S M Fairclough

List of Publications by Year
in descending order

43 papers	1,065 citations	430874 18 h-index	414414 32 g-index
45 all docs	45 docs citations	45 times ranked	2266 citing authors

#	Article	IF	Citations
1	Nanojunctionâ€Mediated Photocatalytic Enhancement in Heterostructured CdS/ZnO, CdSe/ZnO, and CdTe/ZnO Nanocrystals. Angewandte Chemie - International Edition, 2014, 53, 7838-7842.	13.8	133
2	Influence of Shell Thickness and Surface Passivation on PbS/CdS Core/Shell Colloidal Quantum Dot Solar Cells. Chemistry of Materials, 2014, 26, 4004-4013.	6.7	129
3	Influence of Luminescence Quantum Yield, Surface Coating, and Functionalization of Quantum Dots on the Sensitivity of Time-Resolved FRET Bioassays. ACS Applied Materials & Interfaces, 2013, 5, 2881-2892.	8.0	60
4	High-quality functionalized few-layer graphene: facile fabrication and doping with nitrogen as a metal-free catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 15444-15450.	10.3	53
5	Low temperature phase selective synthesis of Cu2ZnSnS4 quantum dots. Chemical Communications, 2013, 49, 3745.	4.1	52
6	Growth and Characterization of Strained and Alloyed Type-II ZnTe/ZnSe Coreâ€“Shell Nanocrystals. Journal of Physical Chemistry C, 2012, 116, 26898-26907.	3.1	50
7	MXene Tunable Lamellae Architectures for Supercapacitor Electrodes. ACS Applied Energy Materials, 2020, 3, 411-422.	5.1	46
8	Ceria Nanocrystals Supporting Pd for Formic Acid Electrocatalytic Oxidation: Prominent Polar Surface Metal Support Interactions. ACS Catalysis, 2019, 9, 5171-5177.	11.2	38
9	Crystalline Interlayers for Reducing the Effective Thermal Boundary Resistance in GaN-on-Diamond. ACS Applied Materials & Interfaces, 2020, 12, 54138-54145.	8.0	38
10	Enhanced photocatalytic hydrogen evolution from water by niobate single molecular sheets and ensembles. Chemical Communications, 2014, 50, 13702-13705.	4.1	37
11	The passivating effect of cadmium in PbS/CdS colloidal quantum dots probed by nm-scale depth profiling. Nanoscale, 2017, 9, 6056-6067.	5.6	29
12	Controlling the emission from semiconductor quantum dots using ultra-small tunable optical microcavities. New Journal of Physics, 2012, 14, 103048.	2.9	28
13	Charge dynamics at heterojunctions for PbS/ZnO colloidal quantum dot solar cells probed with time-resolved surface photovoltage spectroscopy. Applied Physics Letters, 2016, 108, .	3.3	24
14	Enhanced Superconductivity in Few-Layer TaS₂ due to Healing by Oxygenation. Nano Letters, 2020, 20, 3808-3818.	9.1	23
15	Dynamics in next-generation solar cells: time-resolved surface photovoltage measurements of quantum dots chemically linked to ZnO (101Ì„0). Faraday Discussions, 2014, 171, 275-298.	3.2	20
16	Importance of the structural integrity of a carbon conjugated mediator for photocatalytic hydrogen generation from water over a CdSâ€“carbon nanotubeâ€“MoS₂ composite. Chemical Communications, 2016, 52, 13596-13599.	4.1	20
17	Confinement Effects and Charge Dynamics in Zn₃N₂ Colloidal Quantum Dots: Implications for QD-LED Displays. ACS Applied Nano Materials, 2019, 2, 7214-7219.	5.0	20
18	Synthesis and catalytic activity of hybrid metal/silicon nanocomposites. Physica Status Solidi - Rapid Research Letters, 2008, 2, 132-134.	2.4	19

