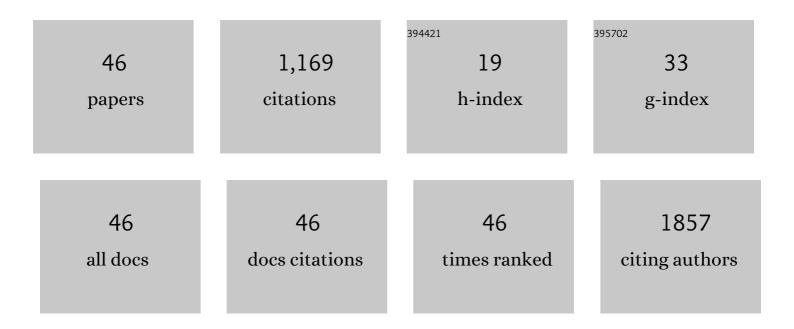
Santhosh Kumar Matam

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Structured Perovskite-Based Catalysts and Their Application as Three-Way Catalytic Converters—A Review. Catalysts, 2014, 4, 226-255.	3.5	125
2	The Intermetallic Compound ZnPd and Its Role in Methanol Steam Reforming. Catalysis Reviews - Science and Engineering, 2013, 55, 289-367.	12.9	102
3	Revisiting the Problem of Active Sites for Methane Combustion on Pd/Al ₂ O ₃ by Operando XANES in a Lab-Scale Fixed-Bed Reactor. Journal of Physical Chemistry C, 2010, 114, 9439-9443.	3.1	78
4	Thermal and chemical aging of model three-way catalyst Pd/Al2O3 and its impact on the conversion of CNG vehicle exhaust. Catalysis Today, 2012, 184, 237-244.	4.4	75
5	On the State of Pd in Perovskite-Type Oxidation Catalysts of Composition A(B,Pd)O _{3±δ} (A =) Tj ETC	2q1_1 0.78	34314 rgBT
6	The Origin of the Catalytic Activity of a Metal Hydride in CO ₂ Reduction. Angewandte Chemie - International Edition, 2016, 55, 6028-6032.	13.8	50
7	Elementary Steps in the Formation of Hydrocarbons from Surface Methoxy Groups in HZSM-5 Seen by Synchrotron Infrared Microspectroscopy. ACS Catalysis, 2019, 9, 6564-6570.	11.2	48
8	The impact of aging environment on the evolution of Al2O3 supported Pt nanoparticles and their NO oxidation activity. Applied Catalysis B: Environmental, 2013, 129, 214-224.	20.2	45
9	Influence of the synthesis method on the structure of Pd-substituted perovskite catalysts for methane oxidation. Catalysis Today, 2013, 208, 42-47.	4.4	38
10	Synchrotron high energy X-ray methods coupled to phase sensitive analysis to characterize aging of solid catalysts with enhanced sensitivity. Physical Chemistry Chemical Physics, 2013, 15, 8629.	2.8	36
11	Bandgap tuning in SrTi(N,O,F)3 by anionic-lattice variation. Journal of Solid State Chemistry, 2013, 206, 226-232.	2.9	33
12	Methane abatement under stoichiometric conditions on perovskite-supported palladium catalysts prepared by flame spray synthesis. Applied Catalysis B: Environmental, 2014, 144, 631-643.	20.2	32
13	Methanol steam reforming catalysts derived by reduction of perovskite-type oxides LaCo _{1â~'xâ~'y} Pd _x Zn _y O _{3±δ} . Catalysis Science and Technology, 2016, 6, 1455-1468.	4.1	31
14	Dimensional and Structural Control of Silica Aerogel Membranes for Miniaturized Motionless Gas Pumps. ACS Applied Materials & Interfaces, 2015, 7, 18803-18814.	8.0	28
15	A modulated excitation ED-EXAFS/DRIFTS study of hydrothermal ageing of Rh/Al2O3. Catalysis Today, 2014, 229, 80-87.	4.4	27
16	PdO x /Pd at Work in a Model Three-Way Catalyst for Methane Abatement Monitored by Operando XANES. Topics in Catalysis, 2013, 56, 239-242.	2.8	26
17	Room temperature methoxylation in zeolite H-ZSM-5: an <i>operando</i> DRIFTS/mass spectrometric study. Chemical Communications, 2018, 54, 12875-12878.	4.1	25
18	The effects of MTG catalysis on methanol mobility in ZSM-5. Catalysis Science and Technology, 2018, 8, 3304-3312.	4.1	23

