. Liquid Crystals, 2005, 32, 483-497.	2.2	13
27	Direct cell-cell communication with three-dimensional cell morphology on wrinkled microposts. Acta Biomaterialia, 2018, 78, 89-97.	8.3	13
28	Optical modeling of liquid crystal biosensors. Journal of Chemical Physics, 2006, 125, 174902.	3.0	12
29	Fabrication of Highly Porous Nonspherical Particles Using Stop-Flow Lithography and the Study of Their Optical Properties. Langmuir, 2017, 33, 184-190.	3.5	10
30	A microfluidic approach for the synthesis and assembly of multi-scale porous membranes. RSC Advances, 2015, 5, 100024-100029.	3.6	9
31	Chitosan hydrogel micro-bio-devices with complex capillary patterns via reactive-diffusive self-assembly. Acta Biomaterialia, 2019, 99, 211-219.	8.3	7
32	Rapid fabrication of sieved microwells and cross-flow microparticle trapping. Scientific Reports, 2020, 10, 15687.	3.3	7
33	Photothermal performance of plasmonic patch with gold nanoparticles embedded on polymer matrix. Korean Journal of Chemical Engineering, 2019, 36, 1746-1751.	2.7	6
34	Macroporous-Enabled Highly Deformable Layered Hydrogels with Designed pH Response. Langmuir, 2018, 34, 6856-6860.	3.5	5
35	Tunable Multiplanar Nanowrinkled Surface Platform. Advanced Materials Interfaces, 2018, 5, 1800663.	3.7	5
36	Facile Fabrication Method of Conical Microwells Using Nonâ€Uniform Photolithography. Advanced Materials Interfaces, 2020, 7, 2000981.	3.7	4

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37	A New Rapid Microfluidic Detection Platform Utilizing Hydrogelâ€Membrane under Crossâ€Flow. Advanced Materials Technologies, 2022, 7, .	5.8	4
38	Computational modeling of texture formation and optical performance of liquid crystal films on patterned surfaces. SIAM Journal on Applied Mathematics, 2006, 67, 214-234.	1.8	3
39	No more bonding, no more clamping, magnetically assisted membrane integration in microfluidic devices. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	3
40	3D Coffeeâ€Ring Effect: The Coffeeâ€Ring Effect on 3D Patterns: A Simple Approach to Creating Complex Hierarchical Materials (Adv. Mater. Interfaces 16/2019). Advanced Materials Interfaces, 2019, 6, 1970104.	3.7	3
41	The Coffeeâ€Ring Effect on 3D Patterns: A Simple Approach to Creating Complex Hierarchical Materials. Advanced Materials Interfaces, 2019, 6, 1900003.	3.7	3
42	Scalable, Membraneâ€Based Microfluidic Passive Crossâ€Flow Platform for Monodispersed, Waterâ€inâ€Water Microdroplet Production. Advanced Materials Interfaces, 2021, 8, 2101371.	3.7	3
43	Microfluidic flow assembly system with magnetic clamp for unlimited geometry in millimetric hydrogel film patterning. Applied Materials Today, 2022, 26, 101330.	4.3	3
44	FORMATION OF HETEROCYCLIC AMINES IN MEAT EMULSION EXTENDED WITH SOY PROTEIN. Journal of Food Processing and Preservation, 2003, 27, 373-386.	2.0	2
45	Plasmon-Free Polymeric Nanowrinkled Substrates for Surface-Enhanced Raman Spectroscopy of Two-Dimensional Materials. Langmuir, 2021, 37, 322-329.	3.5	2
46	Modeling and Numerical Studies of Threeâ€Dimensional Conically Shaped Microwells Using Nonâ€Uniform Photolithography. Macromolecular Theory and Simulations, 2022, 31, 2100085.	1.4	2