

# Reza J Kashtiban

## List of Publications by Year in descending order

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62  
papers

1,897  
citations

257450

24  
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265206

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67  
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67  
docs citations

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times ranked

3719  
citing authors

#	ARTICLE	IF	CITATIONS
1	Waterâ€‘Splitting Electrocatalysis in Acid Conditions Using Ruthenateâ€‘Iridate Pyrochlores. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 10960-10964.	13.8	193
2	Direct Hydrothermal Synthesis and Physical Properties of Rare-Earth and Yttrium Orthochromite Perovskites. <i>Chemistry of Materials</i> , 2011, 23, 48-56.	6.7	152
3	Van der Waals pressure and its effect on trapped interlayer molecules. <i>Nature Communications</i> , 2016, 7, 12168.	12.8	137
4	Characterization of Structural Disorder in $\text{Ga}_2\text{O}_3$ . <i>Journal of Physical Chemistry C</i> , 2014, 118, 16188-16198.	3.1	107
5	Bismuth Iridium Oxide Oxygen Evolution Catalyst from Hydrothermal Synthesis. <i>Chemistry of Materials</i> , 2012, 24, 4192-4200.	6.7	106
6	Instant MOFs: continuous synthesis of metalâ€‘organic frameworks by rapid solvent mixing. <i>Chemical Communications</i> , 2012, 48, 10642.	4.1	103
7	Atomic Defects and Doping of Monolayer $\text{NbSe}_2$ . <i>ACS Nano</i> , 2017, 11, 2894-2904.	14.6	63
8	Under pressure: Control of strain, phonons and bandgap opening in rippled graphene. <i>Carbon</i> , 2015, 91, 266-274.	10.3	55
9	Structures and Magnetism of the Rare-Earth Orthochromite Perovskite Solid Solution $\text{La}_x\text{Sm}_{1-x}\text{CrO}_3$ . <i>Inorganic Chemistry</i> , 2013, 52, 12161-12169.	4.0	50
10	Scalable Patterning of Encapsulated Black Phosphorus. <i>Nano Letters</i> , 2018, 18, 5373-5381.	9.1	43
11	Atomically resolved imaging of highly ordered alternating fluorinated graphene. <i>Nature Communications</i> , 2014, 5, 4902.	12.8	42
12	Incorporation of square-planar $\text{Pd}^{2+}$ in fluorite $\text{CeO}_2$ : hydrothermal preparation, local structure, redox properties and stability. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13072-13079.	10.3	40
13	Ultrafast Optoelectronic Processes in 1D Radial van der Waals Heterostructures: Carbon, Boron Nitride, and $\text{MoS}_2$ Nanotubes with Coexisting Excitons and Highly Mobile Charges. <i>Nano Letters</i> , 2020, 20, 3560-3567.	9.1	40
14	Nanocrystalline Ceriumâ€‘Bismuth Oxides: Synthesis, Structural Characterization, and Redox Properties. <i>Chemistry of Materials</i> , 2010, 22, 6191-6201.	6.7	39
15	Ordered mesoporous silica films with pores oriented perpendicular to a titanium nitride substrate. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 4763-4770.	2.8	39
16	Giant Negative Terahertz Photoconductivity in Controllably Doped Carbon Nanotube Networks. <i>ACS Photonics</i> , 2019, 6, 1058-1066.	6.6	38
17	Replacement of Chromium by Non-Toxic Metals in Lewis-Acid MOFs: Assessment of Stability as Glucose Conversion Catalysts. <i>Catalysts</i> , 2019, 9, 437.	3.5	35
18	Raman Spectroscopy of Optical Transitions and Vibrational Energies of $\sim 41$ nm HgTe Extreme Nanowires within Single Walled Carbon Nanotubes. <i>ACS Nano</i> , 2014, 8, 9044-9052.	14.6	33

