Jeong Young Park

List of Publications by Citations

296 papers	12,560 citations	54 h-index	103 g-index
322 ext. papers	14,022 ext. citations	8.1 avg, IF	6.75 L-index

#	Paper	IF	Citations
296	Thermally stable Pt/mesoporous silica core-shell nanocatalysts for high-temperature reactions. *Nature Materials*, **2009**, 8, 126-31	27	1256
295	Advancing the frontiers in nanocatalysis, biointerfaces, and renewable energy conversion by innovations of surface techniques. *Journal of the American Chemical Society*, **2009**, 131, 16589-605	16.4	457
294	Molecular factors of catalytic selectivity. *Angewandte Chemie - International Edition*, **2008**, 47, 9212-28	16.4	392
293	Size effect of ruthenium nanoparticles in catalytic carbon monoxide oxidation. *Nano Letters*, **2010**, 10, 2709-13	11.5	329
292	Superlubric sliding of graphene nanoflakes on graphene. *ACS Nano*, **2013**, 7, 1718-24	16.7	299
291	Intrinsic relationship between enhanced oxygen reduction reaction activity and nanoscale work function of doped carbons. *Journal of the American Chemical Society*, **2014**, 136, 8875-8	16.4	273
290	Colloid Science of Metal Nanoparticle Catalysts in 2D and 3D Structures. Challenges of Nucleation, Growth, Composition, Particle Shape, Size Control and Their Influence on Activity and Selectivity. *Topics in Catalysis*, **2008**, 49, 126-135	2.3	253
289	A reactive oxide overlayer on rhodium nanoparticles during CO oxidation and its size dependence studied by in situ ambient-pressure X-ray photoelectron spectroscopy. *Angewandte Chemie - International Edition*, **2008**, 47, 8893-6	16.4	245
288	Surface plasmon-driven hot electron flow probed with metal-semiconductor nanodiodes. *Nano Letters*, **2011**, 11, 4251-5	11.5	243
287	Friction anisotropy-driven domain imaging on exfoliated monolayer graphene. *Science*, **2011**, 333, 607-10	33.3	241
286	Role of hot electrons and metal-oxide interfaces in surface chemistry and catalytic reactions. *Chemical Reviews*, **2015**, 115, 2781-817	68.1	230
285	Sum Frequency Generation and Catalytic Reaction Studies of the Removal of Organic Capping Agents from Pt Nanoparticles by UV□Ozone Treatment. *Journal of Physical Chemistry C*, **2009**, 113, 6150-6155	3.8	230
284	Enhanced nanoscale friction on fluorinated graphene. *Nano Letters*, **2012**, 12, 6043-8	11.5	222
283	Tuning of catalytic CO oxidation by changing composition of Rh-Pt bimetallic nanoparticles. *Nano Letters*, **2008**, 8, 673-7	11.5	192
282	Lanthanum-catalysed synthesis of microporous 3D graphene-like carbons in a zeolite template. *Nature*, **2016**, 535, 131-5	50.4	188
281	Seamlessly Conductive 3D Nanoarchitecture of Core□Shell Ni-Co Nanowire Network for Highly Efficient Oxygen Evolution. *Advanced Energy Materials*, **2017**, 7, 1601492	21.8	184
280	High frictional anisotropy of periodic and aperiodic directions on a quasicrystal surface. *Science*, **2005**, 309, 1354-6	33.3	171

279	The Role of Organic Capping Layers of Platinum Nanoparticles in Catalytic Activity of CO Oxidation. *Catalysis Letters*, **2009**, 129, 1-6	2.8	149
278	Intrinsic relation between catalytic activity of CO oxidation on Ru nanoparticles and Ru oxides uncovered with ambient pressure XPS. *Nano Letters*, **2012**, 12, 5761-8	11.5	147
277	Fundamental aspects of energy dissipation in friction. *Chemical Reviews*, **2014**, 114, 677-711	68.1	146
