HÃ¼seyin Enis Karahan

List of Publications by Year
in descending order

125 papers	14,584 citations	29994 54 h-index	18606 119 g-index
126 all docs	126 docs citations	126 times ranked	18413 citing authors

#	Article	IF	Citations
1	Fiber-shaped micro-supercapacitors. , 2022, , 257-271.		1
2	Assemble 2D redox-active covalent organic framework/graphene hybrids as high-performance capacitive materials. Carbon, 2022, 190, 412-421.	5.4	24
3	How Is Cycle Life of Three-Dimensional Zinc Metal Anodes with Carbon Fiber Backbones Affected by Depth of Discharge and Current Density in Zincâ€“Ion Batteries?. ACS Applied Materials & Interfaces, 2022, 14, 12323-12330.	4.0	27
4	Structural colour enhanced microfluidics. Nature Communications, 2022, 13, 2281.	5.8	9
5	Toward Flexible Zincâ€Ion Hybrid Capacitors with Superhigh Energy Density and Ultralong Cycling Life: The Pivotal Role of ZnCl₂ Saltâ€Based Electrolytes. Angewandte Chemie, 2021, 133, 1003-1010.	1.6	130
6	Wetting- and fouling-resistant hollow fiber membranes for dissolved methane recovery from anaerobic wastewater treatment effluents. Journal of Membrane Science, 2021, 617, 118621.	4.1	15
7	Carbon nanotubes for flexible batteries: recent progress and future perspective. National Science Review, 2021, 8, nwaa261.	4.6	71
8	Toward Flexible Zincâ€Ion Hybrid Capacitors with Superhigh Energy Density and Ultralong Cycling Life: The Pivotal Role of ZnCl₂ Saltâ€Based Electrolytes. Angewandte Chemie - International Edition, 2021, 60, 990-997.	7.2	215
9	One-Dimensional van der Waals Heterostructures as Efficient Metal-Free Oxygen Electrocatalysts. ACS Nano, 2021, 15, 3309-3319.	7.3	79
10	Cobalt sulfide catalysts for single-walled carbon nanotube synthesis. Diamond and Related Materials, 2021, 114, 108288.	1.8	8
11	Rechargeable zinc-air batteries with neutral electrolytes: Recent advances, challenges, and prospects. EnergyChem, 2021, 3, 100055.	10.1	59
12	Carbon composite membranes for thermal-driven membrane processes. Carbon, 2021, 179, 600-626.	5.4	12
13	The tripartite role of 2D covalent organic frameworks in graphene-based organic solvent nanofiltration membranes. Matter, 2021, 4, 2953-2969.	5.0	24
14	Carbon nanotubes integrated into polyamide membranes by support pre-infiltration improve the desalination performance. Carbon, 2021, 185, 546-557.	5.4	14
15	Overcoming humidity-induced swelling of graphene oxide-based hydrogen membranes using charge-compensating nanodiamonds. Nature Energy, 2021, 6, 1176-1187.	19.8	37
16	Prussian blue, its analogues and their derived materials for electrochemical energy storage and conversion. Energy Storage Materials, 2020, 25, 585-612.	9.5	181
17	1D Supercapacitors for Emerging Electronics: Current Status and Future Directions. Advanced Materials, 2020, 32, e1902387.	11.1	158
18	A Flexible Rechargeable Zincâ€“Air Battery with Excellent Lowâ€Temperature Adaptability. Angewandte Chemie - International Edition, 2020, 59, 4793-4799.	7.2	217

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19	A Flexible Rechargeable Zincâ€“Air Battery with Excellent Lowâ€Temperature Adaptability. Angewandte Chemie, 2020, 132, 4823-4829.	1.6	57
20	Interfacial engineering of graphenic carbon electrodes by antimicrobial polyhexamethylene guanidine hydrochloride for ultrasensitive bacterial detection. Carbon, 2020, 159, 185-194.	5.4	11
