De-en Jiang

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361 20,390 127 79 h-index g-index citations papers 8.8 23,611 386 7.5 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
361	Porous graphene as the ultimate membrane for gas separation. <i>Nano Letters</i> , 2009 , 9, 4019-24	11.5	733
360	Tuning the basicity of ionic liquids for equimolar CO2 capture. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 4918-22	16.4	517
359	Mechanism of Hydrogen Evolution Reaction on 1T-MoS2 from First Principles. <i>ACS Catalysis</i> , 2016 , 6, 4953-4961	13.1	489
358	Identification of a highly luminescent Au22(SG)18 nanocluster. <i>Journal of the American Chemical Society</i> , 2014 , 136, 1246-9	16.4	436
357	Pseudocapacitance: From Fundamental Understanding to High Power Energy Storage Materials. <i>Chemical Reviews</i> , 2020 , 120, 6738-6782	68.1	402
356	Monoplatinum doping of gold nanoclusters and catalytic application. <i>Journal of the American Chemical Society</i> , 2012 , 134, 16159-62	16.4	383
355	Carbon dioxide capture by superbase-derived protic ionic liquids. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 5978-81	16.4	383
354	Unique chemical reactivity of a graphene nanoribbon's zigzag edge. <i>Journal of Chemical Physics</i> , 2007 , 126, 134701	3.9	380
353	Nickel sulfides for electrocatalytic hydrogen evolution under alkaline conditions: a case study of crystalline NiS, NiS2, and Ni3S2 nanoparticles. <i>Catalysis Science and Technology</i> , 2016 , 6, 1077-1084	5.5	330
352	Ag29(BDT)12(TPP)4: A Tetravalent Nanocluster. <i>Journal of the American Chemical Society</i> , 2015 , 137, 11970-5	16.4	284
351	Toward understanding the growth mechanism: tracing all stable intermediate species from reduction of Au(I)-thiolate complexes to evolution of Au[hanoclusters. <i>Journal of the American Chemical Society</i> , 2014 , 136, 10577-80	16.4	255
350	Oscillation of capacitance inside nanopores. <i>Nano Letters</i> , 2011 , 11, 5373-7	11.5	240
349	The "staple" motif: a key to stability of thiolate-protected gold nanoclusters. <i>Journal of the American Chemical Society</i> , 2008 , 130, 2777-9	16.4	217
348	Electronic ground state of higher acenes. Journal of Physical Chemistry A, 2008, 112, 332-5	2.8	216
347	Thiolate ligands as a double-edged sword for CO oxidation on CeO2 supported Au25(SCH2CH2Ph)18 nanoclusters. <i>Journal of the American Chemical Society</i> , 2014 , 136, 6111-22	16.4	215
346	Multi-Molar Absorption of CO2 by the Activation of Carboxylate Groups in Amino Acid Ionic Liquids. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 7166-70	16.4	212
345	Stabilization and Band-Gap Tuning of the 1T-MoS2 Monolayer by Covalent Functionalization. <i>Chemistry of Materials</i> , 2015 , 27, 3743-3748	9.6	211

(2011-2016)

