SeÃ§kin AkÄ±n

List of Publications by Year
in descending order

55 papers	3,736 citations	159585 30 h-index	168389 53 g-index
57 all docs	57 docs citations	57 times ranked	3925 citing authors

#	Article	IF	Citations
1	Ultrahydrophobic 3D/2D fluoroarene bilayer-based water-resistant perovskite solar cells with efficiencies exceeding 22%. Science Advances, 2019, 5, eaaw2543.	10.3	524
2	Europium-Doped CsPbI2Br for Stable and Highly Efficient Inorganic Perovskite Solar Cells. Joule, 2019, 3, 205-214.	24.0	387
3	New Strategies for Defect Passivation in Highâ€Efficiency Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903090.	19.5	237
4	Novel p-dopant toward highly efficient and stable perovskite solar cells. Energy and Environmental Science, 2018, 11, 2985-2992.	30.8	216
5	Stabilization of Highly Efficient and Stable Phaseâ€Pure FAPbI₃ Perovskite Solar Cells by Molecularly Tailored 2Dâ€Overlayers. Angewandte Chemie - International Edition, 2020, 59, 15688-15694.	13.8	201
6	FAPbI₃â€Based Perovskite Solar Cells Employing Hexylâ€Based Ionic Liquid with an Efficiency Over 20% and Excellent Longâ€Term Stability. Advanced Functional Materials, 2020, 30, 2002964.	14.9	172
7	Poly(<i>N</i>,<i>N</i>â€²â€bisâ€4â€butylphenylâ€<i>N</i>,<i>N</i>â€²â€bisphenyl)benzidineâ€Based Interfacial Passivation Strategy Promoting Efficiency and Operational Stability of Perovskite Solar Cells in Regular Architecture. Advanced Materials, 2021, 33, e2006087.	21.0	128
8	Cesium lead based inorganic perovskite quantum-dots as interfacial layer for highly stable perovskite solar cells with exceeding 21% efficiency. Nano Energy, 2019, 60, 557-566.	16.0	121
9	Composition engineering of operationally stable CsPbI2Br perovskite solar cells with a record efficiency over 17%. Nano Energy, 2021, 87, 106157.	16.0	115
10	Moistureâ€Resistant FAPbI₃ Perovskite Solar Cell with 22.25â€‰% Power Conversion Efficiency through Pentafluorobenzyl Phosphonic Acid Passivation. ChemSusChem, 2021, 14, 1176-1183.	6.8	101
11	Metal oxide electron transport materials for perovskite solar cells: a review. Environmental Chemistry Letters, 2021, 19, 2185-2207.	16.2	98
12	Hysteresis-Free Planar Perovskite Solar Cells with a Breakthrough Efficiency of 22% and Superior Operational Stability over 2000 h. ACS Applied Materials & Interfaces, 2019, 11, 39998-40005.	8.0	86
13	Hydrothermally processed CuCrO₂ nanoparticles as an inorganic hole transporting material for low-cost perovskite solar cells with superior stability. Journal of Materials Chemistry A, 2018, 6, 20327-20337.	10.3	85
14	Lowâ€Cost and Highly Efficient Carbonâ€Based Perovskite Solar Cells Exhibiting Excellent Longâ€Term Operational and UV Stability. Small, 2019, 15, e1904746.	10.0	83
15	Highly efficient, stable and hysteresisâ€'less planar perovskite solar cell based on chemical bath treated Zn2SnO4 electron transport layer. Nano Energy, 2020, 75, 105038.	16.0	77
16	Suppression of the interface-dependent nonradiative recombination by using 2-methylbenzimidazole as interlayer for highly efficient and stable perovskite solar cells. Nano Energy, 2020, 76, 105127.	16.0	76
17	Efficient and Stable Perovskite Solar Cells Enabled by Dicarboxylic Acid-Supported Perovskite Crystallization. Journal of Physical Chemistry Letters, 2021, 12, 997-1004.	4.6	69
18	Dopant Engineering for Spiroâ€OMeTAD Holeâ€Transporting Materials towards Efficient Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2102124.	14.9	67