276	The Nanoscience Revolution: Merging of Colloid Science, Catalysis and Nanoelectronics. *Topics in Catalysis*, **2008**, 47, 1-14	2.3	144
275	Bacterial Nano-Cellulose Triboelectric Nanogenerator. *Nano Energy*, **2017**, 33, 130-137	17.1	142
274	Molecular surface chemistry by metal single crystals and nanoparticles from vacuum to high pressure. *Chemical Society Reviews*, **2008**, 37, 2155-62	58.5	142
273	The evolution of model catalytic systems; studies of structure, bonding and dynamics from single crystal metal surfaces to nanoparticles, and from low pressure (10(-3) Torr) to liquid interfaces. *Physical Chemistry Chemical Physics*, **2007**, 9, 3500-13	3.6	141
272	Electronic control of friction in silicon pn junctions. *Science*, **2006**, 313, 186	33.3	141
271	Silk Nanofiber-Networked Bio-Triboelectric Generator: Silk Bio-TEG. *Advanced Energy Materials*, **2016**, 6, 1502329	21.8	138
270	Probing hot electron flow generated on Pt nanoparticles with Au/TiO2 Schottky diodes during catalytic CO oxidation. *Nano Letters*, **2008**, 8, 2388-92	11.5	128
269	Work function variation of MoS2 atomic layers grown with chemical vapor deposition: The effects of thickness and the adsorption of water/oxygen molecules. *Applied Physics Letters*, **2015**, 106, 251606	3.4	124
268	Nanotribological Properties of Fluorinated, Hydrogenated, and Oxidized Graphenes. *Tribology Letters*, **2013**, 50, 137-144	2.8	104
267	Nanohole-Structured and Palladium-Embedded 3D Porous Graphene for Ultrahigh Hydrogen Storage and CO Oxidation Multifunctionalities. *ACS Nano*, **2015**, 9, 7343-51	16.7	99
266	Hot carrier-driven catalytic reactions on Pt-CdSe-Pt nanodumbbells and Pt/GaN under light irradiation. *Nano Letters*, **2013**, 13, 1352-8	11.5	94
265	Velocity dependence of friction and hydrogen bonding effects. *Physical Review Letters*, **2006**, 96, 236102	7.4	93
264	Work function engineering of single layer graphene by irradiation-induced defects. *Applied Physics Letters*, **2013**, 103, 171604	3.4	92
263	Hot-electron-mediated surface chemistry: toward electronic control of catalytic activity. *Accounts of Chemical Research*, **2015**, 48, 2475-83	24.3	91
262	The catalytic nanodiode: detecting continuous electron flow at oxide-metal interfaces generated by a gas-phase exothermic reaction. *ChemPhysChem*, **2006**, 7, 1409-13	3.2	89

261	Hydrogen oxidation-driven hot electron flow detected by catalytic nanodiodes. *Nano Letters*, **2009**, 9, 3930-3	11.5	88
260	Interfacial and Chemical Properties of Pt/TiO2, Pd/TiO2, and Pt/GaN Catalytic Nanodiodes Influencing Hot Electron Flow. *Journal of Physical Chemistry C*, **2007**, 111, 15331-15336	3.8	88
259	Effect of surface oxygen functionalization of carbon support on the activity and durability of Pt/C catalysts for the oxygen reduction reaction. *Carbon*, **2016**, 101, 449-457	10.4	86
258	Enhanced Surface Plasmon Effect of Ag/TiO2Nanodiodes on Internal Photoemission. *Journal of Physical Chemistry C*, **2014**, 118, 5650-5656	3.8	79
257	A tailored oxide interface creates dense Pt single-atom catalysts with high catalytic activity. *Energy and Environmental Science*, **2020**, 13, 1231-1239	35.4	77
256	The genesis and importance of oxide□metal interface controlled heterogeneous catalysis; the catalytic nanodiode. *Topics in Catalysis*, **2007**, 46, 217-222	2.3	67
