Brigitte Caussat

List of Publications by Year in Descending Order

73 papers	1,259 citations	19 h-index	33 g-index
75 ext. papers	1,401 ext. citations	5 avg, IF	4.09 L-index

#	Paper	IF	Citations
73	Metalorganic chemical vapor deposition of aluminum oxides: A paradigm on the process-structure-properties relationship **2022**, 133-168		
72	An innovative kinetic model allowing insight in the moderate temperature chemical vapor deposition of silicon oxynitride films from tris(dimethylsilyl)amine. *Chemical Engineering Journal*, **2021**, 133350	14.7	0
71	Liquid antimony pentachloride as oxidant for robust oxidative chemical vapor deposition of poly(3,4-ethylenedioxythiophene) films. *Applied Surface Science*, **2021**, 554, 149501	6.7	3
70	Tunable SiO2 to SiOxCyH films by ozone assisted chemical vapor deposition from tetraethylorthosilicate and hexamethyldisilazane mixtures. *Surface and Coatings Technology*, **2021**, 407, 126762	4.4	1
69	An innovative GC-MS, NMR and ESR combined, gas-phase investigation during chemical vapor deposition of silicon oxynitrides films from tris(dimethylsilyl)amine. *Physical Chemistry Chemical Physics*, **2021**, 23, 10560-10572	3.6	1
68	Network hydration, ordering and composition interplay of chemical vapor deposited amorphous silica films from tetraethyl orthosilicate. *Journal of Materials Research and Technology*, **2021**, 13, 534-547	5.5	2
67	Beyond surface nanoindentation: Combining static and dynamic nanoindentation to assess intrinsic mechanical properties of chemical vapor deposition amorphous silicon oxide (SiOx) and silicon oxycarbide (SiOxCy) thin films. *Thin Solid Films*, **2021**, 735, 138844	2.2	
66	Barrier properties and hydrothermal aging of amorphous alumina coatings applied on pharmaceutical vials. *Surface and Coatings Technology*, **2021**, 425, 127711	4.4	
65	An out of the box vision over oxidative chemical vapor deposition of PEDOT involving sublimed iron trichloride. *Synthetic Metals*, **2020**, 266, 116419	3.6	8
64	Large temperature range model for the atmospheric pressure chemical vapor deposition of silicon dioxide films on thermosensitive substrates. *Chemical Engineering Research and Design*, **2020**, 161, 146-158	5.5	5
63	Investigation of the densification mechanisms and corrosion resistance of amorphous silica films. *Journal of Non-Crystalline Solids*, **2019**, 515, 34-41	3.9	14
62	Investigation of the initial deposition steps and the interfacial layer of Atomic Layer Deposited (ALD) Al2O3 on Si. *Applied Surface Science*, **2019**, 492, 245-254	6.7	22
61	In situ N2-NH3 plasma pre-treatment of silicon substrate enhances the initial growth and restricts the substrate oxidation during alumina ALD. *Journal of Applied Physics*, **2019**, 126, 125305	2.5	2
60	Detailed investigation of the surface mechanisms and their interplay with transport phenomena in alumina atomic layer deposition from TMA and water. *Chemical Engineering Science*, **2019**, 195, 399-412	4.4	19
59	Computational Fluid Dynamics simulation of the ALD of alumina from TMA and H2O in a commercial reactor. *Chemical Engineering Research and Design*, **2018**, 132, 795-811	5.5	19
58	Large-scale oxidation of multi-walled carbon nanotubes in fluidized bed from ozone-containing gas mixtures. *Canadian Journal of Chemical Engineering*, **2018**, 96, 688-695	2.3	1
57	Development of a kinetic model for the moderate temperature chemical vapor deposition of SiO2 films from tetraethyl orthosilicate and oxygen. *AICHE Journal*, **2018**, 64, 3958-3966	3.6	6