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19	Pair Distribution Function Analysis of Structural Disorder by Nb <sup>5+</sup> Inclusion in Ceria: Evidence for Enhanced Oxygen Storage Capacity from Under-Coordinated Oxide. <i>Journal of the American Chemical Society</i> , 2018, 140, 1588-1591.	13.7	32
20	Compliance-Free ZrO <sub>2</sub> /ZrO <sub>2-x</sub> /ZrO <sub>2</sub> Resistive Memory with Controllable Interfacial Multistate Switching Behaviour. <i>Nanoscale Research Letters</i> , 2017, 12, 384.	5.7	31
21	Electric Field-Controlled Synthesis and Characterisation of Single Metal-Organic Framework (MOF) Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19696-19701.	13.8	31
22	Control of chemical state of cerium in doped anatase TiO <sub>2</sub> by solvothermal synthesis and its application in photocatalytic water reduction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9890-9898.	10.3	27
23	Band gap expansion, shear inversion phase change behaviour and low-voltage induced crystal oscillation in low-dimensional tin selenide crystals. <i>Dalton Transactions</i> , 2014, 43, 7391-7399.	3.3	26
24	Systematic Modification of UiO-66 Metal-Organic Frameworks for Glucose Conversion into 5-Hydroxymethyl Furfural in Water. <i>ChemCatChem</i> , 2021, 13, 2517-2529.	3.7	26
25	Raman study of stress effect on Ge nanocrystals embedded in Al <sub>2</sub> O <sub>3</sub> . <i>Thin Solid Films</i> , 2010, 518, 5378-5381.	1.8	22
26	Structural variety in iridate oxides and hydroxides from hydrothermal synthesis. <i>Chemical Science</i> , 2011, 2, 1573.	7.4	22
27	Ultrafast, high modulation depth terahertz modulators based on carbon nanotube thin films. <i>Carbon</i> , 2021, 173, 245-252.	10.3	22
28	Exploration of the Smallest Diameter Tin Nanowires Achievable with Electrodeposition: Sub 7 nm Sn Nanowires Produced by Electrodeposition from a Supercritical Fluid. <i>Nano Letters</i> , 2018, 18, 941-947.	9.1	21
29	Linear and Helical Cesium Iodide Atomic Chains in Ultranarrow Single-Walled Carbon Nanotubes: Impact on Optical Properties. <i>ACS Nano</i> , 2021, 15, 13389-13398.	14.6	20
30	Low-temperature fabrication of layered self-organized Ge clusters by RF-sputtering. <i>Nanoscale Research Letters</i> , 2011, 6, 341.	5.7	18
31	(M,Ru)O <sub>2</sub> (M = Mg, Zn, Cu, Ni, Co) Rutilites and Their Use as Oxygen Evolution Electrocatalysts in Membrane Electrode Assemblies under Acidic Conditions. <i>Chemistry of Materials</i> , 2020, 32, 6150-6160.	6.7	17
32	Local Site Layering in Rare-Earth Orthochromite Perovskites by Solution Synthesis. <i>Chemistry - A European Journal</i> , 2016, 22, 18362-18367.	3.3	14
33	Time-Resolved Powder X-ray Diffraction of the Solvothermal Crystallization of Cobalt Gallate Spinel Photocatalyst Reveals Transient Layered Double Hydroxides. <i>Chemistry of Materials</i> , 2017, 29, 5053-5057.	6.7	14
34	Towards a 3D GeSbTe phase change memory with integrated selector by non-aqueous electrodeposition. <i>Faraday Discussions</i> , 2019, 213, 339-355.	3.2	14
35	Spatially correlated erbium and Si nanocrystals in coimplanted SiO <sub>2</sub> after a single high temperature anneal. <i>Journal of Applied Physics</i> , 2010, 107, 044316.	2.5	12
36	Size and spatial homogeneity of SiGe quantum dots in amorphous silica matrix. <i>Journal of Applied Physics</i> , 2009, 106, 084319.	2.5	11