#	Article	IF	Citations
19	High-efficiency dye-sensitized solar cells using ferrocene-based electrolytes and natural photosensitizers. Journal Physics D: Applied Physics, 2012, 45, 425101.	2.8	60
20	Organic Ammonium Halide Modulators as Effective Strategy for Enhanced Perovskite Photovoltaic Performance. Advanced Science, 2021, 8, 2004593.	11.2	57
21	Inorganic CuFeO₂ Delafossite Nanoparticles as Effective Hole Transport Materials for Highly Efficient and Long-Term Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 45142-45149.	8.0	53
22	Modification of photoelectrode with thiol-functionalized Calix[4]arenes as interface energy barrier for high efficiency in dye-sensitized solar cells. Journal of Power Sources, 2016, 307, 796-805.	7.8	52
23	Copolymerâ€Templated Nickel Oxide for Highâ€Efficiency Mesoscopic Perovskite Solar Cells in Inverted Architecture. Advanced Functional Materials, 2021, 31, 2102237.	14.9	51
24	Siteâ€selective Synthesis of Î²â€[70]PCBMâ€like Fullerenes: Efficient Application in Perovskite Solar Cells. Chemistry - A European Journal, 2019, 25, 3224-3228.	3.3	37
25	High-performance perovskite solar cells using the graphene quantum dotâ€“modified SnO2/ZnO photoelectrode. Materials Today Energy, 2021, 22, 100853.	4.7	37
26	Minimizing the Trade-Off between Photocurrent and Photovoltage in Triple-Cation Mixed-Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2020, 11, 10188-10195.	4.6	36
27	An Effective Approach for Highâ€Efficiency Photoelectrochemical Solar Cells by Using Bifunctional DNA Molecules Modified Photoanode. Advanced Functional Materials, 2016, 26, 8776-8783.	14.9	35
28	Power output stabilizing feature in perovskite solar cells at operating condition: Selective contact-dependent charge recombination dynamics. Nano Energy, 2019, 61, 126-131.	16.0	35
29	Improvement of physical properties of CdO thin films by Auâ€“Ag nanocluster codoping. Journal of Alloys and Compounds, 2013, 579, 272-278.	5.5	33
30	Boosting the efficiency and stability of perovskite solar cells through facile molecular engineering approaches. Solar Energy, 2020, 199, 136-142.	6.1	33
31	Enhancing the electron transfer and band potential tuning with long-term stability of ZnO based dye-sensitized solar cells by gallium and tellurium as dual-doping. Electrochimica Acta, 2017, 225, 243-254.	5.2	32
32	Highly efficient tandem photoelectrochemical solar cells using coumarin6 dye-sensitized CuCrO2 delafossite oxide as photocathode. Solar Energy, 2018, 169, 196-205.	6.1	30
33	Interface modification to achieve high-efficiency and stable perovskite solar cells. Chemical Engineering Journal, 2022, 433, 134613.	12.7	30
34	Polyaniline micro-rods based heterojunction solar cell: Structural and photovoltaic properties. Applied Physics Letters, 2012, 101, 253301.	3.3	29
35	Is machine learning redefining the perovskite solar cells?. Journal of Energy Chemistry, 2022, 66, 74-90.	12.9	27
36	Cyclopentadithiophene-Based Hole-Transporting Material for Highly Stable Perovskite Solar Cells with Stabilized Efficiencies Approaching 21%. ACS Applied Energy Materials, 2020, 3, 7456-7463.	5.1	26