255	Catalytic activity of Au/TiO2 and Pt/TiO2 nanocatalysts prepared with arc plasma deposition under CO oxidation. *Applied Catalysis A: General*, **2013**, 454, 53-58	5.1	63
254	Plasmonic hot carrier-driven oxygen evolution reaction on Au nanoparticles/TiO nanotube arrays. *Nanoscale*, **2018**, 10, 22180-22188	7.7	63
253	. *Journal of Physical Chemistry C*, **2012**, 116, 24054-24059	3.8	60
252	Electronic contribution to friction on GaAs: An atomic force microscope study. *Physical Review B*, **2008**, 77,	3.3	60
251	Dynamics of surface catalyzed reactions; the roles of surface defects, surface diffusion, and hot electrons. *Journal of Physical Chemistry B*, **2006**, 110, 20014-22	3.4	59
250	Enhanced H2 Generation of Au-Loaded, Nitrogen-Doped TiO2 Hierarchical Nanostructures under Visible Light. *Advanced Materials Interfaces*, **2014**, 1, 1300018	4.6	58
249	Mechanical and electrical properties of CdTe tetrapods studied by atomic force microscopy. *Journal of Chemical Physics*, **2007**, 127, 184704	3.9	58
248	Boosting hot electron flux and catalytic activity at metal-oxide interfaces of PtCo bimetallic nanoparticles. *Nature Communications*, **2018**, 9, 2235	17.4	56
247	Evolution of the surface science of catalysis from single crystals to metal nanoparticles under pressure. *Journal of Chemical Physics*, **2008**, 128, 182504	3.9	56
246	Concepts, instruments, and model systems that enabled the rapid evolution of surface science. *Surface Science*, **2009**, 603, 1293-1300	1.8	55
245	Mechanical and charge transport properties of alkanethiol self-assembled monolayers on a au(111) surface: the role of molecular tilt. *Langmuir*, **2008**, 24, 2219-23	4	55
244	Frontiers of surface science. *Physics Today*, **2007**, 60, 48-53	0.9	55

243	Friction and Adhesion Properties of Clean and Oxidized Al-Ni-Co Decagonal Quasicrystals: A UHV Atomic Force Microscopy/Scanning Tunneling Microscopy Study. *Tribology Letters*, **2004**, 17, 629-636	2.8	55
242	Adsorbate-driven reactive interfacial Pt-NiO nanostructure formation on the PtNi(111) alloy surface. *Science Advances*, **2018**, 4, eaat3151	14.3	53
241	Between scylla and charybdis: hydrophobic graphene-guided water diffusion on hydrophilic substrates. *Scientific Reports*, **2013**, 3, 2309	4.9	53
240	Area-Selective Atomic Layer Deposition Using Si Precursors as Inhibitors. *Chemistry of Materials*, **2018**, 30, 7603-7610	9.6	52
239	Chemical-reaction-induced hot electron flows on platinum colloid nanoparticles under hydrogen oxidation: impact of nanoparticle size. *Angewandte Chemie - International Edition*, **2015**, 54, 2340-4	16.4	51
238	Sensing current and forces with SPM. *Materials Today*, **2010**, 13, 38-45	21.8	51
237	Mussel-Inspired Defect Engineering of Graphene Liquid Crystalline Fibers for Synergistic Enhancement of Mechanical Strength and Electrical Conductivity. *Advanced Materials*, **2018**, 30, e1803267	24	49
236	Energy conversion from catalytic reaction to hot electron current with metal-semiconductor Schottky nanodiodes. *Journal of Vacuum Science & Technology B*, **2006**, 24, 1967		49
235	Size effect of RhPt bimetallic nanoparticles in catalytic activity of CO oxidation: Role of surface segregation. *Catalysis Today*, **2012**, 181, 133-137	5.3	47
234	Direct Imaging of Surface Plasmon-Driven Hot Electron Flux on the Au Nanoprism/TiO. *Nano Letters* , **2019**, 19, 891-896	11.5	47
