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Chemistry and Biochemistry Affiliated Publications: Snapshot of the Research Publications 2019-2022

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Overview

The Chemistry and Biochemistry Department were affiliated with 411 publications over 4 years. We gathered these publications from various databases including the Web of Science, SciFinder, PubMed, and others.

Table 1: Material Type by Publication Year (All Publications)

All	2019	2020	2021	2022	Total	%
Articles †	73	66	58	48	245	59.6
Book Chapters ‡	9	9	13	0	31	7.5
Meeting Abstracts	29	23	22	28	102	24.8
Preprint	3	5	2	4	14	3.4
Patents	7	5	3	4	19	4.6
Total	121	108	98	84	**411**	100.0

† Articles contain materials of the following type:
Article, Review, Editorial Material, Correction, and Biographical Item.

‡ Book Chapters contain materials of the following type:
Chapter, and Proceedings Paper

Authors

The 411 publications (as shown in Table 1) have 184 authors associated with the department (See Table 2).

- 33 Faculty have 385 publications (93.7%) with an average of 11.67 publications each.
- 65 Graduate Students have 157 publications (38.2%) with an average of 2.42 publications each.
- 19 Post Doctoral researchers have 86 publications (20.9%) with an average of 4.53 publications each.
- 10 Staff members have 60 publications (14.6%) with an average of 6.00 publications each.
- 15 Undergraduate Students have 24 publications (5.8%) with an average of 1.6 publications each.

Most publications (385/411, 93.7%) include at least 1 faculty author from the CHBC department.

- 334 Publications have 1 faculty author.
- 45 Publications have 2 faculty authors.
- 6 Publications have 3 faculty authors.

Some publications (26/411, 6.3%) do not include a faculty author.

- 10 Publications have Staff authors.
- 4 Publications have Graduate Students.
- 3 Publications have Post Doctoral researchers.
- 2 Publications have Undergraduate Students.
- 8 Publications have Unspecified authors.

Table 2: Summary of Publications by Author Type (All Publications)						
All	Faculty	Graduate Student	Post Doc	Staff	UG Student	Un-Specified
Unique Authors	33	65	19	10	15	42
# of Publications	**385**	**157**	**86**	**60**	**24**	**44**
Average Pub / Authors	11.67	2.42	4.53	6.00	1.60	1.05
Articles †	224	91	55	49	13	28
Book Chapters ‡	31	0	1	1	0	4
Meeting Abstracts	97	57	22	7	9	9
Preprint	14	4	4	1	2	1
Patents	19	5	4	2	0	2

Web of Science Indexed Publications and Citations

328 of the 411 publications (79.8%) were in the Web of Science database (See Table 3). These 328 publications have been cited 3051 times (including self-citations) with an average of 9.302 citations per publication and a h-index of 23.

83 of these 411 publications (21.2%) were not in Web of Science. Citation information for these were not gathered from other sources.

- 239 out of 328 publications are Articles (72.9%).
  They were cited 2896 times with an average of 12.117 citations per article.
- 24 out of 328 publications are Book Chapters (7.3%).
  They were cited 153 times with an average of 6.375 citations per book chapter.
- 65 out of 328 publications are meeting abstracts (19.8%).
  They were cited 2 times with an average of 0.031 citations per meeting abstract.

Table 3: Summary of Material Type by Publication Year (WoS Publications)								
WoS	Year				Publications		Citations	
	2019	2020	2021	2022	#	%	#	μ
Articles †	70	65	57	47	239	72.9	2896	12.117
Book Chapters ‡	6	7	11	0	24	7.3	153	6.375
Meeting Abstracts	27	16	10	12	65	19.8	2	0.031
Total	103	88	78	59	**328**	100.0	3051	9.302

Journal Citation Report -- Ranking of Journals : CHBC Affiliated Journal Articles

Most of the CHBC affiliated publications are articles, so the journals are ranked according to the Journal Citation Reports (JCR). (https://go.openathens.net/redirector/uark.edu?url=https://jcr.clarivate.com)

JCR is a database produced by Clarivate Analytics that provides impact factors and rankings of over 12,000 journals from over 3,300 publishers. The impact factor of a journal is calculated based on the number of citations in 2022 to items published in 2020 and 2021 divided by the number of citable items in 2020 and 2021. It offers a range of items for a particular journal including impact factor, total cites, total articles, and immediacy index. It also provides a five-year impact factor and visualized trend data.

In this database, journals are assigned to broad subject categories. Quartile ranks within each category are assigned based on the Journal Impact Factor (JIF) of each journal. It is important to remember that the JIF should only be used to compare journals within a category and never between categories.

Characteristics of the Journals in JCR

The 239 articles found in the WOS for this period were from 147 unique journals. Nine of these titles were not in the JCR.

