Chih-Hung Chang

List of Publications by Year
in descending order

89 papers	2,450 citations	185998 28 h-index	223531 46 g-index
91 all docs	91 docs citations	91 times ranked	3521 citing authors

#	Article	IF	Citations
1	Inkjet Printing and In-Situ Crystallization of Biopigments for Eco-Friendly and Energy-Efficient Fabric Coloration. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 941-953.	2.7	4
2	Synthesis of a 316L stainless steel-copper composite by laser melting. Additive Manufacturing Letters, 2022, 3, 100058.	0.9	2
3	Nanocrystalline semiconductors for thin-film devices by microreactor-assisted chemical solution deposition. , 2021, , 167-194.		0
4	Downshifting and antireflective thin films for solar module power enhancement. Materials and Design, 2021, 201, 109454.	3.3	14
5	Inkjetâ€Printed Ternary Oxide Dielectric and Doped Interface Layer for Metalâ€Oxide Thinâ€Film Transistors with Low Voltage Operation. Advanced Materials Interfaces, 2021, 8, 2100728.	1.9	16
6	Fusion of Stacked Nanowires: From Atomistic to Analytical Models. Advanced Theory and Simulations, 2021, 4, 2100104.	1.3	3
7	Continuous-Flow Photocatalytic Microfluidic-Reactor for the Treatment of Aqueous Contaminants, Simplicity, and Complexity: A Mini-Review. Symmetry, 2021, 13, 1325.	1.1	12
8	Inkjet Printing of Fewâ€Layer Enriched Black Phosphorus Nanosheets for Electronic Devices. Advanced Electronic Materials, 2021, 7, 2100577.	2.6	12
9	A Scalable Solution Route to Porous Networks of Nanostructured Black Tungsten. Nanomaterials, 2021, 11, 2304.	1.9	1
10	Tuning electronic and photocatalytic properties in pulsed light synthesis of Cu2ZnSnS4 films from CuS-ZnS-SnS nanoparticles. Materials Research Bulletin, 2020, 122, 110645.	2.7	15
11	Microfluidics-enabled rational design for Agâ€“ZnO nanocomposite films for enhanced photoelectrochemical performance. CrystEngComm, 2020, 22, 646-653.	1.3	10
12	Reversible Insertion of Mgâ€Cl Superhalides in Graphite as a Cathode for Aqueous Dualâ€Ion Batteries. Angewandte Chemie - International Edition, 2020, 59, 19924-19928.	7.2	39
13	Segmented Microfluidic Flow Reactors for Nanomaterial Synthesis. Nanomaterials, 2020, 10, 1421.	1.9	23
14	Reversible Insertion of Mgâ€Cl Superhalides in Graphite as a Cathode for Aqueous Dualâ€Ion Batteries. Angewandte Chemie, 2020, 132, 20096-20100.	1.6	16
15	Microfluidics for Two-Dimensional Nanosheets: A Mini Review. Processes, 2020, 8, 1067.	1.3	9
16	Oxide dispersion strengthened 304 L stainless steel produced by ink jetting and laser powder bed fusion. CIRP Annals - Manufacturing Technology, 2020, 69, 193-196.	1.7	13
17	Metalâ€“Organic Framework Thin Films: Fabrication, Modification, and Patterning. Processes, 2020, 8, 377.	1.3	31
18	Hydrothermal synthesis and site symmetry tuning of polycrystalline YVO4:Eu nanoparticles via a continuous-flow microreactor. Nanotechnology, 2020, 31, 235603.	1.3	2