56	Effects of reducing the reactor diameter on the dense gas-solid fluidization of very heavy particles: 3D numerical simulations. *Chemical Engineering Research and Design*, **2017**, 117, 575-583	5.5	2
55	Fluidized bed chemical vapor deposition of copper nanoparticles on multi-walled carbon nanotubes. *Surface and Coatings Technology*, **2017**, 331, 129-136	4.4	7
54	Decoration of Carbon Nanotubes by Semiconducting or Metallic Nanoparticles using Fluidized Bed Chemical Vapour Deposition. *KONA Powder and Particle Journal*, **2016**, 33, 322-332	3.4	1
53	Amorphous Alumina Barrier Coatings on Glass: MOCVD Process and Hydrothermal Aging. *Advanced Materials Interfaces*, **2016**, 3, 1600014	4.6	5
52	A new route for the integration of a graphene/diazonium/PEDOT electrode towards antioxidant biomarker detection. *Journal of Electroanalytical Chemistry*, **2016**, 771, 73-79	4.1	7
51	Modeling a MOCVD process to apply alumina films on the inner surface of bottles. *Surface and Coatings Technology*, **2015**, 275, 167-175	4.4	7
50	Effects of reducing the reactor diameter on the fluidization of a very dense powder. *Powder Technology*, **2015**, 277, 268-274	5.2	10
49	Iron deposition on multi-walled carbon nanotubes by fluidized bed MOCVD for aeronautic applications. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 861-868		2
48	Fluidized-Bed Chemical Vapor Deposition of Silicon on Very Dense Tungsten Powder. *Chemical Engineering and Technology*, **2015**, 38, 1254-1260	2	1
47	Silicon coating on very dense tungsten particles by fluidized bed CVD for nuclear application. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 1599-1606	1.6	4
46	Liquid and Solid Precursor Delivery Systems in Gas Phase Processes. *Recent Patents on Materials Science*, **2015**, 8, 91-108	0.3	11
45	The Role of the Gas Phase in Graphene Formation by CVD on Copper. *Chemical Vapor Deposition*, **2014**, 20, 51-58		15
44	Amorphous Alumina Coatings on Glass Bottles Using Direct Liquid Injection MOCVD for Packaging Applications. *Advances in Science and Technology*, **2014**, 91, 117-122	0.1	5
43	Three dimensional graphene synthesis on nickel foam by chemical vapor deposition from ethylene. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2014**, 179, 12-16	3.1	25
42	Synthesis of Multi-Walled Carbon Nanotubes by Fluidized-Bed Chemical Vapor Deposition over Co/Al2O3. *Journal of Chemical Engineering of Japan*, **2014**, 47, 28-39	0.8	1
41	High quality graphene synthesized by atmospheric pressure CVD on copper foil. *Surface and Coatings Technology*, **2013**, 230, 87-92	4.4	22
40	Fluidization and coating of very dense powders by Fluidized Bed Chemical Vapour Deposition. *Chemical Engineering Research and Design*, **2013**, 91, 2477-2483	5.5	7
39	Decorated carbon nanotubes by silicon deposition in fluidized bed for Li-ion battery anodes. *Chemical Engineering Research and Design*, **2013**, 91, 2491-2496	5.5	5

38	Alumina coatings on silica powders by Fluidized Bed Chemical Vapor Deposition from aluminium acetylacetonate. *Chemical Engineering Journal*, **2012**, 211-212, 68-76	14.7	19
37	Low temperature silicon oxide deposition on polymer powders in a fluidized bed coupled to a cold remote plasma. *Surface and Coatings Technology*, **2012**, 206, 4814-4821	4.4	6
36	Alumina coating on dense tungsten powder by fluidized bed metal organic chemical vapour deposition. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 8083-8	1.3	5
35	Fluidized bed chemical vapor deposition of silicon on carbon nanotubes for Li-ion batteries. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 8392-5	1.3	2
34	Multi-scale modelling of silicon nanocrystal synthesis by Low Pressure Chemical Vapor Deposition. *Thin Solid Films*, **2011**, 519, 7650-7658	2.2	8
33	Local Kinetic Modeling of Aluminum Oxide Metal-Organic CVD From Aluminum Tri-isopropoxide. *Chemical Vapor Deposition*, **2011**, 17, 181-185		14
32	Modeling of Silicon CVD into Agglomerates of Sub-micrometer-size Particles in a Fluidized Bed. *Chemical Vapor Deposition*, **2011**, 17, 305-311		3
31	Mechanical and Surface Properties of Chemical Vapor Deposited Protective Aluminium Oxide Films on TA6V Alloy. *Advances in Science and Technology*, **2010**, 66, 66-73	0.1	4
30	Fluidized-Bed MOCVD of Bi2O3 Thin Films from Bismuth Triphenyl under Atmospheric Pressure. *Chemical Vapor Deposition*, **2010**, 16, 123-126		8
29	Chemical vapor deposition of silicon nanodots on TiO2 submicronic powders in vibrated fluidized bed. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 170, 41-50	3.1	8
28	An original growth mode of MWCNTs on alumina supported iron catalysts. *Journal of Catalysis*, **2009**, 263, 345-358	7.3	53
27	Kinetic modeling study of carbon nanotubes synthesis by fluidized bed chemical vapor deposition. *AICHE Journal*, **2009**, 55, 465-474	3.6	14
26	Kinetic study of carbon nanotubes synthesis by fluidized bed chemical vapor deposition. *AICHE Journal*, **2009**, 55, 450-464	3.6	36
25	Multifluid Eulerian modelling of a silicon Fluidized Bed Chemical Vapor Deposition process: Analysis of various kinetic models. *Chemical Engineering Journal*, **2009**, 148, 506-516	14.7	22
24	Silicon Chemical Vapor Deposition on macro and submicron powders in a fluidized bed. *Powder Technology*, **2009**, 190, 185-191	5.2	20
23	High temperature annealing of micrometric Zn2SiO4:Mn phosphor powders in fluidized bed. *Materials Research Bulletin*, **2008**, 43, 2751-2762	5.1	18
22	Properties of Membranes Containing Semi-dispersed Carbon Nanotubes. *Environmental Engineering Science*, **2008**, 25, 565-576	2	83
21	Development of an original model for the synthesis of silicon nanodots by Low Pressure Chemical Vapor Deposition. *Chemical Engineering Journal*, **2008**, 140, 600-608	14.7	4