21	Nanomaterials-based photothermal therapy and its potentials in antibacterial treatment. Journal of Controlled Release, 2020, 328, 251-262.	4.8	325
22	Octahedral Coordinated Trivalent Cobalt Enriched Multimetal Oxygenâ€Evolution Catalysts. Advanced Energy Materials, 2020, 10, 2002593.	10.2	47
23	2D Material Based Advanced Membranes for Separations in Organic Solvents. Small, 2020, 16, e2003400.	5.2	31
24	A graphene-covalent organic framework hybrid for high-performance supercapacitors. Energy Storage Materials, 2020, 32, 448-457.	9.5	103
25	Electrocatalytic hydrogen evolution under neutral pH conditions: current understandings, recent advances, and future prospects. Energy and Environmental Science, 2020, 13, 3185-3206.	15.6	225
26	Synthesis of (9,8) single-walled carbon nanotubes on CoSO4/SiO2 catalysts: The effect of Co mass loadings. Carbon, 2020, 169, 288-296.	5.4	9
27	Biomass-derived nanocarbon materials for biological applications: challenges and prospects. Journal of Materials Chemistry B, 2020, 8, 9668-9678.	2.9	16
28	Metallicityâ€Dependent Ultrafast Water Transport in Carbon Nanotubes. Small, 2020, 16, e1907575.	5.2	23
29	Dualâ€Template Pore Engineering of Whey Powderâ€Derived Carbon as an Efficient Oxygen Reduction Reaction Electrocatalyst for Primary Zincâ€Air Battery. Chemistry - an Asian Journal, 2020, 15, 1881-1889.	1.7	3
30	Catalytic activity atlas of ternary Coâ€“Feâ€“V metal oxides for the oxygen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 15951-15961.	5.2	43
31	MXene Materials for Designing Advanced Separation Membranes. Advanced Materials, 2020, 32, e1906697.	11.1	295
32	The on-demand engineering of metal-doped porous carbon nanofibers as efficient bifunctional oxygen catalysts for high-performance flexible Znâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 7297-7308.	5.2	41
33	Cardanol-derived cationic surfactants enabling the superior antibacterial activity of single-walled carbon nanotubes. Nanotechnology, 2020, 31, 265603.	1.3	6
34	Drying graphene hydrogel fibers for capacitive energy storage. Carbon, 2020, 164, 100-110.	5.4	43
35	Influence of graphene oxide lateral size on the properties and performances of forward osmosis membrane. Desalination, 2020, 484, 114421.	4.0	58
36	Realizing small-flake graphene oxide membranes for ultrafast size-dependent organic solvent nanofiltration. Science Advances, 2020, 6, eaaz9184.	4.7	177

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37	Enhanced O2/N2 Separation of Mixed-Matrix Membrane Filled with Pluronic-Compatibilized Cobalt Phthalocyanine Particles. Membranes, 2020, 10, 75.	1.4	20
38	Graphene oxide laminates intercalated with 2D covalent-organic frameworks as a robust nanofiltration membrane. Journal of Materials Chemistry A, 2020, 8, 9713-9725.	5.2	46
39	Scalable fabrication of graphene-based laminate membranes for liquid and gas separations by crosslinking-induced gelation and doctor-blade casting. Carbon, 2019, 155, 129-137.	5.4	40
40	Graphene-Based Membranes for CO2/CH4 Separation: Key Challenges and Perspectives. Applied Sciences (Switzerland), 2019, 9, 2784.	1.3	29
41	Sub-Ã...ngstrÃ¶m-level engineering of ultramicroporous carbons for enhanced sulfur hexafluoride capture. Carbon, 2019, 155, 56-64.	5.4	22
42	Flexible Zincâ€ion Hybrid Fiber Capacitors with Ultrahigh Energy Density and Long Cycling Life for Wearable Electronics. Small, 2019, 15, e1903817.	5.2	143