Our publications are mostly in high-ranking journals within the specific category. As shown in Table 4, 81 percent of the journals are ranked in either quartile 1 and 2; and only 2.7 percent of the journals are ranked in quartile 4.

Table 4: Characteristics of Publications in JCR

2019-2022	Publication Titles		Article	
Articles	#	%	#	%
Total	147	100.0	245	100.0
Not Indexed	9	6.1	15	6.1
Indexed	138	93.9	230	93.9
Q1	62	42.2	100	43.5
Q2	57	38.8	101	43.9
Q3	15	10.2	24	10.4
Q4	4	2.7	5	2.2

Table 5 below lists the journals in which CHBC affiliated publications appear, the number of articles published in each journal and the categories and ranks assigned to them in JCR.

A journal in JCR may be assigned to multiple categories. The quartile ranking in each category may differ due to different citation patterns within each area of study. For example, ACS Applied Energy Materials is assigned to three categories, namely: Materials Science, Multidisciplinary; Chemistry, Physical; and Energy & Fuels. This journal is ranked in Q1 in the first category and Q2 in the second and third categories. **The journals are grouped in the table below based on the highest rank assigned to the journal.**

How to read the table: CHBC researchers published 10 papers in ACS Applied Materials & Interfaces (2nd row of Q1 Table). Within the first category assigned to this journal, *Materials Science, Multidisciplinary*, the journal is ranked 50th out of the 346 journals in this category and this places the journal in the first quartile (Q1) of this category. ACS Applied Materials & Interfaces is also assigned to the category Nanoscience & Nanotechnology. The journal is ranked 24th out of 110 journals in this category and this places the journal in the first quartile (Q1) also.

Table 5: Journals in which CHBC Faculty Published and JCR Ranking, 2017-2020 (Q1 highest, Q4, lowest)

JCR Q1 Journals [Highest Ranking]		
Journal Title	No. of Articles	Categories/Rank
ACS Applied Energy Materials	1	MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 87/346) | CHEMISTRY, PHYSICAL - SCIE (Q2, 45/165) | ENERGY & FUELS - SCIE (Q2, 39/119)
ACS Applied Materials & Interfaces	10	MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 50/346) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q1, 24/110)
ACS Catalysis	7	CHEMISTRY, PHYSICAL - SCIE (Q1, 19/165)
ACS Central Science	1	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 13/180)
ACS Chemical Neuroscience	1	CHEMISTRY, MEDICINAL - SCIE (Q1, 12/63) | NEUROSCIENCES - SCIE (Q1, 66/275) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 80/297)
ACS Nano	1	MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 21/346) | CHEMISTRY, PHYSICAL - SCIE (Q1, 12/165) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 14/180) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q1, 12/110)
Analytical Chemistry	3	CHEMISTRY, ANALYTICAL - SCIE (Q1, 7/87)
Angewandte Chemie-International Edition	1	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 16/180)
Annual Review of Physical Chemistry	1	CHEMISTRY, PHYSICAL - SCIE (Q1, 14/165)
Antioxidants	1	CHEMISTRY, MEDICINAL - SCIE (Q1, 4/63) | FOOD SCIENCE & TECHNOLOGY - SCIE (Q1, 12/144) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q1, 50/297)
Astronomical Journal	1	ASTRONOMY & ASTROPHYSICS - SCIE (Q1, 15/69)
Astrophysical Journal	1	ASTRONOMY & ASTROPHYSICS - SCIE (Q1, 14/69)
Biomacromolecules	1	CHEMISTRY, ORGANIC - SCIE (Q1, 4/57) | POLYMER SCIENCE - SCIE (Q1, 8/90) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q1, 58/297)
BMC Veterinary Research	1	VETERINARY SCIENCES - SCIE (Q1, 25/145)
Brain and Language	1	LINGUISTICS - SSCI (Q1, 30/195) | AUDIOLOGY & SPEECH-LANGUAGE PATHOLOGY - SCIE (Q2, 8/27) | PSYCHOLOGY, EXPERIMENTAL - SSCI (Q2, 38/91) | NEUROSCIENCES - SCIE (Q4, 208/275)
CBE-Life Sciences Education	1	EDUCATION, SCIENTIFIC DISCIPLINES - SCIE (Q1, 8/44)
Cellulose	2	MATERIALS SCIENCE, PAPER & WOOD - SCIE (Q1, 1/21) | MATERIALS SCIENCE, TEXTILES - SCIE (Q1, 2/26) | POLYMER SCIENCE - SCIE (Q1, 9/90)
Chemical Reviews	1	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 2/180)
Chemical Science	2	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 26/180)
Chemistry of Materials	1	MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 49/346) | CHEMISTRY, PHYSICAL - SCIE (Q1, 31/165)
Computational and Structural Biotechnology Journal	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q1, 70/297)
Current Opinion in Electrochemistry	1	ELECTROCHEMISTRY - SCIE (Q1, 6/30) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 78/346) | CHEMISTRY, PHYSICAL - SCIE (Q1, 40/165)

