DELTA UNIVERSITY
FOR SCIENCE AND TECHNOLOGY

Data-based exploration of potential research collaboration between Delta and Sharjah Universities



جامعة الشارقة
UNIVERSITY OF SHARJAH

Delta University
for Science and Technology
جامعة الدلتا للعلوم والتكنولوجيا

R&D

Benchmark research topics, authors, core facilities and research performance in the last 5 years (2018-2022)

Prepared by
Tarek Abbas Ali Elkhooly, PhD

DELTA UNIVERSITY
FOR SCIENCE AND TECHNOLOGY

Undergraduate degrees



R&D

Faculty of Pharmacy
- Pharm D Program
- Pharm D Clinical Program

Faculty of Engineering
- Architectural Engineering Program
- Civil Engineering Program
- Electronics and Communications Engineering Program
- Mechatronics Engineering Program

Faculty of business administration
- Accounting Program
- Marketing Management and E-Commerce Program

Faculty of Oral and Dental Medicine
- Oral and Dental Medicine Program

Faculty of Physical Therapy
- Physical Therapy Program

Faculty of Medicine
- Bachelor of Medicine and Surgery Program

Faculty of Artificial Intelligence
- Artificial Intelligence Program
- Bioinformatics Program
- Cyber Security Program

Faculty of Applied Health Science Technology
- Medical Laboratory Technology Program
- Technology of Radiography and Medical Imaging Program
- Emergency & Critical Care Technology Program
- Technology of Dental Prostheses Manufacture Program

Faculty of Arts
- Mass Communication and Media Arts Program
- English Language and Literature Program
- Geographic Information Systems Program

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Postgraduate degrees



R&D

Faculty of Pharmacy

- Master degree in Pharmacology and Toxicology

Faculty of Engineering

- Master of Science in Architectural Engineering
- Master of Science in Civil Engineering
- Master of Science in Electronics and Communications Engineering

Faculty of business administration

- Master in Business Administration (MBA)

Faculty of Oral and Dental Medicine

- Master of Science in Oral and Maxillofacial Surgery
- Master of Science in the field of prosthetics

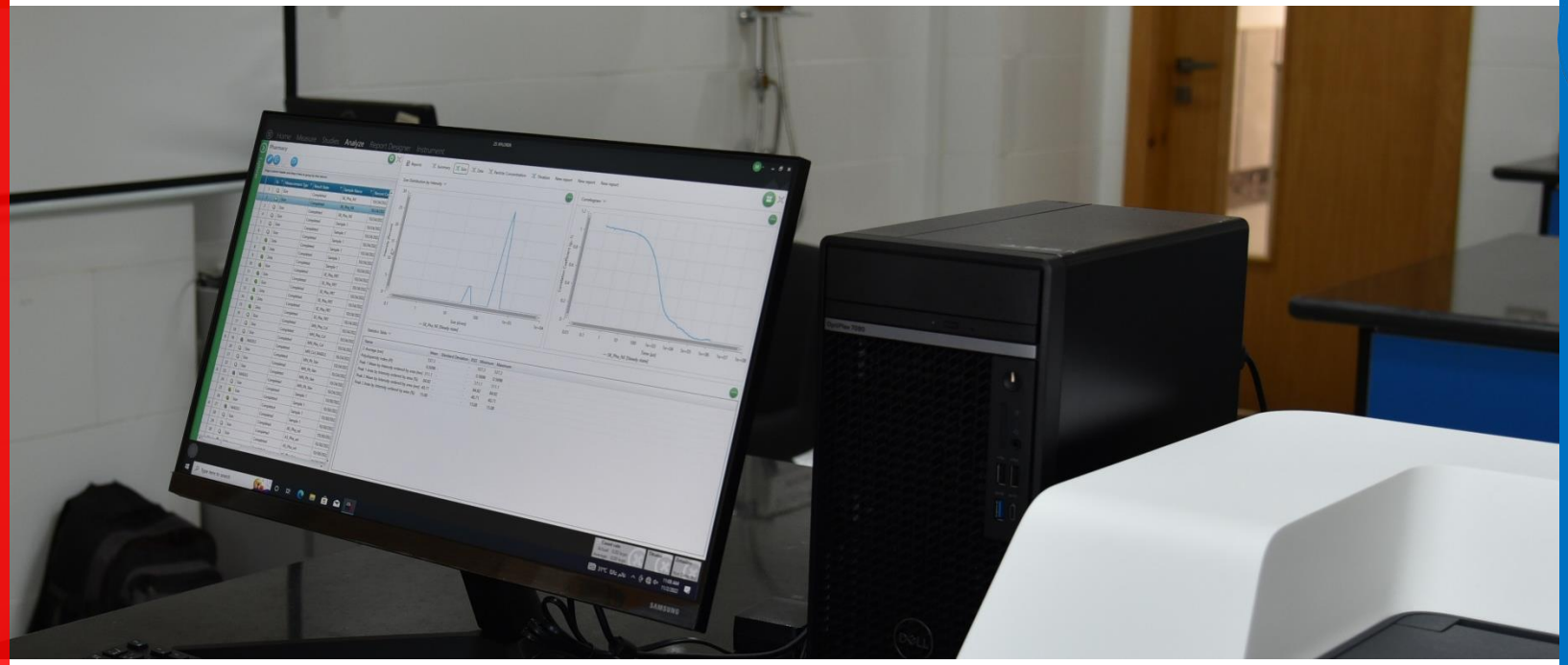
Faculty of Physical Therapy

- Master's degree in Pediatric Physiotherapy

Central Research Units at Delta University (1/1)

“Nanomedicine Research Unit”

Faculty of medicine



Mission

Excellence and innovation in translational interdisciplinary research in the field of applied micro- and nanotechnology

Research Areas

Nano/Diagnostics; Nano/Imaging; Nano/DDS; Nano/Antimicrobial Agents; Nano/Tissue engineering; Nano/ Oncology; Nano/Dentistry; Nano/ biomedical Engineering; Nano/ entrepreneur

Some available equipment

- Electrospinner, NANON-01B, Japan.
- Electrospinner accessories: (Clip, Tubeless, Ultra-thin Coaxial Spinnerets), (Plate, Drum , Disk, Mandrel Collectors)
- Zetasizer Ultra Red Label (Malvern Panalytical, Malvern, UK)
- Shimadzu UV-VIS spectrophotometer uv-1900i, Japan
- SONICS digital Ultrasonic homogenizers, VCX 750, USA
- Christ bench top Freeze dryer ALPHA model 1-2 LD plus, Germany
- Christ Rotational-Vacuum-Concentrator model RVC 2-18 CDplus HCl, Germany

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Central Research Units at Delta University (1/2)

“Drug analysis and chromatography research unit”

Faculty of Pharmacy



Mission

Excellence in providing various laboratory services at a high skill level in the drug analysis and chromatography research field. Assistance in solving analytical research problems, introduction of scientific consultations, and use of specialized scientific personnel.

Research areas

Drug analysis/ environmental pollution/ biosensors/ analytical chemistry/ chromatography/ electrochemistry.

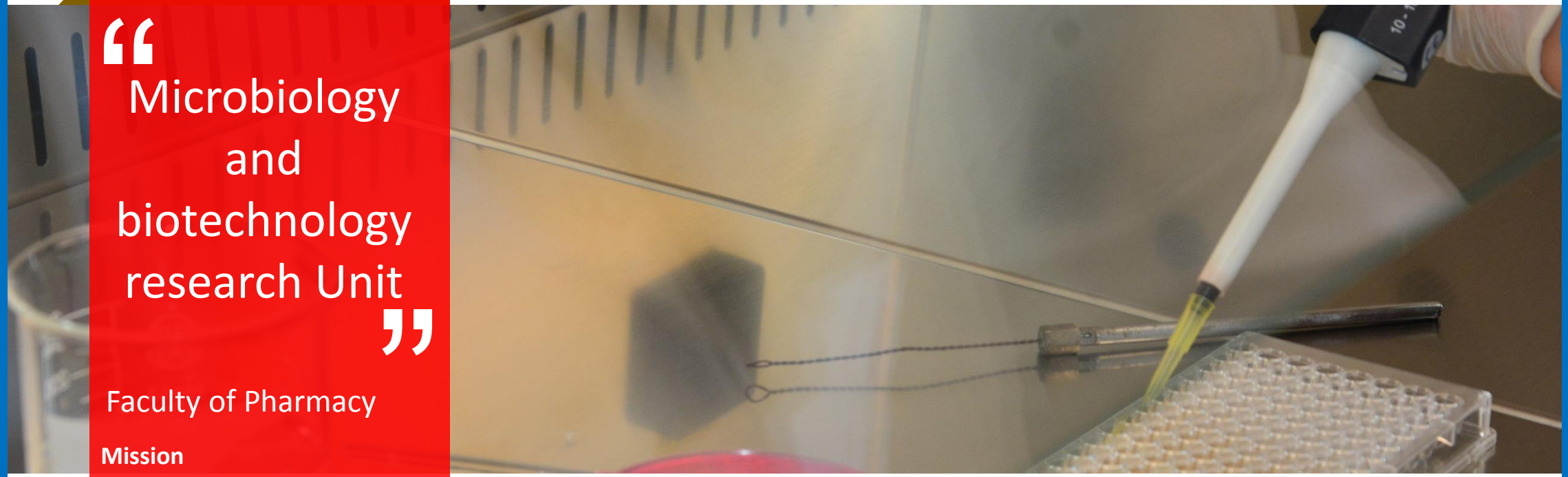
Some available equipment

- Multi Autolab/M204 Modular Multi Potentiostat/Galvanostat (Herisau, Switzerland)
- Spectrofluorophotometer Shimadzu Model RF- 6000, Japan
- Shimadzu UV-VIS spectrophotometer uv-1900i, Japan
- ACQUITY H-Class PLUS (CH-A) Core System UPLC Waters® with PDA and fluorescence detectors, USA
- HPLC with UV detection and quaternary pump with manual injection, Shimadzu, Japan
- Preparative HPLC C-835 BUCHI, Switzerland

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Central Research Units at Delta University (1/3)

“Microbiology and biotechnology research Unit”



Faculty of Pharmacy

Mission

Excellence and innovation in the fields of microbiology and biotechnology to develop excellent academic researchers

Research areas

Applied Microbiology and Biotechnology / Microbiology (medical) / Infectious Diseases / Biochemistry / General Pharmacology, Toxicology and Pharmaceutics/ Microbiota .

Some available equipment

- Safety Cabinet Class II BIOHAZARD (Euroclone Bioair, Italy)
- Refrigerated Centrifuge 15,000 rpm, Centurion scientific
- Microplate reader, Biotek made, USA
- Digital Colony Counter - Bioevopeak Co
- PCR Gradient thermal cycler
- Gel Documentation system, Ingenius UVP
- Vertical electrophoresis, Cleaver scientific
- Cleaver scientific Semi Dry Blotter SD10 , UK
- MEDICAL trading Autoclave PHOENIX BLU , Italy

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Central Research Units at Delta University (1/4)

“Genetics and biochemical analysis Research Unit”



Faculty of Medicine

Mission

The Unit is committed to providing high quality research and community services in the field of genetics and medical biochemical analysis

Research areas

Genetics diagnosis of medical diseases/ hereditary diseases/ forensic medicine/ gene therapy/ Biochemical blood analysis/ biomarkers/ Food Science

Some available equipment

- Bioair Aura Vertical laminar flow hood, BIOAIR, ITALY
- Jenway 7415 Nano Scanning Micro-Volume Spectrophotometer, 198 to 1000 nm, UK
- QuantStudio 5 Real-Time PCR , thermofisher, UK
- BA-88A Semi-Auto Chemistry Analyzer, Mindray Bio-Medical Electronics, China
- Orphee Mythic 18 Hematology Analyzer, Germany
- Agarose gel electrophoresis, Cleaver nanoPAC-300 (Cleaver Scientific, UK)

Central Research Units at Delta University (1/5)

“Consultative Center for Integrated Studies”

Faculty of engineering



Mission

Consultative center for integrated studies seeks to provide distinguished services in all developmental sectors nearby the university campus, through the improvement of the environment and community service, and by strengthening the ties of cooperation between the university and governmental or private associations, industrial zones, and industrial & research development centers.

Research areas

Civil and Structural Engineering / Building and Construction / Mechanical Engineering / Materials Science / Environmental Engineering

Some available equipment

- Blaine Fineness Apparatus
- Flexural testing machine, TECNOTEST
- Technotest concrete testing machine: permeability test
- Universal testing Machine, TBT SCIETECH
- Compressive testing Machine -3000KN, U TEST
- Air content test of concrete, TECNOTEST
- Digital Pendulum Charpy and Izod Impact Testing Machine.
- Rold Cold Steel Rebar Bending Testing Machine
- Los Angeles Abrasion test

https://engineering.deltauniv.edu.eg/EN/Page/consultative-center-for-integrated-studies-/index

Central Research Units at Delta University (1/6)

"Isokinetic, EMG and EEG research Unit"

Faculty of physical therapy



Mission

Excellence and innovation in translational interdisciplinary research in the field of physical therapy and rehabilitation

Research areas

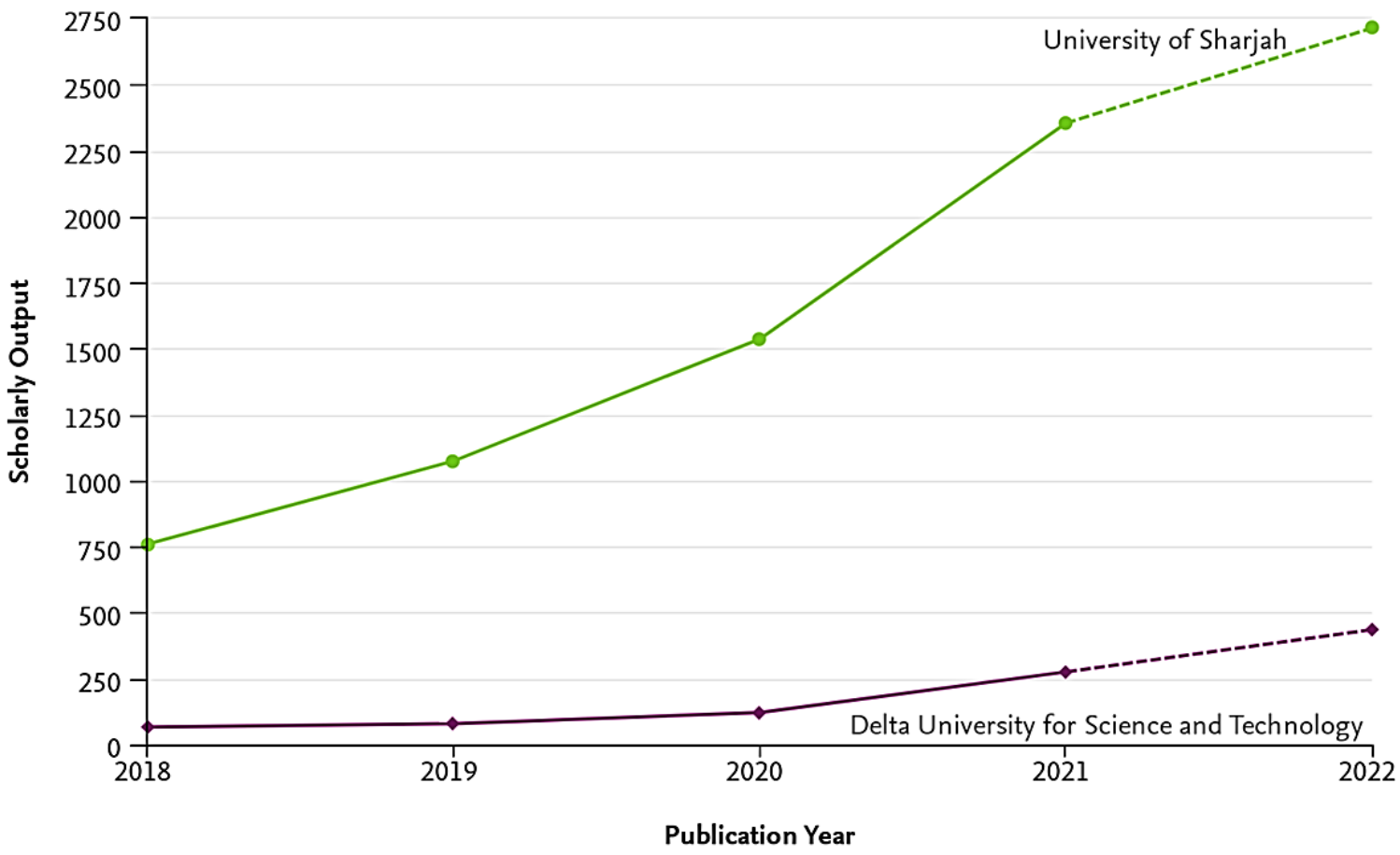
Performance diagnostics/ Isokinetic force diagnostics/ Stress analysis/ Training management/ Isokinetic strength training / Rehabilitation/ Orthopedics Therapy / Basic Science / Biomechanics / Neurology / Pediatrics

