

Gender Distribution and Geography of Highly Cited Papers in ACS Catalysis

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Following the editorial series presented in ACS Catalysis in 2020¹⁻¹⁴, I investigated the gender distribution in highly cited ACS Catalysis papers. I adopted the structure of the Editorial series to form the studied groups of countries, and I also added two new groups: ‘Small Countries’ and ‘Developing Countries’. As the Editorial series focused on countries from which most ACS Catalysis papers had been published, ‘Small Countries’ and ‘Developing Countries’ did not show up in the comparison. The ‘Small Countries’ group includes small, developed countries, such as Cyprus, Greece, Iceland, and Ireland, and due to their relatively small population, it is unrealistic for each country separately to have large contributions to ACS Catalysis. The ‘Developing Countries’ group captures contributions from developing countries, such as Mexico, South Africa, Thailand, and Vietnam, which also cannot individually provide a large number of papers to ACS Catalysis due to their economic status. Specific details of the methodology can be found below.

As a main result, I found that from the 155 highly cited papers that showed up in the analysis, only 15 papers have female corresponding author(s) (9.7%), and only 5 of these 15 papers have solely female corresponding author(s) (3.2%) (Table 1). This latter fact is in wide contrast to the large number (140) of solely male corresponding author papers. Among the 199 corresponding authors of the 155 papers analyzed here, there are only 16 female corresponding authors (8.0%). I emphasize that out of the 16 country groups defined, I could not find female corresponding authors in 7 (Australia, Saudi Arabia, and Singapore; China; France and Spain; Germany and Netherlands; India; Japan; United States) (see details in Table 3-18). The most female corresponding authors happened to be in the groups of ‘Denmark and Sweden’ and ‘United Kingdom’ having 3-3 papers with female corresponding authors, which indicates a large concentration of papers with female corresponding authors to a few countries.

Table 1. Highly cited ACS Catalysis papers with female corresponding authors. Bold highlight indicates papers with solely female corresponding authors.

Country	Author Full Names	Article Title	Publication Year	Volume	Start Page	Document Type	Times Cited
Czechia	Stepankova, Veronika; Bidmanova, Sarka; Koudelakova, Tana; Prokop, Zbynek; Chaloupkova, Radka; Damborsky, Jiri	Strategies for Stabilization of Enzymes in Organic Solvents	2013	3	2823	Article	340
Italy Denmark	Janssens, Ton V. W.; Falsig, Hanne; Lundegaard, Lars F.; Vennestrom, Peter N. R.; Rasmussen, Soren B.; Moses, Poul Georg; Giordanino, Filippo; Borfecchia, Elisa; Lomachenko, Kirill A.; Lamberti, Carlo; Bordiga, Silvia; Godiksen, Anita; Mossin, Susanne; Beato, Pablo	A Consistent Reaction Scheme for the Selective Catalytic Reduction of Nitrogen Oxides with Ammonia	2015	5	2832	Article	252
Thailand	Huang, Yun; Handoko, Albertus D.; Hirunsit, Pussana; Yeo, Boon Siang	Electrochemical Reduction of CO₂ Using Copper Single-Crystal Surfaces: Effects of CO* Coverage on the Selective Formation of Ethylene	2017	7	1749	Article	230
South Korea	Yang, Sungeun; Tak, Young Joo; Kim, Jiwhan; Soon, Aloysius; Lee, Hyunjoo	Support Effects in Single-Atom Platinum Catalysts for Electrochemical Oxygen Reduction	2017	7	1301	Article	193
United Kingdom	France, Scott P.; Hepworth, Lorna J.; Turner, Nicholas J.; Flitsch, Sabine L.	Constructing Biocatalytic Cascades: In Vitro and in Vivo Approaches to de Novo Multi-Enzyme Pathways	2017	7	710	Article	174
Canada	Klinkova, Anna; De Luna, Phil; Dinh, Cao-Thang; Voznyy, Oleksandr; Larin, Egor M.; Kumacheva, Eugenia; Sargent, Edward H.	Rational Design of Efficient Palladium Catalysts for Electroreduction of Carbon Dioxide to Formate	2016	6	8115	Article	164
Russia	Bulushev, Dmitri A.; Zacharska, Monika; Shlyakhova, Elena V.; Chuvilin, Audrey L.; Guo, Yina; Beloshapkin, Sergey; Okotrub, Alexander V.; Bulusheva, Lyubov G.	Single Isolated Pd²⁺ Cations Supported on N-Doped Carbon as Active Sites for Hydrogen Production from Formic Acid Decomposition	2016	6	681	Article	141
United Kingdom	Pirez, Cyril; Caderon, Jean-Michel; Dacquin, Jean-Philippe; Lee, Adam F.; Wilson, Karen	Tunable KIT-6 Mesoporous Sulfonic Acid Catalysts for Fatty Acid Esterification	2012	2	1607	Article	139
Denmark	Mirbagheri, Naghmeahalsadat; Wang, Degao; Peng, Cheng; Wang, Jianqiang; Huang, Qing; Fan, Chunhai; Ferapontova, Elena E.	Visible Light Driven Photoelectrochemical Water Oxidation by Zn- and Ti-Doped Hematite Nanostructures	2014	4	2006	Article	135
Israel	Davydova, Elena S.; Mukerjee, Sanjeev; Jaouen, Frederic; Dekel, Dario R.	Electrocatalysts for Hydrogen Oxidation Reaction in Alkaline Electrolytes	2018	8	6665	Review	126

United Kingdom	Pesci, Federico M.; Sokolikova, Maria S.; Grotta, Chiara; Sherrell, Peter C.; Reale, Francesco; Sharda, Kanudha; Ni, Na; Palezynski, Pawel; Mattevi, Cecilia	MoS₂/WS₂ Heterojunction for Photoelectrochemical Water Oxidation	2017	7	4990	Article	112
Poland	Michalow-Mauke, Katarzyna A.; Lu, Ye; Kowalski, Kazimierz; Graule, Thomas; Nachttegaal, Maarten; Kroecher, Oliver; Ferri, Davide	Flame-Made WO₃/CeO_x-TiO₂ Catalysts for Selective Catalytic Reduction of NO_x by NH₃	2015	5	5657	Article	109
Canada	Liu, Subiao; Liu, Qingxia; Luo, Jing-Li	Highly Stable and Efficient Catalyst with In Situ Exsolved Fe-Ni Alloy Nanospheres Socketed on an Oxygen Deficient Perovskite for Direct CO₂ Electrolysis	2016	6	6219	Article	104
Denmark	Fiordaliso, Elisabetta M.; Sharafutdinov, Irek; Carvalho, Hudson W. P.; Grunwaldt, Jan-D.; Hansen, Thomas W.; Chorkendorff, Ib; Wagner, Jakob B.; Damsgaard, Christian D.	Intermetallic GaPd₂ Nanoparticles on SiO₂ for Low-Pressure CO₂ Hydrogenation to Methanol: Catalytic Performance and In Situ Characterization	2015	5	5827	Article	86
Mexico	Sofia Varela, Ana; Ju, Wen; Bagger, Alexander; Franco, Patricio; Rossmelst, Jan; Strasser, Peter	Electrochemical Reduction of CO₂ on Metal-Nitrogen-Doped Carbon Catalysts	2019	9	7270	Article	83

I also analyzed the total citations of the different groups (Table 2) and found that according to this methodology and metric, the ‘Small Countries’ and ‘Developing Countries’ groups had more citations than that of United Kingdom or Canada. This shows that research groups from parts of the globe that are not considered to be scientific powerhouses still provide significant contributions to ACS Catalysis.

Table 2. Total Citation of the 10 most cited papers from each groups of countries.

