

Fu-Hsiang Ko

List of Publications by Year in descending order

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101
papers

2,345
citations

201674

27
h-index

243625

44
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102
all docs

102
docs citations

102
times ranked

3481
citing authors

#	ARTICLE	IF	CITATIONS
1	The preferential accumulation of cadmium ions among various tissues in mice. <i>Toxicology Reports</i> , 2022, 9, 111-119.	3.3	15
2	Weathering-Resistant Replicas Fabricated by a Three-Dimensional Printing Robotic Platform Induce Shoaling Behavior in Zebrafish. <i>Sensors</i> , 2022, 22, 3481.	3.8	0
3	Screen-Printable Silver Paste Material for Semitransparent and Flexible Metalâ€“Semiconductorâ€“Metal Photodetectors with Liquid-Phase Procedure. <i>Nanomaterials</i> , 2022, 12, 2428.	4.1	3
4	Use of curcumin-modified diamond nanoparticles in cellular imaging and the distinct ratiometric detection of Mg ²⁺ /Mn ²⁺ ions. <i>Nanoscale Advances</i> , 2021, 3, 4459-4470.	4.6	3
5	A novel electronic assay based on a sol-gel transition reaction and a thin-film transistor of supramolecular hydrogels to detect alkaline phosphatase activity. <i>Sensors and Actuators B: Chemical</i> , 2021, 334, 129591.	7.8	8
6	The Multifunctionally Graded System for a Controlled Size Effect on Iron Oxideâ€“Gold Based Core-Shell Nanoparticles. <i>Nanomaterials</i> , 2021, 11, 1695.	4.1	5
7	Trivalent Cations Detection of Magnetic-Sensitive Microcapsules by Controlled-Release Fluorescence Off-On Sensor. <i>Nanomaterials</i> , 2021, 11, 1801.	4.1	2
8	Piezo-enhanced Thermoelectric Properties of Highly Preferred <i>c</i> -Axis ZnO Nanocrystal Films: Implications for Energy Harvesting. <i>ACS Applied Nano Materials</i> , 2021, 4, 9430-9439.	5.0	4
9	Concept for Efficient Light Harvesting in Perovskite Materials via Solar Harvester with Multi-Functional Folded Electrode. <i>Nanomaterials</i> , 2021, 11, 3362.	4.1	4
10	One-pot synthesis of copper nanoconjugate materials as luminescent sensor for Fe ³⁺ and I ⁻ detection in human urine sample. <i>Sensing and Bio-Sensing Research</i> , 2020, 27, 100319.	4.2	7
11	Ultraviolet Photodetecting and Plasmon-to-Electric Conversion of Controlled Inkjet-Printing Thin-Film Transistors. <i>Nanomaterials</i> , 2020, 10, 458.	4.1	3
12	Highly Transparent and Surface-Plasmon-Enhanced Visible-Photodetector Based on Zinc Oxide Thin-Film Transistors with Heterojunction Structure. <i>Materials</i> , 2019, 12, 3639.	2.9	5
13	Effect of Metal Ions on Hybrid Graphite-Diamond Nanowire Growth: Conductivity Measurements from a Single Nanowire Device. <i>Nanomaterials</i> , 2019, 9, 415.	4.1	7
14	Comparison of the Physical and Electrical Properties of HfO ₂ /Al ₂ O ₃ /HfO ₂ /GeO _x /Ge and HfO ₂ /Al ₂ O ₃ /GeO _x /Ge Gate Stacks. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 4529-4534.	0.9	1
15	Cysteamine-capped gold-copper nanoclusters for fluorometric determination and imaging of chromium(VI) and dopamine. <i>Mikrochimica Acta</i> , 2019, 186, 788.	5.0	32
16	Cysteamine-modified diamond nanoparticles applied in cellular imaging and Hg ²⁺ ions detection. <i>Applied Surface Science</i> , 2019, 465, 340-350.	6.1	26
17	Aqueous Solutionâ€“Processable, Flexible Thinâ€“Film Transistors Based on Crosslinked Chitosan Dielectric Thin Films. <i>Macromolecular Materials and Engineering</i> , 2018, 303, 1700468.	3.6	12
18	Nanodiamonds conjugated to gold nanoparticles for colorimetric detection of clenbuterol and chromium(III) in urine. <i>Mikrochimica Acta</i> , 2018, 185, 74.	5.0	34