233	Enhancement of Friction by Water Intercalated between Graphene and Mica. *Journal of Physical Chemistry Letters*, **2017**, 8, 3482-3487	6.4	45
232	Sensing dipole fields at atomic steps with combined scanning tunneling and force microscopy. *Physical Review Letters*, **2005**, 95, 136802	7.4	45
231	Internal and external atomic steps in graphite exhibit dramatically different physical and chemical properties. *ACS Nano*, **2015**, 9, 3814-9	16.7	43
230	Hot Electron and Surface Plasmon-Driven Catalytic Reaction in Metal–Semiconductor Nanostructures. *Catalysis Letters*, **2014**, 144, 1996-2004	2.8	43
229	The impact of surface science on the commercialization of chemical processes. *Catalysis Letters*, **2007**, 115, 87-98	2.8	43
228	Defective Nb2O5-supported Pt catalysts for CO oxidation: Promoting catalytic activity via oxygen vacancy engineering. *Journal of Catalysis*, **2019**, 375, 124-134	7.3	41
227	Skin-attachable and biofriendly chitosan-diatom triboelectric nanogenerator. *Nano Energy*, **2020**, 75, 104904	17.1	41
226	The effect of hot electrons and surface plasmons on heterogeneous catalysis. *Journal of Physics Condensed Matter*, **2016**, 28, 254002	1.8	41

225	Enhanced photocatalytic generation of hydrogen by Pt-deposited nitrogen-doped TiO2 hierarchical nanostructures. *Applied Surface Science*, **2015**, 354, 347-352	6.7	40
224	Influence of carrier density on the friction properties of silicon pn junctions. *Physical Review B*, **2007**, 76,	3.3	39
223	Compositional engineering of solution-processed BiVO4 photoanodes toward highly efficient photoelectrochemical water oxidation. *Nano Energy*, **2018**, 43, 244-252	17.1	39
222	Tuning hydrophobicity of TiO2 layers with silanization and self-assembled nanopatterning. *Langmuir*, **2013**, 29, 3054-60	4	38
221	Tribological properties of quasicrystals: Effect of aperiodic versus periodic surface order. *Physical Review B*, **2006**, 74,	3.3	38
220	Self-organized multi-layered graphene-boron-doped diamond hybrid nanowalls for high-performance electron emission devices. *Nanoscale*, **2018**, 10, 1345-1355	7.7	38
219	Transfer-printable micropatterned fluoropolymer-based triboelectric nanogenerator. *Nano Energy*, **2017**, 36, 126-133	17.1	37
218	Deactivation of Ru Catalysts under Catalytic CO Oxidation by Formation of Bulk Ru Oxide Probed with Ambient Pressure XPS. *Journal of Physical Chemistry C*, **2013**, 117, 13108-13113	3.8	36
217	Charge Transport in Metal□Oxide Interfaces: Genesis and Detection of Hot Electron Flow and Its Role in Heterogeneous Catalysis. *Catalysis Letters*, **2015**, 145, 299-308	2.8	36
216	Trend of catalytic activity of CO oxidation on Rh and Ru nanoparticles: Role of surface oxide. *Catalysis Today*, **2012**, 185, 131-137	5.3	36
215	Nanoscale Schottky behavior of Au islands on TiO2 probed with conductive atomic force microscopy. *Applied Physics Letters*, **2013**, 103, 173103	3.4	35
214	Probing nanoscale conductance of monolayer graphene under pressure. *Applied Physics Letters*, **2011**, 99, 013110	3.4	34
213	Elastic and inelastic deformations of ethylene-passivated tenfold decagonal Al□Ni□Co quasicrystal surfaces. *Physical Review B*, **2005**, 71,	3.3	33
212	Reduced Graphene Oxide as a Catalyst Binder: Greatly Enhanced Photoelectrochemical Stability of Cu(In,Ga)Se2 Photocathode for Solar Water Splitting. *Advanced Functional Materials*, **2018**, 28, 1705136	15.6	32