344	Isomerism in Au28(SR)20 Nanocluster and Stable Structures. <i>Journal of the American Chemical Society</i> , 2016 , 138, 1482-5	16.4	202	
343	A molecule-like PtAu(SCH) nanocluster as an electrocatalyst for hydrogen production. <i>Nature Communications</i> , 2017 , 8, 14723	17.4	196	
342	How do aryl groups attach to a graphene sheet?. Journal of Physical Chemistry B, 2006, 110, 23628-32	3.4	179	
341	Understanding seed-mediated growth of gold nanoclusters at molecular level. <i>Nature Communications</i> , 2017 , 8, 927	17.4	178	
340	First principles study of magnetism in nanographenes. <i>Journal of Chemical Physics</i> , 2007 , 127, 124703	3.9	178	
339	Golden single-atomic-site platinum electrocatalysts. <i>Nature Materials</i> , 2018 , 17, 1033-1039	27	177	
338	Au19 nanocluster featuring a V-shaped alkynyl-gold motif. <i>Journal of the American Chemical Society</i> , 2015 , 137, 652-5	16.4	176	
337	Sulfate recognition by persistent crystalline capsules with rigidified hydrogen-bonding cavities. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 1866-70	16.4	175	
336	Lattice-Hydride Mechanism in Electrocatalytic CO Reduction by Structurally Precise Copper-Hydride Nanoclusters. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9728-9736	16.4	164	
335	First principles assessment of ideal fracture energies of materials with mobile impurities: implications for hydrogen embrittlement of metals. <i>Acta Materialia</i> , 2004 , 52, 4801-4807	8.4	162	
334	Insights into Interfaces, Stability, Electronic Properties, and Catalytic Activities of Atomically Precise Metal Nanoclusters from First Principles. <i>Accounts of Chemical Research</i> , 2018 , 51, 2793-2802	24.3	156	
333	The expanding universe of thiolated gold nanoclusters and beyond. <i>Nanoscale</i> , 2013 , 5, 7149-60	7.7	153	
332	From superatomic Au25(SR)18(-) to superatomic M@Au24(SR)18(q) core-shell clusters. <i>Inorganic Chemistry</i> , 2009 , 48, 2720-2	5.1	153	
331	Universal Surface Engineering of Transition Metals for Superior Electrocatalytic Hydrogen Evolution in Neutral Water. <i>Journal of the American Chemical Society</i> , 2017 , 139, 12283-12290	16.4	151	
330	Solvent Effect on the Pore-Size Dependence of an Organic Electrolyte Supercapacitor. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 1727-31	6.4	151	
329	Adsorption and diffusion energetics of hydrogen atoms on Fe(110) from first principles. <i>Surface Science</i> , 2003 , 547, 85-98	1.8	148	
328	Interconversion between Superatomic 6-Electron and 8-Electron Configurations of M@Au(BR) Clusters (M = Pd, Pt). <i>Journal of the American Chemical Society</i> , 2015 , 137, 10833-40	16.4	146	
327	A classical density functional theory for interfacial layering of ionic liquids. <i>Soft Matter</i> , 2011 , 7, 11222	3.6	143	

326	Single rhodium atoms anchored in micropores for efficient transformation of methane under mild conditions. <i>Nature Communications</i> , 2018 , 9, 1231	17.4	140
325	Quantum mechanical basis for kinetic diameters of small gaseous molecules. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 1150-4	2.8	140
324	Open-shell singlet character of cyclacenes and short zigzag nanotubes. <i>Organic Letters</i> , 2007 , 9, 5449-5.	26.2	135
323	Understanding the MXene Pseudocapacitance. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 1223-1228	6.4	133
322	B80 and B101-103 clusters: remarkable stability of the core-shell structures established by validated density functionals. <i>Journal of Chemical Physics</i> , 2012 , 136, 074302	3.9	131
321	Structure and bonding between an aryl group and metal surfaces. <i>Journal of the American Chemical Society</i> , 2006 , 128, 6030-1	16.4	125
320	Computational Insights into Materials and Interfaces for Capacitive Energy Storage. <i>Advanced Science</i> , 2017 , 4, 1700059	13.6	122
319	Gold nanowired: a linear (Au25)(n) polymer from Au25 molecular clusters. ACS Nano, 2014 , 8, 8505-12	16.7	122
318	Insights into CO2/N2 separation through nanoporous graphene from molecular dynamics. <i>Nanoscale</i> , 2013 , 5, 9984-7	7.7	120
317	Functionalizing porous aromatic frameworks with polar organic groups for high-capacity and selective CO2 separation: a molecular simulation study. <i>Langmuir</i> , 2011 , 27, 3451-60	4	116
316	Understanding the high solubility of CO2 in an ionic liquid with the tetracyanoborate anion. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 9789-94	3.4	116
315	Alkynyl-protected Au23 nanocluster: a 12-electron system. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 5977-80	16.4	114
314	Structure of Au15(SR)13 and its implication for the origin of the nucleus in thiolated gold nanoclusters. <i>Journal of the American Chemical Society</i> , 2013 , 135, 8786-9	16.4	114
313	Density functional theory for differential capacitance of planar electric double layers in ionic liquids. <i>Chemical Physics Letters</i> , 2011 , 504, 153-158	2.5	112
312	Carbon Dioxide Capture by Superbase-Derived Protic Ionic Liquids. <i>Angewandte Chemie</i> , 2010 , 122, 611	4366117	7 112
311	Size Dependence of Atomically Precise Gold Nanoclusters in Chemoselective Hydrogenation and Active Site Structure. <i>ACS Catalysis</i> , 2014 , 4, 2463-2469	13.1	108
310	The strategies for improving carbon dioxide chemisorption by functionalized ionic liquids. <i>RSC Advances</i> , 2013 , 3, 15518	3.7	108
309	Adsorption and dissociation of CO on Fe(1 1 0) from first principles. Surface Science, 2004, 570, 167-177	1.8	108