Current Opinion in Microbiology	1	MICROBIOLOGY - SCIE (Q1, 25/138)
Dalton Transactions	2	CHEMISTRY, INORGANIC & NUCLEAR - SCIE (Q1, 7/46)
Electrochimica Acta	1	ELECTROCHEMISTRY - SCIE (Q1, 7/30)
Energy & Environmental Science	1	ENVIRONMENTAL SCIENCES - SCIE (Q1, 1/279) | ENGINEERING, CHEMICAL - SCIE (Q1, 1/143) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 4/180) | ENERGY & FUELS - SCIE (Q1, 3/119)
FASEB Journal	5	BIOLOGY - SCIE (Q1, 16/94) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 79/297) | CELL BIOLOGY - SCIE (Q2, 77/195)
Food Reviews International	1	FOOD SCIENCE & TECHNOLOGY - SCIE (Q1, 30/144) | NUTRITION & DIETETICS - SCIE (Q1, 20/90)
Frontiers in Bioengineering and Biotechnology	4	MULTIDISCIPLINARY SCIENCES - SCIE (Q1, 16/74)
Frontiers in Genetics	1	GENETICS & HEREDITY - SCIE (Q1, 45/177)
Frontiers in Microbiology	2	MICROBIOLOGY - SCIE (Q1, 35/138)
Frontiers in Molecular Biosciences	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q1, 73/297)
Frontiers in Pharmacology	1	PHARMACOLOGY & PHARMACY - SCIE (Q1, 50/279)
Frontiers in Plant Science	1	PLANT SCIENCES - SCIE (Q1, 21/240)
Geochimica Et Cosmochimica Acta	1	GEOCHEMISTRY & GEOPHYSICS - SCIE (Q1, 8/87)
Geophysical Research Letters	3	GEOSCIENCES, MULTIDISCIPLINARY - SCIE (Q1, 26/203)
Green Chemistry	1	GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY - SCIE (Q1, 6/47) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 24/180)
Inorganic Chemistry	1	CHEMISTRY, INORGANIC & NUCLEAR - SCIE (Q1, 5/46)
International Journal of Molecular Sciences	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q1, 69/297) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 51/180)
iScience	1	MULTIDISCIPLINARY SCIENCES - SCIE (Q1, 15/74)
Joule	1	CHEMISTRY, PHYSICAL - SCIE (Q1, 2/165) | ENERGY & FUELS - SCIE (Q1, 2/119) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 6/346)
Journal of Animal Science and Biotechnology	1	AGRICULTURE, DAIRY & ANIMAL SCIENCE - SCIE (Q1, 4/63)
Journal of Biomolecular Structure & Dynamics	1	BIOPHYSICS - SCIE (Q1, 15/72) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 100/297)
Journal of Chemical Physics	6	PHYSICS, ATOMIC, MOLECULAR & CHEMICAL - SCIE (Q1, 8/36) | CHEMISTRY, PHYSICAL - SCIE (Q2, 77/165)
Journal of Chemical Theory and Computation	4	PHYSICS, ATOMIC, MOLECULAR & CHEMICAL - SCIE (Q1, 7/36) | CHEMISTRY, PHYSICAL - SCIE (Q2, 50/165)
Journal of Geophysical Research-Planets	1	GEOCHEMISTRY & GEOPHYSICS - SCIE (Q1, 19/87)
Journal of Power Sources	1	ELECTROCHEMISTRY - SCIE (Q1, 4/30) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 57/346) | ENERGY & FUELS - SCIE (Q1, 20/119) | CHEMISTRY, PHYSICAL - SCIE (Q1, 34/165)
Journal of the American Chemical Society	3	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 17/180)
Mass Spectrometry Reviews	1	SPECTROSCOPY - SCIE (Q1, 3/43)
Mathematics	1	MATHEMATICS - SCIE (Q1, 21/333)