43	Ultrathin nickel boride nanosheets anchored on functionalized carbon nanotubes as bifunctional electrocatalysts for overall water splitting. Journal of Materials Chemistry A, 2019, 7, 764-774.	5.2	123
44	Defective crystalline molybdenum phosphides as bifunctional catalysts for hydrogen evolution and hydrazine oxidation reactions during water splitting. Inorganic Chemistry Frontiers, 2019, 6, 2686-2695.	3.0	27
45	Biofilm-Templated Heteroatom-Doped Carbonâ€“Palladium Nanocomposite Catalyst for Hexavalent Chromium Reduction. ACS Applied Materials & Interfaces, 2019, 11, 24018-24026.	4.0	24
46	Recent advances in nanomaterial-modified polyamide thin-film composite membranes for forward osmosis processes. Journal of Membrane Science, 2019, 584, 20-45.	4.1	128
47	PDMS-coated porous PVDF hollow fiber membranes for efficient recovery of dissolved biomethane from anaerobic effluents. Journal of Membrane Science, 2019, 584, 333-342.	4.1	44
48	Nanocarbon materials in water disinfection: state-of-the-art and future directions. Nanoscale, 2019, 11, 9819-9839.	2.8	35
49	A core-sheath holey graphene/graphite composite fiber intercalated with MoS2 nanosheets for high-performance fiber supercapacitors. Electrochimica Acta, 2019, 305, 493-501.	2.6	51
50	The roles of metal-organic frameworks in modulating water permeability of graphene oxide-based carbon membranes. Carbon, 2019, 148, 277-289.	5.4	50
51	Big to Small: Ultrafine Mo₂C Particles Derived from Giant Polyoxomolybdate Clusters for Hydrogen Evolution Reaction. Small, 2019, 15, e1900358.	5.2	53
52	2D materials for 1D electrochemical energy storage devices. Energy Storage Materials, 2019, 19, 102-123.	9.5	71
53	Ultralow-platinum-loading nanocarbon hybrids for highly sensitive hydrogen peroxide detection. Sensors and Actuators B: Chemical, 2019, 283, 304-311.	4.0	27
54	Enabling highly efficient, flexible and rechargeable quasi-solid-state zn-air batteries via catalyst engineering and electrolyte functionalization. Energy Storage Materials, 2019, 20, 234-242.	9.5	115

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55	Cobalt Nanoparticles Confined in Carbon Cages Derived from Zeolitic Imidazolate Frameworks as Efficient Oxygen Electrocatalysts for Zincâ€Air Batteries. Batteries and Supercaps, 2019, 2, 355-363.	2.4	16
56	Assembly of pi-functionalized quaternary ammonium compounds with graphene hydrogel for efficient water disinfection. Journal of Colloid and Interface Science, 2019, 535, 149-158.	5.0	41
57	A carbon science perspective in 2018: Current achievements and future challenges. Carbon, 2018, 132, 785-801.	5.4	80
58	Graphene Materials in Antimicrobial Nanomedicine: Current Status and Future Perspectives. Advanced Healthcare Materials, 2018, 7, e1701406.	3.9	166
59	Ultrafast hydrothermal assembly of nanocarbon microfibers in near-critical water for 3D microsupercapacitors. Carbon, 2018, 132, 698-708.	5.4	26
60	Antimicrobial graphene materials: the interplay of complex materials characteristics and competing mechanisms. Biomaterials Science, 2018, 6, 766-773.	2.6	37
61	Milk powder-derived bifunctional oxygen electrocatalysts for rechargeable Zn-air battery. Energy Storage Materials, 2018, 11, 134-143.	9.5	45
62	Selective synthesis of single walled carbon nanotubes on metal (iron, nickel or cobalt) sulfate-based catalysts. Carbon, 2018, 129, 128-136.	5.4	21
63	Metal-free bifunctional carbon electrocatalysts derived from zeolitic imidazolate frameworks for efficient water splitting. Materials Chemistry Frontiers, 2018, 2, 102-111.	3.2	57