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308	Enhancing the Capacitive Performance of Electric Double-Layer Capacitors with Ionic Liquid Mixtures. <i>ACS Energy Letters</i> , 2016 , 1, 21-26	20.1	107
307	The role of low-coordinate oxygen on Co3O4(110) in catalytic CO oxidation. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 978-84	3.6	106
306	Curvature Effect on the Capacitance of Electric Double Layers at Ionic Liquid/Onion-Like Carbon Interfaces. <i>Journal of Chemical Theory and Computation</i> , 2012 , 8, 1058-63	6.4	104
305	Accurate static and dynamic properties of liquid electrolytes for Li-ion batteries from ab initio molecular dynamics. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 3085-90	3.4	104
304	Steric effects in the reaction of aryl radicals on surfaces. <i>Langmuir</i> , 2009 , 25, 286-93	4	103
303	Selective deposition of Ru nanoparticles on TiSiIhanonet and its utilization for LiIDIFormation and decomposition. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8903-6	16.4	100
302	Precise control of alloying sites of bimetallic nanoclusters via surface motif exchange reaction. <i>Nature Communications</i> , 2017 , 8, 1555	17.4	100
301	Superatomic Orbitals under Spin-Orbit Coupling. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3286-9	6.4	99
300	Tuning the Basicity of Ionic Liquids for Equimolar CO2 Capture. <i>Angewandte Chemie</i> , 2011 , 123, 5020-5	03,46	99
299	First principles study of the graphene/Ru(0001) interface. Journal of Chemical Physics, 2009, 130, 07470)5 3.9	99
298	Oxide-supported atomically precise gold nanocluster for catalyzing Sonogashira cross-coupling. <i>Journal of Catalysis</i> , 2013 , 306, 177-183	7.3	97
297	High CO2 solubility, permeability and selectivity in ionic liquids with the tetracyanoborate anion. <i>RSC Advances</i> , 2012 , 2, 11813	3.7	96
296	Microscopic Insights into the Electrochemical Behavior of Nonaqueous Electrolytes in Electric Double-Layer Capacitors. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 1260-7	6.4	95
295	Solid E lectrolyte Interphase Formation and Electrolyte Reduction at Li-Ion Battery Graphite Anodes: Insights from First-Principles Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 24476-24481	3.8	94
294	Electrochemical windows of sulfone-based electrolytes for high-voltage Li-ion batteries. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 12120-5	3.4	94
293	Circumacenes versus periacenes: HOMOIUMO gap and transition from nonmagnetic to magnetic ground state with size. <i>Chemical Physics Letters</i> , 2008 , 466, 72-75	2.5	94
292	Quantum Effects on the Capacitance of Graphene-Based Electrodes. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 22297-22303	3.8	92
291	Adsorption, Diffusion, and Dissociation of H2S on Fe(100) from First Principles. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 19140-19145	3.4	92