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19	Development of extremely stable dual functionalized gold nanoparticles for effective colorimetric detection of clenbuterol and ractopamine in human urine samples. <i>Analytica Chimica Acta</i> , 2018, 1023, 96-104.	5.4	39
20	Ultra-fast and sensitive silicon nanobelt field-effect transistor for high-throughput screening of alpha-fetoprotein. <i>Sensors and Actuators B: Chemical</i> , 2018, 256, 1114-1121.	7.8	11
21	A flexible and miniaturized hair dye based photodetector via chemiluminescence pathway. <i>Biosensors and Bioelectronics</i> , 2017, 90, 349-355.	10.1	15
22	An Affordable Wet Chemical Route to Grow Conducting Hybrid Graphite-Diamond Nanowires: Demonstration by A Single Nanowire Device. <i>Scientific Reports</i> , 2017, 7, 11243.	3.3	18
23	Supramolecular control over the morphology of bio-inspired poly(3-hexylthiophene) for organic thin film transistors. <i>Organic Electronics</i> , 2017, 41, 221-228.	2.6	3
24	Eco-Friendly and Biodegradable Biopolymer Chitosan/Y2O3 Composite Materials in Flexible Organic Thin-Film Transistors. <i>Materials</i> , 2017, 10, 1026.	2.9	40
25	Bio-Inspired Supramolecular Chemistry Provides Highly Concentrated Dispersions of Carbon Nanotubes in Polythiophene. <i>Materials</i> , 2016, 9, 438.	2.9	3
26	Novel anthracene- and pyridine-containing Schiff base probe for selective Cu^{2+} ions towards live cell application. <i>New Journal of Chemistry</i> , 2016, 40, 6101-6108.	2.8	31
27	High photothermal properties in silicon nanostructures. , 2016, , .		1
28	High optical conversion capability within the interface between graphene and Si under zero bias and visible to near infrared regime. , 2016, , .		0
29	Controllable Ink-Jet Printing Technique on Various Channel Width Designs toward Zinc Oxide-Based Thin Film Transistor. , 2016, , .		1
30	Facile synthesis of a biocompatible silver nanoparticle derived tripeptide supramolecular hydrogel for antibacterial wound dressings. <i>New Journal of Chemistry</i> , 2016, 40, 2036-2043.	2.8	27
31	Novel pyrene containing monomeric and dimeric supramolecular AIEE active nano-probes utilized in selective Fe^{3+} trivalent metal and highly acidic pH sensing with live cell applications. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2056-2071.	5.5	71
32	A simple pyrene based AIEE active schiff base probe for selective naked eye and fluorescence Fe^{3+} on detection of trivalent cations with live cell application. <i>Sensors and Actuators B: Chemical</i> , 2016, 231, 18-29.	7.8	89
33	A highly sensitive and selective cyanide detection using a gold nanoparticle-based dual fluorescence colorimetric sensor with a wide concentration range. <i>Sensors and Actuators B: Chemical</i> , 2016, 227, 283-290.	7.8	61
34	Simple bare gold nanoparticles for rapid colorimetric detection of Cr^{3+} ions in aqueous medium with real sample applications. <i>Sensors and Actuators B: Chemical</i> , 2016, 226, 44-51.	7.8	61
35	Using Novel Method to Detect Different Cancer Cell Stages of Model Human Lung Carcinoma. <i>Journal of Clinical Laboratory Analysis</i> , 2015, 29, 285-288.	2.1	2
36	Ultrathin single-crystalline silicon solar cells for mechanically flexible and optimal surface morphology designs. <i>Microelectronic Engineering</i> , 2015, 145, 128-132.	2.4	30