211	Graphene-Semiconductor Catalytic Nanodiodes for Quantitative Detection of Hot Electrons Induced by a Chemical Reaction. *Nano Letters*, **2016**, 16, 1650-6	11.5	31
210	Catalytic activity of Pt/SiO2 nanocatalysts synthesized via ultrasonic spray pyrolysis process under CO oxidation. *Applied Catalysis B: Environmental*, **2014**, 154-155, 171-176	21.8	30
209	Influence of hot carriers on catalytic reaction; Pt nanoparticles on GaN substrates under light irradiation. *Faraday Discussions*, **2013**, 162, 355-64	3.6	30
208	Nanoimprinting-induced nanomorphological transition in polymer solar cells: enhanced electrical and optical performance. *ACS Nano*, **2015**, 9, 2773-82	16.7	29

207	Nanomechanical and Charge Transport Properties of Two-Dimensional Atomic Sheets. *Advanced Materials Interfaces*, **2014**, 1, 1300089	4.6	28
206	The Effect of Dye Molecules and Surface Plasmons in Photon-Induced Hot Electron Flows Detected on Au/TiO2Nanodiodes. *Journal of Physical Chemistry C*, **2012**, 116, 18591-18596	3.8	28
205	Highly sensitive hydrogen detection of catalyst-free ZnO nanorod networks suspended by lithography-assisted growth. *Nanotechnology*, **2011**, 22, 085502	3.4	28
204	Atomic scale friction and adhesion properties of quasicrystal surfaces. *Journal of Physics Condensed Matter*, **2008**, 20, 314012	1.8	28
203	Polarity dependence in pulsed scanning tunneling microscopy fabrication and modification of metal nanodots on silicon. *Journal of Applied Physics*, **2002**, 92, 2139-2143	2.5	28
202	The surface plasmon-induced hot carrier effect on the catalytic activity of CO oxidation on a CuO/hexoctahedral Au inverse catalyst. *Nanoscale*, **2018**, 10, 10835-10843	7.7	27
201	Synergetic effects of edge formation and sulfur doping on the catalytic activity of a graphene-based catalyst for the oxygen reduction reaction. *Journal of Materials Chemistry A*, **2016**, 4, 14400-14407	13	27
200	Hot carrier multiplication on graphene/TiO2 Schottky nanodiodes. *Scientific Reports*, **2016**, 6, 27549	4.9	27
199	Hot Electron Surface Chemistry at Oxide Metal Interfaces: Foundation of Acid-base Catalysis. *Catalysis Letters*, **2016**, 146, 1-11	2.8	27
198	Atomic-scale view of stability and degradation of single-crystal MAPbBr3 surfaces. *Journal of Materials Chemistry A*, **2019**, 7, 20760-20766	13	27
197	Plasmon-Induced Hot Carrier Separation across Dual Interface in Gold Nickel Phosphide Heterojunction for Photocatalytic Water Splitting. *Advanced Functional Materials*, **2020**, 30, 1908239	15.6	27
196	Friction and conductance imaging of sp(2)- and sp(3)-hybridized subdomains on single-layer graphene oxide. *Nanoscale*, **2016**, 8, 4063-9	7.7	26
195	Nanoscale resistive switching Schottky contacts on self-assembled Pt nanodots on SrTiO(3). *ACS Applied Materials & Interfaces*, **2013**, 5, 11668-72	9.5	26
194	Hot electrons generated by intraband and interband transition detected using a plasmonic Cu/TiO nanodiode.. *RSC Advances*, **2019**, 9, 18371-18376	3.7	25
193	Friction anisotropy: A unique and intrinsic property of decagonal quasicrystals. *Journal of Materials Research*, **2008**, 23, 1488-1493	2.5	25
192	Ferroelectric-Polymer-Enabled Contactless Electric Power Generation in Triboelectric Nanogenerators. *Advanced Functional Materials*, **2019**, 29, 1905816	15.6	24