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19	Nanostructured copper sulfide thin film via a spatial successive ionic layer adsorption and reaction process showing significant surface-enhanced infrared absorption of CO₂. Journal of Materials Chemistry C, 2020, 8, 3069-3078.	2.7	9
20	Curating Metalâ€“Organic Frameworks To Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Interfaces, 2020, 12, 6546-6564.	4.0	25
21	Microstructural Analysis of Additively Manufactured 304L Stainless Steel Oxide Dispersion Strengthened Alloy. Microscopy and Microanalysis, 2019, 25, 2594-2595.	0.2	14
22	On the unusual amber coloration of nanoporous sol-gel processed Al-doped silica glass: An experimental study. Scientific Reports, 2019, 9, 12474.	1.6	0
23	Feasibility and Surface Evaluation of the Pigment from Scytalidium cuboideum for Inkjet Printing on Textiles. Coatings, 2019, 9, 266.	1.2	14
24	Investigation of CdS nanoparticles formation and deposition by the continuous flow microreactor. Applied Surface Science, 2019, 472, 158-164.	3.1	8
25	A Foam-Core Meniscus Coating Process for Retrofit Anti-Reflective Coatings. Journal of Micro and Nano-Manufacturing, 2019, 7, .	0.8	2
26	Multimodal characterization of solution-processed Cu₃SbS₄absorbers for thin film solar cells. Journal of Materials Chemistry A, 2018, 6, 8682-8692.	5.2	24
27	Temperature, Crystalline Phase and Influence of Substrate Properties in Intense Pulsed Light Sintering of Copper Sulfide Nanoparticle Thin Films. Scientific Reports, 2018, 8, 2201.	1.6	29
28	Surface-Enhanced Infrared Absorption: Pushing the Frontier for On-Chip Gas Sensing. ACS Sensors, 2018, 3, 230-238.	4.0	49
29	Rapid Pulsed Light Sintering of Silver Nanowires on Woven Polyester for personal thermal management with enhanced performance, durability and cost-effectiveness. Scientific Reports, 2018, 8, 17159.	1.6	24
30	Modeling nanoscale temperature gradients and conductivity evolution in pulsed light sintering of silver nanowire networks. Nanotechnology, 2018, 29, 505205.	1.3	25
31	Characterization of Cotton Ball-like Au/ZnO Photocatalyst Synthesized in a Micro-Reactor. Micromachines, 2018, 9, 322.	1.4	6
32	Growth Kinetics of ZnS Thin Films from a High-Rate Chemical Bath Deposition with Trisodium-Nitrilotriacetate Complexing. ECS Journal of Solid State Science and Technology, 2018, 7, P615-P623.	0.9	1
33	Nucleation and growth of oriented metal-organic framework thin films on thermal SiO2 surface. Thin Solid Films, 2018, 659, 24-35.	0.8	9
34	Capillary Rise of Nanostructured Microwicks. Micromachines, 2018, 9, 153.	1.4	15
35	Scalably synthesized environmentally benign, aqueous-based binary nanoparticle inks for Cu₂ZnSn(S,Se)₄ photovoltaic cells achieving over 9% efficiency. Sustainable Energy and Fuels, 2017, 1, 267-274.	2.5	19
36	Continuous, size and shape-control synthesis of hollow silica nanoparticles enabled by a microreactor-assisted rapid mixing process. Nanotechnology, 2017, 28, 235602.	1.3	16