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37	Solution processable bilayered gate dielectric towards flexible organic thin film transistors. <i>Organic Electronics</i> , 2015, 19, 120-130.	2.6	9
38	Knitting up 2,7-disubstituted carbazole based oligomers through supramolecular interactions for their application in organic thin film transistors. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 5227-5235.	2.8	6
39	Supramolecular polymeric micelles as high performance electrochemical materials. <i>Journal of Materials Chemistry C</i> , 2015, 3, 9528-9533.	5.5	10
40	New Synthesis Route of Hydrogel through A Bioinspired Supramolecular Approach: Gelation, Binding Interaction, and in Vitro Dressing. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 19306-19315.	8.0	22
41	Polystyrene-block-poly(methylmethacrylate) composite material film as a gate dielectric for plastic thin-film transistor applications. <i>RSC Advances</i> , 2014, 4, 18493-18502.	3.6	11
42	Control of active semiconducting layer packing in organic thin film transistors through synthetic tailoring of dielectric materials. <i>RSC Advances</i> , 2014, 4, 29383-29392.	3.6	4
43	Aptamer based surface enhanced Raman scattering detection of adenosine using various core sizes of Au@Ag core-shell nanoparticles. <i>RSC Advances</i> , 2014, 4, 26251-26257.	3.6	14
44	Studying the enhancement of programmed cell death by combined AG1024 and paclitaxel in a model of chronic myelogenous leukemia. <i>Life Sciences</i> , 2014, 102, 118-126.	4.3	1
45	Nucleobase-grafted polycaprolactones as reversible networks in a novel biocompatible material. <i>RSC Advances</i> , 2013, 3, 12598.	3.6	18
46	Real-Time and Label-Free Detection of the Prostate-Specific Antigen in Human Serum by a Polycrystalline Silicon Nanowire Field-Effect Transistor Biosensor. <i>Analytical Chemistry</i> , 2013, 85, 7912-7918.	6.5	101
47	Controlled deposition of new organic ultrathin film as a gate dielectric layer for advanced flexible capacitor devices. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 1807-1812.	2.2	4
48	Room temperature self-organized gold nanoparticles materials for embedded electronic devices. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 376-381.	2.2	2
49	Facile sol-gel preparation of nanocrystal embedded thin film material for memory device. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 423-430.	2.2	2
50	Bioinspired supramolecular fibers for mercury ion adsorption. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7745.	10.3	23
51	Effect of oxygen plasma on the surface states of ZnO films used to produce thin-film transistors on soft plastic sheets. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6613.	5.5	65
52	Using nanopillars of silicon oxide as a versatile platform for visualizing a selective immunosorbent. <i>Applied Physics Letters</i> , 2013, 102, 251903.	3.3	10
53	Ultralow Reflection from Si Nanograss/Si Nanofrustum Double Layers. <i>Advanced Materials</i> , 2013, 25, 1724-1728.	21.0	21
54	Effect of Ti doping concentration on resistive switching behaviors of Yb ₂ O ₃ memory cell. <i>Applied Physics Letters</i> , 2012, 101, 083506.	3.3	28