290	Electrode materialIbnic liquid coupling for electrochemical energy storage. <i>Nature Reviews Materials</i> , 2020 , 5, 787-808	73.3	89
289	Simulating the initial stage of phenolic resin carbonization via the ReaxFF reactive force field. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 6891-4	2.8	85
288	Understanding controls on interfacial wetting at epitaxial graphene: Experiment and theory. <i>Physical Review B</i> , 2012 , 85,	3.3	85
287	Advanced Liquid Membranes Based on Novel Ionic Liquids for Selective Separation of Olefin/Paraffin via Olefin-Facilitated Transport. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 881-888	3.9	85
286	Ion-Gated Gas Separation through Porous Graphene. <i>Nano Letters</i> , 2017 , 17, 1802-1807	11.5	84
285	Enhancing graphene capacitance by nitrogen: effects of doping configuration and concentration. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 4668-74	3.6	84
284	What Protects the Core When the Thiolated Au Cluster is Extremely Small?. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 16983-16987	3.8	81
283	Atomically Precise Bimetallic AuCu Nanocluster with an Icosidodecahedral Cu Shell and an Alkynyl-Cu Interface. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9451-9454	16.4	79
282	The Smallest Thiolated Gold Superatom Complexes. Journal of Physical Chemistry C, 2009, 113, 17291-1	73.95	79
281	Selectivity trend of gas separation through nanoporous graphene. <i>Journal of Solid State Chemistry</i> , 2015 , 224, 2-6	3.3	77
280	Selective Charging Behavior in an Ionic Mixture Electrolyte-Supercapacitor System for Higher Energy and Power. <i>Journal of the American Chemical Society</i> , 2017 , 139, 18681-18687	16.4	76
279	Three-orders-of-magnitude variation of carrier lifetimes with crystal phase of gold nanoclusters. <i>Science</i> , 2019 , 364, 279-282	33.3	75
278	Revealing isoelectronic size conversion dynamics of metal nanoclusters by a noncrystallization approach. <i>Nature Communications</i> , 2018 , 9, 1979	17.4	75
277	Synthesis of Water-Soluble [Au(SR)] Using a Stoichiometric Amount of NaBH. <i>Journal of the American Chemical Society</i> , 2018 , 140, 11370-11377	16.4	72
276	Stabilizing gold clusters by heterostructured transition-metal oxide-mesoporous silica supports for enhanced catalytic activities for CO oxidation. <i>Chemical Communications</i> , 2012 , 48, 11413-5	5.8	72
275	Interstaple dithiol cross-linking in Au25(SR)18 nanomolecules: a combined mass spectrometric and computational study. <i>Journal of the American Chemical Society</i> , 2011 , 133, 20258-66	16.4	71
274	Diphosphine-Protected Au Nanoclusters on Oxide Supports Are Active for Gas-Phase Catalysis without Ligand Removal. <i>Nano Letters</i> , 2016 , 16, 6560-6567	11.5	70
273	First principles study of H2S adsorption and dissociation on Fe(110). <i>Surface Science</i> , 2005 , 583, 60-68	1.8	68

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272	Computational Discovery and Design of MXenes for Energy Applications: Status, Successes, and Opportunities. <i>ACS Applied Materials & Status amp; Interfaces</i> , 2019 , 11, 24885-24905	9.5	65	
271	Global minimization of gold clusters by combining neural network potentials and the basin-hopping method. <i>Nanoscale</i> , 2015 , 7, 14817-21	7.7	64	
270	CoP for hydrogen evolution: implications from hydrogen adsorption. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 23864-71	3.6	64	
269	Monolayer dispersion of MoO3, NiO and their precursors on FAl2O3. <i>Applied Catalysis A: General</i> , 1999 , 188, 201-209	5.1	64	
268	Highly Efficient Carbon Monoxide Capture by Carbanion-Functionalized Ionic Liquids through C-Site Interactions. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 6843-6847	16.4	63	
267	In Search of a Structural Model for a Thiolate-protected Au38 Cluster. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 13905-13910	3.8	62	
266	CO2 Adsorption As a Flat-Lying, Tridentate Carbonate on CeO2(100). <i>Journal of Physical Chemistry C</i> , 2014 , 118, 9042-9050	3.8	61	
265	Oxidation potentials of functionalized sulfone solvents for high-voltage Li-ion batteries: a computational study. <i>Journal of Physical Chemistry B</i> , 2012 , 116, 3235-8	3.4	60	
264	Magnetic doping of a thiolated-gold superatom: First-principles density functional theory calculations. <i>Physical Review B</i> , 2009 , 80,	3.3	60	
263	Unusual effects of solvent polarity on capacitance for organic electrolytes in a nanoporous electrode. <i>Nanoscale</i> , 2014 , 6, 5545-50	7.7	58	
262	Windowed Carbon Nanotubes for Efficient CO2 Removal from Natural Gas. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3343-3347	6.4	57	
261	A Generic Model for Electric Double Layers in Porous Electrodes. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 8704-8710	3.8	57	
260	Effects of Metal-Doping on Hydrogen Evolution Reaction Catalyzed by MAu and MAu Nanoclusters (M = Pt, Pd). <i>ACS Applied Materials & Doping State (M = Pt, Pd)</i> . ACS Applied Materials & Doping State (M = Pt, Pd). ACS Applied Materials & Doping State (M = Pt, Pd).	9.5	57	
259	Understanding Selective Hydrogenation of #Unsaturated Ketones to Unsaturated Alcohols on the Au25(SR)18 Cluster. <i>ACS Catalysis</i> , 2015 , 5, 6624-6629	13.1	56	
258	Expanded Porphyrins as Two-Dimensional Porous Membranes for CO2 Separation. <i>ACS Applied Materials & Acs Applied & Acs Applied</i>	9.5	55	
257	SO absorption in EmimCl-TEG deep eutectic solvents. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 15	168615	1 7;3	
256	Highly soluble alkoxide magnesium salts for rechargeable magnesium batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 581-584	13	55	
255	Structure and basicity of EAl2O3-supported MgO and its application to mercaptan oxidation. <i>Applied Catalysis A: General</i> , 2001 , 219, 69-78	5.1	55	

