Hiang Kwee Lee

List of Publications by Year
in descending order

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62 papers	5,982 citations	126907 33 h-index	110387 64 g-index
67 all docs	67 docs citations	67 times ranked	7381 citing authors

#	Article	IF	Citations
1	Bifunctional Asymmetric Fabric with Tailored Thermal Conduction and Radiation for Personal Cooling and Warming. Engineering, 2022, 10, 167-173.	6.7	15
2	Enriching surface-enhanced Raman spectral signatures in combined static and plasmonic electrical fields in self-powered substrates. Nano Energy, 2022, 92, 106737.	16.0	11
3	Noninvasive and Point-of-Care Surface-Enhanced Raman Scattering (SERS)-Based Breathalyzer for Mass Screening of Coronavirus Disease 2019 (COVID-19) under 5 min. ACS Nano, 2022, 16, 2629-2639.	14.6	71
4	Spray-On Carbon Black Nanopowder/Polyvinylidene Fluoride-Based Solarâ€“Thermalâ€“Electric Generators to Power Electronic Devices. ACS Applied Nano Materials, 2022, 5, 2429-2435.	5.0	4
5	Applying Magneticâ€Responsive Nanocatalystâ€Liquid Interface for Active Molecule Manipulation to Boost Catalysis Beyond Diffusion Limit. ChemCatChem, 2022, 14, .	3.7	2
6	Coldâ€Starting Allâ€Solidâ€State Batteries from Room Temperature by Thermally Modulated Current Collector in Subâ€Minute. Advanced Materials, 2022, 34, .	21.0	5
7	Intensifying Heat Using MOFâ€Isolated Graphene for Solarâ€Driven Seawater Desalination at 98% Solarâ€toâ€Thermal Efficiency. Advanced Functional Materials, 2021, 31, 2008904.	14.9	87
8	Electrolyte-Resistant Dual Materials for the Synergistic Safety Enhancement of Lithium-Ion Batteries. Nano Letters, 2021, 21, 2074-2080.	9.1	37
9	Sensitive, portable heavy-metal-ion detection by the sulfidation method on a superhydrophobic concentrator (SPOT). One Earth, 2021, 4, 756-766.	6.8	2
10	Present and Future of Surface-Enhanced Raman Scattering. ACS Nano, 2020, 14, 28-117.	14.6	2,153
11	Ultralight and fire-extinguishing current collectors for high-energy and high-safety lithium-ion batteries. Nature Energy, 2020, 5, 786-793.	39.5	168
12	Designing a Nanoscale Three-phase Electrochemical Pathway to Promote Pt-catalyzed Formaldehyde Oxidation. Nano Letters, 2020, 20, 8719-8724.	9.1	15
13	Modulating Orientational Order to Organize Polyhedral Nanoparticles into Plastic Crystals and Uniform Metacrystals. Angewandte Chemie - International Edition, 2020, 59, 21183-21189.	13.8	7
14	Modulating Orientational Order to Organize Polyhedral Nanoparticles into Plastic Crystals and Uniform Metacrystals. Angewandte Chemie, 2020, 132, 21369-21375.	2.0	3
15	ZIFâ€Induced dâ€Band Modification in a Bimetallic Nanocatalyst: Achieving Over 44â€‰% Efficiency in the Ambient Nitrogen Reduction Reaction. Angewandte Chemie, 2020, 132, 17145-17151.	2.0	31
16	ZIFâ€Induced dâ€Band Modification in a Bimetallic Nanocatalyst: Achieving Over 44â€‰% Efficiency in the Ambient Nitrogen Reduction Reaction. Angewandte Chemie - International Edition, 2020, 59, 16997-17003.	13.8	116
17	Applying a Nanoparticle@MOF Interface To Activate an Unconventional Regioselectivity of an Inert Reaction at Ambient Conditions. Journal of the American Chemical Society, 2020, 142, 11521-11527.	13.7	26
18	Incorporating the Nanoscale Encapsulation Concept from Liquid Electrolytes into Solid-State Lithiumâ€“Sulfur Batteries. Nano Letters, 2020, 20, 5496-5503.	9.1	30