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55	Liquid Lenses and Driving Mechanisms: A Review. <i>Journal of Adhesion Science and Technology</i> , 2012, 26, 1773-1788.	2.6	67
56	A rapid and portable sensor based on protein-modified gold nanoparticle probes and lateral flow assay for naked eye detection of mercury ion. <i>Microelectronic Engineering</i> , 2012, 97, 294-296.	2.4	36
57	Broadband and wide angle antireflection of sub-20 nm GaAs nanograss. <i>Energy and Environmental Science</i> , 2012, 5, 7601.	30.8	25
58	Novel Chemical Route to Prepare a New Polymer Blend Gate Dielectric for Flexible Low-Voltage Organic Thin-Film Transistor. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 3261-3269.	8.0	19
59	Resistive Switching Characteristics of $Tm_{2}O_{3}$, $Yb_{2}O_{3}$, and $Lu_{2}O_{3}$ -Based Metal-Insulator-Metal Memory Devices. <i>IEEE Nanotechnology Magazine</i> , 2012, 11, 1040-1046.	2.0	21
60	Bioinspired hole-conducting polymers for application in organic light-emitting diodes. <i>Journal of Materials Chemistry</i> , 2012, 22, 18127.	6.7	31
61	New self-assembled supramolecular polymers formed by self-complementary sextuple hydrogen bond motifs. <i>RSC Advances</i> , 2012, 2, 9952.	3.6	16
62	Plasma made antireflective GaAs nanograss. , 2012, , .		0
63	Facile preparation of sol-gel-derived ultrathin and high-dielectric zirconia films for capacitor devices. <i>Applied Surface Science</i> , 2012, 258, 10084-10088.	6.1	12
64	Facile synthetic route to implement a fully bendable organic metal-insulator-semiconductor device on polyimide sheet. <i>Organic Electronics</i> , 2012, 13, 721-732.	2.6	7
65	Plasma-made silicon nanograss and related nanostructures. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 174010.	2.8	31
66	Size-modulated catalytic activity of enzyme-nanoparticle conjugates: a combined kinetic and theoretical study. <i>Chemical Communications</i> , 2011, 47, 7446.	4.1	53
67	Potential role of gold nanoparticles for improved analytical methods: an introduction to characterizations and applications. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 103-118.	3.7	54
68	Highly reliable Si_3N_4/HfO_2 stacked heterostructure to fully flexible poly-(3-hexylthiophene) thin-film transistor. <i>Organic Electronics</i> , 2011, 12, 1414-1421.	2.6	14
69	Thin-Film Composite Materials as a Dielectric Layer for Flexible Metal-Insulator-Metal Capacitors. <i>ChemSusChem</i> , 2010, 3, 1051-1056.	6.8	15
70	Plasma-enhanced flexible metal-insulator-metal capacitor using high-k ZrO_2 film as gate dielectric with improved reliability. <i>Microelectronics Reliability</i> , 2010, 50, 1098-1102.	1.7	8
71	Fabrication and enhanced field emission properties of novel silicon nanostructures. <i>Microelectronics Reliability</i> , 2010, 50, 1973-1976.	1.7	16
72	Catalytic behaviors in modulating enzymatic activity through different-sized gold nanoparticles. , 2010, , .		0