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19	Gas–Solid Reaction of Carbon Dioxide with Alanates. Journal of Physical Chemistry C, 2014, 118, 15940-15945.	3.1	21
20	Methanol loading dependent methoxylation in zeolite H-ZSM-5. Chemical Science, 2020, 11, 6805-6814.	7.4	21
21	Methyltrimethoxysilane (MTMS)-based silica–iron oxide superhydrophobic nanocomposites. Journal of Colloid and Interface Science, 2015, 459, 123-126.	9.4	19
22	Monolithic nitrogen-doped carbon as a water sorbent for high-performance adsorption cooling. RSC Advances, 2016, 6, 25267-25278.	3.6	18
23	Time resolved operando spectroscopic study of the origin of phosphorus induced chemical aging of model three-way catalysts Pd/Al2O3. Catalysis Today, 2013, 205, 3-9.	4.4	17
24	Investigation of ZSM-5 catalysts for dimethylether conversion using inelastic neutron scattering. Applied Catalysis A: General, 2019, 569, 1-7.	4.3	17
25	Improved photoluminescence and afterglow of CaTiO_3:Pr^3+ by ammonia treatment. Optical Materials Express, 2013, 3, 248.	3.0	15
26	The Origin of the Catalytic Activity of a Metal Hydride in CO ₂ Reduction. Angewandte Chemie, 2016, 128, 6132-6136.	2.0	15
27	Methanol Steam Reforming on Perovskite-Type Oxides LaCo1â^'xâ^'yPdxZnyO3±Α: Effect of Pd/Zn on CO2 Selectivity. Topics in Catalysis, 2015, 58, 905-909.	2.8	14
28	Water sorption behavior of physically and chemically activated monolithic nitrogen doped carbon for adsorption cooling. RSC Advances, 2016, 6, 80729-80738.	3.6	14
29	New Synthesis of ZSM-5 from High-Silica Kaolinite and Its Use in Vapor-Phase Conversion of 1-Phenylethanol to Styrene. Industrial & Engineering Chemistry Research, 2015, 54, 3754-3760.	3.7	13
30	The effect of activation time on water sorption behavior of nitrogen-doped, physically activated, monolithic carbon for adsorption cooling. Microporous and Mesoporous Materials, 2019, 276, 239-250.	4.4	11
31	Composition dependent selfâ€regenerative property of perovskiteâ€type oxides. Physica Status Solidi - Rapid Research Letters, 2015, 9, 282-287.	2.4	10
32	Effects of crystal size on methanol to hydrocarbon conversion over single crystals of ZSM-5 studied by synchrotron infrared microspectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 18849-18859.	2.8	10
33	Facile synthesis of resorcinol-melamine-formaldehyde based carbon xerogel. Materials Today: Proceedings, 2018, 5, 13776-13784.	1.8	9
34	Methanol dynamics in H-ZSM-5 with Si/Al ratio of 25: a quasi-elastic neutron scattering (QENS) study. Topics in Catalysis, 2021, 64, 699-706.	2.8	9
35	Methanol steam reforming on LaCo1â^'â^'Pd Zn O3±. Catalysis Today, 2015, 258, 256-261.	4.4	8
36	Perovskite-supported Palladium for Methane Oxidation – Structure–Activity Relationships. Chimia, 2012, 66, 675-680.	0.6	7

#	Article	IF	CITATIONS
37	Lab Scale Fixed-Bed Reactor for Operando X-Ray Absorption Spectroscopy for Structure Activity Studies of Supported Metal Oxide Catalysts. Topics in Catalysis, 2011, 54, 1213-1218.	2.8	6
38	Chromium-induced deactivation of a commercial honeycomb noble metal-based CO oxidation catalyst. Applied Catalysis A: General, 2014, 469, 259-266.	4.3	6
39	Silicon microfabricated reactor for <i>operando</i> XAS/DRIFTS studies of heterogeneous catalytic reactions. Catalysis Science and Technology, 2020, 10, 7842-7856.	4.1	6
40	Investigation of MoOx/Al2O3 under Cyclic Operation for Oxidative and Non-Oxidative Dehydrogenation of Propane. Catalysts, 2020, 10, 1370.	3.5	5
41	Carbene-like reactivity of methoxy groups in a single crystal SAPO-34 MTO catalyst. Catalysis Science and Technology, 2022, 12, 2289-2305.	4.1	4
42	A Workflow Demonstrator for Processing Catalysis Research Data. Data Intelligence, 2022, 4, 455-470.	1.5	4
43	In situ synthesis by salt–surface interaction and the catalytic functionality of the ammonium salt of 12-tungstophosphoric acid. Green Chemistry, 2002, 4, 344-346.	9.0	3
44	Electron energy loss spectroscopy analysis of the interaction of Cr and V with MWCNTs. Micron, 2016, 84, 37-42.	2.2	3
45	Local and nanoscale methanol mobility in different H-FER catalysts. Catalysis Science and Technology, 2022, 12, 1663-1677.	4.1	2
46	Observations on the Aging Environment Dependent NO Oxidation Activity of Model Pt/Al2O3 Diesel Oxidation Catalyst. Topics in Catalysis, 2013, 56, 329-332.	2.8	1