Nanomaterials	1	PHYSICS, APPLIED - SCIE (Q1, 37/161) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 56/180) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q2, 110/346) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q2, 54/110)
Nanoscale	1	PHYSICS, APPLIED - SCIE (Q1, 23/161) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 71/346) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 38/180) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q2, 32/110)
Nature Astronomy	1	ASTRONOMY & ASTROPHYSICS - SCIE (Q1, 5/69)
Nature Energy	1	ENERGY & FUELS - SCIE (Q1, 1/119) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 3/346)
Organic Letters	2	CHEMISTRY, ORGANIC - SCIE (Q1, 5/57)
Poultry Science	2	AGRICULTURE, DAIRY & ANIMAL SCIENCE - SCIE (Q1, 8/63)
Protein Science	3	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q1, 57/297)
Reactive & Functional Polymers	1	POLYMER SCIENCE - SCIE (Q1, 17/90) | CHEMISTRY, APPLIED - SCIE (Q1, 17/73) | ENGINEERING, CHEMICAL - SCIE (Q2, 40/143)
Sensors and Actuators B-Chemical	1	INSTRUMENTS & INSTRUMENTATION - SCIE (Q1, 2/64) | CHEMISTRY, ANALYTICAL - SCIE (Q1, 6/87) | ELECTROCHEMISTRY - SCIE (Q1, 5/30)
Small	1	PHYSICS, APPLIED - SCIE (Q1, 11/161) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q1, 26/346) | PHYSICS, CONDENSED MATTER - SCIE (Q1, 7/69) | CHEMISTRY, PHYSICAL - SCIE (Q1, 17/165) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 19/180) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q1, 15/110)
Surface & Coatings Technology	1	MATERIALS SCIENCE, COATINGS & FILMS - SCIE (Q1, 5/20) | PHYSICS, APPLIED - SCIE (Q2, 42/161)
Toxins	1	TOXICOLOGY - SCIE (Q1, 20/94) | FOOD SCIENCE & TECHNOLOGY - SCIE (Q2, 40/144)
Tribology International	1	ENGINEERING, MECHANICAL - SCIE (Q1, 15/137)
Ultrasonics Sonochemistry	1	ACOUSTICS - SCIE (Q1, 1/32) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q1, 29/180)
JCR Q2 Journals		
Journal Title	No. of Articles	Categories/Rank
ACS Applied Nano Materials	2	MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q2, 102/346) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q2, 47/110)
ACS Chemical Biology	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 130/297)
ACS Combinatorial Science	2	CHEMISTRY, APPLIED - SCIE (Q2, 26/73) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 82/180) | CHEMISTRY, MEDICINAL - SCIE (Q2, 29/63)
ACS Earth and Space Chemistry	3	GEOCHEMISTRY & GEOPHYSICS - SCIE (Q2, 34/87) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 90/180)
ACS Omega	5	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 74/180)
Advanced Therapeutics	2	PHARMACOLOGY & PHARMACY - SCIE (Q2, 78/279)

Analytical and Bioanalytical Chemistry	1	CHEMISTRY, ANALYTICAL - SCIE (Q2, 22/87) | BIOCHEMICAL RESEARCH METHODS - SCIE (Q2, 25/79)
Applied and Environmental Microbiology	2	BIOTECHNOLOGY & APPLIED MICROBIOLOGY - SCIE (Q2, 48/161) | MICROBIOLOGY - SCIE (Q2, 54/138)
Biochimica Et Biophysica Acta-Biomembranes	2	BIOPHYSICS - SCIE (Q2, 26/72) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q3, 160/297)
Biochimica Et Biophysica Acta-Molecular Cell Research	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 110/297) | CELL BIOLOGY - SCIE (Q2, 93/195)
Biomolecules	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 75/297)
Biophysical Journal	46	BIOPHYSICS - SCIE (Q2, 30/72)
Bioresources and Bioprocessing	1	BIOTECHNOLOGY & APPLIED MICROBIOLOGY - SCIE (Q2, 49/161)
Carbohydrate Research	1	CHEMISTRY, ORGANIC - SCIE (Q2, 23/57) | CHEMISTRY, APPLIED - SCIE (Q2, 31/73) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q3, 217/297)
Catalysts	1	CHEMISTRY, PHYSICAL - SCIE (Q2, 71/165)
Cells	2	CELL BIOLOGY - SCIE (Q2, 51/195)
ChemCatChem	1	CHEMISTRY, PHYSICAL - SCIE (Q2, 63/165)
Chemical Communications	2	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 54/180)
Coatings	1	PHYSICS, APPLIED - SCIE (Q2, 66/161) | MATERIALS SCIENCE, COATINGS & FILMS - SCIE (Q2, 9/20) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q3, 202/346)
Crystals	1	CRYSTALLOGRAPHY - SCIE (Q2, 12/26) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q3, 228/346)
Diagnostics	1	MEDICINE, GENERAL & INTERNAL - SCIE (Q2, 60/172)
European Journal of Inorganic Chemistry	2	CHEMISTRY, INORGANIC & NUCLEAR - SCIE (Q2, 23/46)
Faraday Discussions	5	CHEMISTRY, PHYSICAL - SCIE (Q2, 72/165)
FEBS Journal	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 88/297)
FEBS Letters	1	BIOPHYSICS - SCIE (Q2, 27/72) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q3, 170/297) | CELL BIOLOGY - SCIE (Q3, 126/195)
Frontiers in Chemistry	1	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 60/180)
Icarus	4	ASTRONOMY & ASTROPHYSICS - SCIE (Q2, 26/69)
International Journal of Hydrogen Energy	1	CHEMISTRY, PHYSICAL - SCIE (Q2, 43/165) | ELECTROCHEMISTRY - SCIE (Q2, 8/30) | ENERGY & FUELS - SCIE (Q2, 38/119)
International Journal of Quantum Chemistry	1	MATHEMATICS, INTERDISCIPLINARY APPLICATIONS - SCIE (Q2, 39/108) | PHYSICS, ATOMIC, MOLECULAR & CHEMICAL - SCIE (Q3, 22/36) | QUANTUM SCIENCE & TECHNOLOGY - SCIE (Q3, 13/19) | CHEMISTRY, PHYSICAL - SCIE (Q3, 118/165)
Journal of Biological Chemistry	2	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 94/297)
Journal of Biomedical Optics	2	OPTICS - SCIE (Q2, 31/102) | BIOCHEMICAL RESEARCH METHODS - SCIE (Q2, 32/79) | RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING - SCIE (Q2, 60/136)
Journal of Cell Science	1	CELL BIOLOGY - SCIE (Q2, 87/195)