Country Group	Total Citation
United States	6973
Australia, Saudi Arabia, and Singapore	6377
Germany and Netherlands	6335
China	5667
Japan	3373
France and Spain	3093
Italy and Switzerland	2827
South Korea	2624
India	2412
Austria, Belgium, Brazil, and Russia	1939
Small Countries	1835
Developing Countries	1655
Denmark and Sweden	1488
United Kingdom	1449
Israel, Norway, Poland, and Taiwan	1410
Canada	1255

Methodology

I collected the 10 most cited contributions from each group of countries using Web of Science (assessed July 9th, 2021) by searching for the country affiliations of the corresponding authors, resulting in a total of 160 papers (Tables 3-18). I found that 5 papers showed up twice, but I counted these papers once in the above analysis to avoid double-counting (Table 19). The gender of the corresponding authors was assessed based on their webpage/Google Scholar/ResearchGate information if otherwise not mentioned.

Table 3. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from United States.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
United States	Anantharaj, Sengen; Ede, Sivasankara Rao; Sakthikumar, Kuppan; Karthick, Kannimuthu; Mishra, Soumyaranjan; Kundu, Subrata	Recent Trends and Perspectives in Electrochemical Water Splitting with an Emphasis on Sulfide, Selenide, and Phosphide Catalysts of Fe, Co, and Ni: A Review	Review	10.1021/acscatal.6b02479	2016	6	8069	1058	1	0
United States	Benck, Jesse D.; Hellstern, Thomas R.; Kibsgaard, Jakob; Chakthranont, Pongkarn; Jaramillo, Thomas F.	Catalyzing the Hydrogen Evolution Reaction (HER) with Molybdenum Sulfide Nanomaterials	Article	10.1021/cs500923c	2014	4	3957	900	1	0
United States	Benck, Jesse D.; Chen, Zhebo; Kuritzky, Leah Y.; Forman, Arnold J.; Jaramillo, Thomas F.	Amorphous Molybdenum Sulfide Catalysts for Electrochemical Hydrogen Production: Insights into the Origin of their Catalytic Activity	Article	10.1021/cs300451q	2012	2	1916	765	1	0
United States	Perera, Sanjaya D.; Mariano, Ruperto G.; Khiem Vu; Nour, Nijem; Seitz, Oliver; Chabal, Yves; Balkus, Kenneth J., Jr.	Hydrothermal Synthesis of Graphene-TiO ₂ Nanotube Composites with Enhanced Photocatalytic Activity	Article	10.1021/cs200621c	2012	2	949	692	1	0
United States	Grabow, L. C.; Mavrikakis, M.	Mechanism of Methanol Synthesis on Cu through CO ₂ and CO Hydrogenation	Article	10.1021/cs200055d	2011	1	365	640	1	0
United States	Kaur, Parminder; Hupp, Joseph T.; Nguyen, SonBinh T.	Porous Organic Polymers in Catalysis: Opportunities and Challenges	Article	10.1021/cs200131g	2011	1	819	625	2	0
United States	Liu, Jingyue	Catalysis by Supported Single Metal Atoms	Article	10.1021/acscatal.6b01534	2017	7	34	598	1	0
United States	Wang, Jin-Liang; Wang, Cheng; Lin, Wenbin	Metal-Organic Frameworks for Light Harvesting and Photocatalysis	Article	10.1021/cs3005874	2012	2	2630	583	1	0
United States	Nicewicz, David A.; Nguyen, Tien M.	Recent Applications of Organic Dyes as Photoredox Catalysts in Organic Synthesis	Article	10.1021/cs400956a	2014	4	355	562	1	0
United States	McKone, James R.; Sadtler, Bryce F.; Werlang, Caroline A.; Lewis, Nathan S.; Gray, Harry B.	Ni-Mo Nanopowders for Efficient Electrochemical Hydrogen Evolution	Article	10.1021/cs300691m	2013	3	166	550	1	0

Table 4. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Australia, Saudi Arabia, and Singapore.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Singapore	Wang, Haibo; Maiyalagan, Thandavarayan; Wang, Xin	Review on Recent Progress in Nitrogen-Doped Graphene: Synthesis, Characterization, and Its Potential Applications	Review	10.1021/cs200652y	2012	2	781	2427	1	0
Singapore	Ge, Xiaoming; Sumbaja, Afriyanti; Wu, Delvin; An, Tao; Li, Bing; Goh, F. W. Thomas; Hor, T. S. Andy; Zong, Yun; Liu, Zhaolin	Oxygen Reduction in Alkaline Media: From Mechanisms to Recent Advances of Catalysts	Review	10.1021/acscatal.5b00524	2015	5	4643	616	3	0
Singapore	Yan, Ya; Xia, BaoYu; Xu, Zhichuan; Wang, Xin	Recent Development of Molybdenum Sulfides as Advanced Electrocatalysts for Hydrogen Evolution Reaction	Review	10.1021/cs500070x	2014	4	1693	594	1	0
Australia	Duan, Jingjing; Chen, Sheng; Jaroniec, Mietek; Qiao, Shi Zhang	Heteroatom-Doped Graphene-Based Materials for Energy-Relevant Electrocatalytic Processes	Review	10.1021/acscatal.5b00991	2015	5	5207	565	1	0
Singapore	Ren, Dan; Deng, Yilin; Handoko, Albertus Denny; Chen, Chung Shou; Malkhandi, Souradip; Yeo, Boon Siang	Selective Electrochemical Reduction of Carbon Dioxide to Ethylene and Ethanol on Copper(I) Oxide Catalysts	Article	10.1021/cs502128q	2015	5	2814	450	1	0
Australia	Duan, Xiaoguang; Sun, Hongqi; Wang, Yuxian; Kang, Jian; Wang, Shaobin	N-Doping-Induced Nonradical Reaction on Single-Walled Carbon Nanotubes for Catalytic Phenol Oxidation	Article	10.1021/cs5017613	2015	5	553	400	2	0
Australia	Gao, Guoping; O'Mullane, Anthony P.; Du, Aijun	2D MXenes: A New Family of Promising Catalysts for the Hydrogen Evolution Reaction	Article	10.1021/acscatal.6b02754	2017	7	494	394	1	0
Australia	Duan, Xiaoguang; Sun, Hongqi; Kang, Jian; Wang, Yuxian; Indrawirawan, Stacey; Wang, Shaobin	Insights into Heterogeneous Catalysis of Persulfate Activation on Dimensional-Structured Nanocarbons	Article	10.1021/acscatal.5b00774	2015	5	4629	341	2	0
Singapore	Takanabe, Kazuhiro	Photocatalytic Water Splitting: Quantitative Approaches toward Photocatalyst by Design	Review	10.1021/acscatal.7b02662	2017	7	8006	280	1	0
Saudi Arabia	Zhang, Jiaguang; Teo, Jason; Chen, Xi; Asakura, Hiroyuki; Tanaka, Tsunehiro; Teramura, Kentaro; Yan, Ning	A Series of NiM (M = Ru, Rh, and Pd) Bimetallic Catalysts for Effective Lignin Hydrogenolysis in Water	Article	10.1021/cs401199f	2014	4	1574	310	1	0

Table 5. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Germany and the Netherlands.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Germany	Reier, Tobias; Oezaslan, Mehtap; Strasser, Peter	Electrocatalytic Oxygen Evolution Reaction (OER) on Ru, Ir, and Pt Catalysts: A Comparative Study of Nanoparticles and Bulk Materials	Article	10.1021/cs3003098	2012	2	1765	1234	1	0
Germany	Wang, Xinchun; Blechert, Siegfried; Antonietti, Markus	Polymeric Graphitic Carbon Nitride for Heterogeneous Photocatalysis	Article	10.1021/cs300240x	2012	2	1596	1060	1	0
Germany	Moselage, Marc; Li, Jie; Ackermann, Lutz	Cobalt-Catalyzed C-H Activation	Review	10.1021/acscatal.5b02344	2016	6	498	785	1	0
Netherlands	Gascon, Jorge; Corma, Avelino; Kapteijn, Freek; Llabres i Xamena, Francesc X.	Metal Organic Framework Catalysis: Quo vadis?	Article	10.1021/cs400959k	2014	4	361	674	2	0
Netherlands	Lyaskovskyy, Volodymyr; de Bruin, Bas	Redox Non-Innocent Ligands: Versatile New Tools to Control Catalytic Reactions	Article	10.1021/cs200660v	2012	2	270	642	1	0
Netherlands	Galvis, Hirsia M. Torres; de Jong, Krijn P.	Catalysts for Production of Lower Olefins from Synthesis Gas: A Review	Review	10.1021/cs4003436	2013	3	2130	486	1	0
Germany	Wunder, Stefanie; Lu, Yan; Albrecht, Martin; Ballauff, Matthias	Catalytic Activity of Faceted Gold Nanoparticles Studied by a Model Reaction: Evidence for Substrate-Induced Surface Restructuring	Article	10.1021/cs200208a	2011	1	908	404	1	0
Germany	Liu, Weiping; Ackermann, Lutz	Manganese-Catalyzed C-H Activation	Article	10.1021/acscatal.6b00993	2016	6	3743	374	1	0
Netherlands	Diaz-Morales, Oscar; Ledezma-Yanez, Isis; Koper, Marc T. M.; Calle-Vallejo, Federico	Guidelines for the Rational Design of Ni-Based Double Hydroxide Electrocatalysts for the Oxygen Evolution Reaction	Article	10.1021/acscatal.5b01638	2015	5	5380	338	2	0
Germany	Deng, Xiaohui; Tucsuezy, Harun	Cobalt-Oxide-Based Materials as Water Oxidation Catalyst: Recent Progress and Challenges	Article	10.1021/cs500713d	2014	4	3701	338	1	0