191	Tandem-structured, hot electron based photovoltaic cell with double Schottky barriers. *Scientific Reports*, **2014**, 4, 4580	4.9	24
190	Thermal Evolution and Instability of CO-Induced Platinum Clusters on the Pt(557) Surface at Ambient Pressure. *Journal of the American Chemical Society*, **2016**, 138, 1110-3	16.4	24

189	Enhancing the Internal Quantum Efficiency and Stability of Organic Solar Cells via Metallic Nanofunnels. *Advanced Energy Materials*, **2015**, 5, 1501393	21.8	24
188	Facile characterization of ripple domains on exfoliated graphene. *Review of Scientific Instruments*, **2012**, 83, 073905	1.7	24
187	Enhanced triboelectrification of the polydimethylsiloxane surface by ultraviolet irradiation. *Applied Physics Letters*, **2016**, 108, 133901	3.4	24
186	Photon-Induced Hot Electron Effect on the Catalytic Activity of Ceria-Supported Gold Nanoparticles. *Journal of Physical Chemistry C*, **2015**, 119, 16020-16025	3.8	23
185	The nature of hot electrons generated by exothermic catalytic reactions. *Chemical Physics Letters*, **2016**, 645, 5-14	2.5	23
184	Size-controlled model Ni catalysts on Ga2O3 for CO2 hydrogenation to methanol. *Journal of Catalysis*, **2019**, 376, 68-76	7.3	23
183	Elongated Lifetime and Enhanced Flux of Hot Electrons on a Perovskite Plasmonic Nanodiode. *Nano Letters*, **2019**, 19, 5489-5495	11.5	23
182	Ultrathin titania coating for high-temperature stable SiO2/Pt nanocatalysts. *Chemical Communications*, **2011**, 47, 8412-4	5.8	23
181	Atomic force microcopy study of the mechanical and electrical properties of monolayer films of molecules with aromatic end groups. *Langmuir*, **2007**, 23, 11522-5	4	23
180	Atomic scale coexistence of periodic and quasiperiodic order in a 2-fold Al-Ni-Co decagonal quasicrystal surface. *Physical Review B*, **2005**, 72,	3.3	23
179	Oxygen activation on the interface between Pt nanoparticles and mesoporous defective TiO during CO oxidation. *Journal of Chemical Physics*, **2019**, 151, 234716	3.9	23
178	Tailoring metal-oxide interfaces of inverse catalysts of TiO2/nanoporous-Au under hydrogen oxidation. *Chemical Communications*, **2015**, 51, 9620-3	5.8	22
177	Hydrogen Generation on Metal/Mesoporous Oxides: The Effects of Hierarchical Structure, Doping, and Co-catalysts. *Energy Technology*, **2018**, 6, 459-469	3.5	22
176	Three-dimensional hot electron photovoltaic device with vertically aligned TiO nanotubes. *Scientific Reports*, **2018**, 8, 7330	4.9	22
175	Surfactant-Free Vapor-Phase Synthesis of Single-Crystalline Gold Nanoplates for Optimally Bioactive Surfaces. *Chemistry of Materials*, **2017**, 29, 8747-8756	9.6	22
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173	Electrical transport and mechanical properties of alkylsilane self-assembled monolayers on silicon surfaces probed by atomic force microscopy. *Journal of Chemical Physics*, **2009**, 130, 114705	3.9	22
172	Probing the nanoscale Schottky barrier of metal/semiconductor interfaces of Pt/CdSe/Pt nanodumbbells by conductive-probe atomic force microscopy. *Nanoscale*, **2015**, 7, 12297-301	7.7	21

171	Tailoring metal–oxide interfaces of oxide-encapsulated Pt/silica hybrid nanocatalysts with enhanced thermal stability. *Catalysis Today*, **2016**, 265, 245-253	5.3	21