254	Metallic Hydrogen in Atomically Precise Gold Nanoclusters. <i>Chemistry of Materials</i> , 2017 , 29, 4840-4847	9.6	54
253	Alkynyl-protected silver nanoclusters featuring an anticuboctahedral kernel. <i>Nanoscale</i> , 2017 , 9, 11405-	1 / 1 /1 09	54
252	Transformation Strategy for Highly Crystalline Covalent Triazine Frameworks: From Staggered AB to Eclipsed AA Stacking. <i>Journal of the American Chemical Society</i> , 2020 , 142, 6856-6860	16.4	53
251	On the Structure of a Thiolated Gold Cluster: Au44(SR)282\(\mathbb{I}\)Journal of Physical Chemistry C, 2010 , 114, 15883-15889	3.8	53
250	Porous liquid zeolites: hydrogen bonding-stabilized H-ZSM-5 in branched ionic liquids. <i>Nanoscale</i> , 2019 , 11, 1515-1519	7.7	52
249	Boron Supercapacitors. ACS Energy Letters, 2016 , 1, 1241-1246	20.1	52
248	Permeance of H2 through porous graphene from molecular dynamics. <i>Solid State Communications</i> , 2013 , 175-176, 101-105	1.6	52
247	Thiolated gold nanowires: metallic versus semiconducting. <i>ACS Nano</i> , 2009 , 3, 2351-7	16.7	52
246	Confined Interlayer Water Promotes Structural Stability for High-Rate Electrochemical Proton Intercalation in Tungsten Oxide Hydrates. <i>ACS Energy Letters</i> , 2019 , 4, 2805-2812	20.1	51
245	The surface structure of silver-coated gold nanocrystals and its influence on shape control. <i>Nature Communications</i> , 2015 , 6, 7664	17.4	50
244	The ligand effect on the isomer stability of Au24(SR)20 clusters. <i>Nanoscale</i> , 2015 , 7, 2225-9	7.7	50
243	Universal molecular-confined synthesis of interconnected porous metal oxides-N-C frameworks for electrocatalytic water splitting. <i>Nano Energy</i> , 2018 , 48, 600-606	17.1	50
242	Computational investigation of reactive to nonreactive capture of carbon dioxide by oxygen-containing Lewis bases. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 11761-7	2.8	50
241	Transforming Porous Organic Cages into Porous Ionic Liquids via a Supramolecular Complexation Strategy. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 2268-2272	16.4	50
240	General Structure-Reactivity Relationship for Oxygen on Transition-Metal Oxides. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 2206-2211	6.4	49
239	Acid B ase Reactivity of Perovskite Catalysts Probed via Conversion of 2-Propanol over Titanates and Zirconates. <i>ACS Catalysis</i> , 2017 , 7, 4423-4434	13.1	49
238	Hydrogen-Bonded Helices for Anion Binding and Separation. Crystal Growth and Design, 2008, 8, 1909-19	3 15	49
237	The N-B Interaction through a Water Bridge: Understanding the Chemoselectivity of a Fluorescent Protein Based Probe for Peroxynitrite. <i>Journal of the American Chemical Society</i> , 2016 , 138, 4900-7	16.4	49

(2018-2019)