Table 6. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from China.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
China	Tian, Peng; Wei, Yingxu; Ye, Mao; Liu, Zhongmin	Methanol to Olefins (MTO): From Fundamentals to Commercialization	Article	10.1021/acscatal.5b00007	2015	5	1922	756	1	0
China	Ye, Liqun; Liu, Jinyan; Gong, Chuqing; Tian, Lihong; Peng, Tianyou; Zan, Ling	Two Different Roles of Metallic Ag on Ag/AgX/BiOX (X = Cl, Br) Visible Light Photocatalysts: Surface Plasmon Resonance and Z-Scheme Bridge	Article	10.1021/cs300213m	2012	2	1677	658	1*	0
China	Cheng, Daojuan; Ishihara, Yoshihiro; Tan, Bin; Barbas, Carlos F., III	Organocatalytic Asymmetric Assembly Reactions: Synthesis of Spirooxindoles via Organocascade Strategies	Review	10.1021/cs401172r	2014	4	743	624	1	0
China	Shen, Kui; Chen, Xiaodong; Chen, Junying; Li, Yingwei	Development of MOF-Derived Carbon-Based Nanomaterials for Efficient Catalysis	Article	10.1021/acscatal.6b01222	2016	6	5887	623	1	0
China	Yang, Yaqing; Zhang, Kai; Ling, Huanlei; Li, Xiang; Chan, Hang Cheong; Yang, Lichun; Gao, Qingsheng	MoS ₂ -Ni ₃ S ₂ Heteronanorods as Efficient and Stable Bifunctional Electrocatalysts for Overall Water Splitting	Article	10.1021/acscatal.6b03192	2017	7	2357	547	2*	0
China	Huang, Hongwei; Li, Xiaowei; Wang, Jinjian; Dong, Fan; Chu, Paul K.; Zhang, Tierui; Zhang, Yihe	Anionic Group Self-Doping as a Promising Strategy: Band-Gap Engineering and Multi-Functional Applications of High-Performance CO ₃ -Doped Bi ₂ O ₂ CO ₃	Article	10.1021/acscatal.5b00444	2015	5	4094	534	1*	0
China	Yang, Xiaofei; Cui, Haiying; Li, Yang; Qin, Jieliang; Zhang, Rongxian; Tang, Hua	Fabrication of Ag ₃ PO ₄ -Graphene Composites with Highly Efficient and Stable Visible Light Photocatalytic Performance	Article	10.1021/cs3008126	2013	3	363	485	1*	0
China	Li, Kan; Peng, Bosi; Peng, Tianyou	Recent Advances in Heterogeneous Photocatalytic CO ₂ Conversion to Solar Fuels	Review	10.1021/acscatal.6b02089	2016	6	7485	482	1	0
China	Xiong, Ting; Cen, Wanglai; Zhang, Yuxin; Dong, Fan	Bridging the g-C ₃ N ₄ Interlayers for Enhanced Photocatalysis	Article	10.1021/acscatal.5b02922	2016	6	2462	480	1	0
China	Li, Rong; Wei, Zidong; Gou, Xinglong	Nitrogen and Phosphorus Dual-Doped Graphene/Carbon Nanosheets as Bifunctional Electrocatalysts for Oxygen Reduction and Evolution	Article	10.1021/acscatal.5b00601	2015	5	4133	478	1	0

*Based on internet search

Table 7. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Japan.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Japan	Maeda, Kazuhiko	Z-Scheme Water Splitting Using Two Different Semiconductor Photocatalysts	Review	10.1021/cs4002089	2013	3	1486	680	1	0
Japan	Nakagawa, Yoshinao; Tamura, Masazumi; Tomishige, Keiichi	Catalytic Reduction of Biomass-Derived Furanic Compounds with Hydrogen	Review	10.1021/cs400616p	2013	3	2655	386	2	0
Japan	Takeda, Hiroyuki; Cometto, Claudio; Ishitani, Osamu; Robert, Marc	Electrons, Photons, Protons and Earth-Abundant Metal Complexes for Molecular Catalysis of CO ₂ Reduction	Review	10.1021/acscatal.6b02181	2017	7	70	324	2	0
Japan	Jiao, Jiao; Murakami, Kei; Itami, Kenichiro	Catalytic Methods for Aromatic C-H Amination: An Ideal Strategy for Nitrogen-Based Functional Molecules	Review	10.1021/acscatal.5b02417	2016	6	610	323	1	0
Japan	Liu, Yongmei; Tsunoyama, Hironori; Akita, Tomoki; Xie, Songhai; Tsukuda, Tatsuya	Aerobic Oxidation of Cyclohexane Catalyzed by Size-Controlled Au Clusters on Hydroxyapatite: Size Effect in the Sub-2 nm Regime	Article	10.1021/cs100043j	2011	1	2	307	1	0
Japan	Shiraishi, Yasuhiro; Kanazawa, Shunsuke; Sugano, Yoshitsune; Tsukamoto, Daijiro; Sakamoto, Hirokatsu; Ichikawa, Satoshi; Hirai, Takayuki	Highly Selective Production of Hydrogen Peroxide on Graphitic Carbon Nitride (g-C ₃ N ₄) Photocatalyst Activated by Visible Light	Article	10.1021/cs401208c	2014	4	774	285	1	0
Japan	Obora, Yasushi	Recent Advances in alpha-Alkylation Reactions using Alcohols with Hydrogen Borrowing Methodologies	Review	10.1021/cs501269d	2014	4	3972	275	1	0
Japan	Nakajima, Kiyotaka; Hara, Michikazu	Amorphous Carbon with SO ₃ H Groups as a Solid Bronsted Acid Catalyst	Review	10.1021/cs300103k	2012	2	1296	271	1	0
Japan	Xie, Songhai; Tsunoyama, Hironori; Kurashige, Wataru; Negishi, Yuichi; Tsukuda, Tatsuya	Enhancement in Aerobic Alcohol Oxidation Catalysis of Au-25 Clusters by Single Pd Atom Doping	Article	10.1021/cs300252g	2012	2	1519	270	1	0
Japan	Zhan, Wen-Wen; Zhu, Qi-Long; Xu, Qiang	Dehydrogenation of Ammonia Borane by Metal Nanoparticle Catalysts	Article	10.1021/acscatal.6b02209	2016	6	6892	252	1	0