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19	In Situ Differentiation of Multiplex Noncovalent Interactions Using SERS and Chemometrics. ACS Applied Materials & Interfaces, 2020, 12, 33421-33427.	8.0	10
20	Multiplex Surface-Enhanced Raman Scattering Identification and Quantification of Urine Metabolites in Patient Samples within 30 min. ACS Nano, 2020, 14, 2542-2552.	14.6	87
21	Turning Water from a Hindrance to the Promotor of Preferential Electrochemical Nitrogen Reduction. Chemistry of Materials, 2020, 32, 1674-1683.	6.7	35
22	Scalable synthesis of nanoporous silicon microparticles for highly cyclable lithium-ion batteries. Nano Research, 2020, 13, 1558-1563.	10.4	65
23	Tracking Airborne Molecules from Afar: Three-Dimensional Metalâ€“Organic Framework-Surface-Enhanced Raman Scattering Platform for Stand-Off and Real-Time Atmospheric Monitoring. ACS Nano, 2019, 13, 12090-12099.	14.6	87
24	Designing surface-enhanced Raman scattering (SERS) platforms beyond hotspot engineering: emerging opportunities in analyte manipulations and hybrid materials. Chemical Society Reviews, 2019, 48, 731-756.	38.1	468
25	Favoring the unfavored: Selective electrochemical nitrogen fixation using a reticular chemistry approach. Science Advances, 2018, 4, eaar3208.	10.3	333
26	Plasmonic Hotspots in Air: An Omnidirectional Threeâ€Dimensional Platform for Standâ€Off Inâ€Air SERS Sensing of Airborne Species. Angewandte Chemie - International Edition, 2018, 57, 5792-5796.	13.8	41
27	Plasmonic nose: integrating the MOF-enabled molecular preconcentration effect with a plasmonic array for recognition of molecular-level volatile organic compounds. Chemical Communications, 2018, 54, 2546-2549.	4.1	104
28	Plasmonic Hotspots in Air: An Omnidirectional Threeâ€Dimensional Platform for Standâ€Off Inâ€Air SERS Sensing of Airborne Species. Angewandte Chemie, 2018, 130, 5894-5898.	2.0	5
29	Concentrating Immiscible Molecules at Solid@MOF Interfacial Nanocavities to Drive an Inert Gasâ€“Liquid Reaction at Ambient Conditions. Angewandte Chemie, 2018, 130, 17304-17308.	2.0	7
30	Concentrating Immiscible Molecules at Solid@MOF Interfacial Nanocavities to Drive an Inert Gasâ€“Liquid Reaction at Ambient Conditions. Angewandte Chemie - International Edition, 2018, 57, 17058-17062.	13.8	43
31	Creating two self-assembly micro-environments to achieve supercrystals with dual structures using polyhedral nanoparticles. Nature Communications, 2018, 9, 2769.	12.8	46
32	Shape-dependent thermo-plasmonic effect of nanoporous gold at the nanoscale for ultrasensitive heat-mediated remote actuation. Nanoscale, 2018, 10, 16005-16012.	5.6	19
33	Online Flowing Colloidosomes for Sequential Multiâ€analyte Highâ€Throughput SERS Analysis. Angewandte Chemie - International Edition, 2017, 56, 5565-5569.	13.8	35
34	Online Flowing Colloidosomes for Sequential Multiâ€analyte Highâ€Throughput SERS Analysis. Angewandte Chemie, 2017, 129, 5657-5661.	2.0	7
35	SERSâ€•and Electrochemically Active 3D Plasmonic Liquid Marbles for Molecularâ€Level Spectroelectrochemical Investigation of Microliter Reactions. Angewandte Chemie - International Edition, 2017, 56, 8813-8817.	13.8	57
36	SERSâ€•and Electrochemically Active 3D Plasmonic Liquid Marbles for Molecularâ€Level Spectroelectrochemical Investigation of Microliter Reactions. Angewandte Chemie, 2017, 129, 8939-8943.	2.0	16

