Ramon Tena-Zaera

List of Publications by Year
in descending order

98 papers	5,945 citations	66343 42 h-index	71685 76 g-index
102 all docs	102 docs citations	102 times ranked	8216 citing authors

#	ARTICLE	IF	CITATIONS
1	Unravelling fullereneâ€“perovskite interactions introduces advanced blend films for performance-improved solar cells. Sustainable Energy and Fuels, 2019, 3, 2779-2787.	4.9	16
2	Ionic liquid-based electrodeposition of ZnS:nano-MoS2 composite films with self-lubricating properties. Surface and Coatings Technology, 2019, 374, 957-965.	4.8	8
3	Co-Solvent Effect in the Processing of the Perovskite:Fullerene Blend Films for Electron Transport Layer-Free Solar Cells. Journal of Physical Chemistry C, 2018, 122, 2512-2520.	3.1	19
4	Molecular Dynamics Analysis of Charge Transport in Ionicâ€Liquid Electrolytes Containing Added Salt with Mono, Di, and Trivalent Metal Cations. ChemPhysChem, 2018, 19, 1665-1673.	2.1	23
5	Fullereneâ€Based Materials as Holeâ€Transporting/Electronâ€Blocking Layers: Applications in Perovskite Solar Cells. Chemistry - A European Journal, 2018, 24, 8524-8529.	3.3	25
6	Consecutive anchoring of symmetric viologens: Electrochromic devices providing colorless to neutral-color switching. Solar Energy Materials and Solar Cells, 2018, 177, 110-119.	6.2	20
7	Optoelectronic Characterization of ZnO Nanorod Arrays Obtained by Pulse Electrodeposition. Journal of the Electrochemical Society, 2018, 165, D595-D603.	2.9	12
8	Physicochemical Phenomena and Application in Solar Cells of Perovskite:Fullerene Films. Journal of Physical Chemistry Letters, 2018, 9, 2893-2902.	4.6	37
9	Spray-Pyrolyzed ZnO as Electron Selective Contact for Long-Term Stable Planar CH₃NH₃PbI₃ Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 4057-4064.	5.1	18
10	All-in-One Gel-Based Electrochromic Devices: Strengths and Recent Developments. Materials, 2018, 11, 414.	2.9	89
11	Picosecond Capture of Photoexcited Electrons Improves Photovoltaic Conversion in MAPbI₃:C₇₀â€Doped Planar and Mesoporous Solar Cells. Advanced Materials, 2018, 30, e1801496.	21.0	17
12	Electrochemical Reduction of Oxygen in Aprotic Ionic Liquids Containing Metal Cations: A Case Study on the Naâ€“O₂ system. ChemSusChem, 2017, 10, 1616-1623.	6.8	30
13	Colorlessâ€toâ€Black/Gray Electrochromic Devices Based on Single 1â€Alkylâ€1â€²â€Aryl Asymmetric Viologenâ€Modified Monolayered Electrodes. Advanced Optical Materials, 2017, 5, 1600989.	7.3	57
14	Incorporating paper matrix into flexible devices based on liquid electrochromic mixtures: Enhanced robustness, durability and multi-color versatility. Solar Energy Materials and Solar Cells, 2017, 167, 22-27.	6.2	16
15	Modified Fullerenes for Efficient Electron Transport Layerâ€Free Perovskite/Fullerene Blendâ€Based Solar Cells. ChemSusChem, 2017, 10, 2023-2029.	6.8	79
16	Laponite-Based Surfaces with Holistic Self-Cleaning Functionality by Combining Antistatics and Omniphobicity. ACS Applied Materials & Interfaces, 2017, 9, 39078-39085.	8.0	22
17	Dimethylformamide-free processing of halide perovskite solar cells from electrodeposited PbI2 precursor films. Electrochimica Acta, 2017, 246, 1193-1199.	5.2	24
18	Development of ZnO nanowire based CdTe thin film solar cells. Solar Energy Materials and Solar Cells, 2017, 160, 107-115.	6.2	30