Table 8. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from France and Spain.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Spain	Gascon, Jorge; Corma, Avelino; Kapteijn, Freek; Llabres i Xamena, Francesc X.	Metal Organic Framework Catalysis: Quo vadis?	Article	10.1021/cs400959k	2014	4	361	674	2	0
Spain	Martin, Carmen; Fiorani, Giulia; Kleij, Arian W.	Recent Advances in the Catalytic Preparation of Cyclic Organic Carbonates	Review	10.1021/cs5018997	2015	5	1353	601	1	0
France	Takeda, Hiroyuki; Cometto, Claudio; Ishitani, Osamu; Robert, Marc	Electrons, Photons, Protons and Earth-Abundant Metal Complexes for Molecular Catalysis of CO ₂ Reduction	Review	10.1021/acscatal.6b02181	2017	7	70	324	2	0
Spain	Trovarelli, Alessandro; Llorca, Jordi	Ceria Catalysts at Nanoscale: How Do Crystal Shapes Shape Catalysis?	Article	10.1021/acscatal.7b01246	2017	7	4716	274	2	0
France	Katryniok, Benjamin; Paul, Sebastien; Dumeignil, Franck	Recent Developments in the Field of Catalytic Dehydration of Glycerol to Acrolein	Review	10.1021/cs400354p	2013	3	1819	216	1	0
Spain	Climent, Maria J.; Corma, Avelino; Iborra, Sara; Sabater, Maria J.	Heterogeneous Catalysis for Tandem Reactions	Editorial Material	10.1021/cs401052k	2014	4	870	212	1	0
France	Zadick, Anicet; Dubau, Laetitia; Sergent, Nicolas; Berthome, Gregory; Chatenet, Marian	Huge Instability of Pt/C Catalysts in Alkaline Medium	Article	10.1021/acscatal.5b01037	2015	5	4819	209	2	0
France	Huan, Tran Ngoc; Ranjbar, Nastaran; Rousse, Gwenaelle; Sougrati, Moulay; Zitolo, Andrea; Mougel, Victor; Jaouen, Frederic; Fontecave, Marc	Electrochemical Reduction of CO ₂ Catalyzed by Fe-N-C Materials: A Structure-Selectivity Study	Article	10.1021/acscatal.6b03353	2017	7	1520	201	2	0
Spain	Cordovilla, Carlos; Bartolome, Camino; Martinez-Ilduya, Jesus Ma; Espinet, Pablo	The Stille Reaction, 38 Years Later	Review	10.1021/acscatal.5b00448	2015	5	3040	194	1	0
Spain	Dhakshinamoorthy, Amarajothi; Alvaro, Mercedes; Garcia, Hermenegildo	Aerobic Oxidation of Benzylic Alcohols Catalyzed by Metal-Organic Frameworks Assisted by TEMPO	Article	10.1021/cs1000703	2011	1	48	188	1	0

Table 9. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Italy and Switzerland.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Switzerland	Rabis, Annett; Rodriguez, Paramaconi; Schmidt, Thomas J.	Electrocatalysis for Polymer Electrolyte Fuel Cells: Recent Achievements and Future Challenges	Article	10.1021/cs3000864	2012	2	864	597	1	0
Italy	Antolini, Ermete	Iridium As Catalyst and Cocatalyst for Oxygen Evolution/Reduction in Acidic Polymer Electrolyte Membrane Electrolyzers and Fuel Cells	Review	10.1021/cs4011875	2014	4	1426	327	1	0
Italy	Aneggi, Eleonora; Wiater, Dawid; de Leitenburg, Carla; Llorca, Jordi; Trovarelli, Alessandro	Shape-Dependent Activity of Ceria in Soot Combustion	Article	10.1021/cs400850r	2014	4	172	286	1	0
Italy	Trovarelli, Alessandro; Llorca, Jordi	Ceria Catalysts at Nanoscale: How Do Crystal Shapes Shape Catalysis?	Article	10.1021/acscatal.7b01246	2017	7	4716	274	2	0
Italy	Janssens, Ton V. W.; Falsig, Hanne; Lundegaard, Lars F.; Vennestrom, Peter N. R.; Rasmussen, Soren B.; Moses, Poul Georg; Giordano, Filippo; Borfecchia, Elisa; Lomachenko, Kirill A.; Lamberti, Carlo; Bordiga, Silvia; Godiksen, Anita; Mossin, Susanne; Beato, Pablo	A Consistent Reaction Scheme for the Selective Catalytic Reduction of Nitrogen Oxides with Ammonia	Article	10.1021/cs501673g	2015	5	2832	252	1	2
Italy	Jia, Minqiang; Bandini, Marco	Counterion Effects in Homogeneous Gold Catalysis	Review	10.1021/cs501902v	2015	5	1638	246	1	0
Italy	Puiggollers, Antonio Ruiz; Schlexer, Philomena; Tosoni, Sergio; Pacchioni, Gianfranco	Increasing Oxide Reducibility: The Role of Metal/Oxide Interfaces in the Formation of Oxygen Vacancies	Article	10.1021/acscatal.7b01913	2017	7	6493	240	1	0
Switzerland	Dutta, Abhijit; Rahaman, Motiar; Luedi, Nicola C.; Broekmann, Peter	Morphology Matters: Tuning the Product Distribution of CO ₂ Electroreduction on Oxide-Derived Cu Foam Catalysts	Article	10.1021/acscatal.6b00770	2016	6	3804	222	1	0
Switzerland	Vrubel, Heron; Hu, Xile	Growth and Activation of an Amorphous Molybdenum Sulfide Hydrogen Evolving Catalyst	Article	10.1021/cs400441u	2013	3	2002	205	1	0
Switzerland	Schuemperli, Martin T.; Hammond, Ceri; Hermans, Ivo	Developments in the Aerobic Oxidation of Amines	Review	10.1021/cs300212q	2012	2	1108	178	1	0

Table 10. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from South Korea.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
South Korea	Ganesan, Pandian; Prabu, Moni; Sanetuntikul, Jakkid; Shanmugam, Sangaraju	Cobalt Sulfide Nanoparticles Grown on Nitrogen and Sulfur Codoped Graphene Oxide: An Efficient Electrocatalyst for Oxygen Reduction and Evolution Reactions	Article	10.1021/acscatal.5b00154	2015	5	3625	458	1	0
South Korea	Vij, Varun; Sultan, Siraj; Harzandi, Ahmad M.; Meena, Abhishek; Tiwari, Jitendra N.; Lee, Wang-Geun; Yoon, Taeseung; Kim, Kwang S.	Nickel-Based Electrocatalysts for Energy-Related Applications: Oxygen Reduction, Oxygen Evolution, and Hydrogen Evolution Reactions	Review	10.1021/acscatal.7b01800	2017	7	7196	394	2	0
South Korea	Ryu, Jaeyune; Jung, Namgee; Jang, Jong Hyun; Kim, Hyoung-Juhn; Yoo, Sung Jong	In Situ Transformation of Hydrogen-Evolving CoP Nanoparticles: Toward Efficient Oxygen Evolution Catalysts Bearing Dispersed Morphologies with Co-oxo/hydroxo Molecular Units	Article	10.1021/acscatal.5b00349	2015	5	4066	298	1	0
South Korea	Back, Seoin; Yeom, Min Sun; Jung, Yousung	Active Sites of Au and Ag Nanoparticle Catalysts for CO ₂ Electroreduction to CO	Article	10.1021/acscatal.5b00462	2015	5	5089	260	1	0
South Korea	Yu, Xiaomei; Kim, Boseong; Kim, Yu Kwon	Highly Enhanced Photoactivity of Anatase TiO ₂ Nanocrystals by Controlled Hydrogenation-Induced Surface Defects	Article	10.1021/cs4005776	2013	3	2479	241	1	0
South Korea	Choi, Changhyeok; Back, Seoin; Kim, Na-Young; Lim, Juhyung; Kim, Yong-Hyun; Jung, Yousung	Suppression of Hydrogen Evolution Reaction in Electrochemical N ₂ Reduction Using Single-Atom Catalysts: A Computational Guideline	Article	10.1021/acscatal.8b00905	2018	8	7517	217	1	0
South Korea	Mathew, Sam; Yun, Hyungdon	omega-Transaminases for the Production of Optically Pure Amines and Unnatural Amino Acids	Review	10.1021/cs300116n	2012	2	993	197	1*	0
South Korea	Kim, Hyunwoo; Chang, Sukbok	Transition-Metal-Mediated Direct C-H Amination of Hydrocarbons with Amine Reactants: The Most Desirable but Challenging C-N Bond-Formation Approach	Article	10.1021/acscatal.6b00293	2016	6	2341	195	1	0
South Korea	Yang, Sungeun; Tak, Young Joo; Kim, Jiwhan; Soon, Aloysius; Lee, Hyunjo	Support Effects in Single-Atom Platinum Catalysts for Electrochemical Oxygen Reduction	Article	10.1021/acscatal.6b02899	2017	7	1301	193	0	1
South Korea	Patel, Pitambar; Chang, Sukbok	Cobalt(III)-Catalyzed C-H Amidation of Arenes using Acetoxycarbamates as Convenient Amino Sources under Mild Conditions	Article	10.1021/cs501860b	2015	5	853	171	1	0