20	Multifluid Eulerian modeling of dense gas□olids fluidized bed hydrodynamics: Influence of the dissipation parameters. *Chemical Engineering Science*, **2008**, 63, 5540-5551	4.4	115
19	Modeling of spray pyrolysis□hy are the synthesized Y2O3 microparticles hollow?. *AICHE Journal*, **2008**, 54, 394-405	3.6	10
18	Influence of the synthesis conditions of silicon nanodots in an industrial low pressure chemical vapor deposition reactor. *Applied Surface Science*, **2008**, 254, 2927-2933	6.7	1
17	Y2O3:Eu micronic particles synthesised by spray pyrolysis: Global modelling and optimisation of the evaporation stage. *Chemical Engineering and Processing: Process Intensification*, **2008**, 47, 731-743	3.7	8
16	Catalytic Production of Carbon Nanotubes by Fluidized-Bed CVD. *Chemical Vapor Deposition*, **2007**, 13, 447-457		69
15	CVD and Powders: A Great Potential to Create New Materials. *Chemical Vapor Deposition*, **2007**, 13, 443-445		19
14	Silicon CVD on powders in fluidized bed: Experimental and multifluid Eulerian modelling study. *Surface and Coatings Technology*, **2007**, 201, 8919-8923	4.4	22
13	Towards multiscale modeling of Si nanocrystals LPCVD deposition on SiO2: From ab initio calculations to reactor scale simulations. *Surface and Coatings Technology*, **2007**, 201, 8854-8858	4.4	2
12	A dimensionless study of the evaporation and drying stages in spray pyrolysis. *Computers and Chemical Engineering*, **2007**, 31, 1088-1099	4	9
11	A parametric study of the large scale production of multi-walled carbon nanotubes by fluidized bed catalytic chemical vapor deposition. *Carbon*, **2007**, 45, 624-635	10.4	67
10	Crystallization of microscopic Y2O3 powders by different techniques of fluidization at high temperature. *Chemical Engineering Journal*, **2006**, 125, 25-33	14.7	8
9	Principles and applications of CVD powder technology. *Materials Science and Engineering Reports*, **2006**, 53, 1-72	30.9	120
8	Experimental study on fluidization of micronic powders. *Powder Technology*, **2005**, 157, 114-120	5.2	37
7	Modelling of an industrial moving belt chemical vapour deposition reactor forming . *Chemical Engineering Science*, **2005**, 60, 5331-5340	4.4	7
6	Influence of dopant concentration and type of substrate on the local organization of low-pressure chemical vapour deposition in situ boron doped silicon films from silane and boron trichloride. *Thin Solid Films*, **2004**, 446, 218-226	2.2	5
5	Carbon nanotubes produced by fluidized bed catalytic CVD: first approach of the process. *Chemical Engineering Science*, **2003**, 58, 4475-4482	4.4	127
4	LP-CVD Silicon-Based Film Formation in Submicrometer Trenches in Industrial Equipment: Experiments and Simulation. *Chemical Vapor Deposition*, **2002**, 8, 213-219		1
3	Low-Pressure Chemical Vapor Deposition of Semi-insulating Polycrystalline Silicon Thin Films: I. Experimental Study and Proposal of New Kinetic Laws. *Journal of the Electrochemical Society*, **2001**, 148, C149	3.9	4

2	Boron-Doped Polysilicon: Growth Kinetics and Structural Study of Low-Pressure Chemical Vapour Deposited Films in the Case of High Doping Levels. *Solid State Phenomena*, **2001**, 80-81, 59-64	0.4	1
1	Silicon deposition from silane or disilane in a fluidized bed Part I: Experimental study. *Chemical Engineering Science*, **1995**, 50, 3615-3624	4.4	52