Journal of Chemical Education	2	EDUCATION, SCIENTIFIC DISCIPLINES - SCIE (Q2, 16/44) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q3, 96/180)
Journal of Chromatography B-Analytical Technologies in the Biomedical and Life Sciences	1	CHEMISTRY, ANALYTICAL - SCIE (Q2, 39/87) | BIOCHEMICAL RESEARCH METHODS - SCIE (Q2, 37/79)
Journal of Food Science	1	FOOD SCIENCE & TECHNOLOGY - SCIE (Q2, 57/144)
Journal of General Physiology	1	PHYSIOLOGY - SCIE (Q2, 26/81)
Journal of Organometallic Chemistry	1	CHEMISTRY, ORGANIC - SCIE (Q2, 27/57) | CHEMISTRY, INORGANIC & NUCLEAR - SCIE (Q3, 24/46)
Journal of Pharmacology and Experimental Therapeutics	1	PHARMACOLOGY & PHARMACY - SCIE (Q2, 99/279)
Journal of Physical Chemistry A	1	PHYSICS, ATOMIC, MOLECULAR & CHEMICAL - SCIE (Q2, 14/36) | CHEMISTRY, PHYSICAL - SCIE (Q3, 103/165)
Journal of Physical Chemistry C	3	MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q2, 144/346) | CHEMISTRY, PHYSICAL - SCIE (Q2, 78/165) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q3, 63/110)
Journal of Radioanalytical and Nuclear Chemistry	1	NUCLEAR SCIENCE & TECHNOLOGY - SCIE (Q2, 16/34) | CHEMISTRY, INORGANIC & NUCLEAR - SCIE (Q3, 33/46) | CHEMISTRY, ANALYTICAL - SCIE (Q4, 71/87)
Journal of the Electrochemical Society	7	MATERIALS SCIENCE, COATINGS & FILMS - SCIE (Q2, 6/20) | ELECTROCHEMISTRY - SCIE (Q2, 15/30)
Langmuir	2	MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q2, 139/346) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 73/180) | CHEMISTRY, PHYSICAL - SCIE (Q2, 74/165)
Life Sciences in Space Research	1	ASTRONOMY & ASTROPHYSICS - SCIE (Q2, 34/69) | BIOLOGY - SCIE (Q3, 49/94)
Materials Letters	1	PHYSICS, APPLIED - SCIE (Q2, 57/161) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q3, 184/346)
Molecules	1	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 66/180) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q2, 114/297)
Nanoscale Advances	2	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 57/180) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q2, 112/346) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q3, 56/110)
Nanotechnology	1	PHYSICS, APPLIED - SCIE (Q2, 51/161) | MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE (Q2, 162/346) | NANOSCIENCE & NANOTECHNOLOGY - SCIE (Q3, 65/110)
New Journal of Chemistry	2	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q2, 81/180)
New Therapeutic Strategies for Brain Edema and Cell Injury	1	NEUROSCIENCES - SCIE (Q2, 116/275)
Novel Therapeutic Advances in Glioblastoma	1	NEUROSCIENCES - SCIE (Q2, 116/275)
Organometallics	2	CHEMISTRY, INORGANIC & NUCLEAR - SCIE (Q2, 12/46) | CHEMISTRY, ORGANIC - SCIE (Q2, 16/57)
Pathogens	1	MICROBIOLOGY - SCIE (Q2, 59/138)
PLoS One	3	MULTIDISCIPLINARY SCIENCES - SCIE (Q2, 29/74)
Radiation Research	1	BIOLOGY - SCIE (Q2, 36/94) | RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING - SCIE (Q2, 68/136) | BIOPHYSICS - SCIE (Q3, 37/72)