64	Membrane-based technologies for post-treatment of anaerobic effluents. Npj Clean Water, 2018, 1, .	3.1	30
65	Recent Advances in Materials and Design of Electrochemically Rechargeable Zincâ€“Air Batteries. Small, 2018, 14, e1801929.	5.2	192
66	Polycondensation of a Perylene Bisimide Derivative and L-Malic Acid as Water-Soluble Conjugates for Fluorescent Labeling of Live Mammalian Cells. Polymers, 2018, 10, 559.	2.0	9
67	Antimicrobial Nanomedicine: Graphene Materials in Antimicrobial Nanomedicine: Current Status and Future Perspectives (Adv. Healthcare Mater. 13/2018). Advanced Healthcare Materials, 2018, 7, 1870050.	3.9	6
68	Harnessing Filler Materials for Enhancing Biogas Separation Membranes. Chemical Reviews, 2018, 118, 8655-8769.	23.0	239
69	Nanoâ€RuO₂â€Decorated Holey Graphene Composite Fibers for Microâ€Supercapacitors with Ultrahigh Energy Density. Small, 2018, 14, e1800582.	5.2	113
70	A hierarchically porous nickelâ€“copper phosphide nano-foam for efficient electrochemical splitting of water. Nanoscale, 2017, 9, 4401-4408.	2.8	110
71	Controlling water transport in carbon nanotubes. Nano Today, 2017, 14, 13-15.	6.2	30
72	Hydrothermal assembly of micro-nano-integrated core-sheath carbon fibers for high-performance all-carbon micro-supercapacitors. Energy Storage Materials, 2017, 9, 221-228.	9.5	34

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73	Cold Chain-Free Storable Hydrogel for Infant-Friendly Oral Delivery of Amoxicillin for the Treatment of Pneumococcal Pneumonia. ACS Applied Materials & Interfaces, 2017, 9, 18440-18449.	4.0	10
74	Hydrogen evolution reaction activity of nickel phosphide is highly sensitive to electrolyte pH. Journal of Materials Chemistry A, 2017, 5, 20390-20397.	5.2	98
75	Novel Poly(l-lactide)/graphene oxide films with improved mechanical flexibility and antibacterial activity. Journal of Colloid and Interface Science, 2017, 507, 344-352.	5.0	33
76	Amorphous Bimetallic Oxideâ€“Graphene Hybrids as Bifunctional Oxygen Electrocatalysts for Rechargeable Znâ€“Air Batteries. Advanced Materials, 2017, 29, 1701410.	11.1	243
77	Antibacterial performance of graphene oxide complemented with pluronic F-127 on physiologically mature gram-negative bacteria. , 2017, , .		0
78	Sandwich-Architectured Poly(lactic acid)â€“Graphene Composite Food Packaging Films. ACS Applied Materials & Interfaces, 2016, 8, 9994-10004.	4.0	146
79	Probing the Diameter Limit of Single Walled Carbon Nanotubes in SWCNT: Fullerene Solar Cells. Advanced Energy Materials, 2016, 6, 1600890.	10.2	50
80	Carbon nanomaterials for advancing separation membranes: A strategic perspective. Carbon, 2016, 109, 694-710.	5.4	189
81	Bacterial physiology is a key modulator of the antibacterial activity of graphene oxide. Nanoscale, 2016, 8, 17181-17189.	2.8	42
82	â€œSmart poisoningâ€•of Co/SiO2catalysts by sulfidation for chirality-selective synthesis of (9,8) single-walled carbon nanotubes. Nanoscale, 2016, 8, 17705-17713.	2.8	32
83	Synergism of Water Shock and a Biocompatible Block Copolymer Potentiates the Antibacterial Activity of Graphene Oxide. Small, 2016, 12, 951-962.	5.2	30
84	Microbe-derived carbon materials for electrical energy storage and conversion. Journal of Energy Chemistry, 2016, 25, 191-198.	7.1	44
85	Carbon science in 2016: Status, challenges and perspectives. Carbon, 2016, 98, 708-732.	5.4	261
