

# 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  
g-index

61  
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61  
docs citations

61  
times ranked

1982  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ab-initio investigations for structural, mechanical, optoelectronic, and thermoelectric properties of Ba <sub>2</sub> SbXO <sub>6</sub> (X Nb, Ta) compounds. <i>Journal of Alloys and Compounds</i> , 2022, 893, 162332.	5.5	7
2	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
3	Gender-related outcomes in robot-assisted radical cystectomy: A multi-institutional study. <i>Investigative and Clinical Urology</i> , 2022, 63, 53.	2.0	0
4	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
5	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
6	Toggling Technique Allows Retrograde Early Release to Facilitate Neurovascular Bundle Sparing During Robot-Assisted Radical Prostatectomy: A Propensity Score-Matching Study. <i>Journal of Korean Medical Science</i> , 2022, 37, e6.	2.5	1
7	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
8	Identification of potential metal oxides for NO <sub>2</sub> capture: A density functional theory study. <i>Journal of the American Ceramic Society</i> , 2022, 105, 5299-5308.	3.8	3
9	Catalytic activity of Ni <sub>3</sub> Mo surfaces for hydrogen evolution reaction: A density functional theory approach. <i>Applied Surface Science</i> , 2021, 537, 147894.	6.1	25
10	Orientation-Dependent Conversion of VLS-Grown Lead Iodide Nanowires into Organic-Inorganic Hybrid Perovskites. <i>Nanomaterials</i> , 2021, 11, 223.	4.1	1
11	First-principles exploration of MgTi <sub>2</sub> O <sub>5</sub> and MgV <sub>2</sub> O <sub>5</sub> for CO <sub>2</sub> capture and conversion. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26637.	2.0	3
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	Effect of intraoperative fluid volume on postoperative ileus after robot-assisted radical cystectomy. <i>Scientific Reports</i> , 2021, 11, 10522.	3.3	5
14	First-principles-assisted band gap predictions of methylammonium metal formates. <i>Materials Research Bulletin</i> , 2021, 138, 111239.	5.2	1
15	First-principles prediction of NO <sub>2</sub> and SO <sub>2</sub> adsorption on MgO/(Mg <sub>0.5</sub> Ni <sub>0.5</sub> )O/MgO(1 0 0). <i>Applied Surface Science</i> , 2021, 566, 150650.	6.1	7
16	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
17	First-principles evaluation of the potential of using Mg <sub>2</sub> SiO <sub>4</sub> , Mg <sub>2</sub> VO <sub>4</sub> , and Mg <sub>2</sub> GeO <sub>4</sub> for CO <sub>2</sub> capture. <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 42, 101293.	6.8	8
18	Hexagonal and Monoclinic Phases of La <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> Nanoparticles and Their Phase-Related CO <sub>2</sub> Behavior. <i>Nanomaterials</i> , 2020, 10, 2061.	4.1	8