Rapid Communications in Mass Spectrometry	1	SPECTROSCOPY - SCIE (Q2, 18/43) | CHEMISTRY, ANALYTICAL - SCIE (Q3, 54/87) | BIOCHEMICAL RESEARCH METHODS - SCIE (Q3, 59/79)
Royal Society Open Science	1	MULTIDISCIPLINARY SCIENCES - SCIE (Q2, 30/74)
Scientific Reports	7	MULTIDISCIPLINARY SCIENCES - SCIE (Q2, 19/74)
Sensors	1	INSTRUMENTS & INSTRUMENTATION - SCIE (Q2, 19/64) | CHEMISTRY, ANALYTICAL - SCIE (Q2, 29/87) | ENGINEERING, ELECTRICAL & ELECTRONIC - SCIE (Q2, 97/278)
Synthesis-Stuttgart	1	CHEMISTRY, ORGANIC - SCIE (Q2, 22/57)

JCR Q3 Journals		
Journal Title	No. of Articles	Categories/Rank
Analytical Biochemistry	1	CHEMISTRY, ANALYTICAL - SCIE (Q3, 44/87) | BIOCHEMICAL RESEARCH METHODS - SCIE (Q3, 45/79) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q3, 203/297)
Biochemical and Biophysical Research Communications	1	BIOPHYSICS - SCIE (Q3, 39/72) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q3, 196/297)
Biochemistry	2	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q3, 197/297)
Biotechnology Progress	1	FOOD SCIENCE & TECHNOLOGY - SCIE (Q3, 82/144) | BIOTECHNOLOGY & APPLIED MICROBIOLOGY - SCIE (Q3, 106/161)
ChemBioChem	1	CHEMISTRY, MEDICINAL - SCIE (Q3, 36/63) | BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q3, 188/297)
Chemistryselect	1	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q3, 120/180)
ChemPlusChem	1	CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q3, 95/180)
Current Drug Targets	1	PHARMACOLOGY & PHARMACY - SCIE (Q3, 183/279)
Frontiers in Energy Research	1	ENERGY & FUELS - SCIE (Q3, 75/119)
In Vitro Cellular & Developmental Biology-Animal	2	DEVELOPMENTAL BIOLOGY - SCIE (Q3, 22/40) | CELL BIOLOGY - SCIE (Q4, 160/195)
Journal of Physical Chemistry B	8	CHEMISTRY, PHYSICAL - SCIE (Q3, 95/165)
Journal of the American Oil Chemists Society	1	CHEMISTRY, APPLIED - SCIE (Q3, 48/73) | FOOD SCIENCE & TECHNOLOGY - SCIE (Q4, 114/144)
Molecular and Cellular Biochemistry	1	CELL BIOLOGY - SCIE (Q3, 128/195)
Molecular Physics	1	PHYSICS, ATOMIC, MOLECULAR & CHEMICAL - SCIE (Q3, 25/36) | CHEMISTRY, PHYSICAL - SCIE (Q4, 136/165)
Nuclear Medicine and Biology	1	RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING - SCIE (Q3, 79/136)
Planetary and Space Science	2	ASTRONOMY & ASTROPHYSICS - SCIE (Q3, 41/69)

JCR Q4 Journals		
Journal Title	No. of Articles	Categories/Rank
Acta Crystallographica Section C-Structural Chemistry	1	CRYSTALLOGRAPHY - SCIE (Q4, 20/26) | CHEMISTRY, MULTIDISCIPLINARY - SCIE (Q4, 151/180)
Brain Protection Strategies and Nanomedicine	6	NEUROSCIENCES - SCIE (Q4, 216/275)
Journal of Labelled Compounds & Radiopharmaceuticals	1	CHEMISTRY, ANALYTICAL - SCIE (Q4, 68/87) | CHEMISTRY, MEDICINAL - SCIE (Q4, 53/63) | BIOCHEMICAL RESEARCH METHODS - SCIE (Q4, 67/79)
Nanomedicine and Neuroprotection in Brain Diseases	5	NEUROSCIENCES - SCIE (Q4, 216/275)
Nanoneuroprotection and Nanoneurotoxicology	4	NEUROSCIENCES - SCIE (Q4, 216/275)
Natural Product Communications	1	FOOD SCIENCE & TECHNOLOGY - SCIE (Q4, 120/144) | CHEMISTRY, MEDICINAL - SCIE (Q4, 59/63)
Neuropharmacology of Neuroprotection	6	NEUROSCIENCES - SCIE (Q4, 216/275)
Protein and Peptide Letters	1	BIOCHEMISTRY & MOLECULAR BIOLOGY - SCIE (Q4, 268/297)
Zeitschrift fur Naturforschung Section B-a Journal of Chemical Sciences	2	CHEMISTRY, ORGANIC - SCIE (Q4, 48/57) | CHEMISTRY, INORGANIC & NUCLEAR - SCIE (Q4, 42/46)

Table 6: Listing of CHBC Affiliated Publications

2022

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(1) Acharya, P.; Manso, R. H.; Hoffman, A. S.; Bakovic, S. I. P.; Kekedy-Nagy, L.; Bare, S. R.; Chen, J.; Greenlee, L. F. Fe Coordination Environment, Fe-Incorporated Ni(OH)(2) Phase, and Metallic Core Are Key Structural Components to Active and Stable Nanoparticle Catalysts for the Oxygen Evolution Reaction. *ACS Catalysis* **2022**, *12* (3), 1992-2008, Article. DOI: 10.1021/acscatal.1c04881.