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37	Dynamic Rotating Liquid Marble for Directional and Enhanced Mass Transportation in Three-Dimensional Microliter Droplets. Journal of Physical Chemistry Letters, 2017, 8, 243-249.	4.6	22
38	Direct Metal Writing and Precise Positioning of Gold Nanoparticles within Microfluidic Channels for SERS Sensing of Gaseous Analytes. ACS Applied Materials & Interfaces, 2017, 9, 39584-39593.	8.0	42
39	Microchemical Plant in a Liquid Droplet: Plasmonic Liquid Marble for Sequential Reactions and Attomole Detection of Toxin at Microliter Scale. ACS Applied Materials & Interfaces, 2017, 9, 39635-39640.	8.0	34
40	Constructing Soft Substrate-less Platforms Using Particle-Assembled Fluidâ€“Fluid Interfaces and Their Prospects in Multiphasic Applications. Chemistry of Materials, 2017, 29, 6563-6577.	6.7	11
41	Driving CO₂ to a Quasi-Condensed Phase at the Interface between a Nanoparticle Surface and a Metalâ€“Organic Framework at 1 bar and 298 K. Journal of the American Chemical Society, 2017, 139, 11513-11518.	13.7	55
42	Assembling substrate-less plasmonic metacrystals at the oil/water interface for multiplex ultratrace analyte detection. Analyst, The, 2016, 141, 5107-5112.	3.5	6
43	Isolating Reactions at the Picoliter Scale: Parallel Control of Reaction Kinetics at the Liquidâ€“Liquid Interface. Angewandte Chemie, 2016, 128, 8444-8448.	2.0	4
44	Isolating Reactions at the Picoliter Scale: Parallel Control of Reaction Kinetics at the Liquidâ€“Liquid Interface. Angewandte Chemie - International Edition, 2016, 55, 8304-8308.	13.8	20
45	Manipulating the d-Band Electronic Structure of Platinum-Functionalized Nanoporous Gold Bowls: Synergistic Intermetallic Interactions Enhance Catalysis. Chemistry of Materials, 2016, 28, 5080-5086.	6.7	49
46	Identifying Enclosed Chemical Reaction and Dynamics at the Molecular Level Using Shell-Isolated Miniaturized Plasmonic Liquid Marble. Journal of Physical Chemistry Letters, 2016, 7, 1501-1506.	4.6	30
47	Spinning Liquid Marble and Its Dual Applications as Microcentrifuge and Miniature Localized Viscometer. ACS Applied Materials & Interfaces, 2016, 8, 23941-23946.	8.0	33
48	Nanoporous Gold Bowls: A Kinetic Approach to Control Open Shell Structures and Sizeâ€Tunable Lattice Strain for Electrocatalytic Applications. Small, 2016, 12, 4531-4540.	10.0	36
49	Promotion of the halide effect in the formation of shaped metal nanocrystals via a hybrid cationic, polymeric stabilizer: Octahedra, cubes, and anisotropic growth. Surface Science, 2016, 648, 307-312.	1.9	13
50	Plasmonic Colloidosomes as Threeâ€Dimensional SERS Platforms with Enhanced Surface Area for Multiphase Subâ€Microliter Toxin Sensing. Angewandte Chemie - International Edition, 2015, 54, 9691-9695.	13.8	93
51	Graphene Liquid Marbles as Photothermal Miniature Reactors for Reaction Kinetics Modulation. Angewandte Chemie - International Edition, 2015, 54, 3993-3996.	13.8	93
52	Nanoscale surface chemistry directs the tunable assembly of silver octahedra into three two-dimensional plasmonic superlattices. Nature Communications, 2015, 6, 6990.	12.8	137
53	Transformative Two-Dimensional Array Configurations by Geometrical Shape-Shifting Protein Microstructures. ACS Nano, 2015, 9, 9708-9717.	14.6	28
54	Plasmonic Liquid Marbles: A Miniature Substrateâ€less SERS Platform for Quantitative and Multiplex Ultratrace Molecular Detection. Angewandte Chemie - International Edition, 2014, 53, 5054-5058.	13.8	86

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55	Superhydrophobic-Oleophobic Ag Nanowire Platform: An Analyte-Concentrating and Quantitative Aqueous and Organic Toxin Surface-Enhanced Raman Scattering Sensor. Analytical Chemistry, 2014, 86, 10437-10444.	6.5	69
56	Encoding molecular information in plasmonic nanostructures for anti-counterfeiting applications. Nanoscale, 2014, 6, 282-288.	5.6	169
57	A large-scale superhydrophobic surface-enhanced Raman scattering (SERS) platform fabricated via capillary force lithography and assembly of Ag nanocubes for ultratrace molecular sensing. Physical Chemistry Chemical Physics, 2014, 16, 26983-26990.	2.8	45
58	Catalytic liquid marbles: Ag nanowire-based miniature reactors for highly efficient degradation of methylene blue. Chemical Communications, 2014, 50, 5923-5926.	4.1	72
59	Surfactant-Directed Atomic to Mesoscale Alignment: Metal Nanocrystals Encased Individually in Single-Crystalline Porous Nanostructures. Journal of the American Chemical Society, 2014, 136, 10561-10564.	13.7	157
60	One-step synthesis of zero-dimensional hollow nanoporous gold nanoparticles with enhanced methanol electrooxidation performance. Nature Communications, 2014, 5, 4947.	12.8	218
61	Superhydrophobic Surface-Enhanced Raman Scattering Platform Fabricated by Assembly of Ag Nanocubes for Trace Molecular Sensing. ACS Applied Materials & Interfaces, 2013, 5, 11409-11418.	8.0	110
62	An Archetype of The Electrons-Unobstructed Core-Shell Composite with Inherent Selectivity: Conductive Metal-Organic Frameworks Encapsulated with Metal Nanoparticles. Nanoscale, 0, , .	5.6	1