*Based on internet search

Table 11. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from India.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
India	Anantharaj, Sengen; Ede, Sivasankara Rao; Sakthikumar, Kuppam; Karthick, Kannimuthu; Mishra, Soumyaranjan; Kundu, Subrata	Recent Trends and Perspectives in Electrochemical Water Splitting with an Emphasis on Sulfide, Selenide, and Phosphide Catalysts of Fe, Co, and Ni: A Review	Review	10.1021/acscatal.6b02479	2016	6	8069	1058	1	0
India	Chauhan, Meenakshi; Reddy, Kasala Prabhakar; Gopinath, Chinnakonda S.; Deka, Sasanka	Copper Cobalt Sulfide Nanosheets Realizing a Promising Electrocatalytic Oxygen Evolution Reaction	Article	10.1021/acscatal.7b01831	2017	7	5871	222	1	0
India	Mukherjee, Sohini; Mukherjee, Manjitha; Mukherjee, Arnab; Bhagi-Damodaran, Ambika; Lu, Yi; Dey, Abhishek	O-2 Reduction by Biosynthetic Models of Cytochrome c Oxidase: Insights into Role of Proton Transfer Residues from Perturbed Active Sites Models of CcO	Article	10.1021/acscatal.8b02240	2018	8	8915	181	2	0
India	Deepa, Ayillath K.; Dhepe, Paresh L.	Lignin Depolymerization into Aromatic Monomers over Solid Acid Catalysts	Article	10.1021/cs501371q	2015	5	365	179	1	0
India	Bhowmik, Tanmay; Kundu, Manas Kumar; Barman, Sudip	Palladium Nanoparticle-Graphitic Carbon Nitride Porous Synergistic Catalyst for Hydrogen Evolution/Oxidation Reactions over a Broad Range of pH and Correlation of Its Catalytic Activity with Measured Hydrogen Binding Energy	Article	10.1021/acscatal.5b02485	2016	6	1929	149	1	0
India	Li, Hu; Riisager, Anders; Saravanamurugan, Shunmugavel; Pandey, Ashok; Sangwan, Rajender S.; Yang, Song; Luque, Rafael	Carbon-Increasing Catalytic Strategies for Upgrading Biomass into Energy-Intensive Fuels and Chemicals	Review	10.1021/acscatal.7b02577	2018	8	148	142	3	0
India	Patel, Ramesh N.	Biocatalysis: Synthesis of Key Intermediates for Development of Pharmaceuticals	Review	10.1021/cs200219b	2011	1	1056	127	1	0
India	Dhakshinamoorthy, Amarajothi; Asiri, Abdullah M.; Garcia, Hermenegildo	Metal Organic Frameworks as Versatile Hosts of Au Nanoparticles in Heterogeneous Catalysis	Review	10.1021/acscatal.6b03386	2017	7	2896	124	2	0
India	Sen, Malay; Emayavaramban, Balakumar; Barsu, Nagaraju; Premkumar, J. Richard; Sundararaju, Basker	Cp*Co(III)-Catalyzed C(sp ³)-H Bond Activation: A Highly Stereoselective and Regioselective Alkenylation of 8-Methylquinoline with Alkynes	Article	10.1021/acscatal.6b00612	2016	6	2792	117	1	0
India	Maity, Soham; Kancherla, Rajesh; Dhawa, Uttam; Hogue, Ehtasimul; Pimparkar, Sandeep; Maiti, Debabrata	Switch to Allylic Selectivity in Cobalt-Catalyzed Dehydrogenative Heck Reactions with Unbiased Aliphatic Olefins	Article	10.1021/acscatal.6b01816	2016	6	5493	113	1	0

Table 12. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Austria, Belgium, Brazil, and Russia.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Russia	Ananikov, Valentine P.	Nickel: The Spirited Horse of Transition Metal Catalysis	Editorial Material	10.1021/acscatal.5b00072	2015	5	1964	350	1	0
Brazil	Scholten, Jackson D.; Leal, Barbara Caroline; Dupont, Jairton	Transition Metal Nanoparticle Catalysis in Ionic Liquids	Review	10.1021/cs200525e	2012	2	184	251	2	0
Brazil	Lima, Carolina G. S.; Lima, Thiago de M.; Duarte, Marcelo; Jurberg, Igor D.; Paixao, Marcio W.	Organic Synthesis Enabled by Light-Irradiation of EDA Complexes: Theoretical Background and Synthetic Applications	Review	10.1021/acscatal.5b02386	2016	6	1389	226	2	0
Belgium	Theofanidis, Stavros Alexandros; Galvita, Vladimir V.; Poelman, Hilde; Marin, Guy B.	Enhanced Carbon-Resistant Dry Reforming Fe-Ni Catalyst: Role of Fe	Article	10.1021/acscatal.5b00357	2015	5	3028	221	1	0
Austria	Simon, Robert C.; Richter, Nina; Busto, Eduardo; Kroutil, Wolfgang	Recent Developments of Cascade Reactions Involving omega-Transaminases	Article	10.1021/cs400930v	2014	4	129	182	1	0
Russia	Lyakin, Oleg Y.; Ottenbacher, Roman V.; Bryliakov, Konstantin P.; Talsi, Evgenii P.	Asymmetric Epoxidations with H ₂ O ₂ on Fe and Mn Aminopyridine Catalysts: Probing the Nature of Active Species by Combined Electron Paramagnetic Resonance and Enantioselectivity Study	Article	10.1021/cs300205n	2012	2	1196	158	1	0
Russia	Bulushev, Dmitri A.; Zacharska, Monika; Lisitsyn, Alexander S.; Podyacheva, Olga Yu.; Hage, Fredrik S.; Ramasse, Quentin M.; Bangert, Ursel; Bulusheva, Lyubov G.	Single Atoms of Pt-Group Metals Stabilized by N-Doped Carbon Nanofibers for Efficient Hydrogen Production from Formic Acid	Article	10.1021/acscatal.6b00476	2016	6	3442	161	2	0
Russia	Bulushev, Dmitri A.; Zacharska, Monika; Shlyakova, Elena V.; Chuvilin, Audrey L.; Guo, Yina; Beloshapkin, Sergey; Okotrub, Alexander V.; Bulusheva, Lyubov G.	Single Isolated Pd ²⁺ Cations Supported on N-Doped Carbon as Active Sites for Hydrogen Production from Formic Acid Decomposition	Article	10.1021/acscatal.5b02381	2016	6	681	141	1	1
Belgium	Dijkmans, Jan; Dusselier, Michiel; Gabriels, Dries; Houthoofd, Kristof; Magusin, Pieter C. M. M.; Huang, Shuigen; Pontikes, Yiannis; Trekels, Maarten; Vantomme, Andre; Giebeler, Lars; Oswald, Steffen; Sels, Bert F.	Cooperative Catalysis for Multistep Biomass Conversion with Sn/Al Beta Zeolite	Article	10.1021/cs501388e	2015	5	928	126	1	0
Russia	Forslund, Robin P.; Mefford, J. Tyler; Hardin, William G.; Alexander, Caleb T.; Johnston, Keith P.; Stevenson, Keith J.	Nanostructured LaNiO ₃ Perovskite Electrocatalyst for Enhanced Urea Oxidation	Article	10.1021/acscatal.6b00487	2016	6	5044	123	1	0