86	Space-confined assembly of all-carbon hybrid fibers for capacitive energy storage: realizing a built-to-order concept for micro-supercapacitors. Energy and Environmental Science, 2016, 9, 611-622.	15.6	94
87	Shadow-casted ultrathin surface coatings of titanium and titanium/silicon oxide sol particles via ultrasound-assisted deposition. Ultrasonics Sonochemistry, 2016, 31, 481-489.	3.8	3
88	Textile energy storage: Structural design concepts, material selection and future perspectives. Energy Storage Materials, 2016, 3, 123-139.	9.5	128
89	Perylene bisimide-incorporated water-soluble polyurethanes for living cell fluorescence labeling. Polymer, 2016, 82, 172-180.	1.8	14
90	Allâ€Carbon Nanoarchitectures as Highâ€Performance Separation Membranes with Superior Stability. Advanced Functional Materials, 2015, 25, 7348-7359.	7.8	248

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91	Transforming Pristine Carbon Fiber Tows into High Performance Solidâ€State Fiber Supercapacitors. Advanced Materials, 2015, 27, 4895-4901.	11.1	193
92	(9,8) Singleâ€Walled Carbon Nanotube Enrichment via Aqueous Twoâ€Phase Separation and Their Thinâ€Film Transistor Applications. Advanced Electronic Materials, 2015, 1, 1500151.	2.6	23
93	E. coli-derived carbon with nitrogen and phosphorus dual functionalities for oxygen reduction reaction. Catalysis Today, 2015, 249, 228-235.	2.2	18
94	Ternary Hybrids of Amorphous Nickel Hydroxideâ€“Carbon Nanotubeâ€Conducting Polymer for Supercapacitors with High Energy Density, Excellent Rate Capability, and Long Cycle Life. Advanced Functional Materials, 2015, 25, 1063-1073.	7.8	288
95	A high-performance metal-free hydrogen-evolution reaction electrocatalyst from bacterium derived carbon. Journal of Materials Chemistry A, 2015, 3, 7210-7214.	5.2	75
96	All-carbon solid-state yarn supercapacitors from activated carbon and carbon fibers for smart textiles. Materials Horizons, 2015, 2, 598-605.	6.4	120
97	Simultaneous DLSâ€“SLS study of titanium and titanium/silicon oxide sol growth. Journal of Sol-Gel Science and Technology, 2015, 76, 251-259.	1.1	3
98	Nickel hydroxideâ€“carbon nanotube nanocomposites as supercapacitor electrodes: crystallinity dependent performances. Nanotechnology, 2015, 26, 314003.	1.3	15
99	Sulfur-induced chirality changes in single-walled carbon nanotube synthesis by ethanol chemical vapor deposition on a Co/SiO₂catalyst. Journal of Materials Chemistry A, 2015, 3, 3310-3319.	5.2	26
100	Graphene oxide as effective selective barriers on a hollow fiber membrane for water treatment process. Journal of Membrane Science, 2015, 474, 244-253.	4.1	211
101	Emergence of fiber supercapacitors. Chemical Society Reviews, 2015, 44, 647-662.	18.7	498
102	Catalysts for chirality selective synthesis of single-walled carbon nanotubes. Carbon, 2015, 81, 1-19.	5.4	106
103	Extraction of (9,8) Singleâ€Walled Carbon Nanotubes by Fluoreneâ€Based Polymers. Chemistry - an Asian Journal, 2014, 9, 868-877.	1.7	18
104	pH-stability and pH-annealing of H-bonded multilayer films prepared by layer-by-layer spin-assembly. European Polymer Journal, 2014, 56, 159-167.	2.6	10
105	Scalable synthesis of hierarchically structured carbon nanotubeâ€“graphene fibres for capacitive energy storage. Nature Nanotechnology, 2014, 9, 555-562.	15.6	1,312
106	Controlled Functionalization of Carbonaceous Fibers for Asymmetric Solidâ€State Microâ€Supercapacitors with High Volumetric Energy Density. Advanced Materials, 2014, 26, 6790-6797.	11.1	243