Some available equipment

- Isokinetic dynamometer (IsoMed 2000; D&R Ferstl, Hemnau, Germany)
- Motion Analysis Using 4 infrared Cameras, Nepho model 8850,
- Cardiopulmonary exercise test, upright cycle ergometer (Ergo Card, Medisoft, Soriennes, Belgium)
- Hand Held Dynamometer, Pelican- 1150, USA
- Foot Pressure Distribution Measurement
- Electromyography (EMG) device

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Number of publications



University of Sharjah

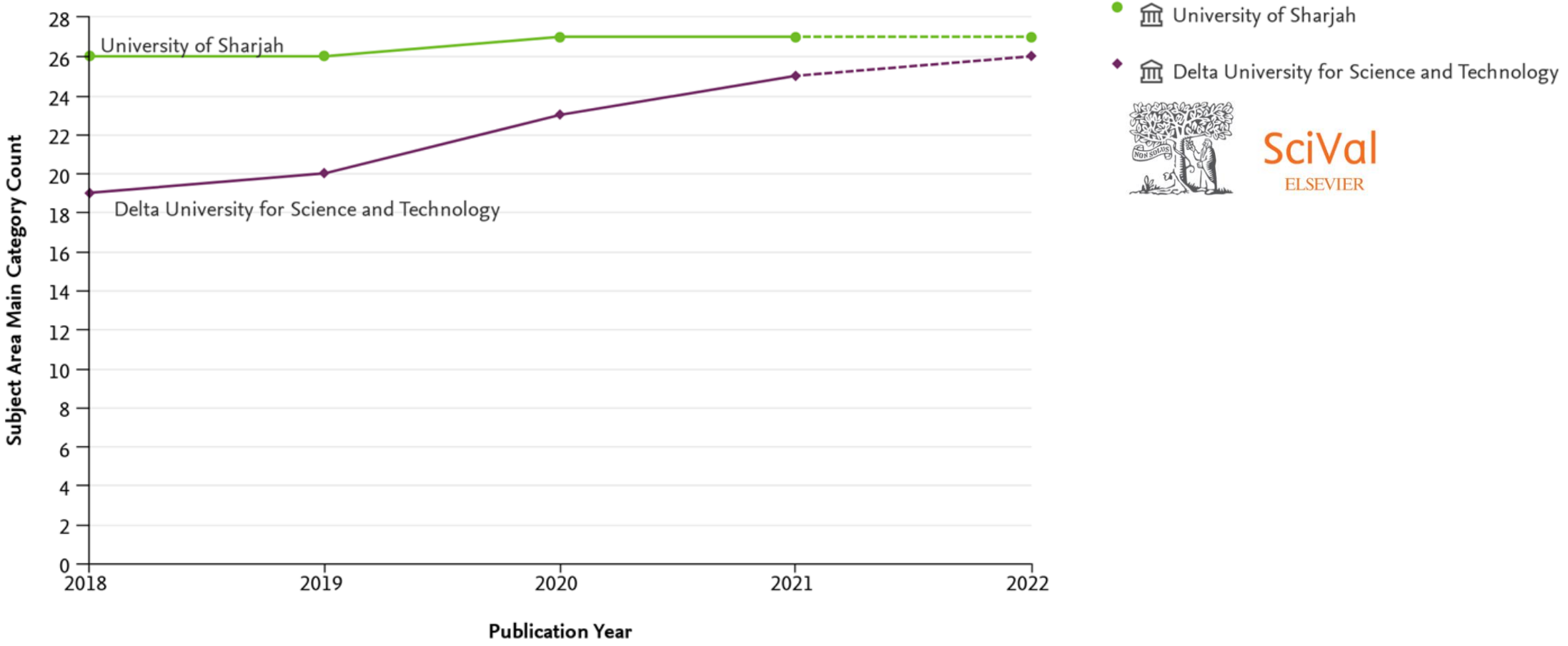
Delta University for Science and Technology

SciVal
ELSEVIER

Benchmark of research performance

University	Overall	2018	2019	2020	2021	2022
Delta University	981	67	80	122	276	436
University of Sharjah	8440	760	1075	1537	2354	2714

Scopus Subject Classification Count: Main categories



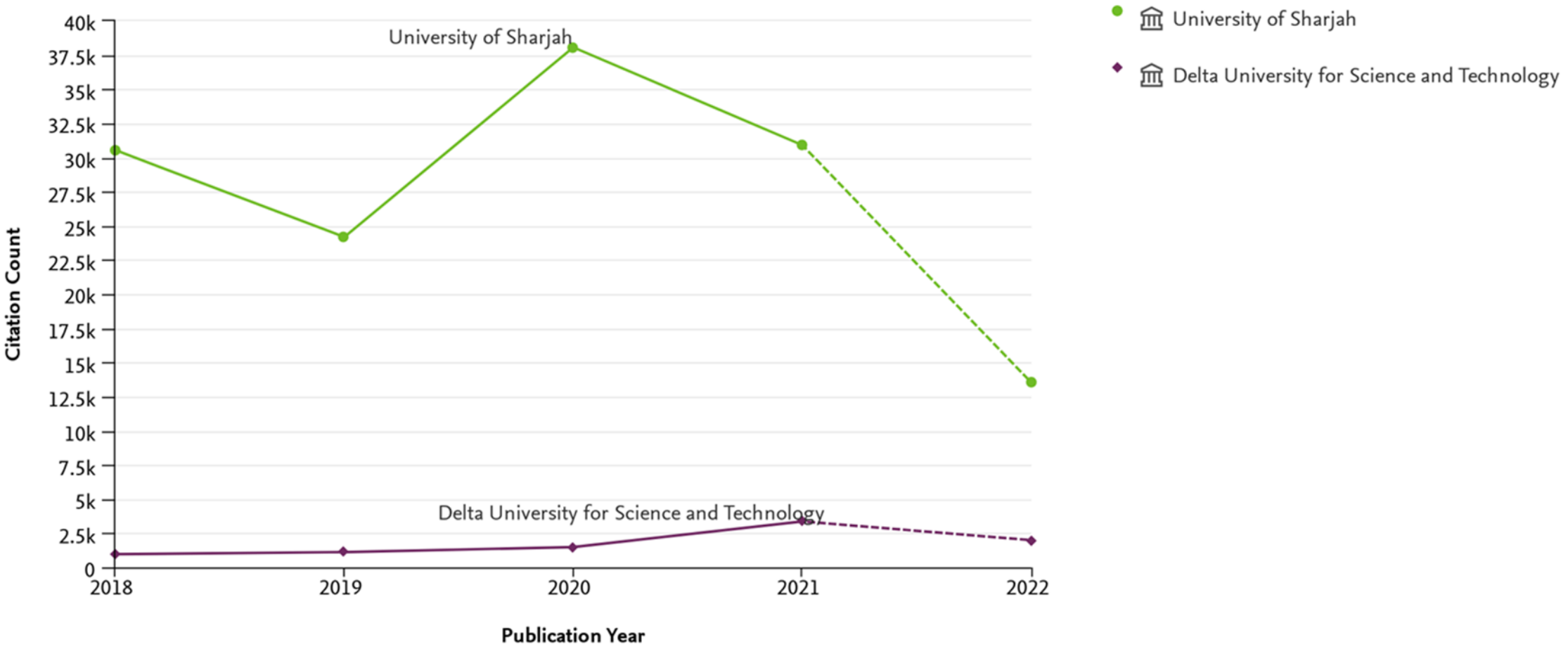
University of Sharjah

Delta University for Science and Technology

SciVal
ELSEVIER

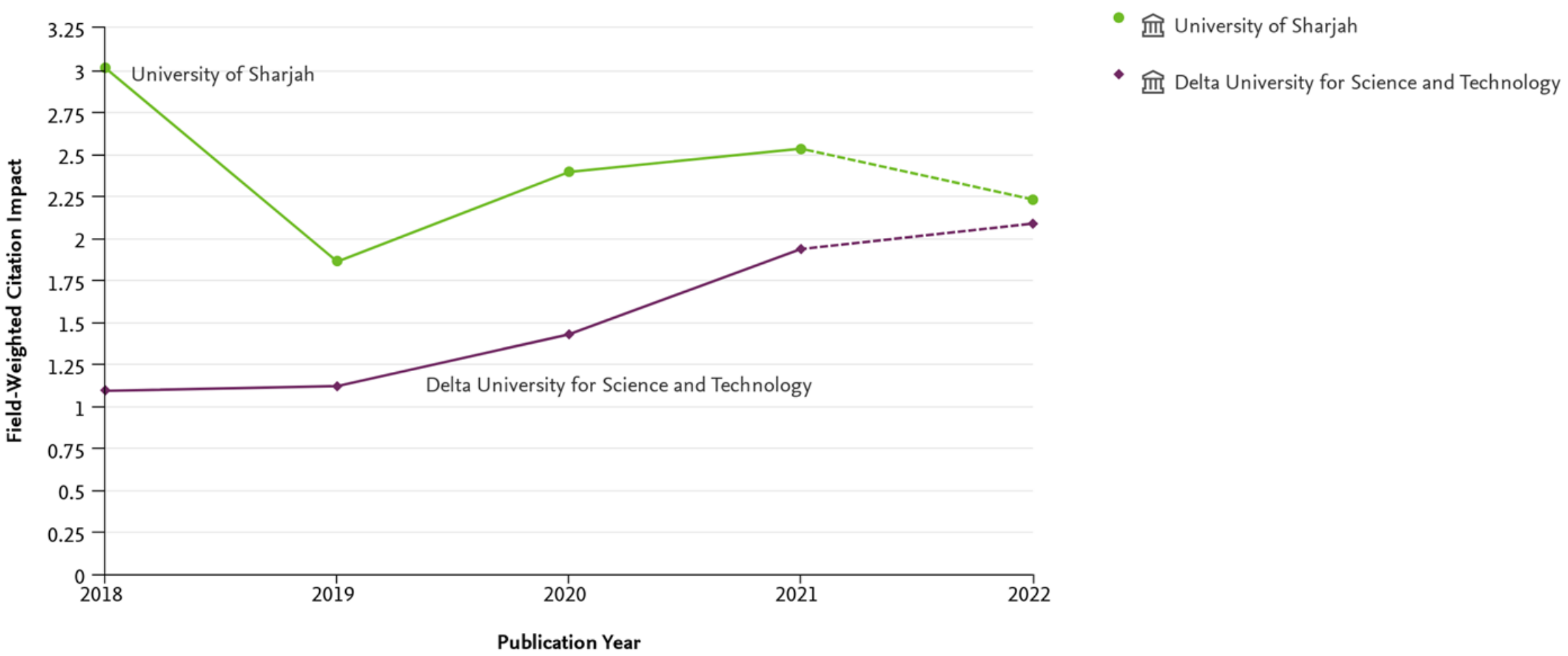
University	Overall	2018	2019	2020	2021	2022
Delta University for Science and Technology	27	19	20	23	25	26
University of Sharjah	27	26	26	27	27	27

Citation Count



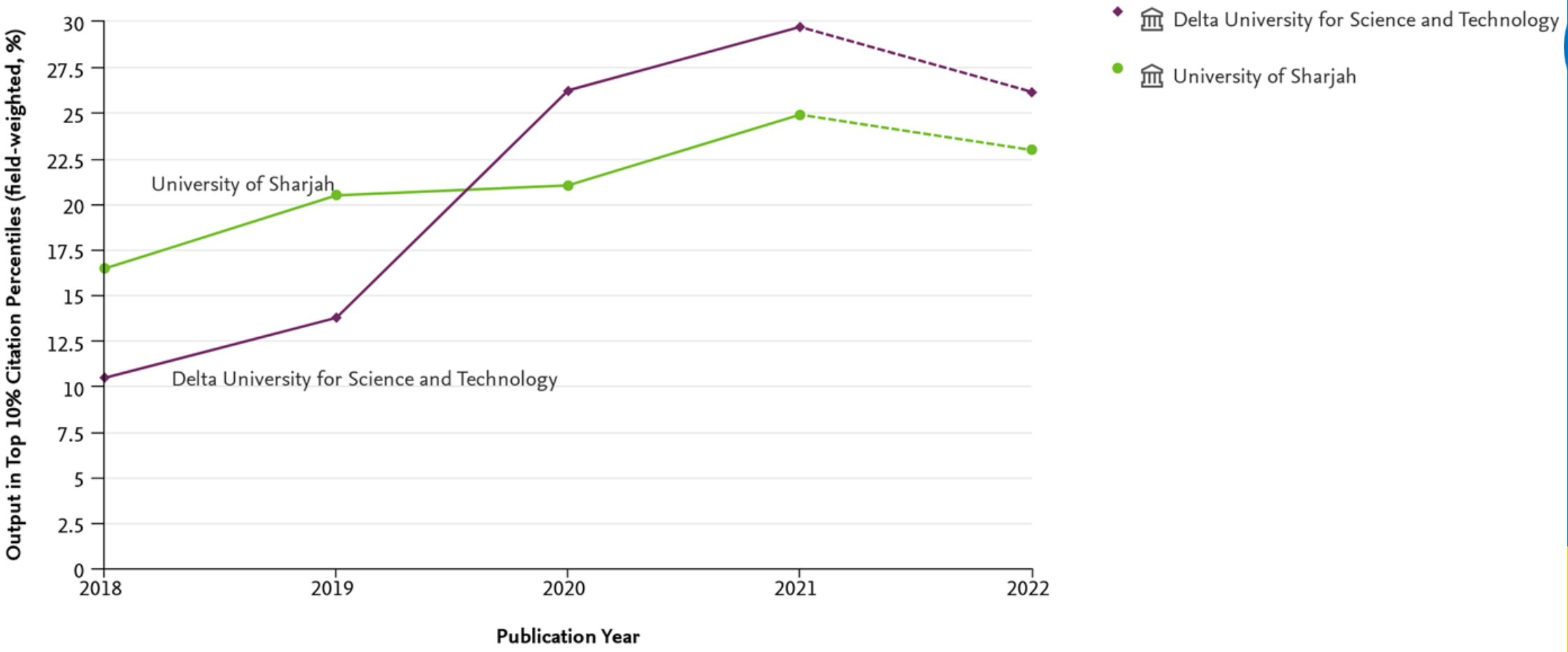
University	Overall	2018	2019	2020	2021	2022
Delta University for Science and Technology	8952	972	1126	1488	3370	1996
University of Sharjah	137257	30551	24188	38069	30918	13531