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37	Plasmonic nanopatch array with integrated metalâ€“organic framework for enhanced infrared absorption gas sensing. Nanotechnology, 2017, 28, 26LT01.	1.3	20
38	Visible to infrared plasmonic absorption from silver nanostructures enabled by microreactor-assisted solution deposition. CrystEngComm, 2017, 19, 1265-1272.	1.3	4
39	Large-scale Generation of Patterned Bubble Arrays on Printed Bi-functional Boiling Surfaces. Scientific Reports, 2016, 6, 23760.	1.6	54
40	Near-infrared absorption gas sensing with metal-organic framework on optical fibers. Sensors and Actuators B: Chemical, 2016, 232, 43-51.	4.0	61
41	Low-temperature, inkjet printed p-type copper(<scp>i</scp>) iodide thin film transistors. Journal of Materials Chemistry C, 2016, 4, 10309-10314.	2.7	59
42	Growth kinetics of copper sulfide thin films by photochemical deposition. CrystEngComm, 2016, 18, 6748-6758.	1.3	2
43	Continuous formation of a seed layer and vertical ZnO nanowire arrays enabled by tailored reaction kinetics in a microreactor. CrystEngComm, 2016, 18, 8645-8652.	1.3	13
44	64-4:Invited Paper: Printed Metal Oxide Transistors. Digest of Technical Papers SID International Symposium, 2016, 47, 876-879.	0.1	0
45	On the self-damping nature of densification in photonic sintering of nanoparticles. Scientific Reports, 2015, 5, 14845.	1.6	40
46	Conformal growth of copper sulfide thin films on highly textured surface via microreactor-assisted solution deposition. CrystEngComm, 2015, 17, 2827-2836.	1.3	13
47	Room temperature fabrication and patterning of highly conductive silver features using in situ reactive inks by microreactor-assisted printing. Journal of Materials Chemistry C, 2015, 3, 7262-7266.	2.7	21
48	The effects of gallium on solution-derived indium oxide-based thin film transistors manufactured on display glass. RSC Advances, 2015, 5, 93779-93785.	1.7	7
49	Plasmonics-enhanced metalâ€“organic framework nanoporous films for highly sensitive near-infrared absorption. Journal of Materials Chemistry C, 2015, 3, 2763-2767.	2.7	41
50	The synthesis of cadmium sulfide nanoplatelets using a novel continuous flow sonochemical reactor. Ultrasonics Sonochemistry, 2015, 26, 452-460.	3.8	19
51	Low-cost & low-temperature curable solution-processed silica-based nanostructured antireflective coatings on CuIn_{1â^'x}Ga_xSe₂thin film solar cells. RSC Advances, 2015, 5, 24712-24717.	1.7	10
52	Ultrashort Near-Infrared Fiber-Optic Sensors for Carbon Dioxide Detection. IEEE Sensors Journal, 2015, 15, 5327-5332.	2.4	49
53	Fabrication of high-performance, low-temperature solution processed amorphous indium oxide thin-film transistors using a volatile nitrate precursor. Journal of Materials Chemistry C, 2015, 3, 854-860.	2.7	63
54	Numerical Modeling of Sub-Wavelength Anti-Reflective Structures for Solar Module Applications. Nanomaterials, 2014, 4, 87-128.	1.9	100

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55	Microreactor-Assisted Solution Deposition for Compound Semiconductor Thin Films. Processes, 2014, 2, 441-465.	1.3	6
56	Chemical Solution Based MoS2 Thin Film Deposition Based on Dimensional Reduction. Materials Research Society Symposia Proceedings, 2014, 1675, 215-218.	0.1	1
57	Two-step continuous-flow synthesis of CuInSe₂ nanoparticles in a solar microreactor. RSC Advances, 2014, 4, 13827-13830.	1.7	7
58	Synthesis of colloidal PbSe nanoparticles using a microwave-assisted segmented flow reactor. Materials Letters, 2014, 128, 54-59.	1.3	30
59	Continuous Microwave-Assisted Gasâ€“Liquid Segmented Flow Reactor for Controlled Nucleation and Growth of Nanocrystals. Crystal Growth and Design, 2014, 14, 5349-5355.	1.4	34
60	Aqueous Synthesis of Tailored ZnO Nanocrystals, Nanocrystal Assemblies, and Nanostructured Films by Physical Means Enabled by a Continuous Flow Microreactor. Crystal Growth and Design, 2014, 14, 4759-4767.	1.4	24
61	Continuous synthesis of colloidal chalcopyrite copper indium diselenide nanocrystal inks. RSC Advances, 2014, 4, 16418-16424.	1.7	14
62	Dense CdS thin films on fluorine-doped tin oxide coated glass by high-rate microreactor-assisted solution deposition. Thin Solid Films, 2013, 532, 16-21.	0.8	21
63	High-rate synthesis of Cuâ€“BTC metalâ€“organic frameworks. Chemical Communications, 2013, 49, 11518.	2.2	127
64	Effects of fluid flow on the growth and assembly of ZnO nanocrystals in a continuous flow microreactor. CrystEngComm, 2013, 15, 3326.	1.3	36
65	Continuous precipitation of ceria nanoparticles from a continuous flow micromixer. International Journal of Advanced Manufacturing Technology, 2013, 64, 579-586.	1.5	17
66	Visible-light-sensitive Na-doped p-type flower-like ZnO photocatalysts synthesized via a continuous flow microreactor. RSC Advances, 2013, 3, 12702.	1.7	47
67	Visible-light-sensitive nanoscale Auâ€“ZnO photocatalysts. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	35
68	Formation of zinc oxide films using submicron zinc particle dispersions. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 041805.	0.6	3
69	Synthesis of CuInSe2 nanocrystals using a continuous hot-injection microreactor. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	12
70	Nanostructured ZnO as biomimetic anti-reflective coatings on textured silicon using a continuous solution process. Journal of Materials Chemistry, 2012, 22, 22906.	6.7	31
71	Microwave assisted synthesis of Cu₂ZnSnS₄ colloidal nanoparticle inks. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 2186-2194.	0.8	68
72	8.01% CuInGaSe2 solar cells fabricated by air-stable low-cost inks. Physical Chemistry Chemical Physics, 2012, 14, 11154.	1.3	64