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19	Determination of Interfacial Chargeâ€Transfer Rate Constants in Perovskite Solar Cells. ChemSusChem, 2016, 9, 1647-1659.	6.8	52
20	Efficient Regular Perovskite Solar Cells Based on Pristine [70]Fullerene as Electronâ€Selective Contact. ChemSusChem, 2016, 9, 1218-1218.	6.8	2
21	Nanophotoactivity of Porphyrin Functionalized Polycrystalline ZnO Films. ACS Applied Materials & Interfaces, 2016, 8, 16783-16790.	8.0	7
22	Multicolor Electrochromics: Rainbow-Like Devices. ACS Applied Materials & Interfaces, 2016, 8, 14795-14801.	8.0	126
23	Plastic electrochromic devices based on viologen-modified TiO2 films prepared at low temperature. Solar Energy Materials and Solar Cells, 2016, 157, 624-635.	6.2	34
24	Graphene quantum dot membranes as fluorescent sensing platforms for Cr (VI) detection. Carbon, 2016, 109, 658-665.	10.3	87
25	Electron Transport Layerâ€Free Solar Cells Based on Perovskiteâ€“Fullerene Blend Films with Enhanced Performance and Stability. ChemSusChem, 2016, 9, 2679-2685.	6.8	60
26	High Capacity Naâ€“O₂ Batteries: Key Parameters for Solution-Mediated Discharge. Journal of Physical Chemistry C, 2016, 120, 20068-20076.	3.1	96
27	Colorless to Neutral Color Electrochromic Devices Based on Asymmetric Viologens. ACS Applied Materials & Interfaces, 2016, 8, 29619-29627.	8.0	78
28	Efficient Regular Perovskite Solar Cells Based on Pristine [70]Fullerene as Electronâ€Selective Contact. ChemSusChem, 2016, 9, 1263-1270.	6.8	54
29	Quantum and Classical Molecular Dynamics of Ionic Liquid Electrolytes for Na/Liâ€based Batteries: Molecular Origins of the Conductivity Behavior. ChemPhysChem, 2016, 17, 2473-2481.	2.1	29
30	Effect of different photoanode nanostructures on the initial charge separation and electron injection process in dye sensitized solar cells: A photophysical study with indoline dyes. Materials Chemistry and Physics, 2016, 170, 218-228.	4.0	10
31	Structural and electrical characterisation of MgCl2-treated CdTe solar cells. , 2015, , .		1
32	ZnO nanowire radial CdTe solar cells. , 2015, , .		1
33	Cathodic electrochemical deposition of CuI from room temperature ionic liquid-based electrolytes. Electrochemistry Communications, 2015, 59, 20-23.	4.7	13
34	Ni/NiO Based 3D Core-Shell Foam Anode for Lithium Ion Batteries. Electrochimica Acta, 2015, 180, 16-21.	5.2	17
35	Passivation of ZnO Nanowire Guests and 3D Inverse Opal Host Photoanodes for Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1400217.	19.5	37
36	Control of the recombination rate by changing the polarity of the electrolyte in dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2014, 16, 21513-21523.	2.8	12

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37	Organo-metal halide perovskite-based solar cells with CuSCN as the inorganic hole selective contact. Journal of Materials Chemistry A, 2014, 2, 12754-12760.	10.3	174
38	Electrodeposition of Antimony Selenide Thin Films and Application in Semiconductor Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 2836-2841.	8.0	113
39	ZnOâ€“ionic liquid hybrid films: electrochemical synthesis and application in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 10173.	10.3	27
40	Dense TiO₂ films grown by solâ€“gel dip coating on glass, F-doped SnO₂, and silicon substrates. Journal of Materials Research, 2013, 28, 385-393.	2.6	12
41	Face-Selective Etching of ZnO during Attachment of Dyes. Journal of Physical Chemistry C, 2013, 117, 18414-18422.	3.1	7
42	Electrodeposited NiO anode interlayers: Enhancement of the charge carrier selectivity in organic solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 564-568.	6.2	32
43	One-step wet chemical deposition of NiO from the electrochemical reduction of nitrates in ionic liquid based electrolytes. Electrochimica Acta, 2013, 96, 261-267.	5.2	19
44	Ultrafast characterization of the electron injection from CdSe quantum dots and dye N719 co-sensitizers into TiO2 using sulfide based ionic liquid for enhanced long term stability. Electrochimica Acta, 2013, 100, 35-43.	5.2	20
45	ZnO/ZnO Coreâ€“Shell Nanowire Array Electrodes: Blocking of Recombination and Impressive Enhancement of Photovoltage in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 13365-13373.	3.1	32
46	Nanomorphology influence on the light conversion mechanisms in highly efficient diketopyrrolopyrrole based organic solar cells. Organic Electronics, 2013, 14, 326-334.	2.6	21
47	Correlative infraredâ€“electron nanoscopy reveals the local structureâ€“conductivity relationship in zinc oxide nanowires. Nature Communications, 2012, 3, 1131.	12.8	53
48	Colloidal PbS and PbSeS Quantum Dot Sensitized Solar Cells Prepared by Electrophoretic Deposition. Journal of Physical Chemistry C, 2012, 116, 16391-16397.	3.1	81
49	Schottky diodes based on electrodeposited ZnO nanorod arrays for humidity sensing at room temperature. Sensors and Actuators B: Chemical, 2012, 174, 274-278.	7.8	23
50	Zinc oxide nanocrystals as electron injecting building blocks for plastic light sources. Journal of Materials Chemistry, 2012, 22, 4916.	6.7	20
51	ZnO-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 11413-11425.	3.1	520
52	New insight into growth mechanism of ZnO nanowires electrodeposited from nitrate-based solutions. Electrochimica Acta, 2012, 69, 181-189.	5.2	73
53	NiO cathodic electrochemical deposition from an aprotic ionic liquid: Building metal oxide nâ€“p heterojunctions. Electrochimica Acta, 2012, 71, 39-43.	5.2	35
54	Insights on the working principles of flexible and efficient ITO-free organic solar cells based on solution processed Ag nanowire electrodes. Solar Energy Materials and Solar Cells, 2012, 102, 148-152.	6.2	82