Citation impact: FWCI



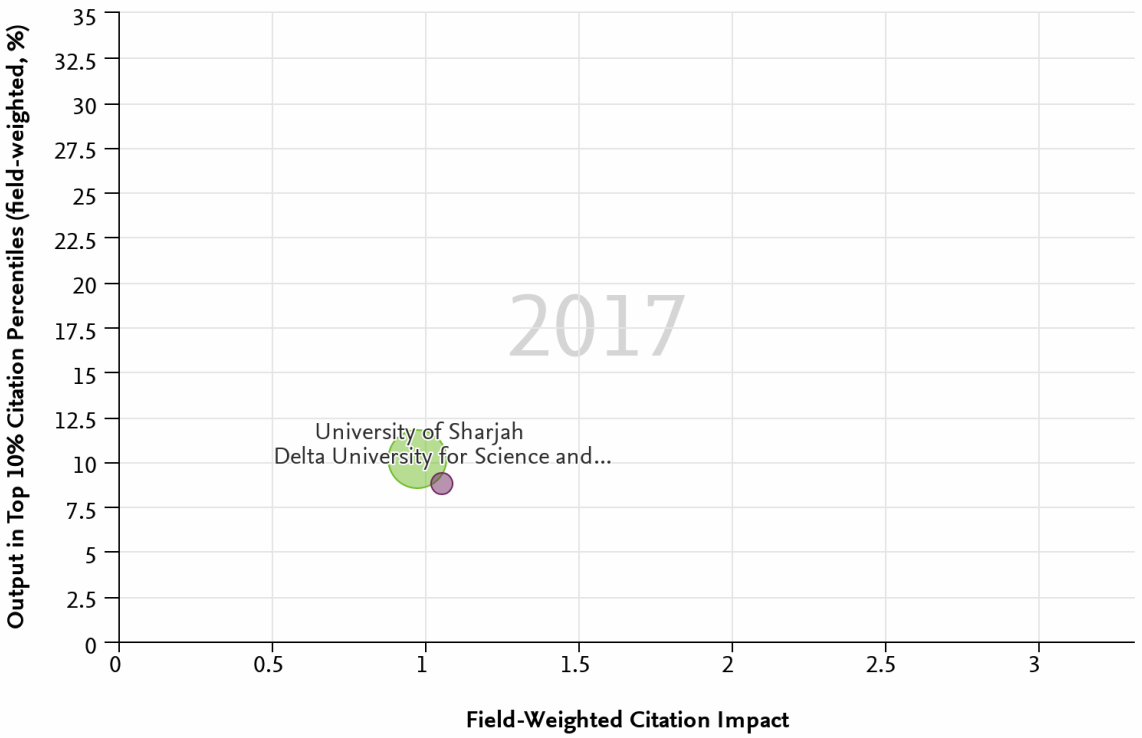
University	Overall	2018	2019	2020	2021	2022
Delta University for Science and Technology	1.81	1.09	1.12	1.43	1.93	2.09
University of Sharjah	2.37	3.01	1.86	2.39	2.53	2.23

Output in Top 10% Citation Percentiles (field-weighted, %)



University	Overall	2018	2019	2020	2021	2022
Delta University for Science and Technology	25.1	10.4	13.8	26.2	29.7	26.1
University of Sharjah	22.2	16.4	20.5	21	24.9	23

Research output, FWCI and output in top 10% citation between 2017 and 2022



University of Sharjah

Delta University for Science and Technology

2.71K
1.53K
301

Scholarly Output

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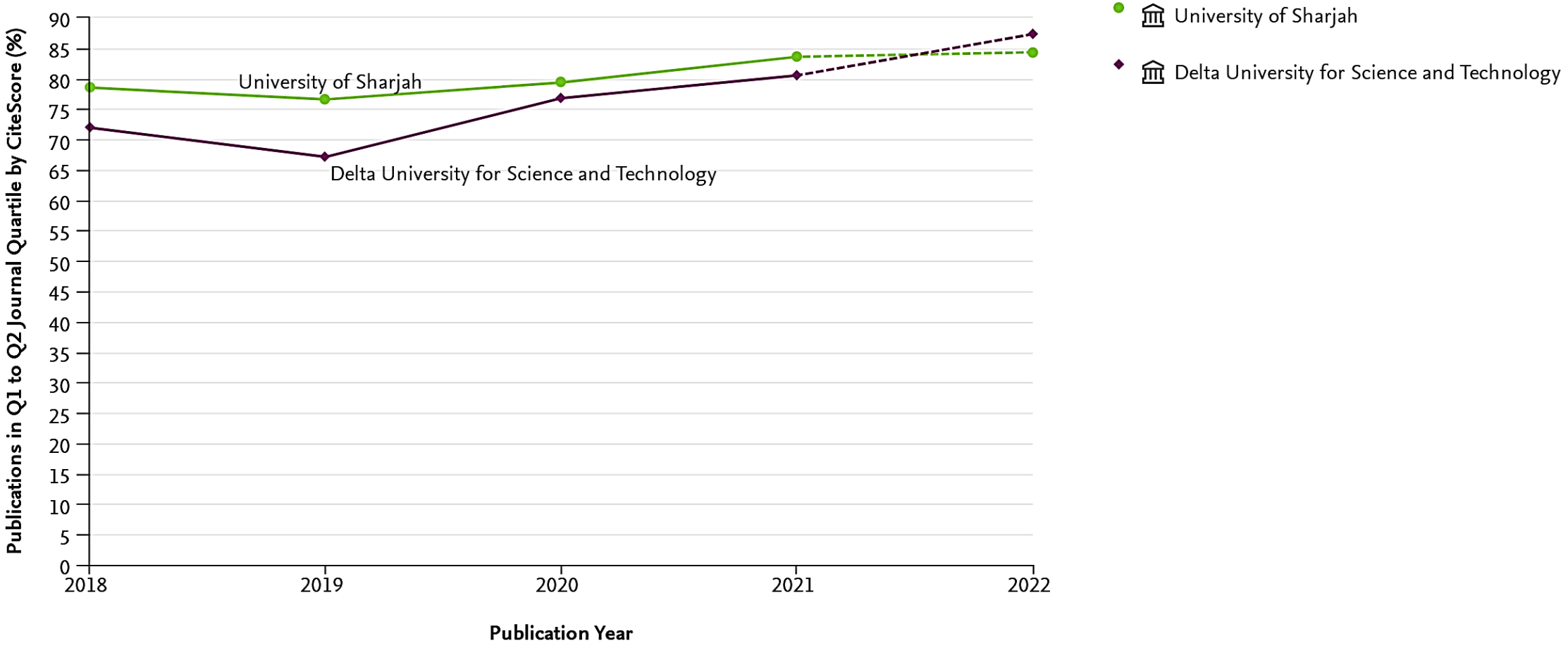
Metrics details

y-axis: **Output in Top 10% Citation Percentiles (field-weighted, %)** **(In top 10% of World, %)**
Types of publications included: all. Self-citations included: yes. Field-weighted: yes
Thresholds

x-axis: **Field-Weighted Citation Impact**
Types of publications included: all. Self-citations included: yes.

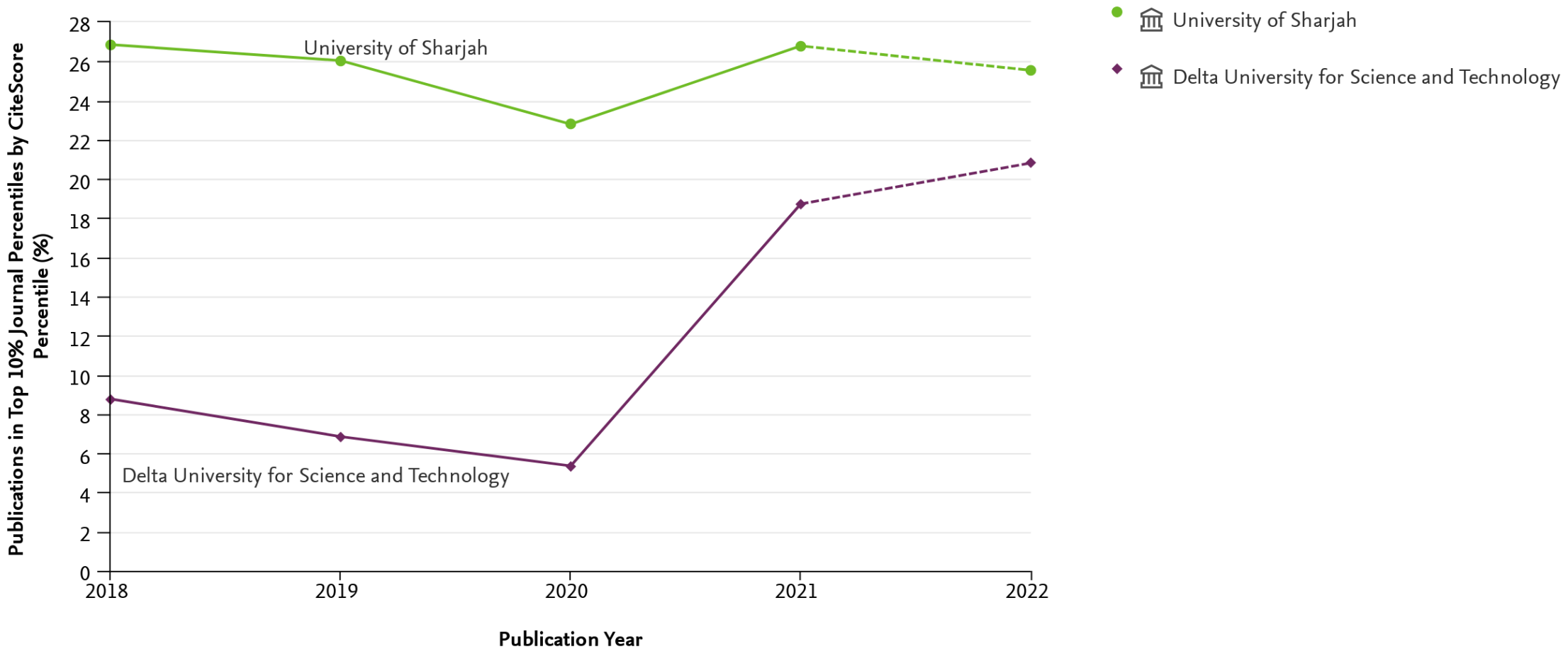
Bubble size: **Scholarly Output**
Types of publications included: all.

Publications in Q1 to Q2 (top 50%) Journal Quartile by CiteScore Percentile (%)



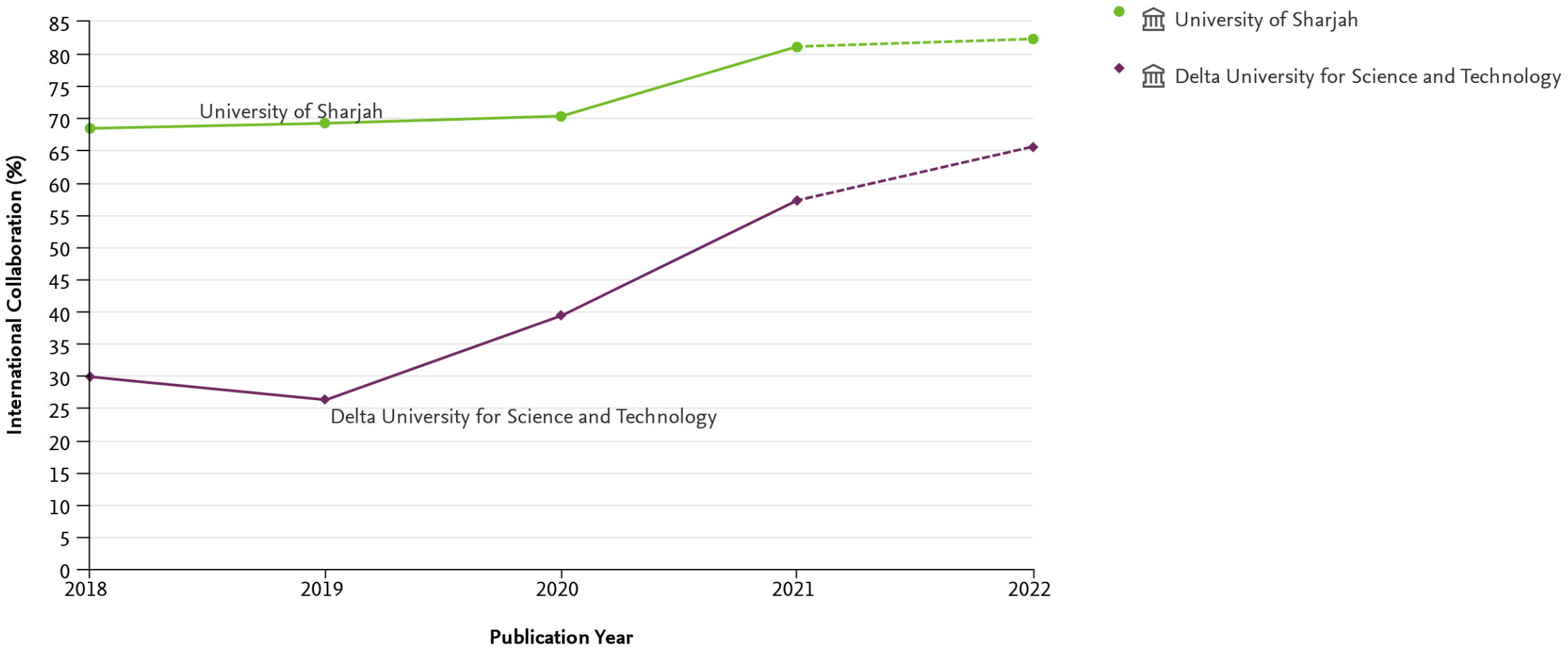
University	Overall	2018	2019	2020	2021	2022
Delta University for Science and Technology	81.6	71.9	67.1	76.8	80.5	87.3
University of Sharjah	81.8	78.5	76.6	79.4	83.6	84.3

Publications in Top 10% Journal Percentiles by CiteScore Percentile (%)



University	Overall	2018	2019	2020	2021	2022
Delta University for Science and Technology	16.5	8.8	6.8	5.4	18.7	20.8
University of Sharjah	25.6	26.9	26	22.8	26.8	25.5

International Collaboration (%)

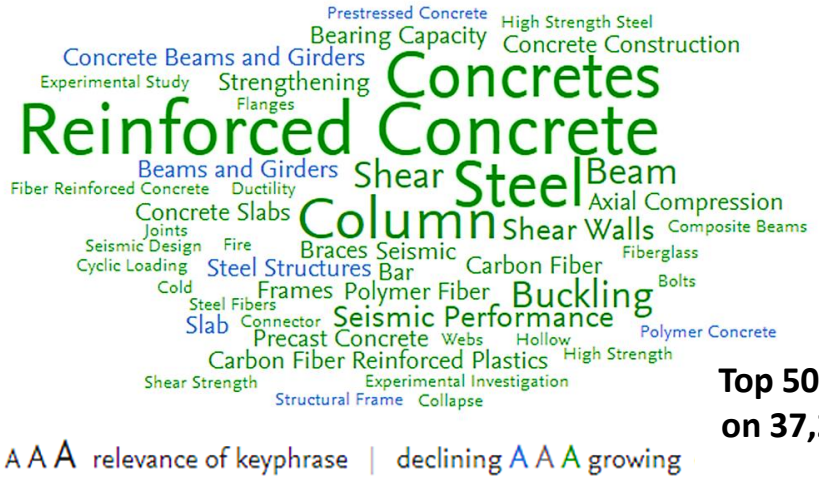


University	Overall	2018	2019	2020	2021	2022
Delta University for Science and Technology	54.3	29.9	26.2	39.3	57.2	65.6
University of Sharjah	76.9	68.4	69.2	70.3	81.1	82.3

Matching authors by their common SciVal Topic Clusters with highest research output (1/1)

Engineering & Material Science (Civil and Structural Engineering/ Building and Construction)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Reinforced Concrete; Concretes; Steel	92.91	20	0.49	**Ahmed S. Abd El-Maula,** Civil Engineering Department, Faculty of engineering	34	1.04	**Salah A. Altoubat & Samer Barakat,** Department of Civil and Environmental Engineering & Sustainable Construction Materials and Structural System Research Group, Research Institute of Sciences and Engineering/ **Zaid A. Al-Sadoon,** Department of Civil and Environmental Engineering



Top 50 keyphrases by relevance, based on 37,209 publications between 2019-June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

8 DECENT WORK AND ECONOMIC GROWTH

1 count

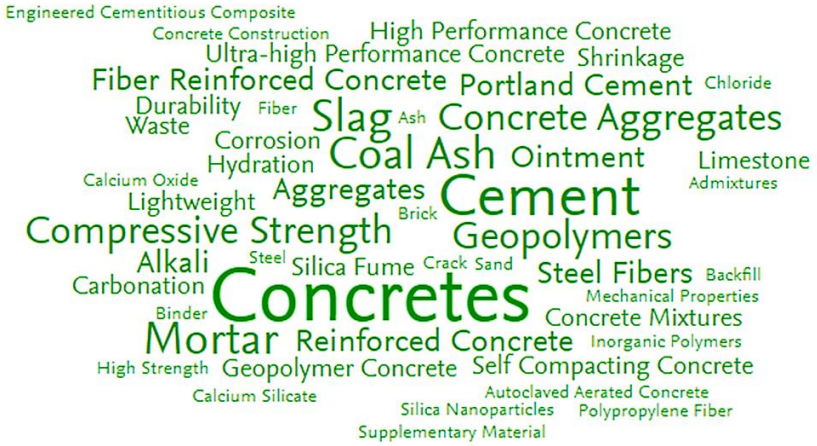
11 SUSTAINABLE CITIES AND COMMUNITIES

2 counts

Matching authors by their common SciVal Topic Clusters with highest research output (1/2)

Engineering & Material Science (Civil and Structural Engineering)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Concretes; Compressive Strength; Cements	98.729	20	3.44	**Khaled Abu el-Hassan,** Civil Engineering Dept., Faculty of Engineering	47	1.04	**Salah A. Altoubat & Samer Barakat**, Department of Civil and Environmental Engineering & Sustainable Construction Materials and Structural System Research Group, Research Institute of Sciences and Engineering / **Talha M. Junaid & Leblouba Moussa**, Department of Civil and Environmental Engineering.