170	MOF-Derived Bifunctional Iron Oxide and Iron Phosphide Nanoarchitecture Photoelectrode for Neutral Water Splitting. *ChemElectroChem*, **2018**, 5, 2842-2849	4.3	21
169	Chemical Doping of TiO2 with Nitrogen and Fluorine and Its Support Effect on Catalytic Activity of CO Oxidation. *Catalysis Letters*, **2014**, 144, 1411-1417	2.8	21
168	Hot-electron-based solar energy conversion with metal-semiconductor nanodiodes. *Journal of Physics Condensed Matter*, **2016**, 28, 254006	1.8	20
167	Nanoscale Friction on Confined Water Layers Intercalated between MoS2 Flakes and Silica. *Journal of Physical Chemistry C*, **2019**, 123, 8827-8835	3.8	19
166	Overcoming the retention vs. voltage trade-off in nonvolatile organic memory: Ag nanoparticles covered with dipolar self-assembled monolayers as robust charge storage nodes. *Organic Electronics*, **2013**, 14, 3260-3266	3.5	19
165	Extremely high electrical conductance of microporous 3D graphene-like zeolite-templated carbon framework. *Scientific Reports*, **2017**, 7, 11460	4.9	19
164	Direct measurement of forces during scanning tunneling microscopy imaging of silicon pn junctions. *Applied Physics Letters*, **2005**, 86, 172105	3.4	19
163	Probing surface oxide formations on SiO2-supported platinum nanocatalysts under CO oxidation. *RSC Advances*, **2017**, 7, 45003-45009	3.7	18
162	The Effect of Thickness and Chemical Reduction of Graphene Oxide on Nanoscale Friction. *Journal of Physical Chemistry B*, **2018**, 122, 543-547	3.4	18
161	One-pot self-templating synthesis of Pt hollow nanostructures and their catalytic properties for CO oxidation. *Chemistry - A European Journal*, **2014**, 20, 11669-74	4.8	18
160	Adhesion properties of decagonal quasicrystals in ultrahigh vacuum. *Philosophical Magazine*, **2006**, 86, 945-950	1.6	18
159	Catalytic Synergy on PtNi Bimetal Catalysts Driven by Interfacial Intermediate Structures. *ACS Catalysis*, **2020**, 10, 10459-10467	13.1	18
158	Polarization Effect of Hot Electrons in Tandem-Structured Plasmonic Nanodiode. *ACS Photonics*, **2018**, 5, 3499-3506	6.3	18
157	Enhanced catalytic activity for CO oxidation by the metal-oxide perimeter of TiO/nanostructured Au inverse catalysts. *Nanoscale*, **2018**, 10, 3911-3917	7.7	17
156	Effect of the metal-support interaction on the activity and selectivity of methanol oxidation over Au supported on mesoporous oxides. *Chemical Communications*, **2018**, 54, 8174-8177	5.8	17
155	Support effect on the catalytic activity of two-dimensional Pt nanoparticle arrays on oxide substrates. *Applied Catalysis A: General*, **2014**, 480, 25-33	5.1	17
154	Nature of Rh Oxide on Rh Nanoparticles and Its Effect on the Catalytic Activity of CO Oxidation. *Catalysis Letters*, **2013**, 143, 1153-1161	2.8	17

153	Reversible bistability of conductance on graphene/CuOx/Cu nanojunction. *Applied Physics Letters*, **2012**, 100, 123101	3.4	17
152	Plasmonic Hot Hole-Driven Water Splitting on Au Nanoprisms/P-Type GaN. *ACS Energy Letters*,1333-1339	20.1	17
151	Isotope- and Thickness-Dependent Friction of Water Layers Intercalated Between Graphene and Mica. *Tribology Letters*, **2018**, 66, 1	2.8	16
150	Hot Electrons at Solid-Liquid Interfaces: A Large Chemoelectric Effect during the Catalytic Decomposition of Hydrogen Peroxide. *Angewandte Chemie - International Edition*, **2016**, 55, 10859-62	16.4	16