107	Non-covalent synthesis of thermo-responsive graphene oxideâ€“perylene bisimides-containing poly(N-isopropylacrylamide) hybrid for organic pigment removal. Journal of Colloid and Interface Science, 2014, 430, 121-128.	5.0	28
108	Multifunctional nitrogen-rich â€œbrick-and-mortarâ€•carbon as high performance supercapacitor electrodes and oxygen reduction electrocatalysts. Journal of Materials Chemistry A, 2013, 1, 11061.	5.2	34

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109	Fabrication of novel functionalized multi-walled carbon nanotube immobilized hollow fiber membranes for enhanced performance in forward osmosis process. Journal of Membrane Science, 2013, 446, 244-254.	4.1	102
110	CoSO4/SiO2 catalyst for selective synthesis of (9, 8) single-walled carbon nanotubes: Effect of catalyst calcination. Journal of Catalysis, 2013, 300, 91-101.	3.1	38
111	Acetoneâ€Induced Graphene Oxide Film Formation at the Waterâ€“Air Interface. Chemistry - an Asian Journal, 2013, 8, 437-443.	1.7	28
112	Nitrogen doped holey graphene as an efficient metal-free multifunctional electrochemical catalyst for hydrazine oxidation and oxygen reduction. Nanoscale, 2013, 5, 3457.	2.8	154
113	Sulfur doped Co/SiO₂catalysts for chirally selective synthesis of single walled carbon nanotubes. Chemical Communications, 2013, 49, 2031-2033.	2.2	25
114	Chiral-Selective CoSO₄/SiO₂ Catalyst for (9,8) Single-Walled Carbon Nanotube Growth. ACS Nano, 2013, 7, 614-626.	7.3	101
115	Hydrogen-bonded multilayers of micelles of a dually responsive dicationic block copolymer. Soft Matter, 2012, 8, 827-836.	1.2	24
116	Asymmetric deposition of manganese oxide in single walled carbon nanotube films as electrodes for flexible high frequency response electrochemical capacitors. Electrochimica Acta, 2012, 78, 122-132.	2.6	44
117	Lateral Dimension-Dependent Antibacterial Activity of Graphene Oxide Sheets. Langmuir, 2012, 28, 12364-12372.	1.6	498
118	How carboxylic groups improve the performance of single-walled carbon nanotube electrochemical capacitors?. Energy and Environmental Science, 2011, 4, 4220.	15.6	119
119	Hollow Fiber Membrane Decorated with Ag/MWNTs: Toward Effective Water Disinfection and Biofouling Control. ACS Nano, 2011, 5, 10033-10040.	7.3	217
120	Antibacterial Activity of Graphite, Graphite Oxide, Graphene Oxide, and Reduced Graphene Oxide: Membrane and Oxidative Stress. ACS Nano, 2011, 5, 6971-6980.	7.3	2,384
121	Antibacterial action of dispersed single-walled carbon nanotubes on Escherichia coli and Bacillus subtilis investigated by atomic force microscopy. Nanoscale, 2010, 2, 2744.	2.8	153
122	Selective Synthesis of (9,8) Single Walled Carbon Nanotubes on Cobalt Incorporated TUD-1 Catalysts. Journal of the American Chemical Society, 2010, 132, 16747-16749.	6.6	119
123	Effect of different catalyst supports on the (n,m) selective growth of single-walled carbon nanotube from Coâ€“Mo catalyst. Journal of Materials Science, 2009, 44, 3285-3295.	1.7	60
124	Sharper and Faster â€œNano Dartsâ€•Kill More Bacteria: A Study of Antibacterial Activity of Individually Dispersed Pristine Single-Walled Carbon Nanotube. ACS Nano, 2009, 3, 3891-3902.	7.3	493
125	Pore Curvature Effect on the Stability of Coâ^'MCM-41 and the Formation of Size-Controllable Subnanometer Co Clustersâ€. Journal of Physical Chemistry B, 2005, 109, 2285-2294.	1.2	45