The highest counted SDGs in the publications of both universities in this topic cluster

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

15 counts

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

12 counts

13 CLIMATE ACTION

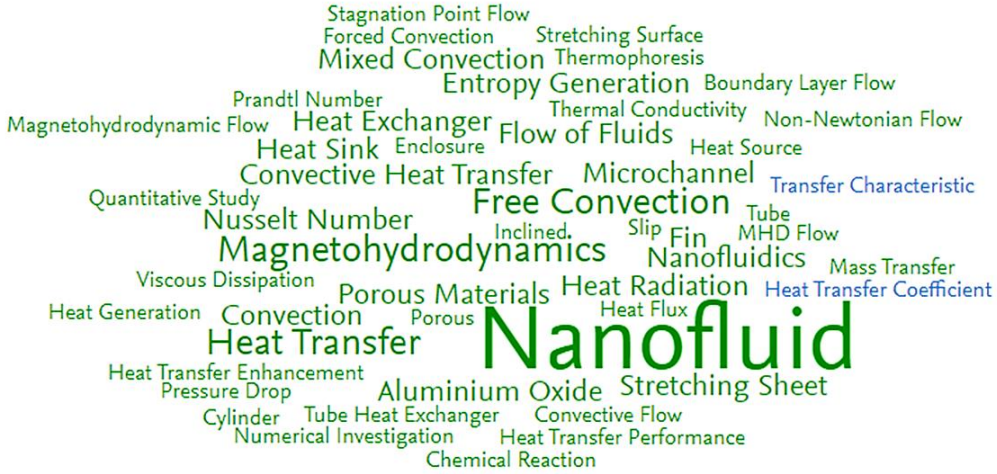
11 counts

Top 50 keyphrases by relevance, based on 66,541 publications between 2019- June 2023

Matching authors by their common SciVal Topic Clusters with highest research output (1/3)

Engineering & Physics & Chemical engineering (Condensed Matter Physics/ General Materials Science/ Fluid Flow and Transfer Processes/ Renewable Energy, Sustainability and the Environment/ Spectroscopy/ Physical and Theoretical Chemistry / Atomic and Molecular Physics, and Optics)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Heat Transfer; Nusselt Number; Natural Convection	96.388	19	1.21	**A. S. Rashed,** Faculty of Engineering	153	4.76	**Zafar Said,** College of Engineering/ **Mamdouh El Haj Assad,** Department of Sustainable and Renewable Energy Engineering/ **Mohammad Ali Abdelkareem**, Sustainable Energy & Power Systems Research Centre



Top 50 keyphrases by relevance, based on 36,083 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

7 AFFORDABLE AND CLEAN ENERGY

44 counts

13 CLIMATE ACTION

11 counts

6 CLEAN WATER AND SANITATION

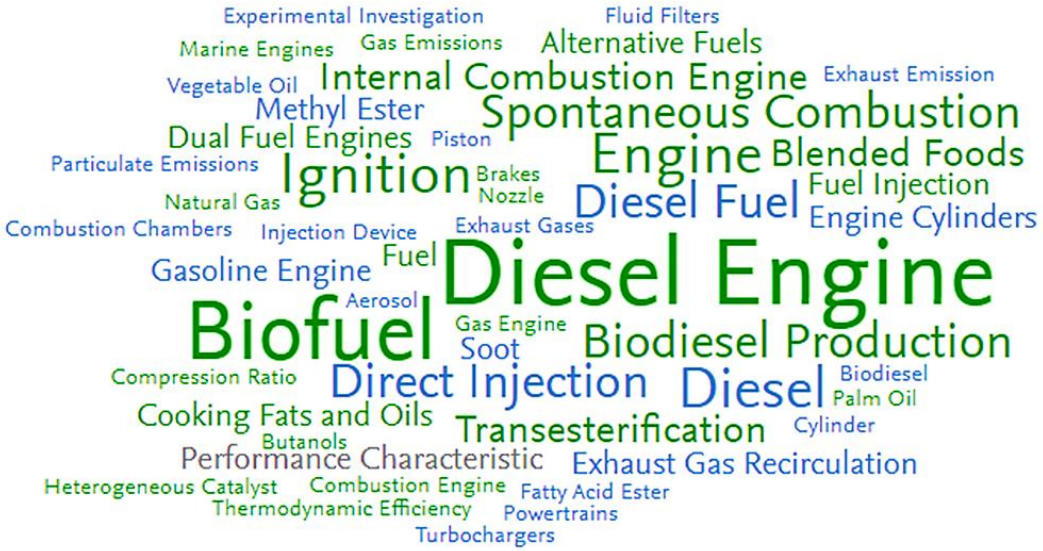
7 counts

DELTA UNIVERSITY FOR SCIENCE AND TECHNOLOGY

Matching authors by their common SciVal Topic Clusters with highest research output (1/4)

Engineering & energy & environmental science (Energy Engineering and Power Technology/ Fuel Technology / Renewable Energy, Sustainability and the Environment / Waste Management and Disposal)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Biodiesel; Diesel Engines; Engine Cylinders	94.047	9	0.74	**A. E. Kabeel,** Vice Dean for Post Graduate and Research Affairs, Faculty of Engineering	54	3.58	**Zafar Said**, College of Engineering/ **Abdul Ghani Olabi**, Sustainable Energy & Power Systems Research Centre / **Abrar Inayat**, Department of Sustainable and Renewable Energy Engineering



Top 50 keyphrases by relevance, based on 27,215 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

7 AFFORDABLE AND CLEAN ENERGY

50 counts

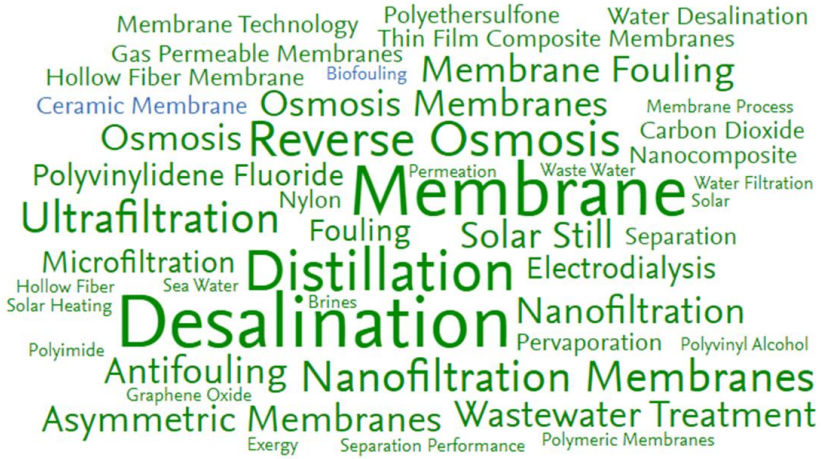
13 CLIMATE ACTION

17 counts

Matching authors by their common SciVal Topic Clusters with highest research output (1/5)

Engineering & material science & chemical engineering (Renewable Energy, Sustainability and the Environment / Pollution/ Energy Engineering and Power Technology / Environmental Chemistry / Water Science and Technology/ General Materials Science / Health, Toxicology and Mutagenesis / Electrical and Electronic Engineering / General Chemical Engineering / Mechanical Engineering)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Membranes; Desalination; Ultrafiltration	97.324	110	2.5	**A. E. Kabeel,** Vice Dean for Post Graduate and Research Affairs, Faculty of Engineering	62	1.95	**Mohammad Ali Abdelkareem & Abdul Ghani Olabi,**, Sustainable Energy & Power Systems Research Centre / **Mamdouh El Haj Assad**, Department of Sustainable and Renewable Energy Engineering



Top 50 keyphrases by relevance, based on 25,939 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

6 CLEAN WATER AND SANITATION

105 counts

7 AFFORDABLE AND CLEAN ENERGY

101 counts

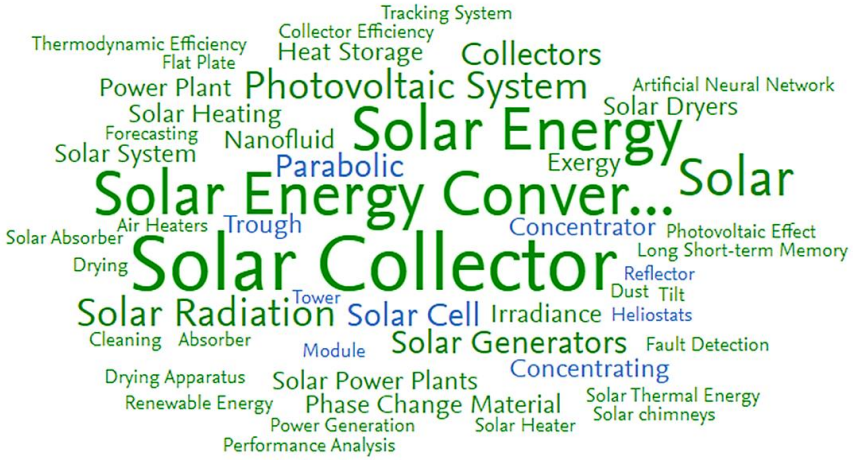
13 CLIMATE ACTION

18 counts

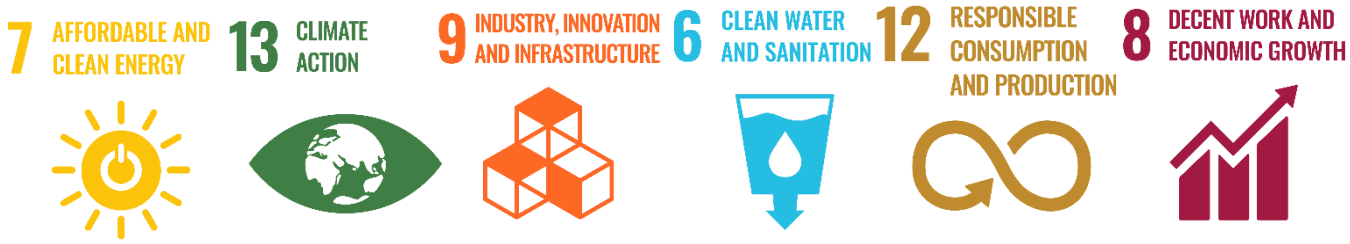
Matching authors by their common SciVal Topic Clusters with highest research output (1/6)

Engineering & energy & material science (Renewable Energy, Sustainability and the Environment / Energy Engineering and Power Technology / Electrical and Electronic Engineering / Industrial and Manufacturing Engineering /Building and Construction/ Mechanical Engineering / General Environmental Science/ Artificial Intelligence/ General Energy/ Fluid Flow and Transfer Processes)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Solar Energy; Photovoltaic Cells; Solar Radiation	94.448	18	2.49	**A. E. Kabeel,** Vice Dean for Post Graduate and Research Affairs, Faculty of Engineering	132	3.4	**Zafar Said,** College of Engineering/ **Mamdouh El Haj Assad,** Department of Sustainable and Renewable Energy Engineering/ **Abdul Ghani Olabi,** Sustainable Energy & Power Systems Research Centre



The highest counted SDGs in the publications of both universities in this topic cluster



137 counts **35 counts** **14 counts** **13 counts** **8 counts** **7 counts**

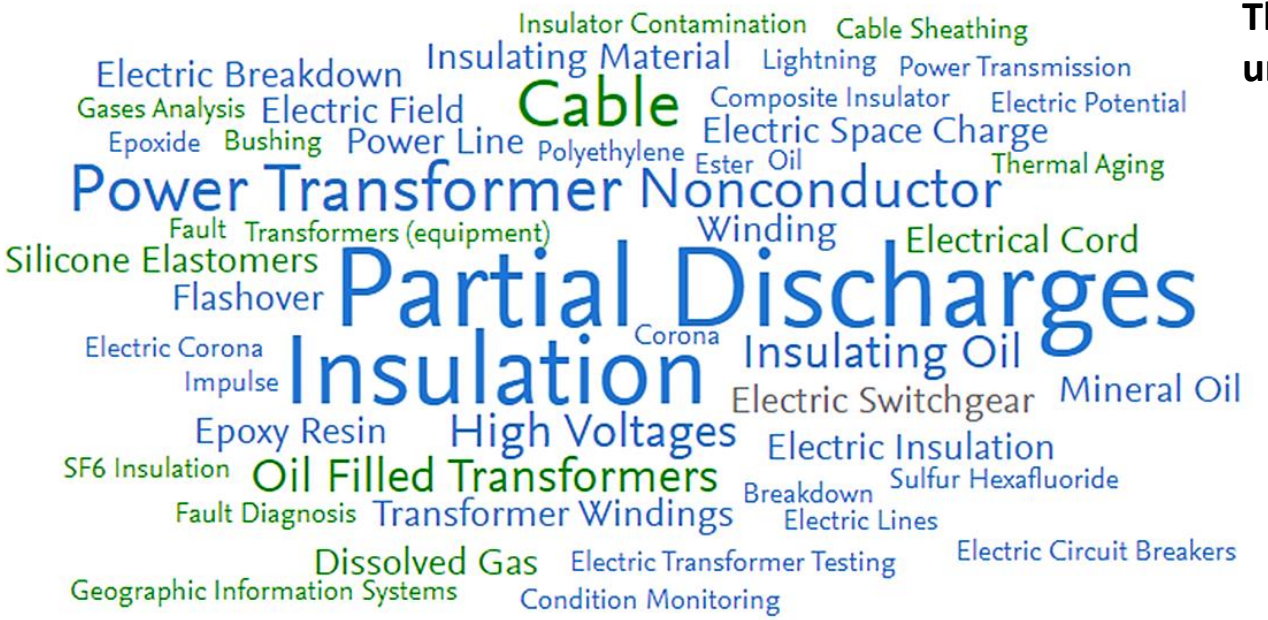
Top 50 keyphrases by relevance, based on 26,831 publications between 2019- June 2023

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Matching authors by their common SciVal Topic Clusters with highest research output (1/7)

Engineering & energy & material science (Electrical and Electronic Engineering / General Engineering / Energy Engineering and Power Technology/ Control and Optimization / Renewable Energy, Sustainability and the Environment)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Partial Discharges; Insulation; Power Transformers	76.254	9	3.95	**Sayed A. Ward**, Dean of the faculty of engineering	3	0.93	**Ramesh C. Bansal,** Department of Electrical Engineering



Top 50 keyphrases by relevance, based on 21,222 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

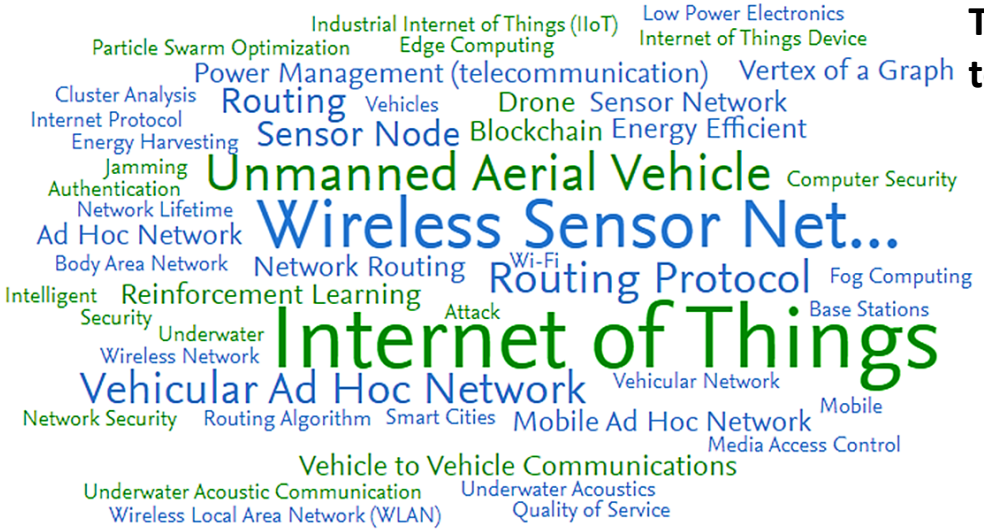
7 AFFORDABLE AND CLEAN ENERGY

3 counts

Matching authors by their common SciVal Topic Clusters with highest research output (1/8)