Table 13. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Small Countries.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Czechia	Stepankova, Veronika; Bidmanova, Sarka; Koudelakova, Tana; Prokop, Zbynek; Chaloupkova, Radka; Damborsky, Jiri	Strategies for Stabilization of Enzymes in Organic Solvents	Article	10.1021/cs400684x	2013	3	2823	340	1	1
Ireland	Lam, Edmond; Luong, John H. T.	Carbon Materials as Catalyst Supports and Catalysts in the Transformation of Biomass to Fuels and Chemicals	Review	10.1021/cs5008393	2014	4	3393	300	1	0
Iceland	Abghoui, Younes; Garden, Anna L.; Howat, Jakob G.; Vegge, Tejs; Skulason, Egill	Electroreduction of N ₂ to Ammonia at Ambient Conditions on Mononitrides of Zr, Nb, Cr, and V: A DFT Guide for Experiments	Article	10.1021/acscatal.5b01918	2016	6	635	182	1	0
Greece	Fountoulaki, Stella; Daikopoulou, Vassiliki; Gkizis, Petros L.; Tamiolakis, Ioannis; Armatas, Gerasimos S.; Lykakis, Ioannis N.	Mechanistic Studies of the Reduction of Nitroarenes by NaBH ₄ or Hydrosilanes Catalyzed by Supported Gold Nanoparticles	Article	10.1021/cs500379u	2014	4	3504	177	1	0
Greece	Konsolakis, Michalis	Recent Advances on Nitrous Oxide (N ₂ O) Decomposition over Non-Noble-Metal Oxide Catalysts: Catalytic Performance, Mechanistic Considerations, and Surface Chemistry Aspects	Article	10.1021/acscatal.5b01605	2015	5	6397	175	1	0
Finland	Tavakkoli, Mohammad; Holmberg, Nico; Kronberg, Rasmus; Jiang, Hua; Sainio, Jani; Kauppinen, Esko I.; Kallio, Tanja; Laasonen, Kari	Electrochemical Activation of Single-Walled Carbon Nanotubes with Pseudo-Atomic-Scale Platinum for the Hydrogen Evolution Reaction	Article	10.1021/acscatal.7b00199	2017	7	3121	153	2	0
Czechia	Naldoni, Alberto; Altomare, Marco; Zoppellaro, Giorgio; Liu, Ning; Kment, Stepan; Zboril, Radek; Schmuksi, Patrik	Photocatalysis with Reduced TiO ₂ : From Black TiO ₂ to Cocatalyst-Free Hydrogen Production	Review	10.1021/acscatal.8b04068	2019	9	345	151	2	0
Slovenia	Zabitskiy, Maxim; Djinovic, Petar; Tchermychova, Elena; Tkachenko, Olga P.; Kustov, Leonid M.; Pintar, Albin	Nanoshaped CuO/CeO ₂ Materials: Effect of the Exposed Ceria Surfaces on Catalytic Activity in N ₂ O Decomposition Reaction	Article	10.1021/acscatal.5b01044	2015	5	5357	129	1	0
Czechia	Chua, Xing Juan; Luxa, Jan; Eng, Alex Yong Sheng; Tan, Shu Min; Sofer, Zdenek; Pummer, Martin	Negative Electrocatalytic Effects of p-Doping Niobium and Tantalum on MoS ₂ and WS ₂ for the Hydrogen Evolution Reaction and Oxygen Reduction Reaction	Article	10.1021/acscatal.6b01593	2016	6	5724	114	1	0
Cyprus	Kalamaras, C. M.; Dionysiou, D. D.; Efsthathiou, A. M.	Mechanistic Studies of the Water-Gas Shift Reaction over Pt/CeZr _{1-x} O ₂ Catalysts: The Effect of Pt Particle Size and Zr Dopant	Article	10.1021/cs3006204	2012	2	2729	114	1	0

Table 14. Top 10 most cited ACS Catalysis papers with corresponding authors from Developing Countries.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Vietnam	Tran, Uyen P. N.; Le, Ky K. A.; Phan, Nam T. S.	Expanding Applications of Metal-Organic Frameworks: Zeolite Imidazolate Framework ZIF-8 as an Efficient Heterogeneous Catalyst for the Knoevenagel Reaction	Article	10.1021/cs1000625	2011	1	120	399	1	0
Thailand	Shaikh, Rafik Rajjak; Pornpraprom, Suriyaporn; D'Elia, Valerio	Catalytic Strategies for the Cycloaddition of Pure, Diluted, and Waste CO ₂ to Epoxides under Ambient Conditions	Review	10.1021/acscatal.7b03580	2018	8	419	268	1	0
Thailand	Huang, Yun; Handoko, Albertus D.; Hirusit, Pussana; Yeo, Boon Siang	Electrochemical Reduction of CO ₂ Using Copper Single-Crystal Surfaces: Effects of CO* Coverage on the Selective Formation of Ethylene	Article	10.1021/acscatal.6b03147	2017	7	1749	230	1	1
Turkey	Goksu, Haydar; Ho, Sally Fae; Metin, Onder; Korkmaz, Katip; Garcia, Adriana Mendoza; Gultekin, Mehmet Serdar; Sun, Shouheng	Tandem Dehydrogenation of Ammonia Borane and Hydrogenation of Nitro/Nitrile Compounds Catalyzed by Graphene-Supported NiPd Alloy Nanoparticles	Article	10.1021/cs500167k	2014	4	1777	165	2	0
Iran	Pourjavadi, Ali; Hosseini, Seyed Hassan; Doulabi, Maliheh; Fakoorpoor, Seyed Mahmoud; Seidi, Farzad	Multi-Layer Functionalized Poly(Ionic Liquid) Coated Magnetic Nanoparticles: Highly Recoverable and Magnetically Separable Bronsted Acid Catalyst	Article	10.1021/cs300140j	2012	2	1259	129	1	0
Argentina	Vecchiotti, Julia; Bonivardi, Adrian; Xu, Wenqian; Stacchiola, Dario; Delgado, Juan J.; Calatayud, Monica; Collins, Sebastian E.	Understanding the Role of Oxygen Vacancies in the Water Gas Shift Reaction on Ceria-Supported Platinum Catalysts	Article	10.1021/cs500323u	2014	4	2088	104	1	0
Iran	Abedi, Sedigheh; Morsali, Ali	Ordered Mesoporous Metal Organic Frameworks Incorporated with Amorphous TiO ₂ As Photocatalyst for Selective Aerobic Oxidation in Sunlight Irradiation	Article	10.1021/cs500123d	2014	4	1398	100	2	0
South Africa	Xiong, Haifeng; Jewell, Linda L.; Coville, Neil J.	Shaped Carbons As Supports for the Catalytic Conversion of Syngas to Clean Fuels	Review	10.1021/acscatal.5b00090	2015	5	2640	93	1	0
Turkey	Bulut, Ahmet; Yurderi, Mehmet; Karatas, Yasar; Say, Zafer; Kivrak, Hilal; Kaya, Murat; Gulcan, Mehmet; Ozensoy, Emrah; Zahmakiran, Mehmet	MnOx-Promoted PdAg Alloy Nanoparticles for the Additive-Free Dehydrogenation of Formic Acid at Room Temperature	Article	10.1021/acscatal.5b01121	2015	5	6099	84	1	0
Mexico	Sofia Varela, Ana; Ju, Wen; Bagger, Alexander; Franco, Patricia; Rossmel, Jan; Strasser, Peter	Electrochemical Reduction of CO ₂ on Metal-Nitrogen-Doped Carbon Catalysts	Article	10.1021/acscatal.9b01405	2019	9	7270	83	1	1

