

Sung Gu Kang

List of Publications by Year in descending order

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61
papers

1,392
citations

430874

18
h-index

361022

35
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61
all docs

61
docs citations

61
times ranked

1982
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective adsorption of organic dyes on graphene oxide: Theoretical and experimental analysis. <i>Applied Surface Science</i> , 2019, 464, 170-177.	6.1	189
2	Synthesis of B-doped graphene quantum dots as a metal-free electrocatalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10537-10543.	10.3	178
3	Novel Graphene Hydrogel/B-doped Graphene Quantum Dots Composites as Trifunctional Electrocatalysts for Zn-Air Batteries and Overall Water Splitting. <i>Advanced Energy Materials</i> , 2019, 9, 1900945.	19.5	150
4	Exploiting Diffusion Barrier and Chemical Affinity of Metal-Organic Frameworks for Efficient Hydrogen Isotope Separation. <i>Journal of the American Chemical Society</i> , 2017, 139, 15135-15141.	13.7	125
5	Specific Isotope-Responsive Breathing Transition in Flexible Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2020, 142, 13278-13282.	13.7	47
6	Initial Experience of Robot-Assisted Radical Cystectomy with Total Intracorporeal Urinary Diversion: Comparison with Extracorporeal Method. <i>Journal of Laparoendoscopic and Advanced Surgical Techniques - Part A</i> , 2012, 22, 456-462.	1.0	43
7	Investigating Polaron Formation in Anatase and Brookite TiO ₂ by Density Functional Theory with Hybrid-Functional and DFT + <i>U</i> Methods. <i>ACS Omega</i> , 2019, 4, 8056-8064.	3.5	34
8	Adsorption mechanisms of lithium oxides (Li ₂ O) on a graphene-based electrode: A density functional theory approach. <i>Applied Surface Science</i> , 2015, 351, 193-202.	6.1	30
9	Engineering Oxidation States of a Platinum Cocatalyst over Chemically Oxidized Graphitic Carbon Nitride Photocatalysts for Photocatalytic Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14537-14549.	6.7	30
10	Robot-Assisted Radical Cystectomy and Pelvic Lymph Node Dissection: A Multi-Institutional Study from Korea. <i>Journal of Endourology</i> , 2010, 24, 1435-1440.	2.1	29
11	First principles assessment of perovskite dopants for proton conductors with chemical stability and high conductivity. <i>RSC Advances</i> , 2013, 3, 3333.	3.6	28
12	Exploiting the Specific Isotope-Selective Adsorption of Metal-Organic Framework for Hydrogen Isotope Separation. <i>Journal of the American Chemical Society</i> , 2021, 143, 8232-8236.	13.7	26
13	Catalytic activity of Ni ₃ Mo surfaces for hydrogen evolution reaction: A density functional theory approach. <i>Applied Surface Science</i> , 2021, 537, 147894.	6.1	25
14	First-principles studies of K _{1-x} M _x MgH ₃ (M=Li, Na, Rb, or Cs) perovskite hydrides for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 2232-2236.	7.1	24
15	Adsorption mechanisms of lithium oxides (Li ₂ O) on N-doped graphene: a density functional theory study with implications for lithium-air batteries. <i>Theoretical Chemistry Accounts</i> , 2016, 135, 1.	1.4	22
16	Characterizing chemical stability and proton conductivity of B-site doped barium hafnate (BaHfO ₃) and barium stannate (BaSnO ₃) with first principles modeling. <i>Journal of Alloys and Compounds</i> , 2017, 693, 738-743.	5.5	22
17	Lessons learned from 12,000 robotic radical prostatectomies: Is the journey as important as the outcome?. <i>Investigative and Clinical Urology</i> , 2020, 61, 1.	2.0	20
18	First-principles investigation of chemical stability and proton conductivity of M-doped BaZrO ₃ (M=K, Rb, and Cs). <i>Journal of the American Ceramic Society</i> , 2017, 100, 2997-3003.	3.8	19