(2) Adams, P. D.; Muhoza, D. Targeting K-Ras Mutations Show Promise Towards Ending Ras's "Undruggable" Era. *Protein and Peptide Letters* **2022**, *29* (12), 1007-1015, Review. DOI: 10.2174/0929866529666221003124202.

(3) Al-Ogaidi, I.; Aguilar, Z. P.; Lay, J. O., Jr. Development of Biodegradable/Biocompatible Nanoliposome-Encapsulated Antimicrobial Essential Oils for Topical Creams and Gels. *ACS Omega* **2022**, *7* (27), 23875-23889, Article. DOI: 10.1021/acsomega.2c02594.

(4) Albrecht, T.; Bohn, P. W.; Buckingham, M. A.; Cao, X. E.; Chen, D. F.; Chen, Q. J.; Corva, M.; Edwards, M. A.; Kamali, A. R.; Kanoufi, F.; et al. State of the art energy conversion at the nanointerface: general discussion. *Faraday Discussions* **2022**, *233* (0), 112-121, Editorial Material. DOI: 10.1039/d2fd90002e.

(5) Albrecht, T.; Cao, X. E.; Chen, D. F.; Corva, M.; Edwards, M. A.; Ewing, A.; Fornasaro, S.; Gooding, J. J.; Gundry, L.; Hirano-Iwata, A.; et al. Electrochemical data mining: from information to knowledge: general discussion. *Faraday Discussions* **2022**, *233* (0), 58-76, Editorial Material. DOI: 10.1039/d2fd90001g.

(6) Alraawi, Z.; Banerjee, N.; Mohanty, S.; Kumar, T. K. S. Amyloidogenesis: What Do We Know So Far? *International Journal of Molecular Sciences* **2022**, *23* (22), 38, Review. DOI: 10.3390/ijms232213970.

(7) Araujo, J.; Ottinger, S.; Venkat, S.; Gan, Q.; Fan, C. Studying Acetylation of Aconitase Isozymes by Genetic Code Expansion. *Frontiers in Chemistry* **2022**, *10*, Article. DOI: 10.3389/fchem.2022.862483.

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(9) Balaghi, S. E.; Heidari, S.; Benamara, M.; Beyzavi, H.; Patzke, G. R. Fluoride etched Ni-based electrodes as economic oxygen evolution electrocatalysts. *International Journal of Hydrogen Energy* **2022**, *47* (3), 1613-1623, Article. DOI: 10.1016/j.ijhydene.2021.10.127.

(10) Batey, J. E.; Yang, M.; Dong, B. Electronically tunable lens in three-dimensional single particle tracking by means of parallax. *Abstracts of Papers of the American Chemical Society* **2022**, *264*, Meeting Abstract.

(11) Bisly, A. A.; Hettiarachchy, N. S.; Kumar, T. K. S.; Lay, J. O., Jr. Antioxidant activities of solid-state fermentation derived proteins and peptides from heat-stabilized defatted rice bran. *Journal of the American Oil Chemists Society* **2022**, *99* (3), 215-228, Article. DOI: 10.1002/aocs.12558.

(12) Bohn, P. W.; Cao, X. K. E.; Chang, S.; Chen, D. F.; Confederat, S.; Duleba, D.; Peisan, E.; Edwards, M. A.; Ewing, A.; Gundry, L.; et al. Advanced nanoelectrochemistry implementation: from concept to application: general discussion. *Faraday Discussions* **2022**, *233* (0), 354-373, Editorial Material. DOI: 10.1039/d2fd90004a.

(13) Brand, S. E.; Scharlau, M.; Geren, L.; Hendrix, M.; Parson, C.; Elmendorf, T.; Neel, E.; Pianalto, K.; Silva-Nash, J.; Durham, B.; et al. Accelerated Evolution of Cytochrome c in Higher Primates, and Regulation of the Reaction between Cytochrome c and Cytochrome Oxidase by Phosphorylation. *Cells* **2022**, *11* (24), Article. DOI: 10.3390/cells11244014.