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55	Electrochemical reduction of O2 in 1-butyl-1-methylpyrrolidinium bis(trifluoromethanesulfonyl)imide ionic liquid containing Zn2+ cations: deposition of non-polar oriented ZnO nanocrystalline films. Physical Chemistry Chemical Physics, 2011, 13, 13433.	2.8	30
56	Novel ZnO nanostructured electrodes for higher power conversion efficiencies in polymeric solar cells. Physical Chemistry Chemical Physics, 2011, 13, 20871.	2.8	32
57	ZnO solar cells with an indoline sensitizer: a comparison between nanoparticulate films and electrodeposited nanowire arrays. Energy and Environmental Science, 2011, 4, 3400.	30.8	67
58	Attachment of Protoporphyrin Dyes to Nanostructured ZnO Surfaces: Characterization by Near Edge X-ray Absorption Fine Structure Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 18195-18201.	3.1	41
59	A Sulfide/Polysulfide-Based Ionic Liquid Electrolyte for Quantum Dot-Sensitized Solar Cells. Journal of the American Chemical Society, 2011, 133, 20156-20159.	13.7	153
60	Inverted ITO-free organic solar cells based on p and n semiconducting oxides. New designs for integration in tandem cells, top or bottom detecting devices, and photovoltaic windows. Energy and Environmental Science, 2011, 4, 453-458.	30.8	58
61	Modeling and characterization of extremely thin absorber (eta) solar cells based on ZnO nanowires. Physical Chemistry Chemical Physics, 2011, 13, 7162.	2.8	45
62	PEDOT Nanotube Arrays as High Performing Counter Electrodes for Dye Sensitized Solar Cells. Study of the Interactions Among Electrolytes and Counter Electrodes. Advanced Energy Materials, 2011, 1, 781-784.	19.5	142
63	Electrochemical synthesis of poly(3,4â€ethylenedioxythiophene) nanotube arrays using ZnO templates. Journal of Polymer Science Part A, 2010, 48, 4648-4653.	2.3	51
64	Anharmonic effects in ZnO optical phonons probed by Raman spectroscopy. Applied Physics Letters, 2010, 96, .	3.3	35
65	Multiresponsive PEDOTâ€“Ionic Liquid Materials for the Design of Surfaces with Switchable Wettability. Advanced Functional Materials, 2009, 19, 3326-3333.	14.9	73
66	ZnO/CdSe nanowires and nanotubes: formation, properties and applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1596-1600.	0.8	12
67	Electrochemical deposition of ZnO in a room temperature ionic liquid: 1-Butyl-1-methylpyrrolidinium bis(trifluoromethane sulfonyl)imide. Electrochemistry Communications, 2009, 11, 2184-2186.	4.7	48
68	Localized versus delocalized states: Photoluminescence from electrochemically synthesized ZnO nanowires. Journal of Applied Physics, 2009, 106, 054304.	2.5	33
69	Electrodeposition and impedance spectroscopy characterization of ZnO nanowire arrays. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2345-2350.	1.8	69
70	Electrochemical deposition of ZnO nanowire arrays with tailored dimensions. Journal of Electroanalytical Chemistry, 2008, 621, 171-177.	3.8	147
71	Influence of the Potassium Chloride Concentration on the Physical Properties of Electrodeposited ZnO Nanowire Arrays. Journal of Physical Chemistry C, 2008, 112, 16318-16323.	3.1	82
72	Effect of the Chemical Nature of the Anions on the Electrodeposition of ZnO Nanowire Arrays. Journal of Physical Chemistry C, 2008, 112, 5736-5741.	3.1	110