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19	Catalytic performance of graphene quantum dot supported manganese phthalocyanine for efficient oxygen reduction: density functional theory approach. <i>New Journal of Chemistry</i> , 2019, 43, 348-355.	2.8	19
20	Understanding CO ₂ Adsorption on a M ₁ (M ₂)-Promoted (Doped) MgO/CaO(100) Surface (M ₁ = Li, Na, K, and Rb, M ₂ = Sr): A DFT Theoretical Study. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16979-16984.	6.7	18
21	Do HOMO/LUMO Energy Levels and Band Gaps Provide Sufficient Understanding of Dye-Sensitizer Activity Trends for Water Purification?. <i>ACS Omega</i> , 2020, 5, 15052-15062.	3.5	18
22	Overall rate, location, and predictive factors for positive surgical margins after robot-assisted laparoscopic radical prostatectomy for high-risk prostate cancer. <i>Asian Journal of Andrology</i> , 2016, 18, 123.	1.6	18
23	Coordinated Molecule-Modulated Magnetic Phase with Metamagnetism in Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2019, 58, 8895-8899.	4.0	17
24	Do patients benefit from total intracorporeal robotic radical cystectomy?: A comparative analysis with extracorporeal robotic radical cystectomy from a Korean multicenter study. <i>Investigative and Clinical Urology</i> , 2020, 61, 11.	2.0	17
25	Identifying Metal Alloys with High Hydrogen Permeability Using High Throughput Theory and Experimental Testing. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 3040-3044.	4.6	16
26	Does Surgeon Subjective Nerve Sparing Score Predict Recovery Time of Erectile Function Following Robot-Assisted Radical Prostatectomy?. <i>Journal of Sexual Medicine</i> , 2015, 12, 1490-1496.	0.6	14
27	Exploring the geometric, magnetic and electronic properties of Hofmann MOFs for drug delivery. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 31316-31324.	2.8	14
28	Designing Pt-based subsurface alloy catalysts for the dehydrogenation of perhydro-dibenzyltoluene: A first-principles study. <i>Applied Surface Science</i> , 2022, 579, 152142.	6.1	13
29	Theoretical Insight into M ₁ TPyP/M ₂ (M ₁ , M ₂ = Fe, Co) MOFs: Correlation between Electronic Structure and Catalytic Activity Extending to Potentiality in Capturing Flue Gases. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9899-9908.	3.1	11
30	Electrochemical Oxygen-Reduction Activity and Carbon Monoxide Tolerance of Iron Phthalocyanine Functionalized with Graphene Quantum Dots: A Density Functional Theory Approach. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27483-27491.	3.1	10
31	First-Principles Computational Screening of Perovskite Hydrides for Hydrogen Release. <i>ACS Combinatorial Science</i> , 2019, 21, 736-742.	3.8	10
32	Oncological and functional outcomes of robot-assisted radical cystectomy in bladder cancer patients in a single tertiary center: Can these be preserved throughout the learning curve?. <i>Investigative and Clinical Urology</i> , 2019, 60, 463.	2.0	10
33	First principles studies of proton conduction in KTaO ₃ . <i>Journal of Chemical Physics</i> , 2014, 141, 024707.	3.0	9
34	Facile synthesis and structural analysis of graphene oxide decorated with iron-cerium carbonate for visible-light driven rapid degradation of organic dyes. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 2616-2626.	6.7	9
35	Assessment of M ₂ O(111) (M = Li and Na) surfaces for CO ₂ adsorption based on first-principles calculations. <i>Applied Surface Science</i> , 2019, 486, 571-577.	6.1	9
36	Account of chemical bonding and enhanced reactivity of vanadium-doped rhodium clusters toward C-H activation: a DFT investigation. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 9935-9948.	2.8	8

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37	First-principles evaluation of the potential of using Mg ₂ SiO ₄ , Mg ₂ VO ₄ , and Mg ₂ GeO ₄ for CO ₂ capture. <i>Journal of CO₂ Utilization</i> , 2020, 42, 101293.	6.8	8
38	Hexagonal and Monoclinic Phases of La ₂ O ₂ CO ₃ Nanoparticles and Their Phase-Related CO ₂ Behavior. <i>Nanomaterials</i> , 2020, 10, 2061.	4.1	8
39	First-principles analysis of ferroelectric transition in MnSnO ₃ and MnTiO ₃ perovskites. <i>Journal of Solid State Chemistry</i> , 2018, 262, 251-255.	2.9	7
40	First-principles rational design of M-doped LiBH ₄ (010) surface for hydrogen release: Role of strain and dopants (M=Na, K, Al, F, or Cl). <i>International Journal of Hydrogen Energy</i> , 2019, 44, 6065-6073.	7.1	7
41	Inherent Resistance of Seed-Mediated Grown MoSe ₂ Monolayers to Defect Formation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 34297-34305.	8.0	7
42	First-principles prediction of NO ₂ and SO ₂ adsorption on MgO/(Mg _{0.5} Ni _{0.5})O/MgO(1 0 0). <i>Applied Surface Science</i> , 2021, 566, 150650.	6.1	7
43	Ab-initio investigations for structural, mechanical, optoelectronic, and thermoelectric properties of Ba ₂ SbXO ₆ (X Nb, Ta) compounds. <i>Journal of Alloys and Compounds</i> , 2022, 893, 162332.	5.5	7
44	Initial experience of single-port robot-assisted radical prostatectomy: A single surgeon's experience with technique description. <i>Prostate International</i> , 2022, 10, 85-91.	2.3	7
45	Predictions of Sulfur Resistance in Metal Membranes for H ₂ Purification Using First-Principles Calculations. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 301-309.	3.7	6
46	First-principles examination of low tolerance factor perovskites. <i>International Journal of Quantum Chemistry</i> , 2017, 117, e25420.	2.0	6
47	A mechanistic insight into rhodium-doped gold clusters as a better hydrogenation catalyst. <i>Nanoscale</i> , 2020, 12, 5125-5138.	5.6	6
48	Single-Port <i>vs</i> Multiport Robot-Assisted Radical Prostatectomy: A Propensity Score Matching Comparative Study. <i>Journal of Endourology</i> , 2022, 36, 661-667.	2.1	6
49	Effect of intraoperative fluid volume on postoperative ileus after robot-assisted radical cystectomy. <i>Scientific Reports</i> , 2021, 11, 10522.	3.3	5
50	Oncologic Outcomes and Predictive Factors for Recurrence Following Robot-Assisted Radical Cystectomy for Urothelial Carcinoma: Multicenter Study from Korea. <i>Journal of Korean Medical Science</i> , 2017, 32, 1662.	2.5	4
51	Insight into the structure and bonding of copper(i) iodide clusters and a cluster-based coordination polymer. <i>New Journal of Chemistry</i> , 2019, 43, 16176-16187.	2.8	4
52	First-principles exploration of MgTi ₂ O ₅ and MgV ₂ O ₅ for CO ₂ capture and conversion. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26637.	2.0	3
53	Low-hysteresis manganese hexacyanoferrate (MnHCF) aqueous battery for low-grade thermal energy harvesting. <i>Journal of Power Sources</i> , 2022, 524, 231080.	7.8	3
54	Identification of potential metal oxides for NO ₂ capture: A density functional theory study. <i>Journal of the American Ceramic Society</i> , 2022, 105, 5299-5308.	3.8	3