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37	High performance GaAs metal-insulatorâ€“semiconductor devices using TiO2 as insulator layer. Current Applied Physics, 2012, 12, 1372-1377.	2.4	24
38	Effect of bromine doping on the charge transfer, ion migration and stability of the single crystalline MAPb(Br_{<i>x</i>}I_{1âˆ’<i>x</i>})₃ photodetector. Journal of Materials Chemistry C, 2021, 9, 15189-15200.	5.5	23
39	Current transport mechanism of antimony-doped TiO2 nanoparticles based on MOS device. Sensors and Actuators A: Physical, 2013, 199, 18-23.	4.1	20
40	Stabilization of Highly Efficient and Stable Phaseâ€Pure FAPbI₃ Perovskite Solar Cells by Molecularly Tailored 2Dâ€Overlayers. Angewandte Chemie, 2020, 132, 15818-15824.	2.0	17
41	Quinary Nanocrystalâ€Based Passivation Strategy for High Efficiency and Stable Perovskite Photovoltaics. Solar Rrl, 2022, 6, 2100737.	5.8	17
42	Atomic Layer Engineering of Aluminumâ€Doped Zinc Oxide Films for Efficient and Stable Perovskite Solar Cells. Advanced Materials Interfaces, 2022, 9, .	3.7	16
43	Insight into Interface Engineering at TiO2/Dye through Molecularly Functionalized Caf1 Biopolymer. ACS Sustainable Chemistry and Engineering, 2018, 6, 1825-1836.	6.7	14
44	Metal Oxide Nanoparticles as Electron Transport Layer for Highly Efficient Dye-Sensitized Solar Cells. , 2018, , 39-79.		12
45	Improvement in electrical performance of half-metallic Fe₃O₄/GaAs structures using pyrolyzed polymer film as buffer layer. Philosophical Magazine, 2014, 94, 2678-2691.	1.6	9
46	Realizing Highâ€Efficiency Perovskite Solar Cells by Passivating Tripleâ€Cation Perovskite Films. Solar Rrl, 2022, 6, .	5.8	9
47	Investigation on the Facet-Dependent Anisotropy in Halide Perovskite Single Crystals. Journal of Physical Chemistry C, 2022, 126, 8906-8912.	3.1	7
48	Recent Progress of Light Intensityâ€Modulated Small Perturbation Techniques in Perovskite Solar Cells. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	6
49	Efficient and Lessâ€Toxic Indiumâ€Doped MAPbI₃ Perovskite Solar Cells Prepared by Metal Alloying Technique. Solar Rrl, 2022, 6, .	5.8	6
50	Impact of Copper-Doped Titanium Dioxide Interfacial Layers on the Interface-State and Electrical Properties of Si-based MOS Devices. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4150-4159.	2.2	5
51	The Role of Pioneering Hole Transporting Materials in New Generation Perovskite Solar Cells. European Journal of Inorganic Chemistry, 2021, 2021, 4251-4264.	2.0	5
52	Future perspectives of perovskite solar cells: Metal oxide-based inorganic hole-transporting materials. , 2021, , 181-219.		5
53	SnO2 Elektron Transfer TabakasÄ±nÄ±n Slot-Die TekniÄŸi ile Ãœretimi ve Optimizasyonu. International Journal of Innovative Engineering Applications, 2022, 6, 170-182.	0.4	1
54	YÃ¼ksek Verimli ve Uzun DÃ¶nem KararlÄ± Perovskit GÃ¼neÅŸ HÃ¼crelerinin Ãœretimi iÃ§in Perovskit/Spiro-OMeTAD ArayÃ¼zeyinin Thiol MolekÃ¼lleri ile Modifikasyonu. European Journal of Science and Technology, 0, , 727-735.	0.5	0

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55	BilyalÄ± Ã–ÄŸÃ¼tÃ¼cÃ¼ ile Ãœretilen Ekonomik Fe@Ni AlaÅŸÄ±mlarÄ±n Boya DuyarlÄ± GÃ¼neÅŸ HÃ¼crelerinde KarÅŸÄ±t Elektrot Potansiyelinin AraÅŸtÄ±rÄ±lmasÄ±. El-Cezeri Journal of Science and Engineering, 0, , .	0.1	0