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37	Surface modification and porosimetry of vertically aligned hexagonal mesoporous silica films. RSC Advances, 2016, 6, 113432-113441.	3.6	11
38	Electrodeposition of tin nanowires from a dichloromethane based electrolyte. RSC Advances, 2018, 8, 24013-24020.	3.6	11
39	<i>In situ</i> XAFS of acid-resilient iridate pyrochlore oxygen evolution electrocatalysts under operating conditions. Physical Chemistry Chemical Physics, 2020, 22, 18770-18773.	2.8	11
40	Ba <sub>4</sub> Ru <sub>3</sub> O <sub>10</sub> .2(OH)1.8: a new member of the layered hexagonal perovskite family crystallised from water. Chemical Communications, 2016, 52, 6375-6378.	4.1	10
41	Zigzag HgTe Nanowires Modify the Electron-Phonon Interaction in Chirality-Refined Single-Walled Carbon Nanotubes. ACS Nano, 2022, 16, 6789-6800.	14.6	10
42	Structural study of Si <sub>1-x</sub> Ge <sub>x</sub> nanocrystals embedded in SiO <sub>2</sub> films. Thin Solid Films, 2010, 518, 2569-2572.	1.8	9
43	Multilayers of Ge nanocrystals embedded in Al <sub>2</sub> O <sub>3</sub> matrix: Structural and electrical studies. Microelectronic Engineering, 2010, 87, 2508-2512.	2.4	8
44	Investigation of some new hydro(solvo)thermal synthesis routes to nanostructured mixed-metal oxides. Journal of Solid State Chemistry, 2014, 214, 30-37.	2.9	8
45	Structures of mixed manganese ruthenium oxides (Mn <sub>1-x</sub> Ru <sub>x</sub> )O <sub>2</sub> crystallised under acidic hydrothermal conditions. Dalton Transactions, 2020, 49, 2661-2670.	3.3	8
46	Exploiting the flexibility of the pyrochlore composition for acid-resilient iridium oxide electrocatalysts in proton exchange membranes. Journal of Materials Chemistry A, 2021, 9, 25114-25127.	10.3	8
47	Optical and microstructural studies of InGaN/GaN quantum dot ensembles. Applied Physics Letters, 2009, 95, 111903.	3.3	7
48	Selective Imaging of Discrete Polyoxometalate Ions on Graphene Oxide under Variable Voltage Conditions. ACS Nano, 2016, 10, 796-802.	14.6	7
49	An expanded MIL-53-type coordination polymer with a reactive pendant ligand. CrystEngComm, 2018, 20, 4355-4358.	2.6	5
50	Electromagnetic Functionalization of Wide-Bandgap Dielectric Oxides by Boron Interstitial Doping. Advanced Materials, 2018, 30, e1802025.	21.0	5
51	Structural and compositional study of Erbium-doped silicon nanocrystals by HAADF, EELS and HRTEM techniques in an aberration corrected STEM. Journal of Physics: Conference Series, 2010, 209, 012043.	0.4	4
52	Coherence lifetime broadened optical transitions in a 2 atom diameter HgTe nanowire: a temperature dependent resonance Raman study. RSC Advances, 2016, 6, 95387-95395.	3.6	4
53	Nanocrystalline Transition-Metal Gallium Oxide Spinel from Acetylacetonate Precursors via Solvothermal Synthesis. Materials, 2019, 12, 838.	2.9	4
54	Ge nanocrystals in alumina matrix: A structural study. Journal of Physics: Conference Series, 2010, 209, 012060.	0.4	3

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55	Study of erbium-doped silicon nanocrystals in silica. Journal of Physics: Conference Series, 2010, 241, 012097.	0.4	3
56	Incorporation of Sb <sup>5+</sup> into CeO <sub>2</sub> : local structural distortion of the fluorite structure from a pentavalent substituent. Dalton Transactions, 2018, 47, 9693-9700.	3.3	3
57	Electric Field-Controlled Synthesis and Characterisation of Single Metal-Organic Framework (MOF) Nanoparticles. Angewandte Chemie, 2020, 132, 19864-19869.	2.0	3
58	Hydrothermal Synthesis of Iridium-Substituted NaTaO <sub>3</sub> Perovskites. Nanomaterials, 2021, 11, 1537.	4.1	3
59	Investigation of the effect of growth interruption on the formation of InAs/GaAs quantum dot superlattice near the InAs critical thickness. Microelectronics Journal, 2009, 40, 479-482.	2.0	2
60	Study of InGaN/GaN quantum dot systems by TEM techniques and photoluminescence spectroscopy. Journal of Physics: Conference Series, 2010, 209, 012038.	0.4	1
61	Resonance Raman Spectroscopy of Extreme Nanowires and Other 1D Systems. Journal of Visualized Experiments, 2016, , .	0.3	1
62	Erbium environments in erbium-silicon/silica light emitting nanostructures. Journal of Physics: Conference Series, 2011, 281, 012016.	0.4	0