Computer Science & Engineering (Electrical and Electronic Engineering/ Computer Networks and Communications/ Computer Science Applications/ Information Systems/ General Computer Science/ Instrumentation/ Hardware and Architecture/Software / Control and Systems Engineering / Artificial Intelligence / Signal Processing)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Wireless Sensor Networks; Sensor Nodes; Routing Protocols	97.124	6	0.38	**Hesham Aarafat Ali,** Dean of faculty of artificial intelligence	142	1.89	Ahmed M. Khedr, Department of Computer Science/



The highest counted SDGs in the publications of both universities in this topic cluster



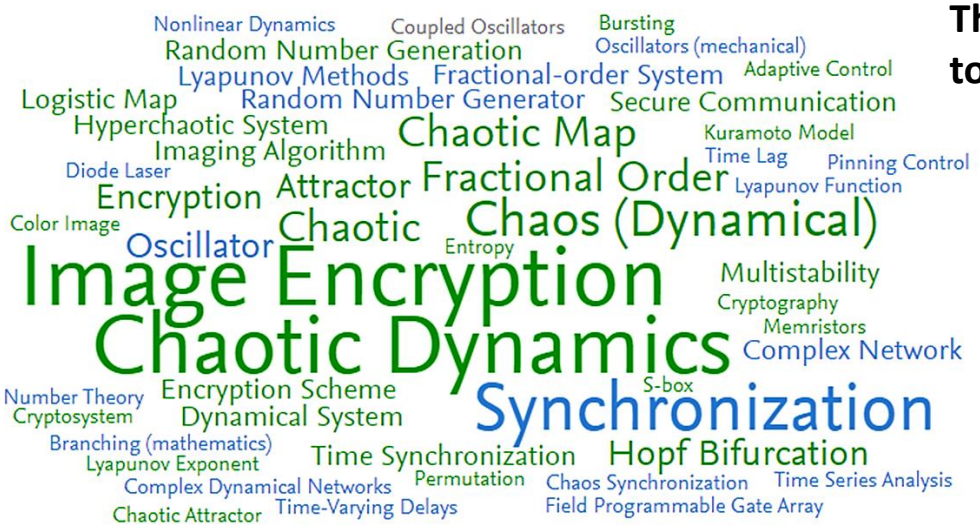
59 counts **26 counts** **17 counts** **8 counts** **4 counts**

Top 50 keyphrases by relevance, based on 67,190 publications between 2019- June 2023

Matching authors by their common SciVal Topic Clusters with highest research output (1/9)

Computer Science & mathematics & Engineering (Electrical and Electronic Engineering / Computer Networks and Communications / Signal Processing / Applied Mathematics / Control and Systems Engineering / General Computer Science / Artificial Intelligence)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Synchronization; Chaotic Systems; Chaos Theory	85.753	15	0.99	**Esam A.A.A. Hagras,** Electronics and Communications Department, Faculty of Engineering	29	2.18	**Talal Bonny,** Department of Computer Engineering/ **Maâmar Bettayeb**, The Department of Electrical Engineering / **Ahmed S. Elwakil,** Department of Electrical Engineering



Top 50 keyphrases by relevance, based on 20,437 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

3 GOOD HEALTH AND WELL-BEING

1 count

7 AFFORDABLE AND CLEAN ENERGY

1 count

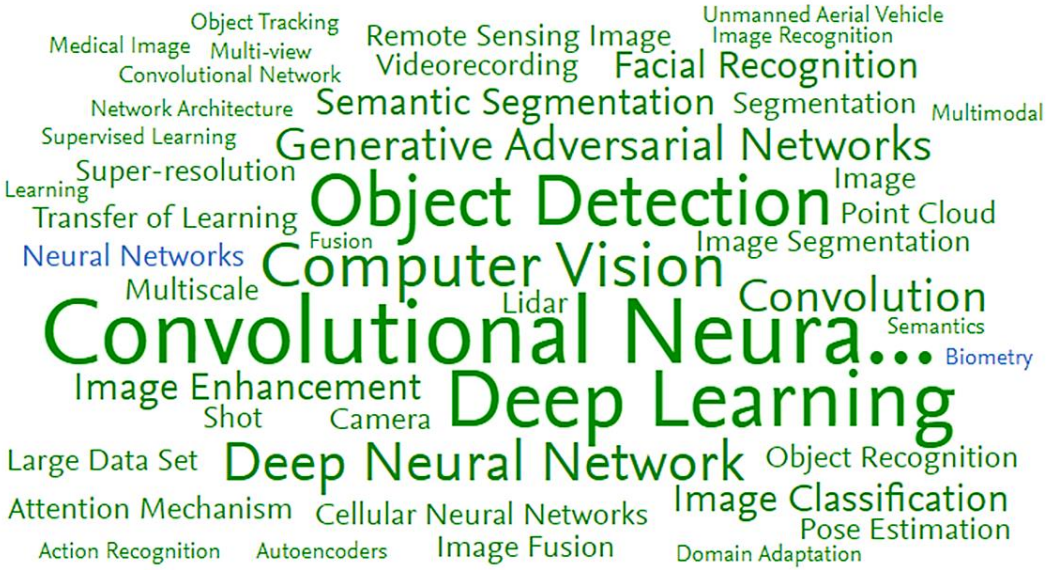
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

1 count

Matching authors by their common SciVal Topic Clusters with highest research output (1/10)

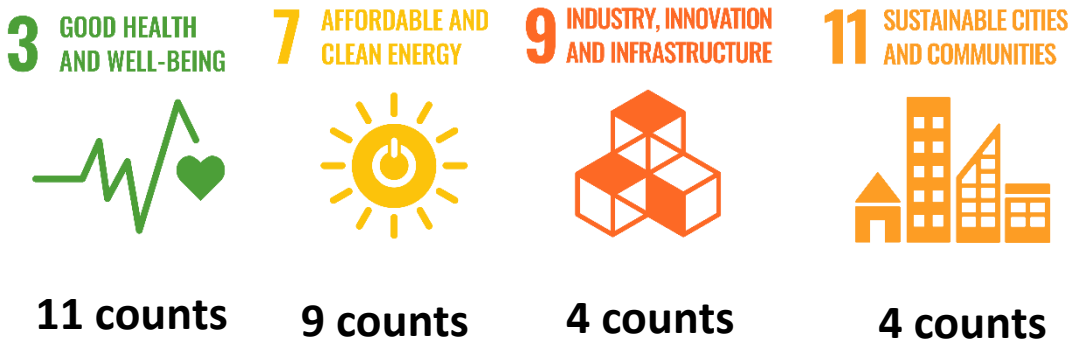
Engineering & mathematics & Computer Science (Artificial Intelligence / Computer Science Applications Computer Networks and Communications / Information Systems / Electrical and Electronic Engineering / General Computer Science / Information Systems and Management / Software / Safety, Risk, Reliability and Quality / Health Informatics /Signal Processing)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Algorithms; Computer Vision; Models	99.799	7	0.97	**Mohamed Saber,** Electronics and Communications Engineering Dep., Faculty of Engineering	114	1.76	**Ahmed M. Khedr,** Department of Computer Science/ **Talal Bonny,** Department of Computer Engineering



Top 50 keyphrases by relevance, based on 298,979 publications between 2019- June 2023

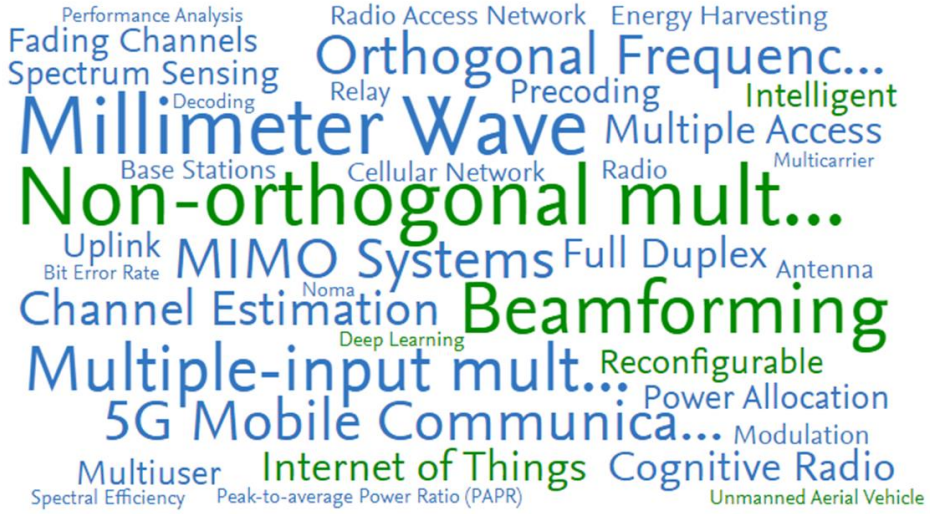
The highest counted SDGs in the publications of both universities in this topic cluster



Matching authors by their common SciVal Topic Clusters with highest research output (1/11)

Computer Science & Engineering & mathematics (Electrical and Electronic Engineering / Computer Networks and Communications/ Computer Science Applications/ Information Systems/ Signal Processing / Information Systems and Management / Artificial Intelligence / Safety, Risk, Reliability and Quality / Hardware and Architecture)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Cognitive Radio; MIMO Systems; Orthogonal Frequency Division Multiplexing	96.99	10	1.66	**W. M. Raslan,** Electronics and Communication Engineering Department, Faculty of Engineering	53	0.53	**Saeed Abdallah**, Department of Electrical Engineering / **Khawla A.N. Alnajjar**, Department of Electrical Engineering/ **Mohamed E.M. Saad**, Research Institute of Sciences and Engineering



The highest counted SDGs in the publications of both universities in this topic cluster

7 AFFORDABLE AND CLEAN ENERGY

6 counts

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

1 count

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

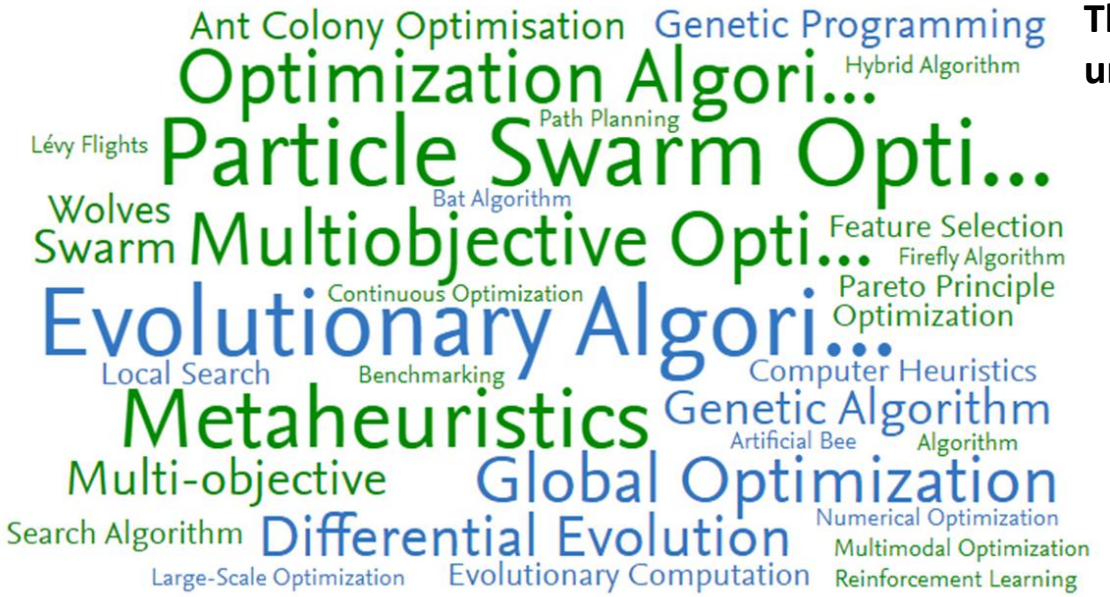
1 count

Top 50 keyphrases by relevance, based on 72,731 publications between 2019- June 2023

Matching authors by their common SciVal Topic Clusters with highest research output (1/12)

Computer Science & mathematics & Engineering (Electrical and Electronic Engineering / Computer Science Applications / Modeling and Simulation / Mechanics of Materials / Biomaterials / General Computer Science / General Engineering)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Optimization; Algorithms; Evolutionary Algorithms	91.237	24	4.16	**Marwa M. Eid,** Faculty of Artificial Intelligence	24	1.82	**Osama Ahmad Alomari,** MLALP Research Group.



The highest counted SDGs in the publications of both universities in this topic cluster

7 AFFORDABLE AND CLEAN ENERGY

3 counts

3 GOOD HEALTH AND WELL-BEING

3 counts

15 LIFE ON LAND

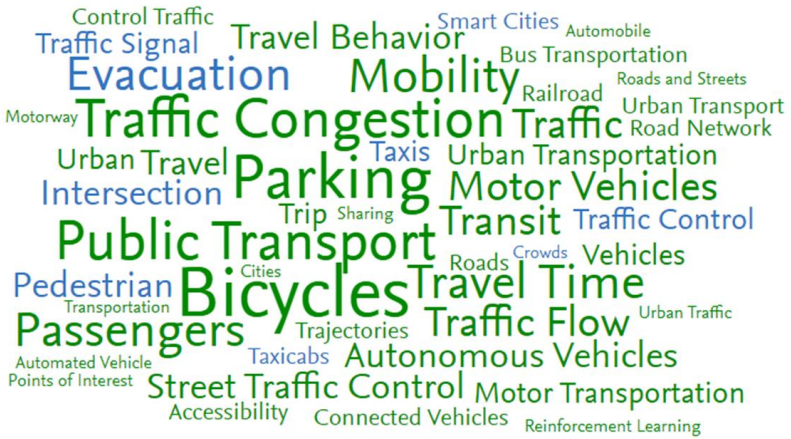
3 counts

Top 50 keyphrases by relevance, based on 23,595 publications between 2019- June 2023

Matching authors by their common SciVal Topic Clusters with highest research output (1/13)

Engineering & Computer Science & Social Science (Computer Science Applications / Civil and Structural Engineering / Automotive Engineering / Transportation / Mechanical Engineering / Modeling and Simulation / Building and Construction / Renewable Energy, Sustainability and the Environment / Computer Networks and Communications / Software / Artificial Intelligence / Geotechnical Engineering and Engineering Geology / Geography, Planning and Development)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Traffic Control; Transportation; Models	97.258	6	0.44	**Amany A. Ragheb & Sara M. Ibrahim & Shahira Assem Abdel-Razek & Yasmin Moanis,** Department of Architectural Engineering, Faculty of Engineering.	26	0.79	**Khaled Hamad,** Department of Civil and Environmental Engineering, College of Engineering & Sustainable Civil Infrastructure Systems Research Group, Research Institute of Sciences and Engineering



The highest counted SDGs in the publications of both universities in this topic cluster