149	Hot Electrons at Solid□iquid Interfaces: A Large Chemoelectric Effect during the Catalytic Decomposition of Hydrogen Peroxide. *Angewandte Chemie*, **2016**, 128, 11017-11020	3.6	16
148	How titanium dioxide cleans itself. *Science*, **2018**, 361, 753	33.3	16
147	Amplification of hot electron flow by the surface plasmon effect on metal-insulator-metal nanodiodes. *Nanotechnology*, **2015**, 26, 445201	3.4	16
146	Domain structures of single layer graphene imaged with conductive probe atomic force microscopy. *Surface and Interface Analysis*, **2012**, 44, 768-771	1.5	16
145	Influence of molecular ordering on electrical and friction properties of □(trans-4-stilbene)alkylthiol self-assembled monolayers on Au(111). *Langmuir*, **2010**, 26, 16522-8	4	16
144	Tuning nanoscale friction on Pt nanoparticles with engineering of organic capping layer. *Langmuir*, **2011**, 27, 2509-13	4	16
143	Theory of hot electrons: general discussion. *Faraday Discussions*, **2019**, 214, 245-281	3.6	15
142	Nanoporous networks as caging supports for uniform, surfactant-free Co3O4 nanocrystals and their applications in energy storage and conversion. *Journal of Materials Chemistry A*, **2015**, 3, 15489-15497	13	15
141	Postsynthesis Modulation of the Catalytic Interface inside a Hollow Nanoreactor: Exploitation of the Bidirectional Behavior of Mixed-Valent Mn3O4 Phase in the Galvanic Replacement Reaction. *Chemistry of Materials*, **2016**, 28, 9049-9055	9.6	15
140	Photocatalytic activity of metal-decorated SiO2@TiO2 hybrid photocatalysts under water splitting. *Korean Journal of Chemical Engineering*, **2016**, 33, 2325-2329	2.8	14
139	The effect of the oxidation states of supported oxides on catalytic activity: CO oxidation studies on Pt/cobalt oxide. *Chemical Communications*, **2019**, 55, 9503-9506	5.8	14
138	Nanoscale investigation of enhanced electron field emission for silver ion implanted/post-annealed ultrananocrystalline diamond films. *Scientific Reports*, **2017**, 7, 16325	4.9	14
137	Influence of reaction with XeF2 on surface adhesion of Al and Al2O3 surfaces. *Applied Physics Letters*, **2008**, 93, 141905	3.4	14
136	A facile method for the selective decoration of graphene defects based on a galvanic displacement reaction. *NPG Asia Materials*, **2016**, 8, e262-e262	10.3	14

135	Mechanistic Insight into the Conversion Chemistry between Au-CuO Heterostructured Nanocrystals Confined inside SiO2 Nanospheres. *Chemistry of Materials*, **2017**, 29, 1788-1795	9.6	13
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133	Probing polarization modes of Ag nanowires with hot electron detection on Au/TiO2 nanodiodes. *Applied Physics Letters*, **2013**, 102, 123112	3.4	13
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131	Nanospace-Confined High-Temperature Solid-State Reactions: Versatile Synthetic Route for High-Diversity Pool of Catalytic Nanocrystals. *Chemistry of Materials*, **2017**, 29, 9463-9471	9.6	12
130	In Situ Observation of Competitive CO and O2 Adsorption on the Pt(111) Surface Using Near-Ambient Pressure Scanning Tunneling Microscopy. *Journal of Physical Chemistry C*, **2018**, 122, 6246-6254	3.8	12
129	Enhancement of Hot Electron Flow in Plasmonic Nanodiodes by Incorporating PbS Quantum Dots. *ACS Applied Materials & Interfaces*, **2018**, 10, 5081-5089	9.5	12
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