(14) Brownd, M.; Moradi, M. Using molecular dynamics simulations to characterize the structural/conformational effect of amino acid substitutions at the second position of the intrinsically disordered mitochondrial localization peptide (MLP). *Biophysical Journal* **2022**, *121* (3), 525A-525A, Meeting Abstract. DOI: 10.1016/j.bpj.2021.11.2764.

(15) Buckingham, M. A.; Cao, X. K. E.; Chang, S.; Chen, H. Y.; Chen, Q. J.; Chinnathambi, S.; Edwards, M. A.; Fornasaro, S.; Gooding, J.; Hill, C.; et al. Emerging electrochemical methods at the nanointerface: general discussion. *Faraday Discussions* **2022**, *233* (0), 257-282, Editorial Material. DOI: 10.1039/d2fd90003c.

(16) Canote, C.; Kilyanek, S. M. Electrochemically mediated DODH in early transition metal-dioxo complexes. *Abstracts of Papers of the American Chemical Society* **2022**, *264*, Meeting Abstract.

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(18) Chen, H.; Ogden, D.; Pant, S.; Cai, W.; Tajkhorshid, E.; Moradi, M.; Roux, B.; Chipot, C. A Companion Guide to the String Method with Swarms of Trajectories: Characterization, Performance, and Pitfalls. *Journal of Chemical Theory and Computation* **2022**, *18* (3), 1406-1422, Article. DOI: 10.1021/acs.jctc.1c01049.

(19) Chen, J. Controlling morphology of Ni-Fe-based nanocatalysts for oxygen evolution reaction. *Abstracts of Papers of the American Chemical Society* **2022**, *263*, Meeting Abstract.

(20) Chevrier, V. F.; Fitting, A.; Elsenousy, A.; Rivera-Valentin, E. G. Thermodynamic modelling of perchlorate/chloride and perchlorate/chlorate deliquescence at Mars-relevant temperatures. *Geochimica Et Cosmochimica Acta* **2022**, *333*, 56-74, Article. DOI: 10.1016/j.gca.2022.06.011.

(21) Clem, C.; Sharma, B.; Striegler, S. Modularly designed polyacrylate microgels for antibacterial activity against Staphylococcus aureus. *Abstracts of Papers of the American Chemical Society* **2022**, *263*, Meeting Abstract.

(22) Coridan, R. H. Exploiting Disordered Photonics for Light Trapping in Photoelectrochemical Energy Conversion Applications. *Abstracts of Papers of the American Chemical Society* **2022**, SWRM 217, Meeting Abstract.

(23) Coridan, R. H.; Lowe, J. M. Light-directed electrochemical patterning of copper structures. US US11214885 B2 2022-01-04, 2022.

(24) DeMoulpied, J. R.; Killenbeck, J. A.; Schichtl, Z. G.; Sharma, B.; Striegler, S.; Coridan, R. H. Solvent-induced inversion of colloidal aggregation during electrophoretic deposition. *ChemRxiv* **2022**, 1-21, Preprint. DOI: 10.26434/chemrxiv-2022-dz3j4.

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(28) Dong, B.; Yang, M.; Bartey, J. Single-molecule photocatalytic dynamics at individual defects in two-dimensional layered materials. *Abstracts of Papers of the American Chemical Society* **2022**, *264*, Meeting Abstract.

(29) Edwards, M. A.; McKelvey, K.; Kang, M.; Brunet Cabre, M.; Jones, N. B.; Unwin, P. R. Flexible open-source nanoscale electrochemical microscopy. *Abstracts of Papers of the American Chemical Society* **2022**, *263*, Meeting Abstract.

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(35) Fernanders, M. S.; Gough, R. V.; Chevrier, V. F.; Schiffman, Z. R.; Ushijima, S. B.; Martinez, G. M.; Rivera-Valentin, E. G.; Archer, P. D.; Clark, J. V.; Sutter, B.; et al. Water uptake by chlorate salts under Mars-relevant conditions. *Icarus* **2022**, *371*, Article. DOI: 10.1016/j.icarus.2021.114715.

(36) Filbrun, S. L.; Zhao, F.; Chen, K. C.; Huang, T. X.; Yang, M.; Cheng, X. D.; Dong, B.; Fang, N. Imaging Dynamic Processes in Multiple Dimensions and Length Scales. *Annual Review of Physical Chemistry* **2022**, *73*, 377-402, Review. DOI: 10.1146/annurev-physchem-090519-034100.

(37) Gale, C. D.; Derakhshani-Molayousefi, M.; Levinger, N. E. How to Characterize Amorphous Shapes: The Tale of a Reverse Micelle. *Journal of Physical Chemistry B* **2022**, *126* (4), 953-963, Article. DOI: 10.1021/acs.jpcb.1c09439.

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(48) Kilyanek, S. M. Electrochemically mediated deoxygenation of biomass model compounds. *Abstracts of Papers of the American Chemical Society* **2022**, SWRM-262, Meeting Abstract.

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