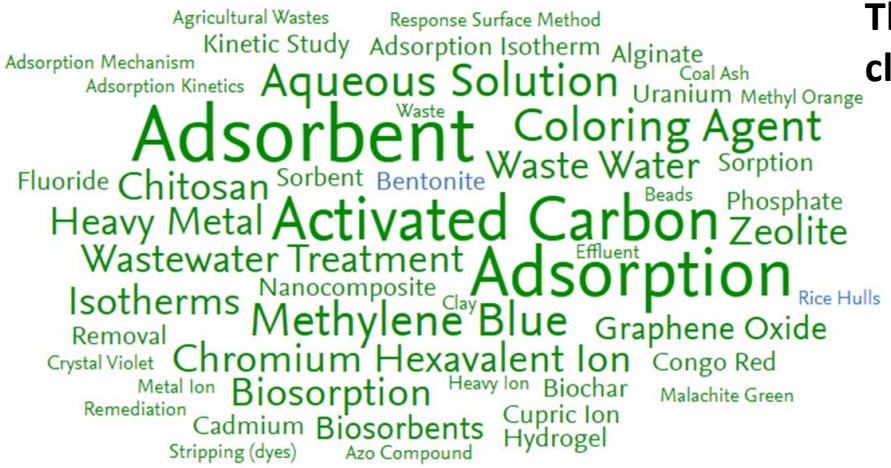
Top 50 keyphrases by relevance, based on 55,186 publications between 2019- June 2023

DELTA UNIVERSITY FOR SCIENCE AND TECHNOLOGY

Matching authors by their common SciVal Topic Clusters with highest research output (1/14)

Environmental science & Chemistry & chemical engineering & material science (Pollution /Water Science and Technology / Renewable Energy, Sustainability and the Environment / Waste Management and Disposal / Environmental Chemistry / Environmental Engineering / Process Chemistry and Technology / General Chemistry)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Adsorption; Adsorbents; Activated Carbon	97.458	6	2.6	**Hesham R. Lotfy & Reda S. Salama,** Basic Science Department, Faculty of Engineering	41	1.76	**Abdallah M. Shanableh,** Biomass & Bioenergy Research Group, Center for Sustainable Energy and Power Systems Research, Research Institute of Sciences and Engineering & Department of Civil and Environmental Engineering



The highest counted SDGs in the publications of both universities in this topic cluster



29 counts | 4 counts | 3 counts | 3 counts | 3 counts

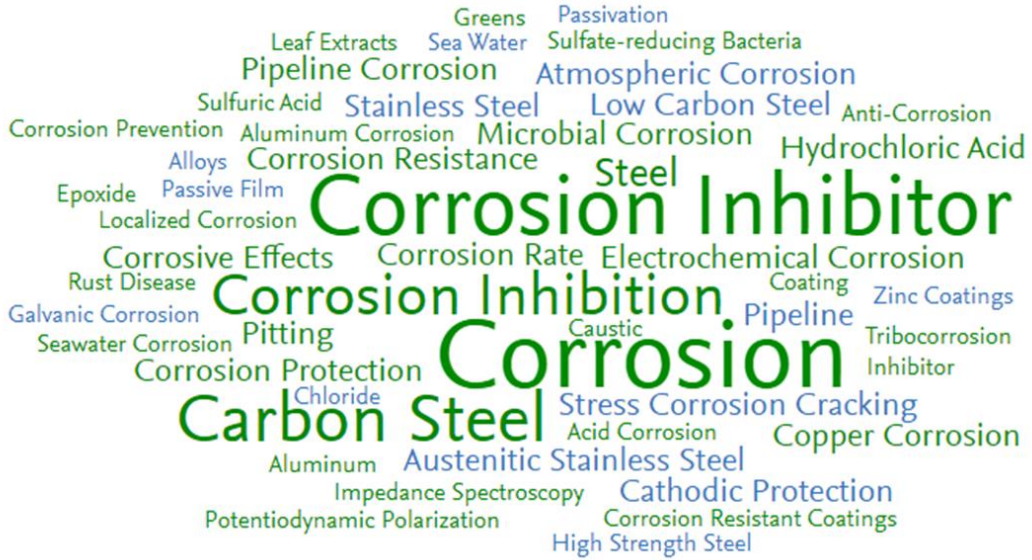
Top 50 keyphrases by relevance, based on 36,029 publications between 2019- June 2023

DELTA UNIVERSITY
FOR SCIENCE AND TECHNOLOGY

Matching authors by their common SciVal Topic Clusters with highest research output (1/15)

Material science & chemistry & Engineering & chemical engineering (Materials Chemistry / Metals and Alloys / Surfaces, Coatings and Films / Physical and Theoretical Chemistry / Mechanical Engineering / General Chemical Engineering / General Chemistry / Surfaces and Interfaces / Condensed Matter Physics / Mechanics of Materials)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Corrosion; Carbon Steel; Corrosion Inhibitors	86.421	10	1.46	**Yasser M. Abdallah,** Department of Dental Biomaterials, Faculty of Oral and Dental Medicine	40	2.95	**Ayssar H. Nahlé & Ibrahim Abdel-Rahman,** Department of Chemistry, College of Sciences



Top 50 keyphrases by relevance, based on 17,295 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

7 AFFORDABLE AND CLEAN ENERGY

2 counts

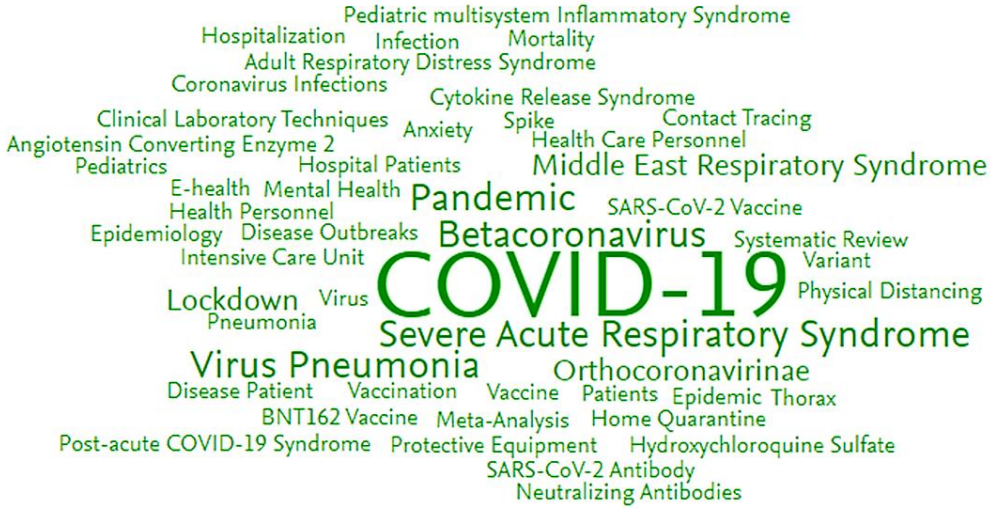
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

1 count

Matching authors by their common SciVal Topic Clusters with highest research output (1/16)

Medicine (**Sharjah:** General Medicine / Public Health, Environmental and Occupational Health / Multidisciplinary / Infectious Diseases / General Dentistry /Immunology / Health Informatics/ Immunology and Allergy / General Biochemistry, Genetics and Molecular Biology / Pharmacology / Computer Science Applications / Health Policy /Artificial Intelligence
Delta: Pharmaceutical Science / Computer Science Applications / Clinical Biochemistry / Health Informatics / Pharmacology (medical) / Signal Processing)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
COVID-19; SARS-CoV-2; Coronavirus	100	21	1.82	**Ahmed Mohamed El-Baz,** Director of microbiology and biotechnology research unit	317	3.5	**Rabih Halwani,** Department of Clinical Sciences, College of Medicine & Research Institute for Medical and Health Sciences



Top 50 keyphrases by relevance, based on 213,871 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

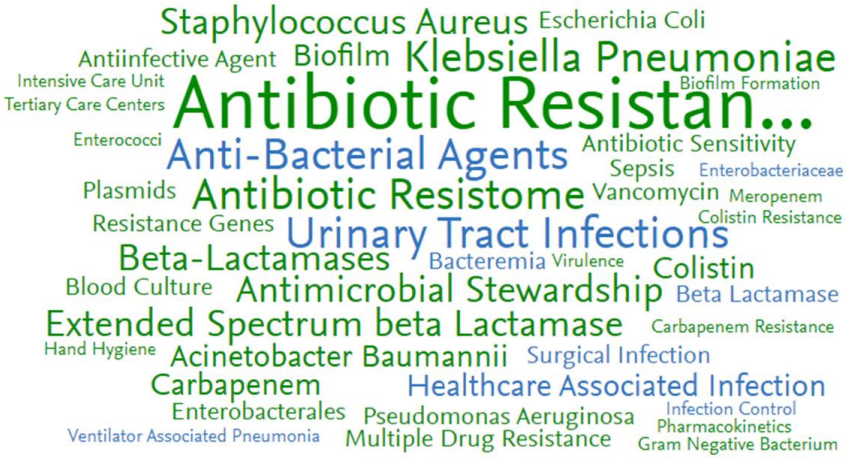


267 counts **8 counts** **7 counts** **6 counts** **5 counts**

Matching authors by their common SciVal Topic Clusters with highest research output (1/17)

Medicine & Immunology and microbiology (Infectious Diseases / Microbiology / Microbiology (medical) / Pharmacology (medical) / Pharmacology / General Pharmacology, Toxicology and Pharmaceutics / Biochemistry / General Immunology and Microbiology / Molecular Biology / Pharmaceutical Science)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Anti-Bacterial Agents; Infection; Methicillin-Resistant Staphylococcus Aureus	97.057	12	0.96	**Mohamed M. Shohayeb,** Department of Microbiology and Biotechnology, Faculty of Pharmacy **/ Ahmed Mohamed El-Baz**, Director of microbiology and biotechnology research unit	41	0.98	**Anthony I. Okoh,** Department of Environmental Health Sciences, College of Health Sciences/ **Karem Hasan Alzoubi**, Department of Pharmacy Practice and Pharmacotherapeutics



Top 50 keyphrases by relevance, based on 55,977 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

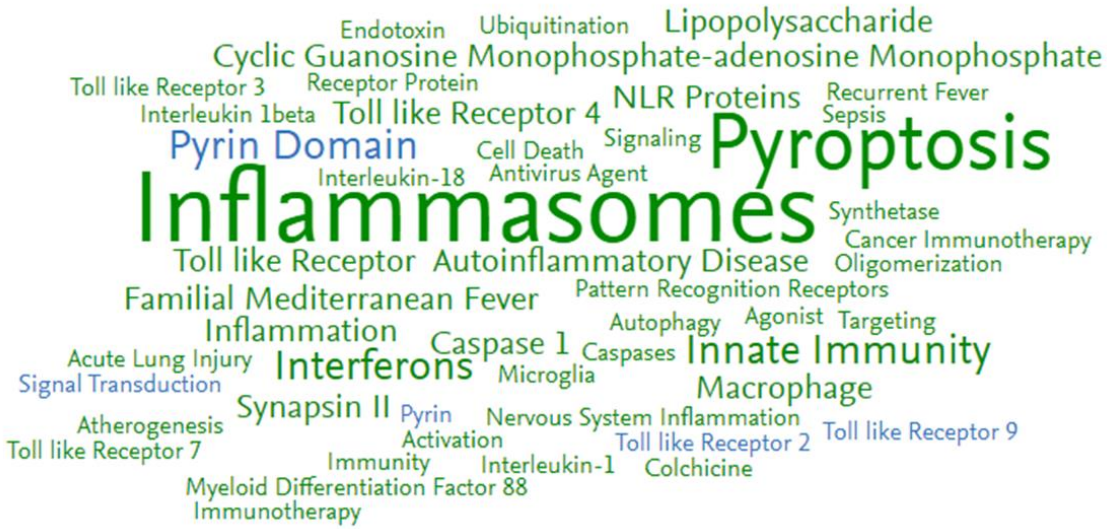


21 counts **4 counts** **1 count** **1 count** **1 count**

Matching authors by their common SciVal Topic Clusters with highest research output (1/18)

Medicine & biochemistry, genetics and molecular biology & immunology and microbiology (Pharmacology / Immunology / Pharmacology (medical) / Immunology and Allergy / General Biochemistry,Genetics and Molecular Biology / General Pharmacology, Toxicology and Pharmaceutics / Toxicology)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Inflammasomes; Inflammation; Toll-Like Receptor 4	91.104	16	3.8	**S. Saber,** Department of Pharmacology, Faculty of Pharmacy	7	1.46	**Rabih Halwani,** Department of Clinical Sciences, College of Medicine & Research Institute for Medical and Health Sciences



Top 50 keyphrases by relevance, based on 16,357 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

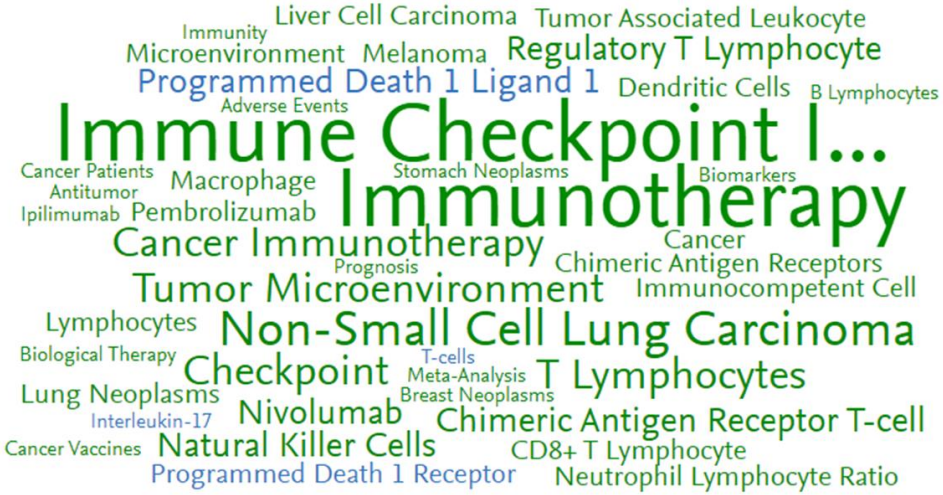


8 counts

Matching authors by their common SciVal Topic Clusters with highest research output (1/19)

Medicine & biochemistry, genetics and molecular biology & immunology and microbiology (Immunology / Pharmacology /Multidisciplinary /Oncology /Pharmacology (medical) /Infectious Diseases / Immunology and Allergy/ Molecular Biology /Pulmonary and Respiratory Medicine / Cancer Research /Genetics / Molecular Medicine)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
T-Lymphocytes; Neoplasms; Immunotherapy	99.666	6	1.44	**Eslam E. Abd El-Fattah,** department of biochemistry, faculty of pharmacy	24	1.13	**Rabih Halwani,** Department of Clinical Sciences, College of Medicine & Research Institute for Medical and Health Sciences/ **Noha Mousaad Elemam,** College of Medicine & Sharjah Institute for Medical Research/ **Rifat Akram Hamoudi,** Clinical Sciences Department, College of Medicine.