Table 15. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Denmark and Sweden.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Denmark	Janssens, Ton V. W.; Falsig, Hanne; Lundegaard, Lars F.; Vennestrom, Peter N. R.; Rasmussen, Soren B.; Moses, Poul Georg; Giordanino, Filippo; Borfecchia, Elisa; Lomachenko, Kirill A.; Lamberti, Carlo; Bordiga, Silvia; Godiksen, Anita; Mossin, Susanne; Beato, Pablo	A Consistent Reaction Scheme for the Selective Catalytic Reduction of Nitrogen Oxides with Ammonia	Article	10.1021/cs501673g	2015	5	2832	252	1	2
Denmark	Mortensen, Peter M.; Grunwaldt, Jan-Dierk; Jensen, Peter A.; Jensen, Anker D.	Screening of Catalysts for Hydrodeoxygenation of Phenol as a Model Compound for Bio-oil	Article	10.1021/cs400266e	2013	3	1774	252	1	0
Sweden	Karkas, Markus D.	Photochemical Generation of Nitrogen-Centered Amidyl, Hydrazonyl, and Imidyl Radicals: Methodology Developments and Catalytic Applications	Article	10.1021/acscatal.7b01385	2017	7	4999	185	1	0
Sweden	Yu, Fengshou; Li, Fei; Zhang, Biaobiao; Li, Hua; Sun, Licheng	Efficient Electrocatalytic Water Oxidation by a Copper Oxide Thin Film in Borate Buffer	Article	10.1021/cs501510e	2015	5	627	155	2	0
Sweden	Hou, Jungang; Zhang, Bo; Li, Zhuwei; Cao, Shuyan; Sun, Yiqing; Wu, Yunzhen; Gao, Zhanming; Sun, Licheng	Vertically Aligned Oxygenated-CoS ₂ -MoS ₂ Heteronanoshet Architecture from Polyoxometalate for Efficient and Stable Overall Water Splitting	Article	10.1021/acscatal.8b00668	2018	8	4612	140	2*	0
Denmark	Mirbagheri, Naghmehsadat; Wang, Degao; Peng, Cheng; Wang, Jianqiang; Huang, Qing; Fan, Chunhai; Ferapontova, Elena E.	Visible Light Driven Photoelectrochemical Water Oxidation by Zn- and Ti-Doped Hematite Nanostructures	Article	10.1021/cs500372v	2014	4	2006	135	1	1
Denmark	Hu, Xin-Ming; Hval, Halvor Hoen; Bjerglund, Emil Tveden; Dalggaard, Kirstine Junker; Madsen, Monica Rohde; Pohl, Marga-Martina; Welter, Edmund; Lamagni, Paolo; Buhl, Kristian Birk; Bremholm, Martin; Beller, Mathias; Pedersen, Steen Utrup; Skrydstrup, Troels; Daasbjerg, Kim	Selective CO ₂ Reduction to CO in Water using Earth-Abundant Metal and Nitrogen-Doped Carbon Electrocatalysts	Article	10.1021/acscatal.8b01022	2018	8	6255	107	1	0
Sweden	Ding, Xin; Gao, Yan; Zhang, Linlin; Yu, Ze; Liu, Jianhui; Sun, Licheng	Visible Light-Driven Water Splitting in Photoelectrochemical Cells with Supramolecular Catalysts on Photoanodes	Article	10.1021/cs500518k	2014	4	2347	93	2	0
Denmark	Fiordaliso, Elisabetta M.; Sharafutdinov, Irek; Carvalho, Hudson W. P.; Grunwaldt, Jan-D.; Hansen, Thomas W.; Chorkendorff, Ib; Wagner, Jakob B.; Damsgaard, Christian D.	Intermetallic GaPd ₂ Nanoparticles on SiO ₂ for Low-Pressure CO ₂ Hydrogenation to Methanol: Catalytic Performance and In Situ Characterization	Article	10.1021/acscatal.5b01271	2015	5	5827	86	0	1
Sweden	Behrends, Malte; Savmarker, Jonas; Sjoberg, Per J. R.; Larhed, Mats	Microwave-Assisted Palladium(II)-Catalyzed Synthesis of Aryl Ketones from Aryl Sulfonates and Direct ESI-MS Studies Thereof	Article	10.1021/cs200428u	2011	1	1455	83	1	0

*Based on internet search

Table 16. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from United Kingdom.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
United Kingdom	Leitch, Jamie A.; Bhonoah, Yunas; Frost, Christopher G.	Beyond C2 and C3: Transition-Metal-Catalyzed C-H Functionalization of Indole	Article	10.1021/acscatal.7b01785	2017	7	5618	205	1	0
United Kingdom	Yang, Sungeun; Verdaguer-Casadevall, Arnau; Arnanson, Logi; Silvio, Luca; Colic, Viktor; Frydendal, Rasmus; Rossmeis, Jan; Chorkendorff, Ib; Stephens, Ifan E. L.	Toward the Decentralized Electrochemical Production of H ₂ O ₂ : A Focus on the Catalysis	Article	10.1021/acscatal.8b00217	2018	8	4064	191	1	0
United Kingdom	Castro-Osma, Jose A.; Lamb, Katie J.; North, Michael	Cr(salophen) Complex Catalyzed Cyclic Carbonate Synthesis at Ambient Temperature And Pressure	Article	10.1021/acscatal.6b01386	2016	6	5012	167	2	0
United Kingdom	France, Scott P.; Hepworth, Lorna J.; Turner, Nicholas J.; Flitsch, Sabine L.	Constructing Biocatalytic Cascades: In Vitro and in Vivo Approaches to de Novo Multi-Enzyme Pathways	Article	10.1021/acscatal.6b02979	2017	7	710	174	1	1
United Kingdom	Pirez, Cyril; Caderon, Jean-Michel; Dacquain, Jean-Philippe; Lee, Adam F.; Wilson, Karen	Tunable KIT-6 Mesoporous Sulfonic Acid Catalysts for Fatty Acid Esterification	Article	10.1021/cs300161a	2012	2	1607	139	0	1
United Kingdom	Parlett, Christopher M. A.; Bruce, Duncan W.; Hondow, Nicole S.; Lee, Adam F.; Wilson, Karen	Support-Enhanced Selective Aerobic Alcohol Oxidation over Pd/Mesoporous Silicas	Article	10.1021/cs200145n	2011	1	636	125	1	0
United Kingdom	Yang, Bo; Burch, Robbie; Hardacre, Christopher; Headdock, Gareth; Hu, P.	Origin of the Increase of Activity and Selectivity of Nickel Doped by Au, Ag, and Cu for Acetylene Hydrogenation	Article	10.1021/cs2006789	2012	2	1027	120	2	0
United Kingdom	Pesci, Federico M.; Sokolikova, Maria S.; Grotta, Chiara; Sherrell, Peter C.; Reale, Francesco; Sharda, Kanudha; Ni, Na; Palczynski, Pawel; Mattevi, Cecilia	MoS ₂ /WS ₂ Heterojunction for Photoelectrochemical Water Oxidation	Article	10.1021/acscatal.7b01517	2017	7	4990	112	0	1
United Kingdom	Slabu, Iustina; Galman, James L.; Lloyd, Richard C.; Turner, Nicholas J.	Discovery, Engineering, and Synthetic Application of Transaminase Biocatalysts	Review	10.1021/acscatal.7b02686	2017	7	8263	110	1	0
United Kingdom	Polidano, Kurt; Allen, Benjamin D. W.; Williams, Jonathan M. J.; Morrill, Louis C.	Iron-Catalyzed Methylation Using the Borrowing Hydrogen Approach	Article	10.1021/acscatal.8b02158	2018	8	6440	106	1	0