236	Real Time Monitoring of the Dynamic Intracluster Diffusion of Single Gold Atoms into Silver Nanoclusters. <i>Journal of the American Chemical Society</i> , 2019 , 141, 18977-18983	16.4	48
235	Kinetic Charging Inversion in Ionic Liquid Electric Double Layers. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 2195-200	6.4	48
234	Au40: A large tetrahedral magic cluster. <i>Physical Review B</i> , 2011 , 84,	3.3	48
233	Rational design and synthesis of a porous, task-specific polycarbazole for efficient CO2 capture. <i>Chemical Communications</i> , 2016 , 52, 4454-7	5.8	47
232	Computational Screening of MXene Electrodes for Pseudocapacitive Energy Storage. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 315-321	3.8	47
231	Comprehensive View of the LigandGold Interface from First Principles. <i>Chemistry of Materials</i> , 2017 , 29, 6908-6915	9.6	46
230	Physicochemical properties of imidazolium-derived ionic liquids with different C-2 substitutions. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 21503-10	3.6	46
229	Insights into the PhC?C/Au Interface. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 10804-10810	3.8	45
228	Solubility of gases in a common ionic liquid from molecular dynamics based free energy calculations. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 2719-25	3.4	44
227	Effect of Pore Topology and Accessibility on Gas Adsorption Capacity in ZeoliticImidazolate Frameworks: Bringing Molecular Simulation Close to Experiment. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 8126-8135	3.8	44
226	Oxidation unzipping of stable nanographenes into joint spin-rich fragments. <i>Journal of the American Chemical Society</i> , 2009 , 131, 9663-9	16.4	44
225	Alkynyl-Protected Au23 Nanocluster: A 12-Electron System. <i>Angewandte Chemie</i> , 2015 , 127, 6075-6078	3.6	43
224	Efficient Absorption of SO2 by Deep Eutectic Solvents Formed by Biobased Aprotic Organic Compound Succinonitrile and 1-Ethyl-3-methylimidazolium Chloride. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 9086-9091	8.3	42
223	A Poly(acrylonitrile)-Functionalized Porous Aromatic Framework Synthesized by Atom-Transfer Radical Polymerization for the Extraction of Uranium from Seawater. <i>Industrial & Description of Chemistry Research</i> , 2016 , 55, 4125-4129	3.9	42
222	Stronger-than-Pt hydrogen adsorption in a Au22 nanocluster for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2018 , 6, 7532-7537	13	41
221	Staple fitness: a concept to understand and predict the structures of thiolated gold nanoclusters. <i>Chemistry - A European Journal</i> , 2011 , 17, 12289-93	4.8	41
220	Interface Engineering of Earth-Abundant Transition Metals Using Boron Nitride for Selective Electroreduction of CO. <i>ACS Applied Materials & Electroreduction of CO. ACS Appli</i>	9.5	40
219	Low-temperature activation of methane on doped single atoms: descriptor and prediction. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 22909-22914	3.6	40

218	All-Carboxylate-Protected Superatomic Silver Nanocluster with an Unprecedented Rhombohedral Ag Core. <i>Journal of the American Chemical Society</i> , 2020 , 142, 16905-16909	16.4	40
217	First-Principles Insight into Electrocatalytic Reduction of CO2 to CH4 on a Copper Nanoparticle. Journal of Physical Chemistry C, 2018, 122, 11392-11398	3.8	39
216	Molecular Dynamics Simulation of Anion Effect on Solubility, Diffusivity, and Permeability of Carbon Dioxide in Ionic Liquids. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 10485-10490	3.9	39
215	Mechanochemical synthesis of pillar[5]quinone derived multi-microporous organic polymers for radioactive organic iodide capture and storage. <i>Nature Communications</i> , 2020 , 11, 1086	17.4	38
214	Thiolate-Protected Trimetallic AuAgPd and AuAgPt Alloy Clusters with Controlled Chemical Composition and Metal Positions. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 2590-2594	6.4	38
213	Identify the Removable Substructure in Carbon Activation. <i>Chemistry of Materials</i> , 2017 , 29, 7288-7295	9.6	38
212	Nitrogen-Doped Mesoporous Carbon for Carbon Capture IA Molecular Simulation Study. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 7106-7110	3.8	38
211	Preparation of ZrO2-supported MgO with high surface area and its use in mercaptan oxidation of jet fuel. <i>Applied Catalysis A: General</i> , 2000 , 201, 169-176	5.1	38
210	Dopant-Dependent Electronic Structures Observed for MAu(SCH) Clusters (M = Pt, Pd). <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 982-989	6.4	37
209	Time-dependent density functional theory for ion diffusion in electrochemical systems. <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 284102	1.8	37
208	Synthesis and Characterization of Lithium Bis(fluoromalonato)borate for Lithium-Ion Battery Applications. <i>Advanced Energy Materials</i> , 2014 , 4, 1301368	21.8	37
207	Synthesis and Characterization of Thiazolium-Based Room Temperature Ionic Liquids for Gas Separations. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 11530-11537	3.9	37
206	Interaction of Gold Clusters with a Hydroxylated Surface. <i>Journal of Physical Chemistry Letters</i> , 2011 , 2, 1211-5	6.4	37
205	Understanding the Impact of Surface Reconstruction of Perovskite Catalysts on CH4 Activation and Combustion. <i>ACS Catalysis</i> , 2018 , 8, 10306-10315	13.1	36
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