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73	Nanowire field effect transistor with its sub-picomolar label-free biosensing capability toward a gene mutation. , 2010, , .		0
74	Design of Artificial Hollow Moth-Eye Structures Using Anodic Nanocones for High-Performance Optics. Chemistry of Materials, 2010, 22, 6583-6589.	6.7	14
75	A Robust Data Retention Characteristic of Sol-Gel-Derived Nanocrystal Memory by Hot-Hole Trapping. IEEE Electron Device Letters, 2010, 31, 746-748.	3.9	8
76	Improved reliability from a plasma-assisted metal-insulator-metal capacitor comprising a high-k HfO ₂ film on a flexible polyimide substrate. Physical Chemistry Chemical Physics, 2010, 12, 2582.	2.8	26
77	Miniaturized metal semiconductor metal photocurrent system for biomolecular sensing via chemiluminescence. Electrophoresis, 2009, 30, 3189-3197.	2.4	16
78	A Nanodot Array Modulates Cell Adhesion and Induces an Apoptosis-Like Abnormality in NIH-3T3 Cells. Nanoscale Research Letters, 2009, 4, 903-912.	5.7	28
79	Novel poly-silicon nanowire field effect transistor for biosensing application. Biosensors and Bioelectronics, 2009, 24, 1223-1229.	10.1	107
80	Poly-silicon nanowire field-effect transistor for ultrasensitive and label-free detection of pathogenic avian influenza DNA. Biosensors and Bioelectronics, 2009, 24, 3019-3024.	10.1	120
81	Label-free biosensing of a gene mutation using a silicon nanowire field-effect transistor. Biosensors and Bioelectronics, 2009, 25, 820-825.	10.1	72
82	An enzymatic kinetics investigation into the significantly enhanced activity of functionalized gold nanoparticles. Chemical Communications, 2008, , 5327.	4.1	54
83	Stress-induced morphology and fine-line stability enhancement of NiSi on poly-SiGe with a buffer polycrystalline silicon interlayer. Applied Physics Letters, 2008, 92, 182106.	3.3	1
84	Hybridization sensing by electrical enhancement with nanoparticles in nanogap. Journal of Vacuum Science & Technology B, 2008, 26, 2572-2577.	1.3	5
85	Nanocrystallization and interfacial tension of sol-gel derived memory. Applied Physics Letters, 2008, 92, 123111.	3.3	5
86	Soft-mold-induced self-construction of polymer patterns under microwave irradiation. Applied Physics Letters, 2007, 90, 191901.	3.3	4
87	Fabrication of SONOS-Type Flash Memory with the Binary High-k Dielectrics by the Sol-Gel Spin Coating Method. Journal of the Electrochemical Society, 2007, 154, H268.	2.9	5
88	Electrical signal amplification of DNA hybridization by nanoparticles in a nanoscale gap. Applied Physics Letters, 2007, 91, .	3.3	12
89	Self-organized tantalum oxide nanopyramidal arrays for antireflective structure. Applied Physics Letters, 2007, 90, 171911.	3.3	34
90	Effect of different gold nanoparticle sizes to build an electrical detection DNA between nanogap electrodes. Microelectronic Engineering, 2007, 84, 1698-1701.	2.4	11

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91	Hafnium silicate nanocrystal memory using sol-gel-spin-coating method. IEEE Electron Device Letters, 2006, 27, 644-646.	3.9	18
92	Characterization of imprinting polymeric temperature variation with fluorescent Rhodamine B molecule. Microelectronic Engineering, 2006, 83, 864-868.	2.4	16
93	Self-aligned tantalum oxide nanodot arrays through anodic alumina template. Microelectronic Engineering, 2006, 83, 1567-1570.	2.4	21
94	Fullerene-incorporation for enhancing the electron beam resist performance for contact hole patterning and filling. Thin Solid Films, 2006, 500, 214-218.	1.8	1
95	PolySi-SiO ₂ -ZrO ₂ -SiO ₂ -Si Flash Memory Incorporating a Sol-Gel-Derived ZrO ₂ Charge Trapping Layer. Journal of the Electrochemical Society, 2006, 153, G934.	2.9	55
96	Physical Characterization and Electrical Properties of Sol-Gel-Derived Zirconia Films. Journal of the Electrochemical Society, 2006, 153, F94.	2.9	19
97	Studying the size/shape separation and optical properties of silver nanoparticles by capillary electrophoresis. Journal of Chromatography A, 2005, 1062, 139-145.	3.7	151
98	Separation and Study of the Optical Properties of Silver Nanocubes by Capillary Electrophoresis. Chemistry Letters, 2004, 33, 902-903.	1.3	18
99	Rapid fabrication of high quality self-assembled nanometer gold particles by spin coating method. Microelectronic Engineering, 2003, 67-68, 702-709.	2.4	53
100	Mechanism and Modeling of Ring Pattern Formation for Electron Beam Exposure on Zwitterresist. Japanese Journal of Applied Physics, 2003, 42, 3838-3841.	1.5	8
101	Evaluation of Metal Migration and Determination of Trace Metals after Microwave Digestion for Lithographic Materials. Analytical Chemistry, 1999, 71, 5413-5419.	6.5	13