Top 50 keyphrases by relevance, based on 88,405 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

3 GOOD HEALTH AND WELL-BEING

23 counts

10 REDUCED INEQUALITIES

1 count

DELTA UNIVERSITY FOR SCIENCE AND TECHNOLOGY

Matching authors by their common SciVal Topic Clusters with highest research output (1/20)

Medicine & biochemistry, genetics and molecular biology (Endocrinology, Diabetes and Metabolism / Pharmacology / Internal Medicine / Pharmaceutical Science / Molecular Medicine / General Biochemistry,Genetics and Molecular Biology / Immunology and Allergy / Pharmacology (medical) / Endocrinology / Drug Discovery)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Insulin; Type 2 Diabetes Mellitus; Glucose	96.254	12	2.76	**Elsayed A. Eid,** Department of endocrinology and Internal Medicine, Faculty of medicine	24	0.89	**Salah E. Abusnana,** College of Medicine & University Hospital Sharjah



The highest counted SDGs in the publications of both universities in this topic cluster

3 GOOD HEALTH AND WELL-BEING

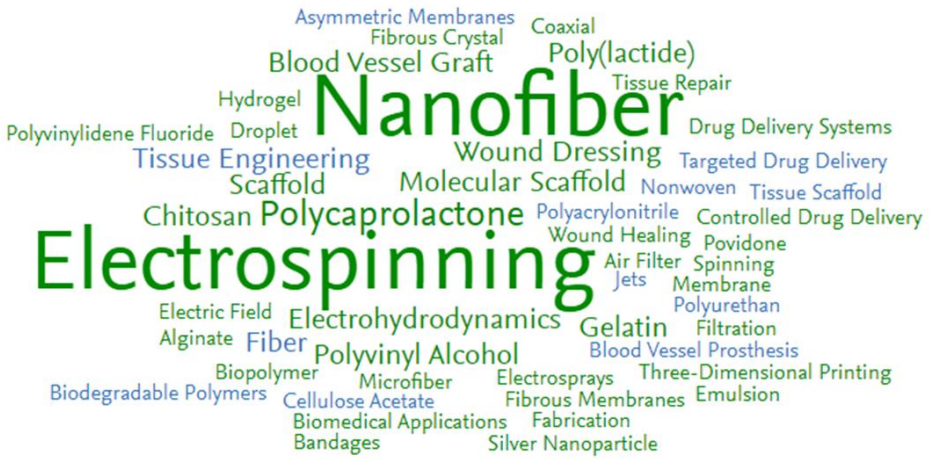
29 counts

Top 50 keyphrases by relevance, based on 41,850 publications between 2019- June 2023

Matching authors by their common SciVal Topic Clusters with highest research output (1/21)

Material science & Engineering & chemical engineering (Mechanical Engineering/ Structural Biology/ Biochemistry/ Molecular Biology/ Artificial Intelligence/ Mechanics of Materials/ Electrical and Electronic Engineering/ Process Chemistry and Technology/ Economics and Econometrics/ Energy/ Engineering and Power Technology/ Renewable Energy, Sustainability and the Environment)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Electrospinning; Nanofibers; Spinning (Fibers)	88.094	1	6.85	**Tarek A. Elkhooly,** Director of nanomedicine research unit, faculty of medicine	4	2.6	**Zahid Hussain**, Department of Pharmaceutics and Pharmaceutical Technology, College of Pharmacy &Research Institute for Medical and Health Sciences



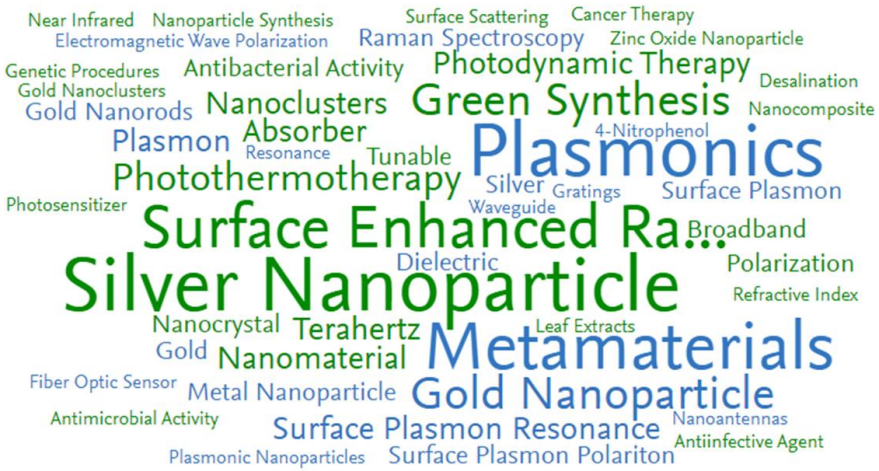
This topic cluster has low number of publications for both universities in the last 3-year period. We can utilize the presence of electrospinning devices in **Functional Nanomaterials Synthesis Laboratory** (W12-016, 013, 125) in University of Sharjah and also in **Nanomedicine Research Unit** (M-402) in Delta University to do joint research with innovative ideas which can be applied in many medical and industrial applications.

Top 50 keyphrases by relevance, based on 10,956 publications between 2019- June 2023

Matching authors by their common SciVal Topic Clusters with highest research output (1/22)

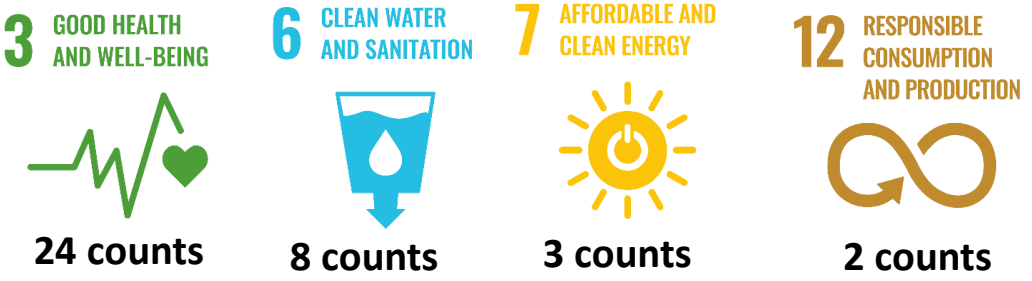
Material science & Physics & Engineering & Chemistry (General Materials Science / General Chemistry / Condensed Matter Physics / Biochemistry / Biotechnology /Surfaces and Interfaces / Electrical and Electronic Engineering / Surfaces, Coatings and Films / General Physics and Astronomy / Electronic, Optical and Magnetic Materials / Pharmacology (medical)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Plasmons; Metamaterials; Surface Plasmon Resonance	99.599	12	2.17	**Tarek A. Elkhooly,** Director of nanomedicine research unit, faculty of medicine	56	1.83	**Mounir Gaidi & Kais Daoudi**, Center for Advanced Materials Research, Research Institute of Sciences and Engineering & Department of Applied Physics and Astronomy/ **Soumya Columbus,** Center for Advanced Materials Research, Research Institute of Sciences and Engineering



Top 50 keyphrases by relevance, based on 84,049 publication between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster



DELTA UNIVERSITY FOR SCIENCE AND TECHNOLOGY

Matching authors by their common SciVal Topic Clusters with highest research output (1/23)

Chemistry & biochemistry, genetics and molecular biology & pharmacology, toxicology and pharmaceutics (Organic Chemistry / Drug Discovery / Molecular Medicine / Pharmaceutical Science /Chemistry (miscellaneous) / Physical and Theoretical Chemistry / Analytical Chemistry / General Chemistry / Pharmacology / Biochemistry / Materials Chemistry)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Synthesis (Chemical); Derivatives; Pyridines	87.291	29	2.17	**Nesma M. Bayoumy**, Department Dental Biomaterials, Faculty of Oral and Dental Medicine / **Reda S. Salama**, Basic Science Department, Faculty of Engineering	26	1.32	**Mohamed H. El-Naggar,** Pure and Applied Chemistry Group, Department of Chemistry, College of Sciences/ **Monther A. Khanfar**, Department of Chemistry, College of Sciences / **Raafat Abd E. El-Awady,** College of Pharmacy, Sharjah Institute for Medical Research



Top 50 keyphrases by relevance, based on 20,781 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

3 GOOD HEALTH AND WELL-BEING

28 counts

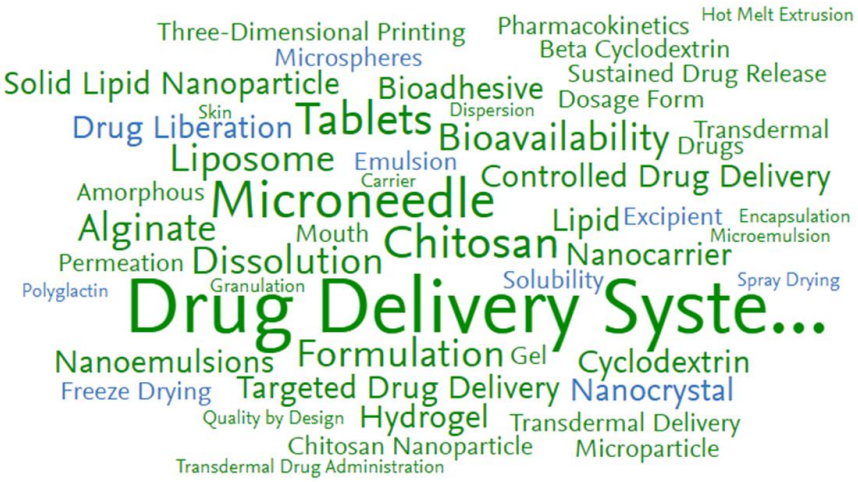
6 CLEAN WATER AND SANITATION

2 counts

Matching authors by their common SciVal Topic Clusters with highest research output (1/24)

pharmacology, toxicology and pharmaceutics & Chemistry & material science (Pharmaceutical Science / Drug Discovery / Pharmacology / Organic Chemistry / Polymers and Plastics / Pharmacology (medical) / General Biochemistry, Genetics and Molecular Biology / General Pharmacology, Toxicology and Pharmaceutics / General Chemistry)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Pharmaceutical Preparations; Nanoparticles; Tablets	96.789	23	2.11	**Tarek A. Elkhooly,** Director of nanomedicine research unit, faculty of medicine/ **Mohamed Nasr,** Department of Pharmaceutics, Faculty of Pharmacy	32	2.01	**Zahid Hussain**, Department of Pharmaceutics and Pharmaceutical Technology, College of Pharmacy &Research Institute for Medical and Health Sciences



Top 50 keyphrases by relevance, based on 33,632 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

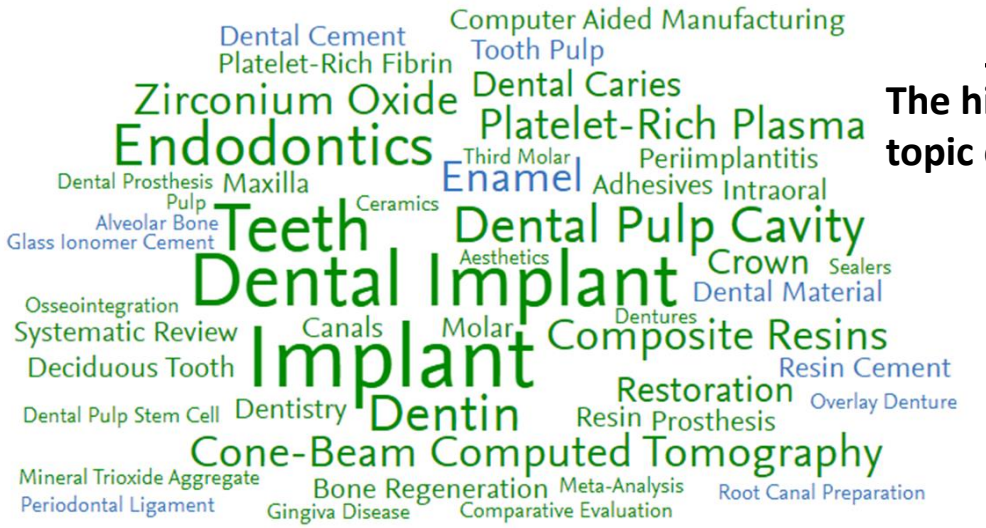
3 GOOD HEALTH AND WELL-BEING

20 counts

Matching authors by their common SciVal Topic Clusters with highest research output (1/25)

Dentistry & medicine (General Dentistry / Oral Surgery / General Materials Science / Surgery / General Medicine / Condensed Matter Physics / Dentistry (miscellaneous) / Otorhinolaryngology / Multidisciplinary / Medicine (miscellaneous) / Periodontics / Biomedical Engineering)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Tooth; Bone And Bones; Dentin	94.916	30	0.85	**Mohammed E. Grawish**, Vice Dean for Post Graduate and Research Affairs, Faculty of dental and oral medicine	145	1.49	**Venkateshbabu Nagendrababu & Mohannad Nassar & Hatem M. El-Damanhoury & Saaid Ayesh Al Shehadat**, Department of Preventive and Restorative Dentistry, College of Dental Medicine



Top 50 keyphrases by relevance, based on 52,572 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

3 GOOD HEALTH AND WELL-BEING

6 counts

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

1 count

17 PARTNERSHIPS FOR THE GOALS

1 count

Matching authors by their common SciVal Topic Clusters with highest research output (1/26)

Medicine (Surgery / General Medicine / Orthopedics and Sports Medicine / Neurology (clinical) / Rehabilitation / Physical Therapy, Sports Therapy and Rehabilitation / Mechanical Engineering / Biophysics / Health Policy)

Topic Cluster	Prominence percentile	Delta University			University of Sharjah		
		Scholarly Output	FWCI	Top Author/s	Scholarly Output	FWCI	Top Author/s
Spine; Patients; Low Back Pain	91.973	7	0.32	**Omar M. Elabd,** Department of Physical Therapy for Musculoskeletal Disorders, Faculty of Physical Therapy	44	0.79	**Ibrahim Moustafa Moustafa,** Department of Physiotherapy, College of Health Sciences & Neuromusculoskeletal Rehabilitation Research Group, RIMHS—Research Institute of Medical and Health Sciences/ **Naser Nawayseh,** Department of Mechanical and Nuclear Engineering, College of Engineering



Top 50 keyphrases by relevance, based on 51,014 publications between 2019- June 2023

The highest counted SDGs in the publications of both universities in this topic cluster

3 GOOD HEALTH AND WELL-BEING

2 counts

Previous research collaboration of Delta University with the University of Sharjah (1/1)

Overall Research performance

Co-authored publications	10
Co-authors at the Delta University	9
Co-authors at the University of Sharjah	14

	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Publications	1202	10	10336
Publications (growth %)	714.7	-	273.5
Authors	380	-	3389
Authors (growth %)	372.4	-	164.5
Citations	10051	37	150091
Citations per Publication	8.4	3.7	14.5
Field-Weighted Citation Impact	1.8	0.54	2.22
Views	22103	202	394513
Views per Publication	18.4	20.2	38.2
Field-Weighted View Impact	1.15	1.21	2.13

Previous research collaboration of Delta University with the University of Sharjah (1/2)

Research performance (breakdown by year)

Entity	Metric	Overall	2017	2018	2019	2020	2021	2022	2023
Co-authored publications	Scholarly Output	10	0	0	0	1	3	3	3
Delta University for Science and Technology (total output)	Scholarly Output	1202	34	67	80	122	277	436	186
University of Sharjah (total output)	Scholarly Output	10336	631	761	1075	1537	2357	2718	1257
Co-authored publications	Citation Count	37	0	0	0	32	3	1	1
Delta University for Science and Technology (total output)	Citation Count	10051	764	976	1133	1503	3439	2089	147
University of Sharjah (total output)	Citation Count	150091	9602	30814	24428	38620	31502	14082	1043
Co-authored publications	Citations per Publication	3.7	0	0	0	32	1	0.3	0.3
Delta University for Science and Technology (total output)	Citations per Publication	8.4	22.5	14.6	14.2	12.3	12.4	4.8	0.8
University of Sharjah (total output)	Citations per Publication	14.5	15.2	40.5	22.7	25.1	13.4	5.2	0.8
Co-authored publications	Field-Weighted Citation Impact	0.54	0	0	0	1.41	0.3	0.16	0.86
Delta University for Science and Technology (total output)	Field-Weighted Citation Impact	1.8	1.05	1.09	1.11	1.42	1.93	2.09	1.88
University of Sharjah (total output)	Field-Weighted Citation Impact	2.22	0.97	3	1.86	2.39	2.53	2.22	1.94

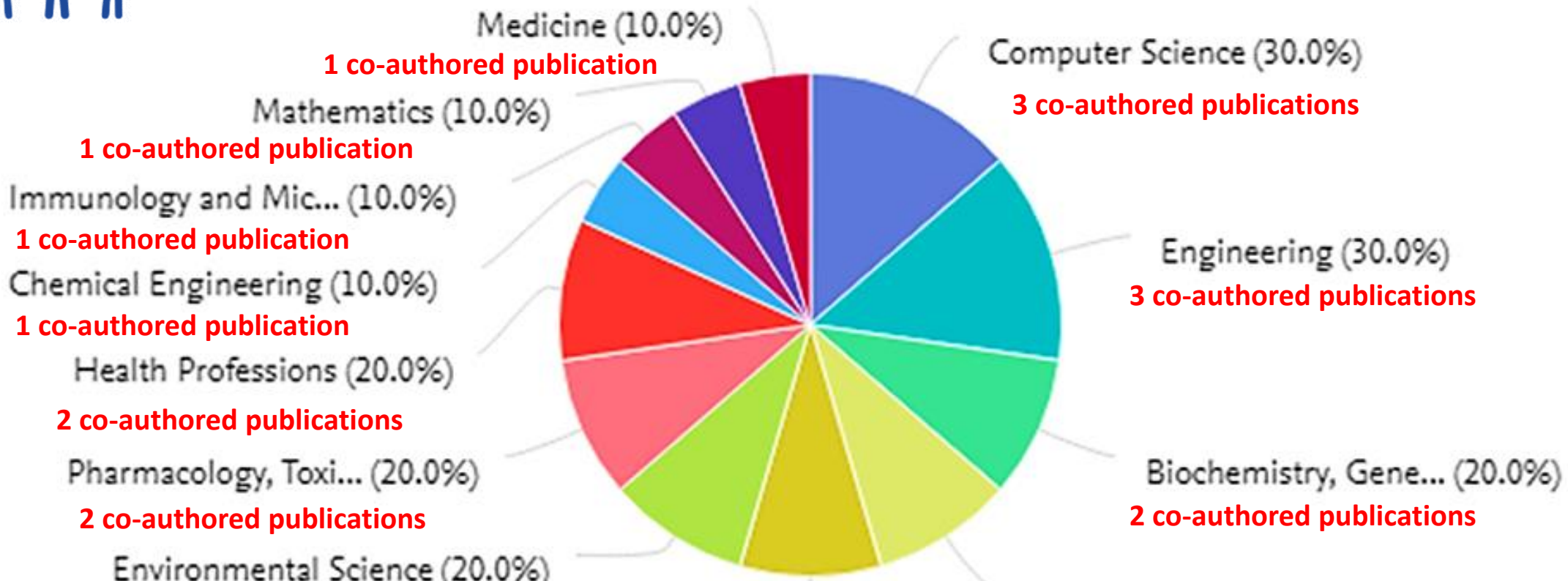
Previous research collaboration of Delta University with the University of Sharjah (1/3)