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73	ZnO nanowire arrays: Optical scattering and sensitization to solar light. Applied Physics Letters, 2008, 93, .	3.3	98
74	Conversion of ZnO Nanowires into Nanotubes with Tailored Dimensions. Chemistry of Materials, 2008, 20, 6633-6637.	6.7	153
75	Electrodeposition of ZnO nanowire arrays with tailored dimensions: building blocks for photoelectrochemical devices. , 2007, , .		1
76	Role of Chloride Ions on Electrochemical Deposition of ZnO Nanowire Arrays from O₂ Reduction. Journal of Physical Chemistry C, 2007, 111, 16706-16711.	3.1	154
77	Electrochemical Deposition of Bi[sub 2]S[sub 3] Thin Films Using Dimethylsulfoxide as a Solvent. Journal of the Electrochemical Society, 2007, 154, D669.	2.9	8
78	Positron annihilation lifetime spectroscopy of ZnO bulk samples. Physical Review B, 2007, 76, .	3.2	47
79	Annealing Effects on the Physical Properties of Electrodeposited ZnO/CdSe Coreâˆ’Shell Nanowire Arrays. Chemistry of Materials, 2007, 19, 1626-1632.	6.7	90
80	Electrodeposition of ZnO nanowires with controlled dimensions for photovoltaic applications: Role of buffer layer. Thin Solid Films, 2007, 515, 8553-8557.	1.8	139
81	Photoelectrochemical texturization of n-type multicrystalline silicon. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1260-1265.	1.8	4
82	Properties of the oxygen vacancy in ZnO. Applied Physics A: Materials Science and Processing, 2007, 88, 147-151.	2.3	153
83	Energetically deep defect centers in vapor-phase grown zinc oxide. Applied Physics A: Materials Science and Processing, 2007, 88, 141-145.	2.3	47
84	Implications of the Negative Capacitance Observed at Forward Bias in Nanocomposite and Polycrystalline Solar Cells. Nano Letters, 2006, 6, 640-650.	9.1	217
85	Determination of carrier density of ZnO nanowires by electrochemical techniques. Applied Physics Letters, 2006, 89, 203117.	3.3	277
86	Negative U-properties of the oxygen-vacancy in ZnO. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 997-1000.	0.8	11
87	Intrinsic and extrinsic point-defects in vapor transport grown ZnO bulk crystals. Physica B: Condensed Matter, 2006, 376-377, 767-770.	2.7	11
88	Fabrication and characterization of ZnO nanowires/CdSe/CuSCN eta-solar cell. Comptes Rendus Chimie, 2006, 9, 717-729.	0.5	97
89	Growth of ZnO crystals by vapour transport: Some ways to act on physical properties. Crystal Research and Technology, 2006, 41, 742-747.	1.3	11
90	CdSe-Sensitized p-CuSCN/Nanowire n-ZnO Heterojunctions. Advanced Materials, 2005, 17, 1512-1515.	21.0	419

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91	ZnO/CdTe/CuSCN, a promising heterostructure to act as inorganic eta-solar cell. Thin Solid Films, 2005, 483, 372-377.	1.8	87
92	A new approach to the growth of ZnO by vapour transport. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1106-1114.	0.8	10
93	The Scope of Zinc Oxide Bulk Growth. , 2005, , 3-14.		1
94	MOCVD growth of CdTe on glass: analysis of in situ post-growth annealing. Journal of Crystal Growth, 2004, 262, 19-27.	1.5	18
95	Structural characterization of CdTe layers grown on (0001) sapphire by MOCVD. Journal of Crystal Growth, 2004, 270, 309-315.	1.5	15
96	Numerical study of the ZnO growth by MOCVD. Journal of Crystal Growth, 2004, 264, 237-245.	1.5	14
97	Study of the ZnO crystal growth by vapour transport methods. Journal of Crystal Growth, 2004, 270, 711-721.	1.5	26
98	Numerical study of the growth conditions in an MOCVD reactor: application to the epitaxial growth of HgTe. Journal of Crystal Growth, 2002, 240, 124-134.	1.5	6