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73	Continuous synthesis of SnTe nanorods. Journal of Materials Chemistry, 2011, 21, 12218.	6.7	27
74	Thermal annealing activates amplified photoluminescence of germanium metabolically doped in diatom biosilica. Journal of Materials Chemistry, 2011, 21, 10658.	6.7	19
75	Bipolar resistive switching of zinc-tin-oxide resistive random access memory. , 2011, , .		2
76	Inkjet printed chalcopyrite CuInxGa1â^'xSe2 thin film solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 2616-2620.	3.0	110
77	Air-stable solution-deposited chalcopyrite CuIn<inf>1−x</inf>Ga<inf>x</inf>Se<inf>2</inf> thin film solar cells. , 2011, , .		0
78	Enhancement of pool-boiling heat transfer using nanostructured surfaces on aluminum and copper. International Journal of Heat and Mass Transfer, 2010, 53, 3357-3365.	2.5	174
79	High-rate synthesis of phosphine-stabilized undecagold nanoclusters using a multilayered micromixer. Nanotechnology, 2010, 21, 445604.	1.3	24
80	Electron Microscopy and Optical Characterization of Cadmium Sulphide Nanocrystals Deposited on the Patterned Surface of Diatom Biosilica. Journal of Nanomaterials, 2009, 2009, 1-7.	1.5	30
81	Self-Assembly of Nanostructured Diatom Microshells into Patterned Arrays Assisted by Polyelectrolyte Multilayer Deposition and Inkjet Printing. Journal of the American Chemical Society, 2009, 131, 4178-4179.	6.6	48
82	Inkjet-Printed High Mobility Transparentâ€"Oxide Semiconductors. Journal of Display Technology, 2009, 5, 520-524.	1.3	66
83	Inkjet printed high-mobility indium zinc tin oxide thin film transistors. Journal of Materials Chemistry, 2009, 19, 3135.	6.7	139
84	Synthesis and post-processing of nanomaterials using microreaction technology. Journal of Nanoparticle Research, 2008, 10, 965-980.	0.8	99
85	Biogenic silica based Zn2SiO4:Mn2+ and Y2SiO5:Eu3+ phosphor layers patterned by inkjet printing process. Journal of Materials Chemistry, 2008, 18, 3633.	6.7	16
86	A grounded coplanar waveguide technique for microwave measurement of complex permittivity and permeability. IEEE Transactions on Magnetics, 2006, 42, 1929-1931.	1.2	24
87	Biosynthesis and Electron Microscopy Characterization of Diatom Nanocomposites. Materials Research Society Symposia Proceedings, 2005, 901, 1.	0.1	0
88	Blue Luminescent Biogenic Silicon-Germanium Oxide Nanocomposites. Materials Research Society Symposia Proceedings, 2005, 873, 1.	0.1	3
89	Novel Multilayer Process for CuInSe2 Thin Film Formation by Rapid Thermal Processing. Materials Research Society Symposia Proceedings, 1997, 485, 163.	0.1	2