Co-authors at the Delta University for Science and Technology (9)

Author	Co-authored publications	Citations	Citations per Publication	h-index	Co-authors at the University of Sharjah	Top 3 co-authors at the University of Sharjah
Mutawea, Maha	2	4	2	1	1	Metawa, Noura (2 co-authored publications)
Behiry, Mohamed A.	2	0	0	1	1	Shousha, Tamer Mohamed (2 co-authored publications)
Metawea, Maha	2	0	0	0	1	**Metawa, Noura** (2 co-authored publications)
El-Gamal, Mohammed I.	1	32	32	22	2	Omar, Hany A. (1 co-authored publication); Zaher, Dana M. (1)
Kabeel, A. E.	1	1	1	73	1	Said, Z. (1 co-authored publication)
Abdelsamee, Mohamed Y.Abdelhamid	1	0	0	0	1	**Shousha, Tamer Mohamed** (1 co-authored publication)
Shaaban, Ahmed A.	1	0	0	0	9	Elmoselhi, Adel B. (1 co-authored publication); Saleh, Mohamed A. (1); Talaat, Iman M. (1)
Shabaan, Ahmed A.	1	0	0	1	1	Saleh, Mohamed A. (1 co-authored publication)
Shehatou, George S.G.	1	0	0	13	9	**Elmoselhi, Adel B.** (1 co-authored publication); **Saleh, Mohamed A.** (1); **Talaat, Iman M.** (1)

Previous research collaboration of Delta University with the University of Sharjah (1/4)

Areas of collaboration



Subject research areas with potential research collaboration (1/1)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Computer Science		**195**	**3**	**2286**
Computer Science	Computer Science Applications	82	1	796
	Computer Networks and Communications	45	1	799
	Computer Science (miscellaneous)	43	1	150
	General Computer Science	32	1	288
	Artificial Intelligence	26	1	719
	Information Systems	20	1	395
	Hardware and Architecture	24	0	337
	Software	20	0	298
	Signal Processing	13	0	269
	Computer Vision and Pattern Recognition	7	0	91
	Computational Theory and Mathematics	3	0	42
	Human-Computer Interaction	2	0	65
	Computer Graphics and Computer-Aided Design	0	0	29

***Potential areas of research collaboration are highlighted in yellow based on the performance, expertise and facilities. Data exported from SciVal in the year range from 2017 to 24 May 2023**

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Subject research areas with potential research collaboration (1/2)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Engineering		**330**	**3**	**3207**
Engineering	General Engineering	66	1	442
	Safety, Risk, Reliability and Quality	15	1	302
	Biomedical Engineering	14	1	59
	Electrical and Electronic Engineering	128	0	1244
	Civil and Structural Engineering	46	0	375
	Mechanics of Materials	43	0	177
	Building and Construction	41	0	383
	Engineering (miscellaneous)	39	0	157
	Mechanical Engineering	26	0	561
	Industrial and Manufacturing Engineering	16	0	555
	Architecture	15	0	129
	Control and Systems Engineering	10	0	405
	Media Technology	4	0	82
	Ocean Engineering	4	0	39
	Automotive Engineering	3	0	67
	Aerospace Engineering	1	0	65
	Computational Mechanics	1	0	20

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Subject research areas with potential research collaboration (1/3)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Pharmacology, Toxicology and Pharmaceutics		**186**	**2**	**543**
Pharmacology, Toxicology and Pharmaceutics	Pharmaceutical Science	62	1	223
	Drug Discovery	44	1	213
	General Pharmacology, Toxicology and Pharmaceutics	30	1	85
	Pharmacology	86	0	192
	Toxicology	21	0	37
	Pharmacology, Toxicology and Pharmaceutics (miscellaneous)	6	0	13

Subject research areas with potential research collaboration (1/4)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Biochemistry, Genetics and Molecular Biology		**179**	**2**	**980**
Biochemistry, Genetics and Molecular Biology	General Biochemistry,Genetics and Molecular Biology	34	1	164
	Biotechnology	22	1	92
	Biochemistry	60	0	241
	Molecular Biology	41	0	233
	Molecular Medicine	30	0	136
	Clinical Biochemistry	22	0	63
	Cell Biology	21	0	81
	Biophysics	14	0	51
	Physiology	12	0	32
	Cancer Research	11	0	111
	Genetics	11	0	82
	Endocrinology	5	0	48
	Structural Biology	4	0	20
	Aging	2	0	7
	Developmental Biology	1	0	19
	Biochemistry, Genetics and Molecular Biology (miscellaneous)	1	0	12

Subject research areas with potential research collaboration (1/5)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Environmental Science		**117**	**2**	**1052**
Environmental Science	Health, Toxicology and Mutagenesis	48	1	97
	Waste Management and Disposal	6	1	322
	Environmental Chemistry	49	0	171
	Pollution	46	0	253
	Water Science and Technology	20	0	105
	Environmental Engineering	18	0	185
	Management, Monitoring, Policy and Law	17	0	230
	General Environmental Science	17	0	183
	Environmental Science (miscellaneous)	7	0	95
	Ecology	3	0	46
	Global and Planetary Change	0	0	10
	Nature and Landscape Conservation	0	0	10
	Ecological Modeling	0	0	6

Subject research areas with potential research collaboration (1/6)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Health Professions		**23**	**2**	**189**
Health Professions	Physical Therapy, Sports Therapy and Rehabilitation	15	2	41
	Medical Laboratory Technology	3	0	7
	Pharmacy	2	0	56
	Complementary and Manual Therapy	2	0	0
	Radiological and Ultrasound Technology	1	0	31
	Health Information Management	1	0	25
	Chiropractics	1	0	1
	Health Professions (miscellaneous)	0	0	20
	General Health Professions	0	0	5
	Occupational Therapy	0	0	1
	Optometry	0	0	1
	Podiatry	0	0	1
	Speech and Hearing	0	0	1

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Subject research areas with potential research collaboration (1/7)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Business, Management and Accounting		**22**	**2**	**676**
Business, Management and Accounting	General Business,Management and Accounting	5	2	96
	Business, Management and Accounting (miscellaneous)	8	0	45
	Strategy and Management	7	0	339
	Business and International Management	2	0	148
	Tourism, Leisure and Hospitality Management	1	0	54
	Accounting	1	0	44
	Management of Technology and Innovation	0	0	73
	Marketing	0	0	59
	Organizational Behavior and Human Resource Management	0	0	51
	Management Information Systems	0	0	46
	Industrial Relations	0	0	12
Economics, Econometrics and Finance		**9**	**2**	**329**
Economics, Econometrics and Finance	General Economics,Econometrics and Finance	6	2	75
	Economics and Econometrics	3	0	168
	Finance	0	0	77
	Economics, Econometrics and Finance (miscellaneous)	0	0	56

***We encourage collaboration in the blue highlighted research subjects**

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Subject research areas with potential research collaboration (1/8)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Medicine		**160**	**1**	**1756**
Medicine	General Medicine	21	1	285
	Pharmacology (medical)	30	0	129
	Infectious Diseases	20	0	125
	Microbiology (medical)	18	0	92
	Immunology and Allergy	13	0	93
	Oncology	11	0	133
	Medicine (miscellaneous)	10	0	69
	Endocrinology, Diabetes and Metabolism	8	0	110
	Otorhinolaryngology	7	0	49
	Psychiatry and Mental Health	7	0	47
	Physiology (medical)	7	0	9
	Surgery	6	0	104
	Rehabilitation	6	0	33
	Histology	6	0	14
	Radiology, Nuclear Medicine and Imaging	5	0	70
	Pathology and Forensic Medicine	5	0	16
	Biochemistry (medical)	5	0	9
	Neurology (clinical)	4	0	46
	Orthopedics and Sports Medicine	4	0	42
	Health Informatics	3	0	170

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Subject research areas with potential research collaboration (1/9)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Medicine	Internal Medicine	3	0	47
	Complementary and Alternative Medicine	3	0	20
	Anatomy	3	0	8
	Public Health, Environmental and Occupational Health	2	0	211
	Hematology	2	0	15
	Gastroenterology	2	0	13
	Urology	2	0	8
	Health Policy	1	0	68
	Genetics (clinical)	1	0	38
	Cardiology and Cardiovascular Medicine	1	0	33
	Pediatrics, Perinatology and Child Health	1	0	31
	Dermatology	1	0	24
	Rheumatology	1	0	9
	Nephrology	1	0	7
	Geriatrics and Gerontology	1	0	6
	Hepatology	1	0	6
	Pulmonary and Respiratory Medicine	0	0	48
	Obstetrics and Gynecology	0	0	33
	Epidemiology	0	0	29
	Reproductive Medicine	0	0	12
	Emergency Medicine	0	0	8
	Ophthalmology	0	0	5
	Family Practice	0	0	4
	Anesthesiology and Pain Medicine	0	0	3
	Critical Care and Intensive Care Medicine	0	0	3
	Embryology	0	0	2

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Subject research areas with potential research collaboration (1/10)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Dentistry		34	0	317
Dentistry	General Dentistry	24	0	274
	Oral Surgery	9	0	29
	Orthodontics	1	0	7
	Periodontics	1	0	6
	Dentistry (miscellaneous)	0	0	20
	Dental Hygiene	0	0	3
	Dental Assisting	0	0	1

Subject research areas with potential research collaboration (1/11)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Mathematics		151	1	944
Mathematics	Applied Mathematics	13	1	276
	Logic	13	1	7
	Mathematics (miscellaneous)	1	1	20
	General Mathematics	51	0	187
	Modeling and Simulation	48	0	215
	Statistics and Probability	21	0	25
	Control and Optimization	15	0	237
	Mathematical Physics	14	0	55
	Geometry and Topology	13	0	16
	Analysis	12	0	65
	Algebra and Number Theory	11	0	30
	Computational Mathematics	6	0	26
	Theoretical Computer Science	4	0	60
	Numerical Analysis	4	0	28
	Discrete Mathematics and Combinatorics	0	0	16

Subject research areas with potential research collaboration (1/12)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Chemical Engineering		104	1	750
Chemical Engineering	Process Chemistry and Technology	22	1	289
	General Chemical Engineering	47	0	207
	Fluid Flow and Transfer Processes	19	0	146
	Bioengineering	13	0	58
	Catalysis	11	0	82
	Colloid and Surface Chemistry	7	0	13
	Chemical Engineering (miscellaneous)	6	0	42
	Filtration and Separation	2	0	26
	Chemical Health and Safety	1	0	6
Immunology and Microbiology		48	1	333
Immunology and Microbiology	General Immunology and Microbiology	6	1	76
	Microbiology	19	0	118
	Immunology	19	0	97
	Virology	4	0	30
	Applied Microbiology and Biotechnology	4	0	25
	Parasitology	4	0	22
	Immunology and Microbiology (miscellaneous)	0	0	6

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Subject research areas with potential research collaboration (1/13)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Materials Science		211	0	1177
Materials Science	General Materials Science	68	0	569
	Electronic, Optical and Magnetic Materials	45	0	351
	Biomaterials	44	0	68
	Materials Chemistry	30	0	208
	Materials Science (miscellaneous)	27	0	33
	Polymers and Plastics	26	0	47
	Surfaces, Coatings and Films	20	0	140
	Ceramics and Composites	12	0	127
	Metals and Alloys	11	0	70
Chemistry		210	0	757
Chemistry	Organic Chemistry	63	0	245
	General Chemistry	62	0	296
	Analytical Chemistry	55	0	110
	Physical and Theoretical Chemistry	40	0	219
	Spectroscopy	39	0	102
	Chemistry (miscellaneous)	23	0	73
	Inorganic Chemistry	19	0	86
	Electrochemistry	4	0	39

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Subject research areas with potential research collaboration (1/14)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Physics and Astronomy		151	0	1191
Physics and Astronomy	Atomic and Molecular Physics, and Optics	47	0	177
	Condensed Matter Physics	46	0	408
	Instrumentation	36	0	223
	General Physics and Astronomy	24	0	189
	Physics and Astronomy (miscellaneous)	13	0	63
	Surfaces and Interfaces	10	0	42
	Statistical and Nonlinear Physics	9	0	22
	Radiation	2	0	63
	Nuclear and High Energy Physics	1	0	142
	Astronomy and Astrophysics	0	0	57
	Acoustics and Ultrasonics	0	0	11
Energy		104	0	1286
Energy	Renewable Energy, Sustainability and the Environment	95	0	899
	Energy Engineering and Power Technology	55	0	806
	Fuel Technology	17	0	262
	Nuclear Energy and Engineering	11	0	125
	Energy (miscellaneous)	5	0	64
	General Energy	2	0	169

Subject research areas with potential research collaboration (1/15)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Social Sciences		35	0	878
Social Sciences	Geography, Planning and Development	16	0	182
	Education	5	0	162
	Library and Information Sciences	5	0	38
	Transportation	4	0	51
	Urban Studies	3	0	31
	Safety Research	2	0	19
	Law	1	0	104
	General Social Sciences	1	0	65
	Linguistics and Language	1	0	41
	Public Administration	1	0	22
	Sociology and Political Science	0	0	89
	Communication	0	0	74
	Social Sciences (miscellaneous)	0	0	61
	Cultural Studies	0	0	47
	Health (social science)	0	0	43
	Political Science and International Relations	0	0	43
	Development	0	0	34
	Human Factors and Ergonomics	0	0	9
	Archeology	0	0	5
	Gender Studies	0	0	4
	Demography	0	0	3
	Anthropology	0	0	2
	Life-span and Life-course Studies	0	0	2

Subject research areas with potential research collaboration (1/16)

Subject Area	Subcategory	Delta University (total output)	Co-authored publications	University of Sharjah (total output)
Arts and Humanities		4	0	259
Arts and Humanities	Arts and Humanities (miscellaneous)	3	0	28
	Language and Linguistics	1	0	72
	History	0	0	59
	Literature and Literary Theory	0	0	48
	Religious Studies	0	0	36
	General Arts and Humanities	0	0	34
	Philosophy	0	0	33
	Archeology (arts and humanities)	0	0	23
	Visual Arts and Performing Arts	0	0	15
	Conservation	0	0	12
	Museology	0	0	4
	History and Philosophy of Science	0	0	3
	Classics	0	0	1
	Music	0	0	1

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Summary

Suggested topic clusters to start with

Life Sciences & Medicine



Engineering & Technology

01

Pharmaceutical Preparations; Nanoparticles; Tablets

Slide number 42

Faculty of pharmacy

02

Tooth; Bone And Bones; Dentin

Slide number 43

Faculty of Dentistry

03

Spine; Patients; Low Back Pain

Slide number 44

Faculty of physical therapy

04

Membranes; Desalination; Ultrafiltration

Slide number 23

Faculty of engineering

05

Wireless Sensor Networks; Sensor Nodes; Routing Protocols

Slide number 26

Faculty of AI

06

Electrospinning; Nanofibers; Spinning (Fibers)

Slide number 39

Research centres



THANK YOU

Delta University for science and Technology

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