Table 17. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Israel, Norway, Poland, and Taiwan.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Israel	Gnayem, Hani; Sasson, Yoel	Hierarchical Nanostructured 3D Flowerlike BiOCl _x Br _{1-x} Semiconductors with Exceptional Visible Light Photocatalytic Activity	Article	10.1021/cs3005133	2013	3	186	215	1	0
Israel	Kozuch, Sebastian; Martin, Jan M. L.	Turning Over Definitions in Catalytic Cycles	Editorial Material	10.1021/cs3005264	2012	2	2787	213	1	0
Norway	Teketel, Shewangizaw; Skistad, Wegard; Benard, Sandrine; Olsbye, Unni; Lillerud, Karl Petter; Beato, Pablo; Svelle, Stian	Shape Selectivity in the Conversion of Methanol to Hydrocarbons: The Catalytic Performance of One-Dimensional 10-Ring Zeolites: ZSM-22, ZSM-23, ZSM-48, and EU-1	Article	10.1021/cs200517u	2012	2	26	151	1	0
Poland	Samson, K.; Sliwa, M.; Socha, R. P.; Gora-Marek, K.; Mucha, D.; Rutkowska-Zbik, D.; Paul, J-F.; Ruggiero-Mikolajczyk, M.; Grabowski, R.; Sloczynski, J.	Influence of ZrO ₂ Structure and Copper Electronic State on Activity of Cu/ZrO ₂ Catalysts in Methanol Synthesis from CO ₂	Article	10.1021/cs500979c	2014	4	3730	142	1	0
Israel	Davydova, Elena S.; Mukerjee, Sanjeev; Jaouen, Frederic; Dekel, Dario R.	Electrocatalysts for Hydrogen Oxidation Reaction in Alkaline Electrolytes	Review	10.1021/acscatal.8b00689	2018	8	6665	126	1	1
Norway	Yang, Ming-Lei; Zhu, Yi-An; Zhou, Xing-Gui; Sui, Zhi-Jun; Chen, De	First-Principles Calculations of Propane Dehydrogenation over PtSn Catalysts	Article	10.1021/cs300031d	2012	2	1247	126	2	0
Israel	Hu, Peng; Diskin-Posner, Yael; Ben-David, Yehoshua; Milstein, David	Reusable Homogeneous Catalytic System for Hydrogen Production from Methanol and Water	Article	10.1021/cs500937f	2014	4	2649	123	1	0
Poland	Michalow-Mauke, Katarzyna A.; Lu, Ye; Kowalski, Kazimierz; Graule, Thomas; Nachtgeal, Maarten; Kroecher, Oliver; Ferri, Davide	Flame-Made WO ₃ /CeO _x -TiO ₂ Catalysts for Selective Catalytic Reduction of NO _x by NH ₃	Article	10.1021/acscatal.5b01580	2015	5	5657	109	1	1
Israel	Gelman, Dmitri; Musa, Sanaa	Coordination Versatility of sp ³ -Hybridized Pincer Ligands toward Ligand-Metal Cooperative Catalysis	Article	10.1021/cs3005083	2012	2	2456	103	1	0
Israel	Khusnutdinova, Julia R.; Garg, Jai Anand; Milstein, David	Combining Low-Pressure CO ₂ Capture and Hydrogenation To Form Methanol	Article	10.1021/acscatal.5b00194	2015	5	2416	102	1	0

Table 18. Top 10 most cited ACS Catalysis papers with corresponding author affiliations from Canada.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
Canada	Pitre, Spencer P.; McTiernan, Christopher D.; Ismaili, Hossein; Scaiano, Juan C.	Metal-Free Photocatalytic Radical Trifluoromethylation Utilizing Methylene Blue and Visible Light Irradiation	Article	10.1021/cs5005823	2014	4	2530	165	1	0
Canada	Klinkova, Anna; De Luna, Phil; Dinh, Cao-Thang; Voznyy, Oleksandr; Larin, Egor M.; Kumacheva, Eugenia; Sargent, Edward H.	Rational Design of Efficient Palladium Catalysts for Electroreduction of Carbon Dioxide to Formate	Article	10.1021/acscatal.6b01719	2016	6	8115	164	1	1
Canada	Zeng, Huiying; Qiu, Zihang; Dominguez-Huerta, Alejandra; Hearne, Zoe; Chen, Zhengwang; Li, Chao-Jun	An Adventure in Sustainable Cross-Coupling of Phenols and Derivatives via Carbon-Oxygen Bond Cleavage	Article	10.1021/acscatal.6b02964	2017	7	510	143	2	0
Canada	Higgins, Drew C.; Hoque, Md Ariful; Hassan, Fathy; Choi, Ja-Yeon; Kim, Baejung; Chen, Zhongwei	Oxygen Reduction on Graphene-Carbon Nanotube Composites Doped Sequentially with Nitrogen and Sulfur	Article	10.1021/cs5003806	2014	4	2734	134	1	0
Canada	Dimitrijevic, Elena; Taylor, Mark S.	Organoboron Acids and Their Derivatives as Catalysts for Organic Synthesis	Review	10.1021/cs4000848	2013	3	945	113	1	0
Canada	Li, Wenmu; Wu, Jason; Higgins, Drew C.; Choi, Ja-Yeon; Chen, Zhongwei	Determination of Iron Active Sites in Pyrolyzed Iron-Based Catalysts for the Oxygen Reduction Reaction	Article	10.1021/cs300579b	2012	2	2761	113	1	0
Canada	Nair, Mahesh Muraleedharan; Kaliaguine, Serge; Kleitz, Freddy	Nanocast LaNiO ₃ Perovskites as Precursors for the Preparation of Coke-Resistant Dry Reforming Catalysts	Article	10.1021/cs500918c	2014	4	3837	110	2	0
Canada	Balcha, Tesfaldet; Strobl, Jonathan R.; Fowler, Candace; Dash, Priyabrat; Scott, Robert W. J.	Selective Aerobic Oxidation of Crotyl Alcohol Using AuPd Core-Shell Nanoparticles	Article	10.1021/cs200040a	2011	1	425	106	1	0
Canada	Liu, Subiao; Liu, Qingxia; Luo, Jing-Li	Highly Stable and Efficient Catalyst with In Situ Exsolved Fe-Ni Alloy Nanospheres Socketed on an Oxygen Deficient Perovskite for Direct CO ₂ Electrolysis	Article	10.1021/acscatal.6b01555	2016	6	6219	104	0	1
Canada	Yen, Hoang; Seo, Yongbeom; Kaliaguine, Serge; Kleitz, Freddy	Role of Metal-Support Interactions, Particle Size, and Metal-Metal Synergy in CuNi Nanocatalysts for H ₂ Generation	Article	10.1021/acscatal.5b00869	2015	5	5505	103	1	0

Table 19. Top cited ACS Catalysis papers shown twice in Table 3-18 due to corresponding author affiliations from two different country groups.

Country	Author Full Names	Article Title	Document Type	DOI	Publication Year	Volume	Start Page	Times Cited	Corresponding author (Men/Women)	
India United States	Anantharaj, Sengen; Ede, Sivasankara Rao; Sakthikumar, Kuppan; Karthick, Kannimuthu; Mishra, Soumyaranjan; Kundu, Subrata	Recent Trends and Perspectives in Electrochemical Water Splitting with an Emphasis on Sulfide, Selenide, and Phosphide Catalysts of Fe, Co, and Ni: A Review	Review	10.1021/acscatal.6b02479	2016	6	8069	1058	1	0
Netherlands Spain	Gascon, Jorge; Corma, Avelino; Kapteijn, Freek; Liabres i Xamena, Francesc X.	Metal Organic Framework Catalysis: Quo vadis?	Article	10.1021/cs400959k	2014	4	361	674	2	0
France Japan	Takeda, Hiroyuki; Cometto, Claudio; Ishitani, Osamu; Robert, Marc	Electrons, Photons, Protons and Earth-Abundant Metal Complexes for Molecular Catalysis of CO ₂ Reduction	Review	10.1021/acscatal.6b02181	2017	7	70	324	2	0
Italy Spain	Trovarelli, Alessandro; Llorca, Jordi	Ceria Catalysts at Nanoscale: How Do Crystal Shapes Shape Catalysis?	Article	10.1021/acscatal.7b01246	2017	7	4716	274	2	0
Denmark Italy	Janssens, Ton V. W.; Falsig, Hanne; Lundegaard, Lars F.; Vennstrom, Peter N. R.; Rasmussen, Soren B.; Moses, Poul Georg; Giordano, Filippo; Borfecchia, Elisa; Lomachenko, Kirill A.; Lamberti, Carlo; Bordiga, Silvia; Godiksen, Anita; Mossin, Susanne; Beato, Pablo	A Consistent Reaction Scheme for the Selective Catalytic Reduction of Nitrogen Oxides with Ammonia	Article	10.1021/cs501673g	2015	5	2832	252	1	2

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