#	Article	IF	Citations
19	Chemically-specific time-resolved surface photovoltage spectroscopy: Carrier dynamics at the interface of quantum dots attached to a metal oxide. Surface Science, 2015, 641, 320-325.	1.9	17
20	Dual doping effects (site blockage and electronic promotion) imposed by adatoms on Pd nanocrystals for catalytic hydrogen production. Chemical Communications, 2015, 51, 46-49.	4.1	17
21	Characterising porosity in platinum nanoparticles. Nanoscale, 2019, 11, 17791-17799.	5.6	17
22	Photocatalytic hydrogen production by biomimetic indium sulfide using Mimosa pudica leaves as template. International Journal of Hydrogen Energy, 2019, 44, 2770-2783.	7.1	17
23	Ultrafast exciton dynamics in Type II ZnTeâ€“ZnSe colloidal quantum dots. Physical Chemistry Chemical Physics, 2012, 14, 13638.	2.8	15
24	A New Class of Tunable Heterojunction by using Two Support Materials for the Synthesis of Supported Bimetallic Catalysts. ChemCatChem, 2015, 7, 230-235.	3.7	15
25	Hydrophobin-Encapsulated Quantum Dots. ACS Applied Materials & Interfaces, 2016, 8, 4887-4893.	8.0	15
26	Optimizing hot carrier effects in Pt-decorated plasmonic heterostructures. Faraday Discussions, 2019, 214, 387-397.	3.2	15
27	An atom efficient, single-source precursor route to plasmonic CuS nanocrystals. Nanoscale Advances, 2019, 1, 522-526.	4.6	15
28	Beyond surface redox and oxygen mobility at pd-polar ceria (100) interface: Underlying principle for strong metal-support interactions in green catalysis. Applied Catalysis B: Environmental, 2020, 270, 118843.	20.2	15
29	Origin(s) of Anomalous Substrate Conduction in MOVPE-Grown GaN HEMTs on Highly Resistive Silicon. ACS Applied Electronic Materials, 2021, 3, 813-824.	4.3	14
30	Rapid and Low-Temperature Molecular Precursor Approach toward Ternary Layered Metal Chalcogenides and Oxides: Mo_{1â€“x}W_xS₂ and Mo_{1â€“x}W_xO₃ Alloys (0 â‰¤ x â‰¤ 1). Chemistry of Materials, 2020, 32, 7895-7907.	6.7	13
31	Gain Spectroscopy of Solutionâ€Based Semiconductor Nanocrystals in Tunable Optical Microcavities. Advanced Optical Materials, 2016, 4, 285-290.	7.3	12
32	Magnetic conjugated polymer nanoparticles doped with a europium complex for biomedical imaging. Photochemical and Photobiological Sciences, 2018, 17, 718-721.	2.9	10
33	Alloy segregation at stacking faults in zincblende GaN heterostructures. Journal of Applied Physics, 2020, 128, 145703.	2.5	8
34	Method for inferring the mechanical strain of GaN-on-Si epitaxial layers using optical profilometry and finite element analysis. Optical Materials Express, 2021, 11, 1643.	3.0	7
35	Stacking fault-associated polarized surface-emitted photoluminescence from zincblende InGaN/GaN quantum wells. Applied Physics Letters, 2020, 117, .	3.3	6
36	Multimicroscopy of cross-section zincblende GaN LED heterostructure. Journal of Applied Physics, 2021, 130, .	2.5	6

#	Article	IF	Citations
37	Photoâ€•and Electroluminescence from Znâ€Doped InN Semiconductor Nanocrystals. Advanced Optical Materials, 2020, 8, 2000604.	7.3	4
38	Point Defects in InGaN/GaN Coreâ€“Shell Nanorods: Role of the Regrowth Interface. Nano Express, 2021, 2, 014005.	2.4	4
39	Investigation of wurtzite formation in MOVPE-grown zincblende GaN epilayers on AlxGa1â^'xN nucleation layers. Journal of Applied Physics, 2022, 131, .	2.5	3
40	Additions and corrections published in 2013. Chemical Communications, 2013, 49, 11812.	4.1	1
41	A New Class of Tunable Heterojunction by using Two Support Materials for the Synthesis of Supported Bimetallic Catalysts. ChemCatChem, 2015, 7, 173-173.	3.7	0
42	Synthesis of IR-emitting HgTe quantum dots using an ionic liquid-based tellurium precursor. Nanoscale Advances, 2021, 3, 4062-4064.	4.6	0
43	Gain Spectroscopy and Tunable Single Mode Lasing of Solution-Based Quantum Dots and Nanoplatelets Using Tunable Open Microcavities. , 2016, , .		0