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19	Do HOMO and LUMO Energy Levels and Band Gaps Provide Sufficient Understanding of Dye-Sensitizer Activity Trends for Water Purification?. ACS Omega, 2020, 5, 15052-15062.	3.5	18
20	Specific Isotope-Responsive Breathing Transition in Flexible Metal-Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 13278-13282.	13.7	47
21	Inherent Resistance of Seed-Mediated Grown MoSe <sub>2</sub> Monolayers to Defect Formation. ACS Applied Materials & Interfaces, 2020, 12, 34297-34305.	8.0	7
22	A mechanistic insight into rhodium-doped gold clusters as a better hydrogenation catalyst. Nanoscale, 2020, 12, 5125-5138.	5.6	6
23	Lessons learned from 12,000 robotic radical prostatectomies: Is the journey as important as the outcome?. Investigative and Clinical Urology, 2020, 61, 1.	2.0	20
24	Do patients benefit from total intracorporeal robotic radical cystectomy?: A comparative analysis with extracorporeal robotic radical cystectomy from a Korean multicenter study. Investigative and Clinical Urology, 2020, 61, 11.	2.0	17
25	BRCA1-associated protein 1 expression and prognostic role in prostate adenocarcinoma. Investigative and Clinical Urology, 2020, 61, 166.	2.0	2
26	First-principles identification of ferroelectric metal-organic frameworks of [CH <sub>3</sub> NH <sub>3</sub> ][B(HCOO) <sub>3</sub> ] (B = Tl, ET, Q, O, R, G, BT, /Overlock 10 T	2.9	1
27	Electrochemical Oxygen-Reduction Activity and Carbon Monoxide Tolerance of Iron Phthalocyanine Functionalized with Graphene Quantum Dots: A Density Functional Theory Approach. Journal of Physical Chemistry C, 2019, 123, 27483-27491.	3.1	10
28	First-Principles Computational Screening of Perovskite Hydrides for Hydrogen Release. ACS Combinatorial Science, 2019, 21, 736-742.	3.8	10
29	Understanding CO <sub>2</sub> Adsorption on a M <sub>1</sub> (M <sub>2</sub> )-Promoted (Doped) MgO/CaO(100) Surface (M <sub>1</sub> = Li, Na, K, and Rb, M <sub>2</sub> = Sr): A DFT Theoretical Study. ACS Sustainable Chemistry and Engineering, 2019, 7, 16979-16984.	6.7	18
30	Catalytic performance of graphene quantum dot supported manganese phthalocyanine for efficient oxygen reduction: density functional theory approach. New Journal of Chemistry, 2019, 43, 348-355.	2.8	19
31	Novel Graphene Hydrogel/B-doped Graphene Quantum Dots Composites as Trifunctional Electrocatalysts for Zn-Air Batteries and Overall Water Splitting. Advanced Energy Materials, 2019, 9, 1900945.	19.5	150
32	Coordinated Molecule-Modulated Magnetic Phase with Metamagnetism in Metal-Organic Frameworks. Inorganic Chemistry, 2019, 58, 8895-8899.	4.0	17
33	Assessment of M <sub>2</sub> O(111) (M = Li and Na) surfaces for CO <sub>2</sub> adsorption based on first-principles calculations. Applied Surface Science, 2019, 486, 571-577.	6.1	9
34	Investigating Polaron Formation in Anatase and Brookite TiO <sub>2</sub> by Density Functional Theory with Hybrid-Functional and DFT + U Methods. ACS Omega, 2019, 4, 8056-8064.	3.5	34
35	Account of chemical bonding and enhanced reactivity of vanadium-doped rhodium clusters toward C-H activation: a DFT investigation. Physical Chemistry Chemical Physics, 2019, 21, 9935-9948.	2.8	8
36	First-principles rational design of M-doped LiBH <sub>4</sub> (010) surface for hydrogen release: Role of strain and dopants (M=Na, K, Al, F, or Cl). International Journal of Hydrogen Energy, 2019, 44, 6065-6073.	7.1	7

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37	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
38	Selective adsorption of organic dyes on graphene oxide: Theoretical and experimental analysis. <i>Applied Surface Science</i> , 2019, 464, 170-177.	6.1	189
39	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
40	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
41	Theoretical Insight into $M_1TPyM_2$ ( $M_1, M_2 = Fe, Co$ ) 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
42	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
43	First-principles studies of $K_1-xMxMgH_3$ ( $M = Li, Na, Rb, \text{ or } Cs$ ) perovskite hydrides for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 2232-2236.	7.1	24
44	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
45	First-principles investigation of chemical stability and proton conductivity of M-doped $BaZrO_3$ ( $M = K, Rb, \text{ and } Cs$ ). <i>Journal of the American Ceramic Society</i> , 2017, 100, 2997-3003.	3.8	19
46	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
47	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
48	First-principles examination of low tolerance factor perovskites. <i>International Journal of Quantum Chemistry</i> , 2017, 117, e25420.	2.0	6
49	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
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	Adsorption mechanisms of lithium oxides ( $Li_2O_2$ ) 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
52	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
53	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
54	Adsorption mechanisms of lithium oxides ( $Li_2O_2$ ) on a graphene-based electrode: A density functional theory approach. <i>Applied Surface Science</i> , 2015, 351, 193-202.	6.1	30

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55	First principles studies of proton conduction in KTaO <sub>3</sub> . Journal of Chemical Physics, 2014, 141, 024707.	3.0	9
56	First principles assessment of perovskite dopants for proton conductors with chemical stability and high conductivity. RSC Advances, 2013, 3, 3333.	3.6	28
57	Initial Experience of Robot-Assisted Radical Cystectomy with Total Intracorporeal Urinary Diversion: Comparison with Extracorporeal Method. Journal of Laparoendoscopic and Advanced Surgical Techniques - Part A, 2012, 22, 456-462.	1.0	43
58	Predictions of Sulfur Resistance in Metal Membranes for H <sub>2</sub> Purification Using First-Principles Calculations. Industrial & Engineering Chemistry Research, 2012, 51, 301-309.	3.7	6
59	Identifying Metal Alloys with High Hydrogen Permeability Using High Throughput Theory and Experimental Testing. Journal of Physical Chemistry Letters, 2011, 2, 3040-3044.	4.6	16
60	Robot-Assisted Radical Cystectomy and Pelvic Lymph Node Dissection: A Multi-Institutional Study from Korea. Journal of Endourology, 2010, 24, 1435-1440.	2.1	29
61	Theoretical investigation of metal oxides for SO <sub>2</sub> capture through first-principles calculations. International Journal of Quantum Chemistry, 0, , e26822.	2.0	1